UNIVERSITA' POLITECNICA DELLE MARCHE

FACOLTA' DI ECONOMIA "GIORGIO FUÀ"

Dottorato di Ricerca in Management and Law – XXIX Ciclo (XV n.s.)

COMPETENCE DEVELOPMENT FOR NEW VENTURING:

HOW BUSINESS DEVELOPMENT INTEGRATES.

LOCCIONI CASE STUDY

Coordinatore del corso di dottorato:
Chiar.mo Prof. Luca Del Bene

Relatore: PhD candidate:
Chiar.mo Prof. Gian Luca Gregori   Nathalie Perkins

TABLE OF CONTENTS

INTRODUCTION

INTRODUCTION

It is not easy to categorize this work within a single classification or a single field of study.

It is about knowledge management and organizational learning processes occurring when organizations decide to undertake new business paths.

Embracing novelty requires the set-up of a team and of a structure, with specific vision, mission and goals: this is Business Development.

The main reference field of study has been identified into Entrepreneurship, Corporate Venturing and Dynamic Capabilities.

Every topic has been investigated and then, through the Business Development's lens, the competence development process has been analysed.

Taking into account the amount of info necessary to face new markets (the pure characteristics of Business Development as discipline) and the selection of the structure dedicated to the new initiative (the Corporate Entrepreneurship and Venturing background), several answers have been formulated.

On one hand, the interest has been focused on how the process of competence development shaped, how each step emerged, following which kind of approach.

Here the main reference studies can be related to Eisenhardt and Tabrizi's interest about the acceleration of adaptive processes when product innovation occurs (1995). There is a contrast between two different theoretical models representing two different approaches: the compression and experiential ones, planning against flexibility.

This experience has been applied to the case study, in order to realize the tendency and aptitude of the Business Development team.

On the other hand, again on the process of competence development, another reflection has been formulated about two different moments: the comprehension of the management team working and the deftness of task execution.

In this case the reference study has been related to McGrath, MacMillan and Venkataraman and their focus on the identification of a paradigm for the competence development. Here, drawing from the real experience of the case study, specific routines have been recognized and it has been possible to understand the decisive moments contributing to the consciousness raising about the competence development, necessary both to fulfil a specific request and to grow in terms of technology, knowledge and know-how.

What emerged is that due to the "imperceptible push" by Business Development is possible to define a leitmotiv, a base on which new knowledge, leading to new competences, builds up.

Indeed, organizing all the info, in terms of time and quality (the distinction between true and false information, relevant from superficial information), a process can be outlined.

The third big focus is, indeed, about the impact of Business Development on the process, not only as a carrier of knowledge but also as mechanism triggering virtuous behaviours.

One the most important has been the behaviour relative to the facilitation of ambidexterity, the capability, typical of dynamic environments, to simultaneously explore new capabilities and exploit existing ones.

The Business Development proved to be an active organism of organization, not just a compilation of data but a structure capable to define targets, collect info and involve all the internal and external actors protagonists of the network.

The research has been conducting through the use of a case study, a qualitative and positive approach.

The two years within Loccioni Group, experienced by the undersigned, represent the hugest source of information of the research; six interviews were conducted on site, in the company. The interviews can be considered as semi-structured, since they were based on a general interview guide.

In addition, other significant contributors to the total dataset were secondary source material such as annual and monthly reports and confidential firm-internal data on profit margins. It is important to underline that an action-research approach has been used.

The contents are structured in 4 chapters.

The first one is about Organizational Learning and the process of evolution of Dynamic Capabilities.

The second chapter refers to the Corporate Entrepreneurship attitude and how this concept has been applied on a company level, analysing forms and structures through which organization can open new businesses.

The third one focuses on Business Development, considering the limit of the perspective that sees this discipline as a mere "tool" that separates the preparation activities for growth opportunities and their implementation.

The fourth chapter describes the case study and analyses the process of competence development looking at its approach (compression vs experiential), its milestones (the comprehension and deftness stages) and the implications produced by Business Development, in terms of new perspectives and new point of view.

To follow, conclusions and reflections about the entire process of competence development and the integration of Business Development have been expressed.

Methodology

To give proof and realize how a new competence is developed, the selection of a single case study resulted appropriate.

The developed research methodology has been qualitative, based on subjective and qualitative characteristics of the analysed data.

Data have been collected through a single case study method, allowing a deep and rich analysis of the phenomenon.

The research was part of a broader project, an opportunity to test and make experience within existing organizations, where the researcher was an active part of the selected project.

During a period of two years, the undersigned, has been part of Loccioni Group, working as a real collaborator, joining all the activities and events typical of a company.

The undersigned got the position of Business Development, as a leader of a team made by key figures from the Management, from R&D and Sales.

Due to competences of Business Development, such as data analysis, business planning, meeting organization, relationship management etc., the first part of the research project occurred within the company and so it has been possible to consider this approach as field-based research, allowing to study the real activity of Business Development on a company level.

The single case study analysis has been supported by the conduction of interviews.

It is possible to say that the research revealed as interventionist , with a direct involvement of the researcher on the design and testing of marketing and business plan, customer relationship and event organization inside the

company's context. The phenomenon has been observed through the theory's eyes and guidelines.

The study has been useful to identify the different steps leading to the development of a new competence, in particular it has been verified

- that it was possible to recognize in the real F&B experience what the literature stated
- to check the weight of the compression and experiential strategy in relation to the case study (Eisenhardt and Tabrizi, 1995)
- to prepare the ground for the analysis of comprehension and deftness experience (Mc Grath, MacMillan and Venkataraman, 1995).

To do so, six interviews were conducted on site, in the company. The interviews can be considered as semi-structured, since they were based on a general interview guide.

The face - to – face interviews were audio-recorded and later transcribed. In addition, other significant contributors to the total dataset were secondary source material such as annual and monthly reports and confidential firm-internal data on profit margins.

Interviews were later individually coded for content, read in relation to one other, allowing general patterns to be detected (Strauss & Corbin, 1990), in a clustering process that identified eight key activities forming the basis of the process, the one that leads to the development of the new competence.

The respondents were high-level figures, representing several different and distinct organizational groupings within the firm: management, sales, research and development, sales and marketing.

They were asked to answer about the main stages of product development theorized by Eisenhardt and Tabrizi. Some are recognized as typical of the

compression strategy, others from the experiential one. The results have been collected to make reflections about the implications that the Business Development approach can produce in terms company's growth and evolution.

CHAPTER 1

ORGANIZATIONAL LEARNING AND COMPETENCE DEVELOPMENT

The first chapter focuses on the change issue, considered as growth's stimulus for organizations but also as keystone of a set of company's values, based on constant research for innovation.

These are the main ingredients of the Organizational Learning process, where experience becomes the light to follow, in order to set up development strategies, especially, business development strategies.

On the literature side, the Resource Based View and its evolution enhanced by the dynamic dimension, represent the core of this chapter, which concludes introducing the competence's topic, together with abilities and capabilities' one, analysed as mean to show organizations' personality, essential to reach competitive advantage.

1.1 Change: boost and inspiration to evolve

Organizations and individuals are healthy when they share the same three characteristics: productivity, innovativeness and resilience (Goldberger, 1999). At the base of these three milestones there is the idea of change that enables companies to adapt and evolve. If an excess of regularity occurs, predictability rises and resiliency goes down: this kind of periodicity has bad effects on the health of organizations. These last ones, in turn, must embrace variability and plasticity so that they may range between complete randomness and excessive order, finding the comfort zone for facing changes and keeping healthy (Suikki et al. 2006)

One of the biggest hurdle is represented by the turbulence of today's environments, especially unexplored business environments.

Lalonde (2011) states that revolutionary environments drive open systems to face ongoing change, to adapt to them and, as a consequence, a strategy of continuous learning occurs, becoming integral part of the organizational culture. While et al. (1996) argue that change and uncertainty are criteria of excellent leadership selection. Business is a sort of continuous flow of challenges made by uncertainties and opportunities; companies must learn from failures, extrapolate the right information and make use of them to obtain new knowledge.

Novelty, renovation, "to be new", translate into the capacity to learn faster than others. This is the modern concept of competitive advantage in the long run: an invention, an idea, a new service or application can be considered as a learning process (Senge, 1994).

Organizational learning, together with knowledge management are the foundations of competence development: the so changing environments- i.e. product life cycle reduction or productive processes redesign – are demanding from companies new learning approaches, in which knowledge management plays a refreshing role oriented toward product and process' innovation (Zangiski et al. 2013).

Since researchers have long debated on the meaning of organizational learning, it must be admitted it is not easy to give a definition. The topic addresses different contributing disciplines such as: sociology, psychology, management, leadership, industrial engineering.

For the purpose of this project, organizational learning will be considered as a process of acquisition, a series of experiences and decisions driving the company to modify and evolve its own routines. Indeed, drawing from Argote (2013), most

researchers agree with defining organizational learning as a change in the organization's knowledge that occurs as a function of experience.

Experience is the sum of what is happening in a context, within the organization and outside, in the external environment (Glynn, Lant & Milliken, 1994). Outside the boundaries of the organization there are competitors, clients, suppliers, partners, educational establishments and institutions. The environmental context affects the experience the organization acquires (Argote, 2013).

The organizational context includes elements such as structure, culture, technology, identity, memory, goals, incentives and strategies. The context also includes relationships with other organizations through alliances, joint ventures or memberships. The context interacts with experience to create knowledge. Experience accumulates as the organization performs its tasks. Given the fact that the organization learns from attempts to perform tasks that are incomplete, new or unsuccessful, experience can be also defined in terms of task performances rather than the number of task completed.

Organizational learning turns out to be an interactive process, comprehending people, their relations, information sharing, experimentation and knowledge diffusion (Zangiski et al., 2013)

1.2 The Organizational Learning Process

Since it involves the addition of something new within an existing environment, organizational learning requires rethinking organizational design and individuals' behaviour change. As above mentioned, it is shaped by a knowledge acquisition process, made by information processing mechanisms.

Organizational learning is a process that improves the behaviour and capability of individuals, making the organization more capable to respond to its environment (Murray and Donegan, 2003).

Organizational learning research deals also with finding better and smarter ways to learn (Argyris, 1994; Senge, 1990), so that the successful results can be implemented in the workplace (Leonard-Barton, 1992; De Geus, 1988; Argyris, 1993).

Within a company, the presence of a strong learning culture is good not only at creating, acquiring, and transferring knowledge but also at modifying behaviour to reflect new knowledge and insight (Garvan, 1993; Huber, 1991). It is really useful to allow people becoming aware of changes, challenging existing mental models (Senge, 1990).

Strategic management theories offer several routes to explore organizational learning. In addition, successful corporate strategy has been often associated to the resource capability of a company (Grant, 1991).

Resources, in order to be applied for gaining competitive advantages, must be turned into competences. Competences, as it will explain later, can be the result of resources management in terms of integration, mix and release.

In order to deepen the organizational learning issue, it can be useful to underline that several perspectives can be applied on it and so different types of learning can be identified. By Neergaard (1994), a model has been set up.

The individual behaviour perspectives is about informal learning processes of an individual. It relates to human behaviour, for example human reactions in given situations or under specific conditions. The focus is on the informal, unconscious behaviour of a single organizational member and the interpersonal interactions among a number of members of an organization (Argyris, 1993).

The decision support perspective is about formal and individual learning processes. The focus is on how an individual decision maker learns in connection with problem-solving situations. It regards the use of information technology and decision models to support decision making and the perspective wants to see the influence of information technology on individual learning (Duncan and Weiss, 1973: Alter, 1980).

The management system and organisational structure perspective is about collective learning process as guided by formal organisational structure and by management system: formal planning, control processes, operating procedures and reward systems (Riis, 1978; Cyert and March, 1963; Jelinek, 1979).

The corporate culture perspective is what the organisation knows, the intangible sphere: social and informal relations, collective habits, behavioural patterns and attitudes. Corporate culture stands out from collective learning processes, guiding and shaping collective and individual behaviour (Drejer, 2000).

Anyway, these are just perspectives than can be useful to contextualize the organizational learning topic, wide and inter-disciplinary, so they can do little to help understanding the process of developing competence as a result of learning. Drawing from Garvin (1993), the organizational learning process derives from skills related to the following five main tasks

1. Systematic problem solving
2. New approaches for experimenting
3. Learning from prior know-how
4. Learning from others' know-how and best-practices
5. Knowledge diffusion in a fast and efficient way

Organizational learning is the result of individual and group learning process. On the individual hand, the process relies on self-awareness and mental frameworks

based on explicit individual objectives; on the group hand, it requires shared view and ideas, a mind-set that considers the organization as a whole and links the individual and group learning process (Den Hertog et al., 2010, Senge, 2009). Moreover, Dixon (1999) suggests that this process of knowledge acquisition stems from investigation – oriented lessons

- Prior experiences interpretation of success or failure
- Establishment of causal links between actions and results and their effects on future actions
- Description of organizational changes and future probable performance demands
- Analysis of potentialities and limitations of strategic alternatives to organizations' structures, technologies, information systems and "empowerments" systems
- Description of conflicting views and interests that emerge from complexity and uncertainty conditions
- Portrayal of the wanted future and carrying out of the means through which it can be achieved
- Critical reflection of the organizational theories in use and restructuring of proposal
- Description and analysis of other organizations' know-how

On looking at the above list of activities, one could say that learning is made by actions and operations that cover three time frames.

First of all there is the *past*: previous projects and situations are a reference point for the construction of a new mental approach, a source of experience representing an important tool to avoid past mistakes and failures.

Than the *present* and so there is a sort of learning by doing attitude, because organizations must be like a sponge, absorbing new info and data, being able to react and adapt to new stimuli, in order to respond to specific requirements.

The *future,* corresponding to organisations' vision, the long term projection that requires changes and modifications: new markets, new people, new competences, new organisations. Here, the biggest effort is to put together all the output coming from the three different time stages and apply them in the form of strategy, of clear goals. The hurdle is the "unknown", characterizing the future, the ambiguity and the uncertainty of data: although the complexity, it concretely pushes the company to make both planning and creativity exercises, that will give life to a very elaborate organizational learning process.

Basically, in this kind of process, the goal is to transform the intangible into tangible, to create a joined organizational mind-set, to become part of the routine and to come to light as a competence.

The origin of such occurrence is made by a change, in this case generated by the company's desire to explore new markets. It forces a new organizational behaviour and, consequently, organizational learning becomes a key tool for comprehending how an organization assimilates new knowledge and makes it a "weapon" of competitive advantage.

These capabilities are made out of concepts, thoughts, approaches.

Today the weight of these resources over the total asset of enterprises has changed: indeed, knowledge and skills heavily affect not only the production procedures but also strategies of business, competition and relationships.

Therefore, intangibles and intellectual capital increasingly constitute the foundation of the company's competitive power.

Looking at what has been said so far, it transpires that learning process, as a source for new competence development, is officially recognized.

Since the focus is about the development of the above mentioned competence, it is really crucial to go and see which is the base for the competences' field of study. The origin lies in the Resource Based Theory as foundation of the competence, then enhanced by dynamic capabilities analysis.

1.3 The Resource - Based Theory: how to achieve and sustain competitive advantages

The resource- based view of the firm (RBV) was born in the 80's and propagated in the 90's as evolution of strategy studies. This perspective focuses on resources, competences and capabilities that an organization is able to develop over time as source of the competitive advantage. The basic idea is that any kind of competitive advantage originates from company's resources, organizational structure, production, technological and market know-how.

Until the 90's the "classical" strategy studies – i.e. Porter – concentrated on sector and placement choices: it was taken for granted that organizations were able to satisfy market's requests. These studies proposed a different answer to the question related to how companies can reach competitive advantages. As for Porter, the analysis of the target sector, together with the target market, were the starting point for the strategy definition. The evaluation of the resources on hands, necessary to enter the market, and the analysis of the ones to procure, took place subsequently.

But profitability and success are affected not only by the type of target market – and its own features- but also by the company's resources and specific capabilities. It is true that each single market or industry has its own personality

and rules but it cannot be ruled out that firm's specific factors can, in turn, contribute to create specific added value.

At the beginning of the 80's, following the pioneering ideas by Penrose (1959) which assumed that firms can be conceptualized as bundles of resources, it began to spread the belief that success of a company could depend on its ability to generate and control distinctive competences, hard to imitate by competitors. Differently from the previous theories, here the focus is firstly on the identification of the strengths (internal potential) and then on the market position; the attention so is shifted from what happened outside the company to the internal dynamics. The determinants of the competitive advantage, according to this approach, were within the organization and not only in the position assumed in the referent segment or sector.

To move the perspective from the external environment to the internal one, it means to reflect on what the company is and will capable to do, a path that will follow, in turn, to the creation of a durable and sustainable competitive advantage.

The core of the analysis relied no more on the choice of the market or product through which to compete, because these last ones could result as well profitable and vulnerable in the long run, due to imitation strategies by competitors.

Thus, the need for a sustainable competitive advantage came to light: enduring, not easy to attack, that strongly focused on the most specific internal variables, the most difficult to imitate.

The greatest peculiarity of the RBV theory is about the importance attached to internal and firm – specific factors, as rationale to explain the company's performance: the understanding of the causes leading to different results.

This approach investigates the process of resources' generation within companies and the relative resources' deployment, highlighting the importance of resources recombination when innovative capabilities are developed. Following this thinking process, companies are heterogeneous not only due to the "nature" of their own resources but also due to the manners through which they can use them. Given this, the key for the economic return is in the exploitation of differences: superior resources and high efficient resources' management.

Anyway, resources, as previously said, are a great potential; they are a necessary requisite but not sufficient to succeed. The competitive advantage derives from the capabilities which represent the company's total ability to activate, coordinate and integrate resources so that a greater success can be obtained, with respect to competitors (Penrose, 1959).

The distinction between resources and capabilities is one of the striking peculiarity of the Resource Based View and represents the base for the strategy construction.

According to the RBV, resources are the primary source of competitive advantage: they are the focal point of a strategy. Some authors presented similar definitions: resources are defined as a stock of available factors possessed or controlled by the company (Amit and Schoemaker, 1993); as company assets that are difficult or impossible to imitate (Teece et al., 1997) ; as a stock of knowledge, physical assets, human capital and other tangible and intangible factors governed by the company, that allows to give added value to markets (Capron and Hullan, 1999); then Barney (1991), who defines resources as those factors necessary to formulate and implement a strategy.

Of course there have been several resource classifications. By Barney (1991), resources can be grouped into three categories: physical capital, human and organizational; by Grant (1996), instead, resources can be tangible, intangible and human.

A part from the well- known tangible and intangible ones, human resources are comprehensive of all the productive services that employees and executives can do within the organization in the form of competences, knowledge, analysis and decision - making process. They are durable, nurtured by investments in training, education and learning mechanisms. It is not easy to identify and evaluate them.

Following the RBV approach, especially its more recent evolution, it comes to light that human resources are the humus of competitive advantage. This idea seems to be supported by theories considering human capital as a driver of knowledge: in the new economy, since work is no more governed by physical strengths (making use of human power) but by cognitive functions (aimed at spreading new knowledge), human resources cover a prominent role (Rullani, 2004). It is universally recognized that individuals are the most important "collectors" of knowledge, in particular tacit knowledge (Argote, Ingram 2000; Nonaka, Takeuchi, 1995).

So, once again, taking this approach as a reference point, if companies use resources to stimulate superior knowledge, they can find the way to get competitive advantages.

Companies have a set of resources they can implement through abilities, which allow them to garner rents on the basis of distinctive competence (Selznick, 1957).

Not only resources cannot be easily purchased, stolen or imitated and substituted – so they are idiosyncratic - but, moreover, companies can show

their own "personality" with them, they develop distinctive abilities, actions and approaches that can help to be unique and gain the competitive advantage. In a nutshell, these are what competences are.

As in our case, a principal operation through which organizations want to develop new competitive advantages is through the pursuit of a new initiative – for instance efforts to add new products, solutions, markets and technologies to their current repertoire.

New initiatives are always strategical; they occur with a planned intent, thus companies consciously desire to embrace a change, or as a result of serendipity, without an official development programme or strategy (Burgelman, 1983). In any case, boosting for new scenarios is really important in order to survive on the global market, to grow and diversify.

By doing so, companies can

− Open to new initiatives using resources already possessed to explore new market areas, exploiting their lower costs, their already known references, competing efficiently with competitors

− Open to new initiatives to partially known markets or less challenging ones, with the intention to learn and then develop product, market or technology assets (McGrath, MacMillan & Venkataraman, 1995). This presumes a long term vision and perspective

− Open to new initiatives because of lucky chances or by the fact of being at the right place in the right moment.

New initiatives are a good method for expanding the boundaries of the corporate capabilities and to find new ways of resources combination, as well as the already possessed ones.

1.4 The Dynamic Resource Based View

Competitive advantage and disadvantage comes about over a period of time and also may shift over time.

The resource-based view provides an explanation of competitive heterogeneity based on the idea that close competitors differ in their resources and capabilities in important and durable ways.

These differences in turn affect competitive advantage and disadvantage. Nothing in this premise necessarily implies a static approach to the resource-based view.

Indeed, recent research on the evolution of organizational capabilities suggests the promise of dynamic resource-based theory (Helfat, 2000). The concept of dynamic capabilities (Teece, Pisano, and Shuen, 1997), as it will be described, for example, has attracted increasing attention (Zollo and Winter, 2002; Zott, 2002). By definition, dynamic capabilities involve adaptation and change, because they build, integrate, or reconfigure other resources and capabilities.

All organizational capabilities can be considered, 'dynamic' or otherwise, in a dynamic resource-based view.

In the article by Helfat and Peteraf, a new concept is introduced, the one that underpins a more comprehensive approach to dynamic resource-based theory: the capability lifecycle (CLC).

Heterogeneity of capabilities and resources in a population of firms is one of the cornerstones of resource-based theory (Peteraf, 1993; Hoopes, Madsen, and Walker, 2003). Within the resource based view, however, there is lack of a clear conceptual model that includes an explanation of how this heterogeneity arises.

Absent an understanding of where heterogeneity in resources and capabilities comes from, it is difficult for researchers to fully explain how firms use resources

and capabilities to create competitive advantage. This gap in our understanding makes it more difficult to offer prescriptive advice to managers as well. As one of its contributions, the capability lifecycle helps to explain the fundamental sources of firm heterogeneity.

The capability lifecycle provides a common language and way of thinking about the evolution

of capabilities, as well as a more fully dynamic approach to resource-based theory.

The authors outline the main elements of the capability lifecycle and explain the supporting logic.

They started by explaining the general approach taken in the analysis. They then define the term 'organizational capability,' provide an overview of the capability lifecycle, and explain each individual stage of the lifecycle in greater detail. An important part of the analysis includes the 'branching' of an original capability into several possible altered forms. A concluding section discusses implications for future research on the dynamic resource-based view of the firm.

1.5 On the way to advantage: competences

Retracing our discussion, it has been observed that companies search for long term competitive advantages and this is a sort of flowing process, where old competences can be renovated, sometimes partially replaced, saving the "good" parts and mashing up with the new sources of advantage.

This kind of process, our object of analysis, takes place at the subunits level: it is the sum of all the activities and resources put together by teams dedicated to the development of new products or solutions or technologies (McGrath, MacMillan & Venkataraman, 1995).

So the team, which manages info and data –generally speaking knowledge- is concretely responsible for the pursuit of the initiative, its activity generates routines. Within routines, advantages stand out.

Initial conditions of the surrounding environment are a very important antecedent to take into account

- Missing information
- Difficulty of signs and behaviours' interpretation
- Lack of experience
- Lack of references

Planning, control and learning , typical of mature businesses, are difficult to apply to such projects, so uncertainty is the most prevalent aspect.

The team is thought to move and react without solid references.

Let's say that the only certainty the team has at its disposal is t awareness of the gap between the objectives to achieve and the results achieved: since is a step by step process, the evaluation of the gap can help to define the state of art of the project, understanding how good or bad the company is performing.

It could be a sort of "learning by failing" but is crucial for competence development, because it allows to redefine the resource assets on the fly, such as technology and knowledge.

The gap management is really critical; the recognition of advantages is possible only *ex post.* It is not unusual to combine resources and define several competences and then figure out that they do not fit on the market.

So within the gap the core of the competence pulses. The potential advantage is going to emerge when there is an increasing convergence between the objectives of an initiatives and its results.

If convergence does not stand out, it is not possible to affirm the team is well performing and without competence, advantage hardly will follow.

The more the objectives are accomplished by the team, the greater the confidence that the team will acquire in new competences, maybe combining resources in new ways. The idea of convergence is consistent with the theory, because all the definitions linked to competence have something to do with what purposes companies want to achieve (Amit and Schoemaker, 1993), showing a superiority over other firms (Prahalad and Hamel, 1990).

Accepting that convergence is an indicator of emerging competence and the precursor of future competitive advantage, it is possible to compare ex ante objectives with ex post results with respect to a new initiative: which is the extent to which ex ante objectives are being realized in ex post results (McGrath, MacMillan and Venkataraman, 1995)?

Consequently, competence can be defined as the team's ability to reliably and consistently meet or exceed its objectives.

Ideally, if such convergence occurs, two processes must take place (McGrath, MacMillan and Venkataraman, 1995).

The first it is when the team, at the subunit level, realizes precisely what combination of resources will guide to achieve objectives. This phase is named "comprehension", following Weick and Roberts (1993).

The second process involves the creation of working relationships, that atmosphere creating the conditions for the team to execute properly in light of the above mentioned comprehension. Once, relating to Weick and Roberts (1993: 374-375), it is like a collective mind that comes out, the activities performed by the team are interrelated so that desirable outcomes may be achieved and undesirable outcomes avoided. A group able to develop such a

collective mind has operated with "deftness": it allows to face complexity, going beyond each team member ability.

The figure helps to understand the concept and the competence development process, leading to the acquisition of a competitive advantage.

First there is the emergence of the competence, the capability of the team to meet or exceed the objectives. Then, to develop, competence must face comprehension and deftness stages.
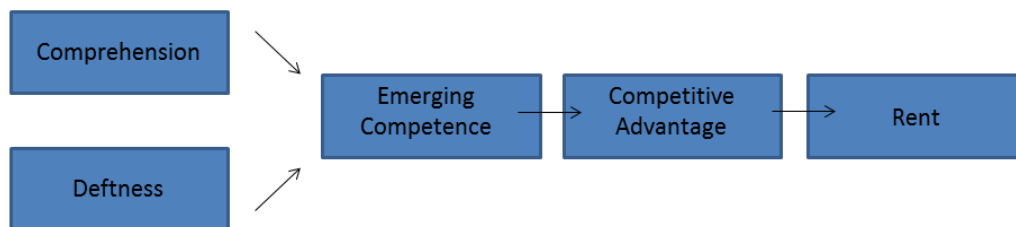
Figure 1. Conceptual Model (McGrath, MacMillan, Venkataraman, 1995)

Comprehension

Considering that the team has to define a series of target goals and then meet them, even exceed, the actions deriving from this operation imply the understanding of which combinations of resources, which sequences to apply to certain situations. It is about a real complexity of interrelationships, even more complicated if dealing with new initiatives (McGrath, MacMillan, Venkataraman, 1995).

The "new" is always characterized by ambiguity and uncertainty. Just think to the people in the subunit level dedicated on the new initiative: not only they have no background together, but they have to figure out the mechanisms, the dynamics in order to construct mutual trust and relationship.

Moreover, it has been demonstrated (Kahneman, Slovic and Tversky, 1982) individuals are poor processor of complexity, they can misjudge probabilities, they can base decisions on biased estimates or misinterpret the nature of causal situations they have to face.

What is known about the causal relationships is really little and it is in the mind of the individuals, in the form of skills and personal know-how.

Comprehension results from the combination of individual know-how and skills, when these become linked, comprehension emerges.

This linking process creates a group understanding, going beyond the cognitive capabilities of every single member (Weick and Roberts, 1993).

At the beginning of a new initiative, comprehension is really limited. Decisions about the future activities, how to structure people, distribution of tasks etc. are made out of assumptions, more than well-understood relationships (Block and MacMillan, 1985).

To fix target goals is different from the understanding of which factors will drive goal attainment (Vesper, 1990; Block, 1989) is still in the uncertainty sphere.

The development of comprehension is achieved through several experiences, that some can promote or interfere with, but everything is useful for its realization. The process by which comprehension develops is critical to the concrete development of competences: a superior comprehension to competitors can itself be the source of competitive advantage (McGrath, MacMillan, Venkataraman, 1995).

Just think of Ikea, it can be an example of a company which showed superior comprehension. Since the beginning, the Swedish furniture maker developed completely different methods of warehousing, distributing and sourcing products comparing to the already existing competitors. This allowed Ikea to build a deep

comprehension of the factors which shaped the firm's highly effective low –cost strategy.

To sum up, "the degree of competence development, as measured by the ability to achieve or exceed objectives, is positively associated with the level of comprehension of the focal group" (McGrath, MacMillan, Venkataraman, 1995).

The comprehension is the first "condition" the dedicated team passes through, compulsory to achieve objectives; the second one is related to the nature of the group's interrelationships.

Deftness

Here again it is from Weick and Roberts that has been possible to reflect about the idea of "heedful interrelating". The concept is that in order to have effective outcomes, effective group processes – "heedful"- must occur. The authors affirm that facts assume specific meaning only if they can be communicated, heard, applied, interpreted or incorporated into activities or placed in certain contexts.

Then they make a distinction between the level of a group's development and the level of the collective mind: a group can be undeveloped – in terms of structure or roles – but can manifest a well-developed collective mind. Since Weick and Roberts do not expressly rifer to the specific operational characteristics one can expect to find related to a group which operates "heedfully", McGrath, MacMillan and Venkataraman use the term "deftness". This definition implies the quality, possessed by a group, which permits to create relationships and interactions at minimal cost. In particular are taken into account opportunity, transactions and agency costs.

As for opportunity costs, it is about the fact that the team has no previous experience in working together and it is not easy to trust each other. Trust is a

sort of process requiring time to develop and reinforce. Moreover, highly skilled people find themselves working side by side to low skilled ones, and so it is clear that a lot of effort will be directed to developing patterns of relationship.

Starting working together as a group could bring confusion and uncertainty with respect to who is supposed to do what, what kind of information are required in order to have people performing good, priority order and so on. That is the transaction cost, time and energies spent on understanding the dynamics and structure of interrelations.

Since the team is new, every team member does not possess knowledge about one another's background, level of commitment or personal motivation. There is no history about repetitive interactions and, as a consequence, it is difficult to make people predictable to one other, producing the right condition for mutual trust.

Teams without deftness tend to face agency costs of monitoring team elements, setting up mechanisms to ensure performance or finding solutions for missing skills and capabilities.

So deftness, after comprehension, is the second necessary antecedent for the development of competence. Now it is possible to affirm that the degree of competence development, measured by the ability to achieve objectives, will be positively associated with the deftness of the project team.

Reconnecting to our ideag, companies achieving sustained superior performance have to create competitive advantages composed by the firm's idiosyncratic assets. By pursuing new initiatives, companies can create such advantages, but only if they are able to develop new competences, new ways of combining resources: this new combination represent an obstacle for competitors.

The problem is that the identification of the specific competences leading to competitive advantages is a difficult operation and must be done ex ante.

A potential tool, indicating that the right path has been undertaken, is when the gap between performance and targets for the initiative begins to narrow, meaning that competence is increasing within the new initiative group.

Increasing competence is a necessary condition for the creation of new advantage but two other elements are required in order to have the competence entirely structured: the achievement of comprehension and of group deftness.

CHAPTER 2

DYNAMIC CAPABILITIES: FACTS AND IMPLICATIONS

This second chapter is dedicated to the study of competences, especially it is about the analysis of Dynamic Capabilities, their composition made out of a sequence of routines, aiming at producing new knowledge and know-how.

The topic is backed by a theory drawn by product development (Eisenhardt and Brown, 1995), showing that routines can be faced following two different approaches, the experiential and the compression one, highlighting a series of market characteristics that can influence the development process.

The chapter concludes analysing implications and consequences due to new competences' development, in particular investigating exploration and exploitation leading to ambidexterity.

2.1 When competences face the real world: the Dynamic Capabilities

Therefore, the competence development is a series of activities, relationships, info acquisition and info processing that , in a nutshell, it is possible to associate to a real and concrete process, such as product development or strategic decision making.

This gives the opportunity to level up and move from competence environment to dynamic capabilities: it is a zoom on routines, with their own peculiar and specific characteristics.

These routines are guided by learning mechanisms because, basically, when it comes to deal with competence it is about building up knowledge, in particular the transformation of tacit knowledge into real one. To do so, it is clear that the

external environment takes its toll, influencing the above mentioned process: this is more and more true for corporate venturing – generally new businesses - where turbulence and ambiguity take over.

Anyway, drawing mainly from Eisenhardt and Tabrizi (2000), they still focus the attention on the resource-based view of the firm, referring to one of its most critical area: the connection between resources, competitive advantage and dynamic capabilities.

Analysing this linkage, new aspects about dynamic capabilities emerged, giving a kind of greater dignity to the topic and bringing concrete examples from the world of business.

The resource-based view of the firm (RBV) can be considered as a theoretical framework useful for understanding how competitive advantage within organizations is achieved and how that advantage might be last in the long period (Barney, 1991; Nelson, 1991; Penrose, 1959; Peteraf, 1993; Prahalad and Hamel, 1990; Schumpeter, 1934; Teece, Pisano and Shuen, 1997; Wernerfelt, 1984).

The interesting aspect, as also previously underlined, is the internal focus. The perspective is "within" the firm and so is an extension of the traditional and past view, the one considering the industry structure and strategic positioning as turning points of competitive advantage.

Given this, scholars and researchers have theorized that when companies possess resources that are valuable, rare, inimitable and nonsubstitutable (also known as VRIN attributes), conditions for the achievement of sustainable competitive advantage are satisfied, strategies that cannot be easily duplicated by competitors can be designed (Barney, 1991; Conner and Prahalad, 1996; Nelson, 1991; Peteraf, 1993; Wernerfelt, 1984, 1995).

Then, once resources and the relative activities show complementarities, all the elements for the good realization of a sustainable competitive advantage are there (Collis and Montgomery, 1995, 1998; Milgrom, Qian, and Roberts, 1991; Milgrom and Roberts, 1990; Porter, 1996).

At the end of the 90's the RBV topic has been extended to dynamic markets (Teece et al., 1997) and the rationale can be found on the question about how and why some companies are able to develop competitive advantage despite of uncertainty and unpredictability of changing environments.

Changing environments have shifted scenarios and dynamic capabilities; these became tools through which actors (managers, business development , etc.) integrated, built and reconfigured internal and external competencies, so that they could face the impact of rapid changes and gained competitive advantage (Teece et al., 1997).

In particular, considering how many sources of knowledge a company can address to, it is clear with what difficultly the dynamic capabilities' process unfolds (Grant, 1996; Kogut, 1996).

The contribution of Eisenhardt and Tabrizi has been meaningful to fixing a series of lacks that have characterized the dynamic capabilities topic for years: vagueness, tautology, avoidance of mechanisms by which resources actually contribute to competitive advantage, lack of empirical grounding (Mosakowski and McKelvey, 1997; Priem and Butler, 2000; Williamson, 1999).

Differently, given the fact that dynamic capabilities are processes embedded in companies, empirical and organizational perspectives have been enhanced, rather than economic and formal modelling ones (Barney, 1991; Peteraf, 1993).

2.2 Dynamic Capabilities: resources' combination

The heart of dynamic capabilities are resources. Resources are assets , as told in the first part of the chapter, tangible and intangible, necessary to give birth to value- creating strategies (Barney, 1986; Wernerfelt, 1984,1995).

Strategies include also competences, fundamental to the competitive advantage to reach.

Dynamic capabilities are the antecedent organizational and strategic routines, by which managers alter the resource base, acquire new ones, integrate or recombining them in order to generate new value-creating strategies (Grant, 1996; Pisano, 1994).

Dynamic capabilities boost the process of creation, evolution and recombination of other resources into new resources of competitive advantage. By Eisenhardt and Martin, inspired by Teece and colleagues, dynamic capabilities are seen as a typical firm's process where through actions such as integration, recombination and release of resources, organizations aim to matching or creating market change. Dynamic capabilities help companies to define and implement their own strategies following market's trends: growth, evolution, crisis, death.

There could be one problem; routine can remind of something less concrete, up in the air, something difficult to figure out into real activities or specific skills. That is why they have been criticized as being tautological, endlessly recursive and non-operational, especially by Mosakowski and McKelvey (1997), Priem and Butler (2000) and Williamson (1999).

It is clear that dynamic capabilities are identifiable as specific routines; they can deal with integration of resources, reconfiguration of resources, gain and release of new resources.

As for the integration process, it is possible to mention the product development routines: managers combine a variety of skills and functional backgrounds because they want to create revenue-producing products and services (see Clark and Fujimoto, 1991; Dougherty, 1992; Helfat and Raubitschek, 2000). This is a dynamic capability. One more example can be the strategic decision making where business, functional and personal competences are put together to define the strategic moves of the firm.

Resources can be reconfigured in order to find new linfa for the definition of strategies. Especially for knowledge-based ones, within organizations, managers move and transfer resources for replication and brokering activities. Sometimes, resource allocation routines occur in order to distribute scarce resources (i.e. capital or manufacturing assets) from central points within the hierarchy (Burgelman, 1994).

Other dynamic capabilities are linked to the gain and release of resources. Once again, the knowledge creation routines can be taken as example. In specific industries, like pharmaceuticals, the construction of a new thinking is a crucial dynamic capability since it is vital for effective strategy and performance (Helfat, 1997; Henderson and Cockburn, 1994; Rosenkopf and Neckar, 1999). Also alliance and acquisition routines are part of the activities belonging to the gain and release category.

Basically, the authors have identified dynamic capabilities as a particular process and this brought several different implications.

RBV theory has taken into account a body of empirical research – never done before. The process of comparing dynamic capabilities to product development or alliance formation, pushed scholars and researchers to think of them as specific processes and to find general rules.

Then dynamic capabilities, seen as relationships altering the resource base, address the risen tautology when the value of dynamic capabilities is defined in terms of their effects on performance (Priem and Butler, 2000; Williamson, 1999).

Relating to this last point, VRIN resources were thought to drive competitive advantage because they showed a superior performance, attributing that to whatever unique resources the firms appeared to possess; by doing so, the theory became tautological. In contrast, if dynamic capabilities are defined in terms of their functional relationship to resource manipulation, their value is defined independent of firm performance.

2.3 Dynamic Capabilities' features: Commonalities and Market Dynamism

Starting from the idea that dynamic capabilities are processes, drawing from Teece (1997), it has been observed they are unique and idiosyncratic, coming from path-dependence histories of individual firms.

So, further than idiosyncrasy, empirical observations show that dynamic capabilities exhibit common features that are associated with effective processes across firms.

The final goal, characterizing all organizations, is to reach a competitive advantage but, of course, there are several ways to do it: some will be more effective, others will not satisfy the expectations. The same is for dynamic capabilities, to be more or less successful, and also best practices that can guarantee a minimum level of good commitment can be found.

Product development, a well-known and deeply analysed process, to be effective, is supposed to involve the participation of cross-functional teams that

bring together different sources of expertise. These sources are necessary for the realization of superior products because each of them refers to a unique aspect of quality, production, technology and so on.

Another routine fostering an effective result is the one related to brainstorming sessions or team discussions and debates, in order to fix problems. The connection of different brains and ways of thinking lead to innovation, for instance to reflect on the already known topics, and to follow new perspectives.

The presence of common features do not mean dynamic capabilities are the same across firms.

To understand, just think of the knowledge creation process. This is a real crucial dynamic capability within high-technology firms. A common trait across successful knowledge creation processes is explicit linkage between the focal firm and knowledge sources outside the firm. For example, following the pioneering research of Allen and colleagues, these linkages corresponded to a small number of gatekeepers within the firm.

These individuals are the link promoting active communication with scientists, universities, opinion leaders etc. with the outside world. These activities can express also through different forms such as alliances or partnerships but also informal personal relationships. They are necessary for effective knowledge creation but they can take varied configurations.

Commonalities across firms for effective specific dynamic capabilities have several implications.

The first is about the final goal of dynamic capabilities. These processes, like knowledge creation or product development, can reach the same final end stage but the paths can be multiple. Commonalities imply equifinality for dynamic capabilities.

Second, they imply substitutability and fungibility. As for the former, the example of knowledge creation is useful to get that effective dynamic capabilities can differ in form and details as long as the important commonalities are present. As for fungibility, commonalities recommend the efficacy of particular dynamic capabilities across a range of industries.

Third, commonalities imply that dynamic capabilities per se are not likely to be sources of sustained competitive advantage: sustained competitive advantage occurs when capabilities are not only valuable and rare, but also inimitable, immobile and nonsubstitutable. Since they have common features, they can be substituted even if different in many details: dynamic capabilities per se can be a source of competitive, but non sustainable advantage.

The structure of effective dynamic capabilities depends on the degree of existing knowledge.

Moderately dynamic markets are characterized by frequent changes but along predictable and linear paths. Generally, it is possible to find stable industry structures where market boundaries and actors are clear and well known.

In this type of markets, effective dynamic capabilities count on existing knowledge. Within this context, managers have the chance to reflect and analyse situations making use of tacit knowledge and rules of thumb; then they can plan and organize their project in a well -structured way (Burns and Stalker, 1966). It is possible to develop efficient processes, linear and quite stable, where managers can implement directly to the market what they have previously planned and studied (Helfat, 1997).

Pisano in 1994 studied the development of new manufacturing processes in a sample of 23 process development projects in chemical and biological-based pharmaceutical companies. Since the chemical industry is considered as a

moderately dynamic market, made by deep theoretical and practical knowledge, the routines for developing new manufacturing processes were more powerful and effective when they involved a structured and analytic process. It is a "learning before doing" process, where the initial phase is made out of the manufacturing planning, followed by the implementation of the planning itself.

One of the turning key point is the codification of existing tacit knowledge into detailed routines, through which steps are specified, activities are well -defined and distributed among collaborators. Such routines strengthen the memory of firms (Argote, 1999) and increase the predictability of the process (Nelson and Winter, 1982).

The situation is different in high velocity markets (Eisenhardt, 1989). Here changes are not so predictable or linear. Market boundaries are less distinct and business models result unclear. Market players are ambiguous and shifting. Generally the complete structure of this kind of industry is unclear. Uncertainty is the main characteristic of these markets and this implies dynamic capabilities necessarily rely much less on existing knowledge and much more on rapidly creating situation-specific new knowledge.

In high - velocity markets effective dynamic capabilities are simple, uncomplicated, differently form moderately dynamic markets.

The simplicity of routines helps managers to keep focus on main issues without locking them into specific behaviours or into the use of past experience that could result inappropriate for new specific sectors or industries. Simplicity is given by a few rules that specify boundary conditions or indicate priorities, very important in fast-moving markets where attention is in short supply.

Dynamic capabilities are simple in high-velocity markets, but this does not mean they completely lack of structure (Burns and Stalker, 1966; Lawrence and Lorsch, 1967): they are processes and they must have some kind of structure as such.

Simple routines are enough to guarantee structure and help people to focus attention, be confident and do the right thing, even if ambiguity and uncertainty of information are present.

This gives an idea of how much formal routines do not rely very much in already existing tacit knowledge in high-velocity markets, but they contribute to create new, situation-specific knowledge. This occurs by getting involved in experiential actions leading to a quick learning and then compensated the limited existing knowledge by rapidly creating new knowledge about the current situation.

Frequently, dynamic capabilities use prototyping and early testing to gain new knowledge quickly. By doing so, rapid learning is created due to small losses and immediate feedbacks (Argote, 1999; Sitkin, 1992).

In these markets dynamic capabilities follow iterative procedures: new information implies adaptation to fast changing conditions, subsequently a continuous development of alternatives and new choices arises, very different from the less dynamic markets.

Along this process, actors, which have to deal with the external reality, face real-time information, cross-functional relationships and intensive communication.

In these markets dynamic capabilities are characterized by parallel consideration and often partial implementation of multiple options: the possibility to test a solution gives managers a sense of confidence to act quickly. Alternatives are smart options in rapidly changing environments.

By Pisano (1994), it has been observed that this is similar to a "learning by doing" process, in contrast to the moderately dynamic market characterized by the

"learning before doing". By studying new manufacturing procedures in chemical and biological-based pharmaceutical firms, he found it was effective to engage in greater experimentation and prototyping with early testing of processes.

Studies of strategic decision processes (Eisenhardt, 1989; Judge and Miller, 1991; Wally and Baum, 1994) found, as well , experiential actions -like creating multiple alternatives- were linked to more effective strategic decion making processes in high-velocity markets. Again, Eisenhardt and Tabrizi (1995) indicated that more and earlier testing, next to more prototypes, were signals of effective product development processes in the fast-paced work station and personal computing markets.

Experiential processes are in contrast with the more detailed and linear ones, typical of less dynamic markets.

All these observations underline that effective dynamic capabilities in high-velocity markets are experiential and they make use of prototyping, real-time information, experimentation and multiple alternatives.

Anyway, generally, while dynamic capabilities in high-velocity markets consist of simple rules and real time knowledge creation, they may have detailed routines to deal with aspects of the process where prior knowledge and codification are particularly useful. It is about more detailed scripting, especially at the end of a process, where scripting helps to ensure fast, coordinated execution of complex details.

To explain the concept, for instance, while prototyping could involve a variety of alternatives and options, once prototyping is selected implementation of the chosen approach occurred in a highly scripted fashion.

To sum up, market dynamism produces several effects on dynamic capabilities.

First, sustainability of capabilities is strictly related to the degree of dynamism. In moderately dynamic markets, dynamic capabilities have the form of the traditional conception of routines: complicated, predictable, analytic processes that rely extensively on existing knowledge, linear execution and slow evolution over time (Cyert and March, 1963; Nelson and Winter, 1982; Zollo and Winter, 1999). Actors can gain experience through these routines and, thanks to the experience, they can groove the process more deeply such that they become easily sustained and even inertial. As consequence, the capabilities become robust.

Instead, high-velocity make dynamic capabilities different.

They are simple, not complicated, experiential and iterative processes. In this context they count on the creation of situation-specific knowledge, very easy, made by simple boundary and priority-setting rules. Since they are not complicated, there could be the risk that this kind of improvisational processes are dissipative, requiring a strenuous effort in terms of energy and concentration in order to stay on track (Prigogine and Stengers, 1984).

It is quite difficult to sustain dynamic capabilities in high-velocity markets, because this lack of robust structure is really challenging.

In moderately dynamic market, competitive advantage is eroded by external firm factors; in high-velocity markets there is an additional aspect, the potential collapse coming from the inside instability of the organizational structure of the process.

Another implication due to the dynamism is the causal ambiguity issue. In moderately dynamic markets, dynamic capabilities are causally ambiguous because they are complicated and difficult to observe (Simonin, 1999). In contrast, in high-velocity markets this ambiguity feature is due to the simplicity:

the experiential attitude tends to obscure the commonalities that drive the effectiveness of the capability.

2.4 The evolution of Dynamic Capabilities

The literature defines dynamic capabilities as complicated routines that emerge from path dependent processes (Nelson and Winter, 1982; Teece et al., 1997; Zollo and Winter, 1999).

Path dependence, even if appropriately it would be the encoding of inferences from unique stories into distinctive routines, is better described as learning mechanisms, typically from the psychological literature (Argote, 1999). These learning mechanisms guide the evolution of dynamic capabilities.

One learning mechanism of dynamic capabilities development is the repeated practice. Practice is a fundamental experience helping people to understand processes more fully and to develop more effective routines.

Many studies, supported by empirical tests, showed the efficacy of practice. Integration, relatedness and acquisition experience led to increased performance. In particular, repeated practice, with homogenous acquisitions, boosts the accumulation of tacit and explicit knowledge about how to execute acquisition and achieve superior acquisition performance.

Another way to ease the realization and acceleration of routines is the codification of experiences into technology and formal procedures (Argote, 1999; Zander and Kogut, 1995).

The evolution of dynamic capabilities is favoured by mistakes as well. Small "moment of weakness" or little collapses can really contribute to effective learning (Sitkin, 1992). These failures give a sort of motivation to learn and to do

better, focusing on the entire processing, without creating defensiveness that impedes learning.

The sense of crisis creates greater engagement in the situation, producing an increased learning process (Kim, 1998).

The evolution route is characterized also by the pacing of experience. If experience comes too fast, there could be the risk of lose control and so no way to transform experience into meaningful learning. Similarly, an infrequent experience can make people forgetting the previously acquired knowledge and consequently there could be a little knowledge accumulation - or not at all (Argote, 1999).

So far, aspects related to learning mechanisms guiding the evolution of dynamic capabilities have been considered, others aspects depend on market dynamism.

In moderately dynamic markets, experience in closely related, but different situations, is really effective in sharpening dynamic capabilities. Frequent and small changes help managers to take more consciousness about capabilities, to elaborate them and extend to the already possessed knowledge.

Managers are supposed to create superior skill when they reinforce existing knowledge and can extend their experience into new types of acqustions.

This translates into efficient and robust routines, keeping pace with changing markets and spotting opportunities for growth.

In high-velocity markets another crucial operation is the selection of experiences, more than the number and variation of them.

Selection is critical because it is not easy to figure out which experience should be generalized from the extensive situation-specific knowledge that occurs. There must be a precise selection between the experiences useful to be incorporated into the ongoing routines for the development of capabilities and

the useless ones. The risk of a quick generalization exists, as well as the risk to give up capabilities too often on the basis of idiosyncratic events (Gersick, 1994; Sastry, 1999).

The last aspect refers to the order of implementation of dynamic capabilities: it is consequential. Dynamic capabilities are often combinations of simpler capabilities and related routines, some of which may be foundational to others and so must be learned first. By Brown and Eisenhardt (1997) they are named sequenced steps.

2.5 Approaching the novelty: compression and experiential model

It has been demonstrated that dynamic capabilities can be considered as a complementary theory of the RBV, showing that competitive sustainable advantage can be reached by a strategic use of firms' resources.

So, the same construction is useful to analyse how firms organize when they face new businesses and when new info are collected in order to respond to market and customers' requests.

In addition to the previous evidence, there is another study that can really help to examine the series of operations companies put into action when they are in new environments.

The reference paper is by Eisenhardt and Tabrizi; they used data from 72 product development projects from around the world to make a broad strategic argument about product development processes.

The main research question is *how do firms develop products quickly*. They discuss the fact that existing literature has the tendency to answer by proposing planning and construction of a strict agenda, rational state of mind, with

emphasis on the understanding of process, squeezing and compressing it in order to go faster.

They divide into pieces the product development process, a set of predictable steps that can be known, at least to some degree, in advance.

However, the authors reveal that a more experiential model, made up of attempts, involving different actors, more testing and prototyping activities, will be more appropriate in industries like the hi-tech industry, especially dealing with product adaptation, very critical and important.

Since in high-velocity environments, adaptation and flexibility are significant as well as ambiguity and uncertainty, the same reasoning can be applied also to new business environments, marked by the same peculiarities.

Moreover, since there is a lack of theoretical interests in approaching the competence development within existing organizations, Eisenhardt and Tabrizi's study – drawing from project management strategies and adjusting to product development processes- resulted really interesting.

In the paper adaption is the key element through which product innovation is analysed. During the 90's the debate about adaptation shifted to the description and consideration about the modality and timing of this phenomenon. Punctuated equilibrium, focuses on large, infrequent, structural changes to achieve adaptation, has emerged as the dominant model of such processes (Miller and Chen, 1994; Romanelli and Tushman, 1994). However, others (Miller and Chen, 1994; Brown and Eisenhardt, 1995) observed that adaptation can also derived from small, frequent shifts.

The theme of product innovation is really fruitful for adaptation because the creation of new product is a central path by which companies evolve and adapt

their organizations in changing environments (Womack, Jones, and Roos, 1990; Dougherty, 1992; Brown and Eisenhardt, 1995).

In addition, adaptation has become a central strategic competence (Eisenhardt, 1989; Stalk and Hout, 1990): fast pace and the speed of response to market requirements has become essential to become successful on the market.

The core of the paper is the investigation of how companies develop new products quickly. Previous research has given some insights.

One stream is about a series of activities aimed at shortening the time of steps in the development process. For instance, Cordero (1991) drew on his industry experience to emphasize the use of computer-aided design as well as planning and targeted rewards to accelerate product development.

A second stream put light into impressionistic data gathered from managers engaged in product development (Gupta and Wilemon, 1990; Mabert, Muth and Schmenner, 1992; McDonough, 1993). Senior management support, multifunctional involvement and detailed product requirements planning, are examples of factors facilitating and accelerating new product development.

A third one is characterized by in-depth case studies or small studies belonging to global industries, paying great attention to the virtues of Japanese management. Imai, Nonaka and Takeuchi (1985) studied five innovative and successful Japanese products, each representing a different technology-based industry. As well as in the previous cases, a series of milestones have been recognized as significant of a quick new product development: supplier network involvement, multifunctional teams and overlapping product development stages.

Taken together, these research results considered planning, the use of CAD system, supplier involvement, powerful project leaders and multifunctional team as macro elements encouraging the speed of product development.

As for the effectiveness of data, some rely on impressionistic data from the authors' career experiences or managers' subjective ideas of product development processes. Although data from the third stream are more systematic, the theory is modest, samples are not very rich (in terms of size), no multivariate analysis has been used to test the hypothesis. Then, since they deal with the Japanese industry, the generalizability is even more complicated.

In contrast to this perspective on fast product development, some authors tried to look at the product development process with a different state of mind.

The heart of the matter is that frequently people have to make fast strategic decisions in a short time and when situations are uncertain, counting on real-time info or past experiences. Unlike the product development research, the works by Bastien and Hostager (1988), Eisenhardt (1989) and Weick (1993) suggest achieving fast pace . To sum up, rapid adaptive process has been explored, focusing on product innovation as a crucial adaptive process.

The two authors created two theoretical models, one building on existing product development research and the other based on findings that put light into real-time experiences, flexibility and improvisation.

The two different models have been analysed with data from 72 product development projects from 36 Asian, U.S., and European firms operating in the fast-paced, global computer industry. The main characteristics of this global industry segment: no Japanese domination, evolving scientific base, intense and international competition, short product life cycles.

Eisenhardt and Tabrizi's thesis is that both compression and experiential strategies accelerate product development. They do in a different way because the initial assumption is different as well: the compression one is typical of

certain, predictable and well-understood situations, the experiential on the other hand is unpredictable, intractable or uncertain.

When product development is a predictable path of well-known markets and technologies, the compression strategy is relevant. If the road is more uncertain then an experiential strategy is more pertinent.

2.5.1 The comparison of models

The underlying belief of the compression strategy is that product development is a predictable or certain process that can be described as series of well-known steps. This process can be compressed by shortening the time of each step, overlapping the execution of successive steps and rewarding developers for achieving all the scheduled targets. The result is an accelerated product development. A list of elements, easing this process and positively associated with shorter time, will follow.

Planning is really crucial under the compression point of view. Planning means developers can better understand and rationalize the development process (Gupta and Wilemon, 1990). Then it is possible to eliminate unnecessary steps, sequence activities in a better order avoiding not needed tasks, saving so many resources.

Planning is a tool through which is possible to delegate steps properly to the best-qualified people that will execute tasks quickly and correctly. So there is evidence of rationalize, reduction of mistakes and shortening of delays (Rosenau, 1988; Gupta and Wilemon, 1990; Corder, 1991; Iansiti, 1992).

Further, planning is a good chance for squeezing development time because it can help to smooth interactions among developers and gain resources both of which can accelerate pace.

Planning can also help to coordinate project team interaction, limiting misunderstanding, saving once again time, as team member can refer to the plan for a common language and understanding.

If suppliers are involved in the many steps of the process, they can be a further support for catching future problems and then fixing them. They are important also in the product design phase, integrating ideas and adding perspectives.

Another way to compress the product development process is by shortening the time of individual steps (Rosenau, 1988; Stalk and Hout, 1990). Cordero observed that CAD speeds up the design process by allowing developers to reach a final design more quickly through the automation of predictable computational procedures. Generally, the automatization of procedures is a great approach because team members can make use of past designs, relying on the "machine", smoothing interaction among project team members.

In addition to shortening individual steps there can also be a reduction of waiting time between steps or even overlapping those steps (Stalk and Hout, 1990). Predictable steps can be overlapped because they are well-known in advance, more tasks can be developed in parallel and the waiting time between steps can be eliminated by overlapping these steps. Nonaka and Takeuchi (1985) gave evidence of this in the field of problem solving by the Fuji-Xerox case study: problem solving could be overlapped by overlaying engineering and production phases in the development of a successful copier developed by Fuji-Xerox.

Closely linked to successful project overlap, different stages rely on different mix of skills and competences of multifunctional expertise. Multifunctional teams make it possible to integrate development steps with technical, marketing and manufacturing functions. Multifunctional teams speed up the process because they have many eyes supported by different backgrounds in solving problems,

especially having an incredible advantage in the early stages of the process. Involving more functions permits to reduce waiting time between steps, in particular between design and prototype manufacturing (Imai, Nonaka and Takeuchi, 1985; Gold, 1987)

Drawing from agency theory, achievement and learning theories of motivation, rewards have effect on the speed of product development. Especially if steps are predictable and belong to well-known situations. Rewards help by focusing the attention on the project and creating synergies and good atmosphere when deadlines are accomplished. They help developers to focus on time-based performance and on the particular project at hand. They create team alignment and motivation to keep up with other agendas.

Opposite to the compression strategy, the experiential one sees product development as a highly uncertain path among changing and shifting markets and technologies. The turning point for a fast product development is to build intuition and flexible options rapidly, so that the team can learn quickly and move within uncertain environments. Another strong assumption is about the creation of a structure and motivation for people to stay tuned, because the uncertainty can create paralyzing anxiety about the future (George 1980; Weick, 1993).

As well as in the case of the compression strategy, there is a series of aspects positively associated with shorter development time

According to the experiential perspective, frequent iteration is an activity that can speed up product development.

Multiple design iterations not only create alternatives routes to hit the target, but they also become themselves designs that are iteration of previous designs

and so they favour the set up "historical memory" in uncertain and ambiguous environments, accelerating the process. There are other reasons.

Frequent iterations increase the understanding about the product; learning by doing through multiple iterations is a quicker way to learn than less participative and more cognitive strategies. Once again, since in unpredictable settings is really difficult to judge the worth of an iteration, multiple ones make such judgements easier, because comparing more options makes strength and weakness much more evident (Payne, Bettman and Johnson, 1988; Eisenhardt, 1989). Then iterations shorten the process by improving the confidence of development teams: relying on multiple attempts pushes the team not to procrastinate and be less worried about the right choice (Eisenhardt, 1989)

Closely related to frequent iterations is testing throughout the design process. Testing is a crucial phase for several reasons. First of all, it speeds product development because developers are more likely to discover errors earlier in the process, when they are easier to fix (Gupta and Wilemon, 1990).

It gives frequent evaluations of the current design, especially in uncertain situations in which it is easier to discover rather than anticipate errors.

It is a sort of trial and error approach that helps to understand and reconceptualise the product. This is really useful also in shifting the mind set of developers that can get used to react quickly, updating and improving their thinking about the project.

Testing has effects also under an emotional point of view. It is a way to speed up the product development process because it enhances the team's confidence..

Testing is a sources of failures so that developers can learn and find out so many new aspects or hidden ones. Since the testing is on-going, the size of any failure is likely to be small because probably designers incorporated the learning from

previous failures. This increases the attention of developers and creates rapid learning.

Linked to the fact that testing shifts on a concrete plan the ideas and designs of developers, testing increases the speed because if provides ground discussions in concrete facts, avoiding abstraction and endless debates.

Even frequent milestones – for instance formal project review points – accelerate product development, suggesting frequent reassessment of the current state of progress.

Frequent milestones force people to look often at what they are doing and this produces acceleration. Especially in uncertain settings, frequent checks are useful to better understand evolving markets and technologies (Gersick, 1994).

Milestones offer a sense of order and routine that represent a counterpart to the more chaotic activities such as iteration and testing (Bastien and Hostager, 1988; Weick, 1993).

They create also the conditions for motivation and enthusiasm. The frequency creates a sense of urgency that, again, keeps people far away from procrastination. Accomplishing milestones provides a sense of control   that translates into motivation (McClelland, 1961; Langer, 1975). They promote coordination and communication among different parts of the development team. It is easy to realize that when widely spaced milestones occur, problems are spotted later – with consequent difficulty to readjust or reshape situations, lack of communication can create several misunderstandings among team members. The adaptive process could fail because of an absent structure and because of the presence of chaos (Waldrop, 1992).

The presence of a charismatic leader accelerates product development by keeping the process focused. Highly iterative and experiential process tend to lose sight on the big picture.

Powerful leaders hold the process together favouring acceleration because they maintain discipline, setting the tone, keeping the chaos of experiential product development under control (Brown and Eisenhradt, 1995).

Leaders are supposed to have an efficient vision of the process, capable of securing resources that the team needs to execute the design tasks. Clark and Fujimoto (1991) provided evidence for the importance of a powerful leader to the pace of a product development project: "heavyweight" is the leader who report to high levels within hierarchy, has high status within the organization, is responsible for many aspects of the project.

Characteristics	Compression	Experiential
Key assumption	Certainty	Uncertainty
Image of product innovation	Predictable series of well-defined steps	Uncertain path through foggy & shifting markets and technologies
Strategy of speed	Rationalize & then squeeze the process	Quickly build understanding & options while maintaining focus & motivation
Tactics for speed	Planning Supplier involvement Cut step time through CAD Overlap with multifunctional teams	Multiple iterations Extensive testing Frequent milestones Powerful leader

	Reward for meeting schedule	

Figure 2. Comparison of Compression and Experiential Models (Eisenhardt and Tabrizi, 1995)

The power and influence of this paper is given by the fact that it has been the first examining theoretical models of fast-paced, organizational processes. From literature on the classic organization, two theoretical processes have been developed whose distinguishing factor is certainty vs uncertainty. Several results came out.

The paper supports the link between fast product development and multifunctional teams and the experiential strategy of iterations, testing, milestones and powerful leaders

- iterations and testing would rapidly build understanding and create multiple options

- frequent milestones and powerful leaders would motivate and focus product development teams

- multifunctional teams would create a wider range of ideas

The results suggest that, in this setting, product development is recognized as a process of navigating through unclear and shifting markets and technologies, using experiential and improvisational tactics. Fast product development shows up as more uncertain than predictable, more experiential than planned, more iterative than linear.

These findings relate to the existing product development literature in several ways.

The results for multiple iterations, extensive testing and frequent milestones suggest a more real-time, hands-on approach to fast product development, in particular for uncertain products, rather than the compression approach that is predominant in much of the previous documents.

As for the importance of powerful project team leaders and multifunctional teams, these two aspects strengthen the thinking and empirical results of many authors, such as Quinn (1985), Gold (1987), Gupta and Wilemon (1990) and Clark and Fujimoto (1991) through more systematic research designs and field data from an industry that is less Japanese-dominated and less characterized by mechanical products.

Relatively to CAD, supplier involvement and overlap, results are mixed. As showed before, supplier involvement would simplify the process, CAD would shorten timing of process steps and overlapping would shorten the process. For the full sample these variable are negatively or non -significantly associated with fast product development

For CAD one reason can be linked to the inappropriate implementation

- It takes a very long time to learn and use efficiently these kinds of programme
- Some designers become too involved with CAD and lose attention on product development
- CAD systems are often used in order to automate well-known calculations and reuse old designs and this means that this application could speed up product development but it is poorly suited to create new iterations and comprehensive testing. It is really helpful for predictable projects.

As for supplier involvement the mixed result could derive from unpredictability. Along uncertain projects the early involvement of suppliers is difficult to achieve, since there is less certainty about which suppliers will be chosen.

The mixed results for CAD, overlap and supplier involvement also relate to the previous literature on product development. These variables have been explored in association with fast product development but the results suggest that they work when it comes to deal with predictable and mature industries, such as automobile.

Oppositely, they are less significant or even negative predictors at speeding up the product development process for products such as personal computers, typical of fast and rapidly changing environments.

This gives an idea of fast product development in which the compression strategy is relevant for predictable projects, while the experiential strategy is more applicable to unpredictable projects. A combination of strategies will be relevant in projects with a mix of predictable and unpredictable.

As for planning and rewards for schedule, they are associated with slow product development, in contrast with past researches.

As for planning, one simple reason could be that it wastes time, especially in high-velocity industries: fast strategic decision makers do not take into account planning, because it makes no sense in a changing environment. It can also slow down the pace of process when info is incomplete, obsolete or ambiguous.

2.6 Exploration and Exploitation: the potential of ambidexterity

A fundamental question, at the heart of the new business development, is how do companies organize in the face of change?

Two major perspectives are in the research of organizational change: adaptation versus those that argue firms are inert and change occurs through an evolutionary process of variation, selection and retention.

The former perspective has seen two themes coming together.

The first, based on research in strategy, suggests that dynamic capabilities explain long-term competitive advantage. The second, based on organizational design, states that ambidexterity, the ability of a company to simultaneously explore and exploit, enables a firm to adapt over time.

Adaptation requires firms to evolve, to move from a situation to another, to change technology, to enter new market segments … in a nutshell, to change their mind-set and to transmit new knowledge within the organization.

It is an increment of their cognitive development process; companies need a particular capacity, defined by Cohen and Levinthal (1990) as absorptive capacity. It allows organizations to start innovation processes that include two contrasting but complementary activities: exploration and exploitation (March, 1991).

These terms represent two diametrically opposite actions. However, these two actions do not exclude each other but they join together in the flow of transmission of knowledge and they contribute to the creation of the ambidextrous model. Ambidexterity will be explained and by doing so an interview to Professor Charles O'Reilly from Stanford Business School will help to better understand the sense of the topic. It has drawn from Corriere della Sera

«I manager davvero visionari non devono arrendersi al conflitto fra prodotti di alta o bassa qualità, fra strategia prudente o rischiosa, fra profitti di breve o di lungo periodo. Devono trovare un modo per conciliare yin e yang in una stessa organizzazione, anche se sembrano andare in direzioni opposte secondo una visione standard». (…) «In un' epoca di cambiamenti rapidi come questa, bisogna essere capaci di perseguire nello stesso tempo il core business dell'azienda, ma

anche aprire nuovi fronti di espansione. In sostanza, si tratta di togliere risorse ai settori dove si vola già alto per identificare e sviluppare quelli in cui si volerà alto tra dieci anni, anche se può essere difficile da giustificare di fronte agli azionisti» (…) «Due casi concreti nello stesso settore, uno negativo e uno positivo: Polaroid e Kodak. Polaroid avrebbe avuto tutte le risorse necessarie per riconvertirsi in un' azienda di software se avesse perseguito il nuovo business in tempo. Ma è finita in bancarotta. Kodak, invece, ha saputo aprire nuovi fronti prima di perdere la guerra sul vecchio. E prospera» (…) «Non si può pensare che un progetto molto innovativo generi gli stessi profitti e le stesse dinamiche del core business. Essere ambidestri significa accettare di avere all'interno segmenti di business che vengono misurati con criteri diversi, non imporre la stessa strategia manageriale a tutto il gruppo». In pratica? «Ibm si è reinventata molte volte nei suoi cent' anni di vita, la sua principale fonte di reddito erano i mainframe e oggi sono i servizi, ma negli anni Novanta, quando ha cominciato ad emergere l'informatica distribuita, ha rischiato di fallire. Ibm ha risalito la china puntando su due direttrici: i servizi a valore aggiunto e i sistemi cosiddetti midrange, che sono letteralmente esplosi prima nelle pmi e poi anche nelle grandi aziende, come snodo fra i grandi mainframe e le unità produttive decentrate. Ma prima che esplodessero sono passati anni, in cui i profitti tardavano ad arrivare. È quello il momento più difficile». (…) «Gli azionisti premono per vedere i risultati e il management deve decidere se continuare gli sforzi o abbandonare un progetto che potrebbe diventare la fonte centrale di reddito del futuro, ma ancora non lo è. Decidere se tenere duro o cambiare strada è molto difficile. Per questo è importante capire che i nuovi business non vanno misurati con gli stessi parametri dei vecchi e bisogna dar loro tempo per svilupparsi»

What O'Reilly said it allows to realize that to be ambidextrous means exploiting existing opportunities while looking for new ones.

In his first theory elaboration (Tushman, O'Reilly, 1996), ambidexterity expected exploration and exploitation activities to be done by separate but parallel structures. The organization has units that carry out the activities separately.

Once the processes have been concluded, the top management is responsible for their integration.

In the course of time, however, other hypothesis concerning a contextual ambidexterity more than structural came out (Birkinshaw, Gibson, 2004).

The idea is that individuals who form the organization are those who have to choose how to divide their time and their energies between exploration and exploitation.

To do so, it is necessary to build an appropriate framework, again with the help of senior management. This last one holds a relevant position in both approaches. The top management team is, somehow, said to be the link between contextual and structural ambidexterity.

The importance of its role is such that a third approach based on leadership emerged.

Indeed, some authors believe that the top management is the only one capable of making possible the balance between exploitation and exploration in organizations, enabling them to be ambidextrous.

By definition, simultaneously ambidexterity is very onerous to realize and, along time, a sequential ambidextrous approach showed up (Venkatraman 2007).

The latter involves an alternation between exploration and exploitation phases which allows organizations to focus their efforts on one of the activities at a time. The sequential ambidexterity has been the subject of some investigations mainly concerning the system of strategic alliances (Rothaermel, Deeds, 2004; Lavie, Rosenkopf, 2006), which confirmed the importance of partnership and collaborations in order to get a good balance.

Particularly, recent studies have shown that network is the turning point for ambidexterity. Indeed, companies belonging to a network, through info exchange, can specialize in exploration or exploitation activities, getting new knowledge and skills that are far from the core. The network phenomenon gives

the possibility to apply the ambidextrous approach also to SMEs that would otherwise be excluded.

Indeed, SMEs do not possess the necessary resources to manage complex contexts or structurally separate units.

Therefore, as stated by Chang and Hughes (2012), thanks to a wide network of relationships and a strong leadership, small companies can be ambidextrous as well.

2.7 Ambidexterity: the necessary "strabismus" to face innovation

After March influential paper on exploration and exploitation (1991), the interest on how, and when and if organizations adapt to change, has grown.

A pessimistic group, mainly driven by Christensen (1997), considered change – often associated to disruptive technology – as a threat for competition and a less profitable and sophisticated alternative to satisfy customers' requirements. According to him, companies are not able to pursue exploitation and exploration and a separate organization in charge of exploration is necessary, not to obstruct the mainstream businesses.

In addition, others (Ghemawat & Costa, 1993; Porter, 1980) saw the contemporary research for exploitation and exploration as a status of "stuck in the middle", producing mediocre results.

This point of view, surely provoking, is in contrast with the idea that, in order to survive and prosper, organizations have to maintain the short-term profit and be able to adapt to changes and remain successful in the long term (O'Reilly & Tushman, 2007). In strategy research the crucial question is how firms achieve and sustain competitive advantage (Teece et al., 1997). Here dynamic capabilities

play their role and suggest the reconfiguration of assets to capture new opportunities.

Dynamic capabilities, contrary to studies of organizational ecology analysing the content of the change process, focus on those mechanisms that easier companies' ability to exploit and explore over time.

In particular they pay attention to how a firm and its leaders are structured to sense and seize opportunities and their aptitude to reconfigure assets to address these. There is much evidence supporting the concept that conducting exploration and exploitation is typical of many enterprises, trying to answer the question on how to be an efficient ambidexterity organization.

In - depth case studies, simulations, formal modelling, lab studies and field studies show linkages between dynamic capabilities and organizational adaptation (e.g., Gibson & Birkenshaw, 2004; Gupta et al., 2006; Lubatkin, et al., 2006; Markides & Charitou, 2004). Others, even if they do not address ambidexterity directly, focus on how organization can pursue innovation by exploration and exploitation (e.g., Holmqvist, 2004; Lee, Lee & Lee, 2003; Nemancich & Keller, 2006; Sidhu, et al., 2004).

2.6.1 Ambidexterity

The first use of the term ambidexterity is attributable to Duncan in 1976 which argued that firms, in order to gain long-term profit, have to consider dual structures: one is initiate innovation process, the other is the execution. His view underlines a sequential ambidexterity where organizations switch structures as innovations evolve. Structures are adjusted depending on the phase of the innovation process: organic structures are employed to explore, mechanistic structures to exploit. This temporal dimension is still evident also in current

research on organizational adaptation (e.g. Eisenhardt & Brown, 1997; Lovas & Ghoshal, 2000; Venkatraman et al., 2006).

The temporal sequencing of exploration and exploitation is realistic in many circumstances but it is based on the assumption that the rate of change in markets and technologies proceeds at a pace allowing companies to define organizational alignments sequentially (O'Reilly &Tushman, 2007).

Tushman and O'Reilly (1997), since the change could be rapid, ambiguous and complex and make really difficult the consequent new products or services development, argued that ambidexterity may require that exploration and exploitation be pursued simultaneously with separate subunits and business models.

These different structures, characterized by different competences, systems, incentives, processes and cultures, are internally aligned. They are held together by a common strategic intent, driven by a senior team, that has to orchestrate divided units linked by a shared set of values and macro targets.

The challenges faced by senior team are different when ambidexterity is adopted sequentially or simultaneously.

In the former, the challenge is transforming one internally consistent strategy and organizational alignment (e.g. a focus on efficiency or exploitation) to another. It is difficult. The simultaneously one is more complex, because it is about the management of two contradictory alignments.

Exploration and exploitation occurring contemporary requires that senior management articulate a vision and strategic intent that justifies the ambidextrous form (e.g. Rotemberg & Saloner, 2000).

The differences between the two separate organizations can also incentive conflicts and disagreement. For this reason, it is important the presence of a common set of values to provide a common identity.

There must be a clear consensus, as well within the senior team, about the strategy and the importance of ambidexterity. A clear vision has been demonstrated as an important determinant of success (Volberda & Commandeur, 2004).

In addition, the organization should focus on the construction of the integration necessary to leverage both exploration and exploitation to capture all the benefits (Westerman, Iansiti & McFarlan, 2006; Govindarajan &Trimble, 2006).

It is easy to comprehend that the challenges of managing mature business with its focus on productivity, incremental improvement and short-term targets are quite different from managing entrepreneurial ventures where to survive, organizations have to move quickly, learn from failure and embrace a long-term vision.

The management of ambidextrous organizations possesses, in addition, all the challenges for senior managers to transfer clearly their vision and values and face the tensions due to the pursuit of different business models. It is interesting the attention Smith and Tushman (2005) payed to the stresses that the paradoxical frames of exploration and exploitation create, and the consequent cognitive complexity required by senior teams to manage these contradictions.

Given the complex nature of ambidexterity, it is hard to comprehend why managers should pursue this ambition.

Two tools can help us to understand this.

The first one is by Tushman and O'Reilly (2005) and it is about the innovation streams, showing how markets and technology evolve over time. In the first axis

we have customers and markets: firms can offer products or services to existing customer segments or to new ones. The second axis describes the nature of innovation.

Considering these two dimensions, innovation path can help illustrate why companies often overstress exploitation more than exploration and why organizations fail to capture the benefits of their innovation when engaging in exploration (Teece, 1998)

Innovation shows up in three different ways. The following figure illustrates the innovation streams.
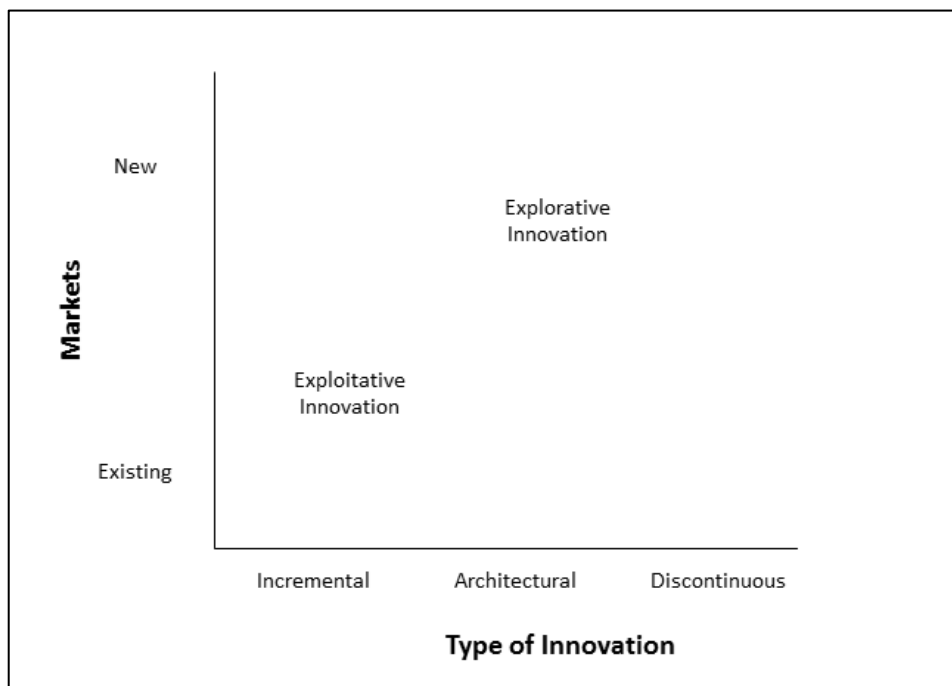

Figure 3. Innovation streams, adaptation from Tushman &Smith (2005)

There could be an incremental innovation; it is about a better, faster o cheaper way to offer existing products or services (Nelson & Winter, 1982). Even though

it could be not so easy or expensive, the relative improvements rely on an existing set of competences and follow a well know trajectory.

Innovation may occur also through major or discontinuous changes translating into competence-destroying advance in technology: the improvements require competences or skills different from what the organization possesses.

The architectural innovations call into question the architectural knowledge. They constitute a less disruptive phenomenon but not for this less invasive, whose implications on the system of business skills in most cases are, however, ignored or underestimated by companies. This happens because the architectural knowledge tends to be rooted in the structure and procedures of the companies, those companies that have difficulty recognizing their obsolescence. Basically the required improvements for innovation ask for competences and skills different from what the companies own.

Innovation can also occur through a total new technological paradigm and so it shows the need to generate new expertise (R&D, Marketing, Production) and new organizational approaches. The impact is so strong, but for this reason, it is expected that the need for change is more evident.

In figure 3 exploitation takes place when firms count on existing competences and capabilities to sell to existing customers.

Generally, when firms become stable and quite successful, they do know their customers and what to do in order to fulfil their desires. Strategy, competences, formal structures and culture shape to reflect this.

However, to keep up with competition and to face decreasing margins in well-known and mature markets, companies realize the need to move to adjacent markets. They can choose to address new customer segments or propose innovations with the idea to gain higher margins, for instance.

This strategy evolution pushes companies to deploy a different set of competences and different organizational alignments; established organizations cannot be prepared to make a shift like this. They do not see the need to move from the origin or they move with conspicuous delay or incompetently (e.g., Tripsas & Gavetti, 2000; Christensen, 1997; Sull, Tedlow & Rosenbloom, 1997; Smith & Tushman, 2005; Tushman et al., 2007).

This incapacity is identified by Tushman and O'Reilly as firm's inability to host exploitation and exploration; most of the time these companies have the new technology to face challenges of innovation but have no structures to capture value from it (Chesbrough & Rosenbloom, 2002; Sull, 1999b; Teece, 1998).

Again, it is easy to comprehend how though is hosting simultaneously exploration and exploitation for companies. Anyway, there conditions under which ambidexterity be important.

The approach is showed in figure 3. Depending on the situation, companies can develop something new or have opportunities to move beyond their core, into new fields of action.

Burgelman (1984) in his study of corporate entrepreneurship classified opportunities

- strategically important
- opportunities relying or not relying on existing assets (e.g. sales channels, manufacturing, common technology platform)

If a product has low strategic importance but offers operational leverage (for example the use of channel distribution) it can be internalized or contracted out.

When a business is strategically important but there is no way to leverage on existing firm assets, the direction is to operate the new business as an

independent business unit. This might be the substitution of a product with a new application.

If a new opportunity looks strategically important and can benefit from already present firm's assets and capabilities , conditions for ambidexterity occur.

There is empirical evidence supporting this perspective.

He and Wong (2004) and Venkatraman e al. (2006) found that ambidexterity was associated with higher sales growth.

Other studies underlined that companies have chances to live longer if they are able to combine exploration and exploitation (Cottrell & Nault, 2004), with better financial results (Govindarajan & Trimble, 2005; Markides & Charitou, 2004) and improving their learning capacity – due to innovation aptitude (Adler, et al., 1999; Holmqvist, 2004; Katila & Ahuja, 2002; McGrath, 2001; Rothaermel & Deeds, 2004).

Even though the intricate nature of ambidexterity, if executed in the appropriate strategic contexts, it can produce a sustained competitive advantage.

Several studies focused also on ambidexterity's antecedents. It has been demonstrated it is more likely to occur under conditions of environmental dynamisms: unstable markets, changing and competitive are factors fostering ambidexterity (Jansen, Van den Bosch and Volberda, 2005).

Other studies put light into the fact that the more dynamic the firm's environment, the higher the likelihood of ambidexterity (e.g., Lee et al., 2003; Masini, Zollo & van Wassenhove, 2004; McGrath, 2001; Raisch, 2006; Siggelkhow & Levinthal, 2003; Siggelkhow & Rivkin, 2005).

Among other determinants we can mention the diversity of experience in the senior team and performance shortfall and pressure on senior management (Beckman, 2006; Holmqvist, 2004; Tushman et al., 2007).

These evidences reflect the same conditions under which dynamic capabilities are most valuable (Eisenhardt & Martin, 2000; Teec, 2006) and reinforce the importance of ambidexterity as a dynamic capability.

CHAPTER 3

CORPORATE ENTREPRENEURSHIP AND CORPORATE VENTURING IN EXISTING ORGANIZATIONS: "THE START UP STATE OF MIND"

In chapter 3 the idea of "newness" it is addressed considering the origin, the reason why pushing organizations to face new business adventures.

It is the Corporate Entrepreneurship, indeed, that can be recognized as a source of this attitude, that spirit of proactivity and initiative typical of entrepreneurs that can be applied on a company level.

Within companies, the search for new businesses can assume several different forms, one of them is Corporate Venturing, the one that Loccioni Group decided to take up.

3.1 Corporate Entrepreneurship (CE)

In time like this, characterized by incredible progress and evolution in information and communication technology, enterprises have to guarantee the business continuity that contributes to the maintenance of markets' development, relationships' development, people and methods. Basically enterprises must

- Foster customers' relationships, source of growth and profit
- Develop new branches within established businesses
- Internationalize all the businesses and open to new geographical areas
- Start new businesses

In a nutshell, this kind of activities imply a continuous exchange with the outside, whose goal is to identify the unexplored parts and find a way to join

them. This represents a very big effort, mostly because the company's soul is involved: organization, knowledge, technology and culture.

It can be assimilated to an approach, a new "mental" one, that lead managers to think in an innovative, flexible and growth-oriented way.

As defined by Gundogdu, in 2012, it is the adoption of an "entrepreneurial mind set" hosted by the constant research for growth which occurs, of course, out of the conventional boundaries of the firm.

Nowadays entrepreneurship is a concept commonly put side by side to start up trend, as this could be something disconnected from established companies.

By contrast, the discussion about entrepreneurship within companies is vivid, inspires the birth of new ideas and turns to improve the entrepreneurial ecosystem.

Entrepreneurial activities, within existing organizations, have been already took in consideration: behind a successful company there has been a start-up that, especially at the beginning, faced challenges and numerous growth and development stages.

What it is of interest is that CE phenomenon is emerging as a new model of development and growth, proposing reasoning and processes showing efficacy and positive effects able to accelerate the development of firms: some kind of new technology is introduced and supported by business models aiming at new markets or new product developments.

CE is useful to facilitate a change of course in the traditional business models, where the conventional processes of business development are too slow compared to the speed of changes of competitive international environments.

The turning point relies on the modification of the business model, a very critical phase, which required management efforts and long term visions: several

analysis show that companies capable to adapt and modify significantly their business model are supposed to grow more rapidly and with more profit. CE can be seen as a path to reach new competitive assets, in shorter periods, both for products and markets development.

To sum up, the entrepreneurship topic in established firms is articulated as following

- To speed up the "traditional" innovation's procedures (from business development to corporate entrepreneurship)

- To create a business ecosystem made by dynamism and innovation sharing, so that companies can reinforce and improve their core business with a network approach

- To react to turbulent environments and to adapt the innovation management, making use of entrepreneurial approach.

- Novelty as a mandatory switch for companies

- To shorten Research and Development time, to respond to market's evolutions. Every company should consider other R&D tools, not only internal resources but even valid alternatives to foster and take value from the usual internal structure

- To find an empirical approach to consider innovation opportunities: failure can be around the corner – a sort of natural selection for start-up companies – so companies must have the strength to risk and to make decisions in a very short time

3.2 CE historical origin and its "raison d' être" (la teoria)

Analysing the composition of CE, it is naturally grounded in entrepreneurship. This theme has been highlighted by the doctrines starting from XVIII century and

the topic has its theoretical foundation when Richards Cantillon (1734) used the term to distinguish entrepreneurs from employees. It emerged since the birth of competitive capitalism that replaced feudalism and the absolutist monarchy of the XVIII century. Entrepreneurship did foster innovation and the technological revolution of post-feudalism (Barreira 2008, Brouwer 1996). Cantillon was the first at using the concept of risk within uncertain environment as one of the main characteristics of entrepreneurship.

Joseph Schumpeter (1883-1950) added proactivity and innovation as milestones of the entrepreneurial spirit. Since 1970, entrepreneurial doctrines grew up due also to the contribution of scholars such as Birch (1979) which linked the concept of entrepreneurship to that of economic growth. Afterwords, the definition of entrepreneurship by Schumpeter as "Disruptive Creation" concerning novelty creation, innovation, renewal and redefinition of organizations, markets and industries, stood out.

Entrepreneurship is the identification and exploitation of opportunities previously not taken into account. Even though Schumpeter's works are focused on single entrepreneurship experiences, further studies show how this concept strengthened on a firm level, shaping as corporate entrepreneurship.

The implementation of corporate entrepreneurship or intrapreneurship has seen a great development in the 80's and basically three milestones marked the evolution of this concept

- In 1985 Peter Drucker published a very innovative book titled "Innovation and Entrepreneurship" where he dealt with a rising phenomenon he defined as "Entrepreneurial Management"

- In the same year Gifford Pinchot published "Intrapreneuring" where he analysed the entrepreneurial process in existing organizations

64

- In 1986 Steven Brandt faced the entrepreneurial and innovation attitude within organizations.

Following the growing interest about entrepreneurship, the Journal of Business Venturing and Entrepreneurship Theory and Practice from 1980 proved the growth of research and the birth of all the relative sub disciplines , such as Corporate Entrepreneurship. Starting from 1990 the concept of Corporate Entrepreneurship generated its own discipline.

Probably the essay by Sharna and Chrisman (1999) can be considered the best attempt in trying to find a universal definition of company entrepreneurship, describing it as a process through which an individual or a group of individuals of an existing corporation create novelty or start an organizational renewal.

Whatever the form, the entrepreneurship issue within an existing organization refers to the creation of a kind of innovation aiming at a certain target: finding new opportunities to gain a competitive advantage.

Covin and Miles (1999) have discussed this: with reference to firm-level entrepreneurial orientation identified in the literature, it is argued that innovation, broadly defined, is the single common theme underlying all forms of corporate entrepreneurship. The presence of innovation, per se, is not sufficient to label a firm entrepreneurial. Rather it is suggested that this label be reserved for firms that use innovation as a mechanism to redefine or rejuvenate themselves, their positions within markets and industries, or the competitive arenas in which they compete. In their paper a typology of the forms is presented, in which corporate entrepreneurship is often manifested, and the robustness of this typology is assessed using criteria that have been proposed for evaluating classification schemata. Theoretical linkages are then drawn

demonstrating how each of the generic forms of CE may be a path to competitive advantage.

3.3 CE and the pursuit of competitive advantage

CE can be given credit for promoting and sustaining corporate competitiveness. Many scholars have noted that CE can be used to improve competitive positioning and to facilitate changes in corporations, markets and industries in order to create added value innovation to exploit opportunities (Schollhammer 1982; Miller, 1983; Khandwalla, 1987; Guth and Ginsberg, 1990; Naman and Slevin, 1993; Lumpkin and Dess, 1996).

It is in the 90's that empirical evidence has been provided to give reasons that CE leads to superior firm performance. The strongest evidence is given by Zahra and Covin (1995) where they examined the longitudinal impact of CE on a financial performance index, composed of both growth and profitability indicators. By data from three separate samples and a total of 108 firms, the authors identified a positive and strengthening linkage between CE behaviour and subsequent financial performance.

Since linkages between CE and competitive advantages have not been so much explored, actions and processes of CE have not been so much explained, Covin and Miles contributed to avoid ambiguities and discussed the reasons why various forms of CE may be paths to competitive advantages

  – Sustained Regeneration

Firms that regularly and continuously introduce new products and services or enter new markets. The core is to capitalize on latent or under-exploited market opportunities using the firm's valued innovation-producing competencies. These

firms are characterized by cultures, structures and systems supportive of innovation

- Organizational Rejuvenation

Organizations seek to sustain or improve its competitive standing by altering its internal processes, structures and/or capabilities. The focus and target of innovation is the organization per se: firms need not to change their strategies in order to be entrepreneurial. Examples: reconfiguration of firms' value chain or renewal of resources allocation.

- Strategic Renewal

Companies seek to redefine their relationships with markets or industry competitors by fundamentally altering how they compete . The focal point for strategic renewal is the firm within its environmental context and, in particular, the strategy that mediates the organization-environment interface. Examples: strategic renewal can be observed in a variety of business scenarios, such as redefinition of industry positions or re-rank to facilitate the maintenance of competitive superiority among industry leaders.

- Domain Redefinition

This is the label used to refer to the CE phenomenon whereby the organization proactively creates a new product – market arena that others have not recognized or actively sought to exploit. By engaging in it, the firm takes the competition to a new arena where its first or early mover status is hoped to create bases for sustainable competitive advantage.

Considering the competitive advantage meaning, there are several fundamental bases for it. Porter's writings (1980; 1985) clarified the logic of overall cost leadership and differentiation as bases for competitive advantage. Lately, strategic management scholars have recognized the importance of speed or

quick response – that is, having a market offering prior to competitors, as a distinct basis for competitive advantage (e.g. Bhide, 1986, Stalk, 1988). Each of the bases for advantage potentially could be exploited by firms that engage in sustained regeneration, organizational rejuvenation, strategic renewal, or domain redefinition.

Overall cost leadership	**Organizational rejuvenation** , due to its internal, organizational focus , may most commonly create advantage based on efficiencies achieved through actions that lower an organization's structure
Differentiation –based advantage	**Sustained regeneration**: the more innovative the company, the higher the reputational distinction
Quick response	**Domain redefinition** implies taking the competitive battle to a new product – market arena. If competitors have yet to enter this arena, then the quick response basis for advantage is necessarily being exploited.
Strategic Renewal	It has the feeblest link to any of the three bases for competitive advantage. This does not mean that there is no connection between strategic renewal and the bases of competitive advantage but there is simply not an obvious "most likely" basis for advantage one would associate with the strategic renewal of corporate entrepreneurship. Most could depend on the specific manifestation or case

		of strategic renewal in question.

Fig. 3.1 Own elaboration of Covin & Miles (1999)

Further on Covin and Miles, it has been elaborated a table summarizes the key characteristics of each form of corporate entrepreneurship, then it underlines the "typical basis for competitive advantage" associated with each. For each form the "typical frequency of new entrepreneurial acts" and the "magnitude of negative impact if new entrepreneurial act is unsuccessful" are taken in consideration.

"New entrepreneurial act": the result of the focus of the form of corporate entrepreneurship in question

Sustained regeneration	**New Entrepreneurial Act**	New products or new markets
Organizational rejuvenation	**New Entrepreneurial Act**	Improving functioning or strategy implementation
Strategic Renewal	**New Entrepreneurial Act**	Pursuit of new strategic direction
Domain redefinition	**New Entrepreneurial Act**	Creation and exploitation of a new or previously unoccupied product- market arena

"Magnitude of negative impact if new Entrepreneurial Act is Unsuccessful": the potential down-side to corporate entrepreneurship, the risk the organization faces when pursuing the various forms of corporate entrepreneurship

Sustained Regeneration	**Level of Magnitude** Low	One bad product/poor market entry decision will not threaten the strength of highly innovating firm
Organizational Rejuvenation	**Level of Magnitude** Low to moderate	It depends upon the centrality of the innovation to the firm's effective implementation of its business strategy
Strategic Renewal	**Level of Magnitude** Moderate to High	A failure implies that a firm has been unable to successfully execute a strategic redirection
Domain Redefinition	**Level of Magnitude** Varying	It can vary according the size of the firm, the cost of exploitation of new products/markets, etc.

3.4 CE , Organizational Learning and Knowledge

Corporate Entrepreneurship is a phenomenon that induces and cultivates organizational learning, which is a key source of new knowledge that could be used to develop organizational capabilities. Learning is at the heart of the strategic renewal process that enables the firm to adapt and respond to challenges in their new markets (Zahra, Nielsen & Bogner, 1999).

When companies deal with new contexts they start up processes of experimentation which fosters learning by doing . Learning is crucial for the

creation and exploitation of the new knowledge necessary for product, process and organizational innovation. Corporate Entrepreneurship activities are important for the promotion of organizational learning and the development of new knowledge that generates advantages.

The analysis of Dess et al. (2003) shows how knowledge is created through the different typologies of CE. Through the mediation of two forms of organizational learning these CE types lead to three forms of new knowledge that are then used differently within the firm.

Knowledge creation and exploitation are important objectives within CE.

Zahra et al. (1999) put in evidence that formal and informal CE activities foster the company's performance by creating new knowledge that becomes a foundation for building new competencies or revitalizing existing ones.

Knowledge is vital to forming competitive advantages, very often a key source to gain new market and customers, but the way to make it a real benefit to the achievement of superior firm performance is in the relationship between people and organizational units (Ireland, Hitt, Camp & Sexton, 2001).

To sum up

- CE can lead to different types of new knowledge
- Organizational learning mediates the relationships between different CE types and different kinds of knowledge
- The different types of knowledge should be used differently for the organization to gain maximum competitive benefit from them

Organizational learning is a capability allowing firms to create knowledge as the source of improved performance (Hitt & Ireland 2000). Consequently, organizational learning facilitates the relationships between CE and the development of new types of knowledge.

Organizational learning can reveal as

- − Action, that is learning by doing (Lieberman, 1984)
- − Memory, the constant repetition of an organization's activities (Nelson & Winter, 1982)

Two types of learning can be acquisitive and experimental and they occur depending on the CE activities companies face.

- − Acquisitive learning takes place when the firm gains access to - and subsequently internalizes - pre-existing knowledge, from its external environment. Hardly acquisitive knowledge is the turning point for companies to get sustainable competitive advantages (Leonard-Barton, 1995) because it is grounded in public knowledge, residing in the public domain.
- − Experimental learning occurs inside the firm and generates knowledge that is distinctive to it. Since it is something peculiar of the firm and more difficult to imitate, competitive advantages evolving from experimental learning tend to be more sustainable than are those that are products of acquisitive learning

Acquisitive learning represent a necessary but insufficient condition for competitive success as measured by the firm's ability to develop new knowledge; experimental one turns out to be more robust and long term sustainable.

As for the ability of the organization to learn, CE leads to three different types of new knowledge.

- − Technical Knowledge

It results primarily from acquisitive learning. It helps companies to reshape current products and extend product lines, often through process innovations. It helps to get more value by how they complete primary and support activities in

its value chain. Technology knowledge is rarely a milestone for sustainable competitive advantage

- Integrative Knowledge

It is a mix about how firms combine intrinsic resources and capabilities so that they can get value. Grounded in memory, employees create integrative knowledge by recombining and extending the firm's resources and their own capabilities, in manners that demonstrate Schumpeter's classic concept of entrepreneurship. To sum up, integrative knowledge is given by acquisitive plus experimental learning

- Exploitative Knowledge

Knowledge is the result of exploitation of company's resources. The company get value mixing together and exploiting its technical and integrative knowledge

From the above description it comes out that for each use of knowledge a different degree of emphasis and efforts is required

- Technical Knowledge: the implementation focus is on leveraging knowledge
- Integrative Knowledge: recombination and extension of knowledge
- Exploitative Knowledge: import of new technical and integrative knowledge into value- creating activities

The firm needs to explore how its innovative and competitive capabilities can be redefined, renewed, or replaced while ensuring that the resulting changes in policies, priorities, and procedures will be accepted throughout the organization. There must be a sort of acceptance of the shift from one set of operating routines to another.

Sustained regeneration	Competence deployment and modification

Organizational Rejuvenation	Deployment of existing competence and modification of organizational processes
Strategic Renewal	Rethinking of competences
Domain Redefinition	Definition and deployment of new competencies

Fig. 3.2 Own elaboration of Dess et al. (2003)

3.5 Corporate Venturing

So far, it has been observed that multiple authors had given their contributions to the Corporate Entrepreneurship issue, identifying three manners of performing (Sharma & Chrisman, 1999)

1. The birth of new business within an existing corporation
2. The transformation of existing organization through the renewal or reshaping of the key ideas on which they are built
3. Innovation

Interpreting the above mentioned definitions, once again, two clusters arise: Strategic Renewal and Corporate Venturing (CV). Both strategic renewal and corporate venturing advocate changes in either the strategy or structure of an existing corporation, which may involve innovation. The main distinction relies in the creation of a new business, typical of corporate venturing while strategic renewal consists of a reconfiguration of existing business within a corporate setting.
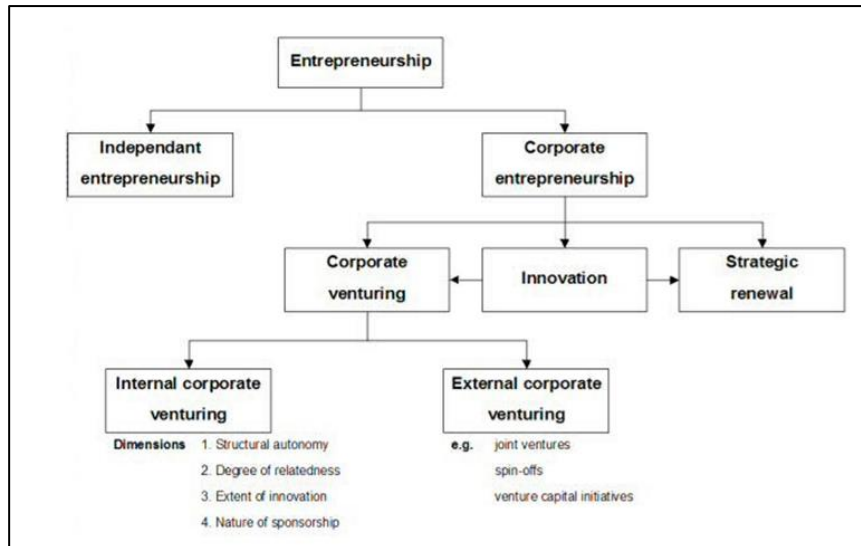
Fig. 3.3 Sharma & Chrisman (1999)

As a component of CE, CV emphasizes the creation of a new business within or outside the organization (Sharma and Chrisman, 1999). While some CV activities frequently build upon the firm's innovations in new markets or by introducing new products, others may lead to significant changes in a company's business, strategy or competitive profile, renewing the firm's operations (Narayanan et al., 2009)

CV differs from two other dimensions of CE because

- It has its focus on the various steps and processes associated with creating new businesses
- It integrates them into the firm' s overall business portfolio

Drawing from Roberts and Berry (1985: 6) definition, "Internal ventures are a firm's attempts to enter different markets or develop substantially different products from those of its existent base business by setting up a separate entity within the existing corporate body".

75

Internal corporate venturing became popular between mid- 1960 and 1970. following the extraordinary process of pioneering independent venture capital funds.

In the 1980s the phenomenon declined and a decrease of the interest in it has been observed. This was due in part to the mixed success of internal corporate venturing but also to the changes in the corporate and markets' context (Block & MacMillan, 1993).

In general, corporations have periodically come in and out of venture investing, prompted by the cyclical nature of the venture capital industry and economic downturns (Battistini et al., 2013)

The decline could be associated with an emphasis on greater corporate focus and greater efficiency. In the 1990s , for example, the identification and re-engineering of existing business processes became fashionable but, as firms have begun to exhaust the benefits of this approach, they have begun to re-examine options for creating new businesses (Tidd et al., 1997).

Then the dot-com boom, characterized by disruptive technological advances and the proliferation of high-tech entrepreneurial ventures. Here again, a huge quantity of venturing programs were launched at the height of the boom then dismantled when the market collapsed, prompting corporations to reconsider the case for venturing initiatives.

Nowadays corporate venturing is on the rise. The growing intensity of corporate venturing activities since the start of 2011 has been described as a resurgence or a golden age (Mawson, 2011). The economic downturn has fostered initiatives and in the 50- year history of corporate venturing, it is the first time such a situation occurs at the beginning of an economic cycle, despite adverse financial conditions (Dushnitsky, 2011).

Anyway, corporate venturing passed through a series of changes that translated into a new awareness about its core characteristics (Battistini et al., 2013)

- It is given more importance to the origination phase of the project

- There is more access to high- quality human resources with relevant background in venture capital or new business development

- Increased awareness among senior executives that the corporate venturing needs internal and external access to sources of innovation to be sustainable

So an evolution occurred and the direction is cleared: efforts are put in order to get more longevity and to handle corporate venturing as mechanism to infuse innovation. This, in turn, has produced shifts in terms of strategy and organization.

So "strategy" is the corporate venturing natural habitat. Three are its spheres of action

1. Motives for venturing: its rationale, the reason why for the mandate

2. The financial goal: the necessary conditions for the sustainability of the activities

3. Organizational learning: exploitation and exploration of capabilities

As for the first point, venture is of strategic importance for corporate development, it is universally recognised. Reviewing the literature, two approaches stand out relatively to how corporate venturing is initiated and developed (Evald & Senderovitz, 2013)

- One focuses on how it can be initiated and developed in a strategic manner, creating value for established large firms

- The other addresses how corporate venturing sometimes happens spontaneously in established firms, starting up a flow of new ideas and opportunities firms could or even should capitalise upon

Starting from the first approach, once again, corporate venturing is seen as an important element of corporate strategy and underline the engagement of established firms in corporate venturing in a predominantly pre-planned way in order to infuse more innovative thinking. Corporate venturing is a crucial part of the evolution of the firm's strategy but, furthermore, play a big role in the capability development process

- It can be used as an effective vehicle for driving purposefully new business development by established firms
- It can imply improvements in better managing and organising different types of ventures, better managing interventions when the ventures are challenged

The literature puts in evidence large firms' issue, backed by the strong belief that this kind of activities are suitable for larger firms that are in a state of continuous struggle for reinventing themselves in order to be competitive in the future (Burgelman 1983). In this way corporate venturing is a possible strategy for business expansion and is seen as a way of regaining and keeping the innovative entrepreneurial characteristics of newer and smaller firms (Roberts and Berry, 1985). Anyway, the struggle for continued innovation and renewal is, however, relevant not only for large firms. Well-established small and medium sized enterprises also need to develop, innovate and rejuvenate (Carrier, 1996)

In other contributions the strategic approach is less apparent and the common denominator is a sort of emergent and improvisational motivation. Following this definition, activities in this approach are described as they may be initiated and

occur on an ad hoc basis, without clear strategic intentions and planning (Burgelman, 1983; Vesper, 1984; Sharma and Chrisman , 1999; Covin and Miles, 2007). The following features can be observed

– Spontaneity internally among employees in a large corporation versus formal initiation when working with corporate venturing activites

– Creation and development of activities without backing or permission from top management (Vesper 1984; Sharma and Chrisman 1999)

– Corporate venturing activities grow emergently on their own (Keil et al. 2009)

– Corporate venturing activities can either be organised in a formal and induced fashion or in an informal and autonomous manner (Zahra, 1993)

– Corporate venturing activities are created both top down and bottom up in large corporations (Day 1994; Heinonen and Toivonen 2008)

To sum up, it is recognized that corporate ventures operations can happen spontaneously in a more emergent improvised way.

The two approaches have a different logic with regard to how firms engage in corporate venturing, but they agree on the fact that established large firms need to address these activities in an intended strategic way in order to enjoy all of the potential and benefits (Maine, 2008). When firms embrace the second approach, so with less planned strategic intent, they should attempt to manage their activities strategically and structure the spotted ad hoc activities into strategically operating entities that leverage existing resources and capabilities for the benefit of the parent firm. One of the goal of this project is to analyse deeply the process through which companies face new ventures in the effort to gain the best added value.

As for the financial goal, the evaluation of the performance of venturing activities is not an easy procedure, depending a lot on the planned objectives

- The traditional venture capital funds had the single objective of maximizing financial return
- Today most corporate venturing units must meet a combination of financial and strategic targets

Anyway, looking at the reference studies (Battistini et al., 2013; Tidd and Taurins, 1999; Kuratko, Covin & Garrett, 2009; Vanhaverbeke & Peeters, 2005), financial returns are considered very important objectives, following by the exploitation of resources to access to new technology, diversify businesses , development of strategic relationships .

Zahra and Covin (1995) suggested that corporate entrepreneurship has a positive impact on financial measures of company performances. They show that benefits from venturing activities are supposed to grow over time, since results are mostly modest if a short-time horizon is taken into account. It is illustrated that these activities can be an effective means for improving long-term company financial performance, especially if the company operates in hostile environments. Principally, the study reveals three implications

- A general financial viability of engaging in corporate entrepreneurship is proved
- The need for a use long-term horizon in order to adequately analyse the financial consequences of the new projects
- Hostile business settings activate corporate entrepreneurial and then venturing attitudes

However, performance measures often capture the strategic value of venturing activities only partially.

The most fashionable adopted key performance indicators are financial metrics, such as the internal rate of return or the financial gain of portfolio companies (Battistini et al., 2013). Other quantitative indicators could be measures of technological intelligence, the number of business ideas screened, the increase in sales of related products and technology, and the number of technological innovations (patents or new products).

On the contrary, as recent studies suggest (Napp & Marshall, 2011), and this is in accordance to multiple level nature of corporate venture units, corporate venturing value is best measured if the ultimate outcomes is effectively taken into account. The adoption of a wider range of indicators can help to track all the positive feedbacks, to map and document the significance of the insights venturing units provide to top management, to business units and the R&D organization. Indicators put light also on to the strategic influence due to collaborations, partnerships and networking activities.

The evaluation procedure is at the heart of venturing in order to improve the organization and concretely figure out the contribution to the innovation and growth targets of the project.

By now it has been underlined how much is important the definition of a precise strategy for the good realization of the corporate venturing unit. This represent just one side of the coin because, if the strategic importance will globally shape the activities and operations, the proximity to existent skills and capabilities will determine the degree of operational integration which is desirable (Tidd and Taurins, 1999). In general

- The greater the strategic importance, the stronger the administrative linkages between the corporation and ventures

- The closer the skills and capabilities are to the core activities, the greater the efforts to get the required efficiency to hit the target

The assessment of the gap between the actual situation and the desired one is a very crucial issue for companies.

The reasons why for the gap, the so called rationale for starting up venturing activities, as said before, can vary from the financial to the strategical point of view but , going beyond these statements, new venture can be driven by the wish to exploit existing skills and capabilities or by the wish to develop new skills and capabilities.

This, in turn, can be grouped into two sets

- Leveraging: exploitation of existing competences in new markets or technologies

- Learning: attempt to learn new competences, which are often needed in existing markets or technologies

Here, once again, the ambidexterity essence re-emerges and, consequently, the problem of balancing exploration and exploitation.

In terms of organizational learning, the field of our interest, it is about the distinction between refinement of an existing technology and invention of a new one (Winter, 1971; Levinthal and March, 1981).

It is clear that exploration of new possibilities takes longer time than the improvement of existing skills in the case of exploitation. On the other hand, improvement of existing competences is less attractive than the energy coming from new projects (Levitt & March, 1988).

Finding an appropriate balance is arduous because the same issues occur at levels of system, individual level, the organizational level and the social system level.

CHAPTER 4

THE DEVELOPMENT OF A NEW BUSINESS

The fourth chapter analyses the Business Development (BD) as a tool to investigate, collect and filter the info found on the market.

This perspective allows to see the BD function not as a as a mere "tool" that separates the preparation activities for growth opportunities and their implementation but it proved to be an active organism of organization, not just a compilation of data but a structure capable to define targets, collect info and involve all the internal and external actors protagonists of the network

4.1 Examining Business Development

Previously it has been observed that corporate venturing involves the firm creating an entirely new business (Govindarajan & Trimble, 2005).

What constitutes a "new business" within an extant company could be something vague. To help clarifying this idea, an approach could be the one found in the product/market growth matrix by Morris, Kuratko and Covin (2008).

Market Focus	Current product of the Corp	Extension of the current prod.	New prod. for the Corp. in current industry	New prod. for the Corp. in new industry (i.e. diversification)
Market Creation	New Business	New Business	New Business	New Business
New Market for the Corp.	Major Market Development	New Business	New Business	New Business
Extension of current market	Minor Market Development	Minor Product Market Development	New Business	New Business
Current market of the Corp	Market Penetration	Minor Product Development	Major Product Development	New Business

Product Focus

Fig. 4.1 Defining what constitutes a "new business" (Morris et al., 2008)

The matrix includes intermediate-level variations in market and product novelty. Increase of current markets or products are considered, depending on the relative dimension of the "newness".

A market can be new to the firm or new to the world, that is market creation; new products can be added to already existing industry or give the firm the possibility to enter new industries – already extant or newly created by the firm's new product offering.

All these combinations allow companies to choose the most interesting strategy: there could be no reason to innovate on both markets and products but enterprises can take into account intermediate level of development.

Looking at the matrix, one can easily realize that many elaborations can be derived from.

Taking from Burgelman and Sørensen, the definition of business development is coherently aligned with the complexity of the activities concerning decisions and tactics to enter new markets. Indeed, business development is defined as the tasks and processes about analytical preparation of potential growth opportunities, and the support and monitoring of the implementation of growth opportunities.

By definition, business development is not directly involved on decisions on strategy and implementation of growth opportunities.

There is no total agreement about this. Since business development integrates into other working groups within organizations, it is not possible to deny that results from business development analysis influenced future steps of a company's strategy. Moreover, output from business development activities can be a base on which management can construct future strategy or take important strategical decisions.

Anyway, given the practical nature of business development, it helps companies facing at least two challenges that could impede growth for firms

> 1. It provides resources for managers, so that they can rely on a series of info, fundamental to take decisions about potential growth opportunities
>
> 2. It is a "tool" that separates the preparation activities for growth opportunities and their implementation

Business development is within corporate venturing process (Burgelman, 1983; Narayanan, Yang and Zahra, 2009) that, in turn, is nested within the literature of corporate entrepreneurship (Zahra, 1991; Barringer & Bluedorn, 1999).

It is precisely described as the impetus stage (from an opportunity) of corporate venturing processes (Burgelman, 1983) and as designated organizational unit

with distinct tasks and processes (Noda and Bower, 1996; Kind and Knyphausen – Aufsesse, 2007; Sørensen, 2012; Bussgang et. al, 2013).

Generally, the scholarly papers related to the subject treat business development referring to the outcome of internal/external corporate venturing (Burgelman, 2002; Covin and Miles, 2007) and the organization of radical innovation (O'Connor and DeMartino, 2006).

In addition, the concept of (new/external) business development has been used interchangeably with external corporate venturing (Kanter, 1986: 58; Keil et al., 2008: 896) and with new venture development to denote difference to existing businesses.

For clarity in the definition, business development is considered as not existing phenomena, such as product development, market development, project management etc., as underlined by Chesbrough (2002).

Sørensen (2012) synthetizes the existing perspectives on business development and integrates them into one general construction, backed by insights from seniors business developers and strategists from successful firms from Europe, US and India, together with international venture capitalists.

According to him, business development refers to "the tasks and processes concerning analytical preparation of potential growth opportunities, the support and monitoring of the implementation of growth opportunities, but does not include decisions on strategy and implementation of growth opportunities" (2012: 26). What comes out is

- business development is an activity helping horizontal and vertical coordination and integration of tasks and processes across specialist functions and external partners

- business development belongs to firm's strategic momentum: choices that are commitment intensive and cause heightened predictability.

Basically, business development is focused on preparing and evaluating a continuous stream of potential innovations that have strategic appeal but are not in the current strategic budget.

There is distinction between the business development activities in the planning phase of a growth opportunity and in their implementation stage. This distinction has directly to do with two managerial challenges: the first is the shortage of time and resources to take informed decisions, the second is the disconnection between the preparation of growth opportunities and their actual implementation (Penrose, 1959; Hrebiniak, 2005).

The nature of business development tasks and processes are quite independent from firm and industry type. Generally, business development tasks and processes are performed by business developers.

The skills characterizing a business developer are summarized by Sørensen with his definition of "integrating generalist" (2012).

Integrating generalists are characterized by being experienced working with both senior management and in multiple line-functions, having practical knowledge about the firm's technology, products, customer types and industry dynamics, and being capable of thinking conceptually and in abstract fashion rather than merely closing deals.

Beyond all the various definitions and relations with corporate entrepreneurship and corporate venturing, business development deals with the actual development of product - solution – market combination. In a nutshell: it involves the "execution" of innovation.

An activity potentially "spread" throughout the company.

The corporate entrepreneurship function represents the approach through which the company embraces the innovation process, in order to create, maintain and improve innovativeness and business development.

In the corporate entrepreneurship function, companies set up the strategic flexibility to cope with the tensions between exploitation and exploration (March, 1991).

Following Sørensen and considering also the implications with the ambidexterity sphere, business development shows an across - the - board nature. Since it aims at new opportunities and consequently to the creation of a competitive advantage, business development draw from four different dimensions, as represented in the following figure
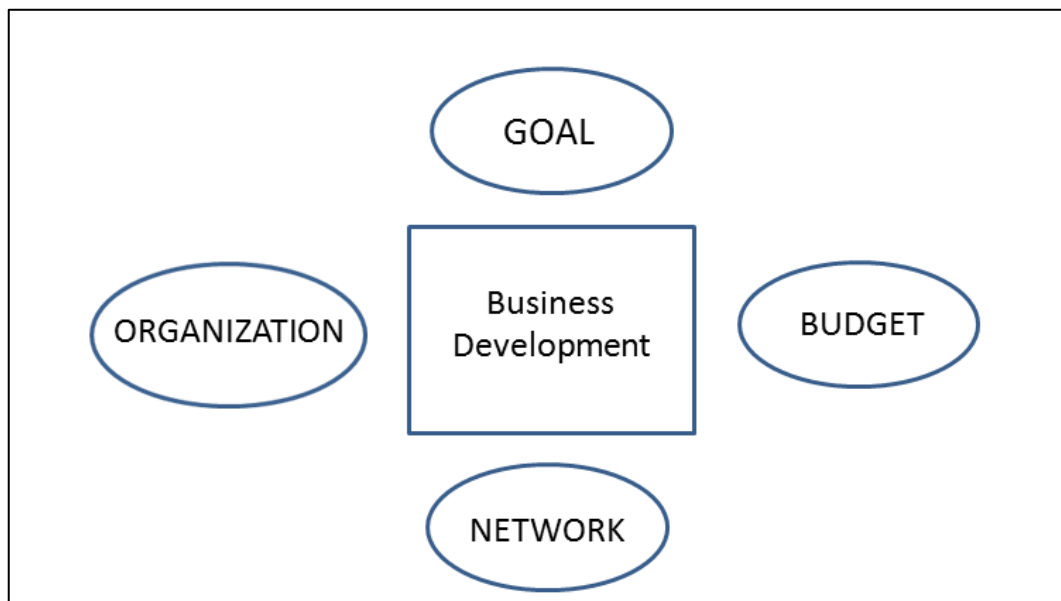

Figure 4.2 Own elaboration of Business Development structure

Every business development project has its own strategy, with a defined mission and vision. When companies intend to approach a new initiative, guide lines

must be delineated: target market, target customers, etc. From the idea, the vision of the company has outlined, to the strategy, the definition of the activities and actions.

Depending on the size and peculiarities of the project, analysis about the internal state of the art of competences and skills are set up so that, in terms of organization, the necessary changes can be made.

A new team is organized and so resources must be collected and placed into a new form. People with different skills have to cooperate, they have to put efforts in order to create the team spirit atmosphere and let the rest of the organization know that a new team dedicated to a new project has risen.

It is a great tool through which a company can control if it is going towards the right direction. It is helpful not only for the operative side of team but for the management as well. It is fundamental, because it is an organizational and motivational tool, since it puts in evidence the goals to accomplish. Moreover, the budget highlights the responsibilities so that everyone is well conscious of the importance of his or her own tasks, paying attention to the quantitative and qualitative aspects.

Sharing the budget building process, increases its effectiveness: if everyone participates, it is easier its acceptance. Even if the time employed in the construct is greater, the subsequent management of activities becomes certainly simpler, given the previous alignment.

The network dimension refers to the process of structuring the environment to generate sufficient opportunities for the new initiative. It is about relations and, in order to get and evaluate their role within the referent market, it is important to notice   their different facets (such as duration, goal, content, functions, intensity) and the impact on firms. Relations are of great significance for

companies, because they imply a more or less intense involvement. The degree of involvement corresponds to the impact relations have on companies, both in positive and negative terms. The degree of involvement defines both the potential and the constraint the relation entails.

4.2 Business Development types

As said before, business development aims at generating new contacts and scouting new opportunities in order to explore a new market or open new scenarios. It can be considered as an approach, a constant research for long term chances to grow that can be applied on any function of the organization, any team … any person.

Anyway, even if the integrating generalist definition by Sørensen, there can be different types of business development, depending on the basic orientation.

Drawing from Uittenbogaard, Broens, and Groen, (2005), four different models are extracted: network-oriented business development, internally oriented business development, R&D – oriented business development and business development with ad hoc idea generation.

The fundamental differences rely on the process of idea generation.

In network-oriented business development, market opportunities are spotted through the use of networks. Diversified networks are more difficult to manage but give more chances to grow and expand.

In internally oriented business development, opportunities are spotted through the other business units and the marketing department by using their contacts with the organizational environment.

In R&D – oriented business development, opportunities are created through the development of technological innovations: these last ones drive the search for possibilities in the target market.

Business development with ad hoc idea generation instead can be described as "market oriented with no strategy", that is opportunities are exploited but without a clear and complete awareness in terms of strategy.

Type of BD process	Characteristics of BD function	Crucial factors
Network oriented	Central or integrated position, self –created and managed network	Network is considered a formal role, network strategy is formulated, a strong reputation is favourable
Internally oriented	Decentralized position, network structure "borrowed" from other business functions	Good communication structure, sufficient power and top – management support are required
R&D oriented	"New to the world" – technology oriented	An extensive R&D staff, a large R&D budget, a wide technological network, sufficient patents and large target markets are required
Ad hoc idea generation	No clear idea generation strategy, inertia present or in transition phase	

Figure 4.3 Summary of Business Development Types (Uittenbogaard, Broens and Groen, 2005)

Based on the categorization of business development and the previous literature review related to the corporate entrepreneurship function, the authors constructed a guideline for structuring innovation as well.

The construction is interesting not for the innovation of contents but because it "makes neat" in the concept, clarifying the links between business development, the organization and the external environment.

The main aspect is the intensity: how innovative is the project represents the desired and actual level of innovativeness, pro-activeness and risk attitude.

Intensity is the turning key characteristic, influenced by mission and vision. It includes the level of desired impact of the developed innovations and the time horizon that the mission covers (short term or long term).

The more ambitious and long term the mission, the higher the required level of intensity. Long-term objectives reveal a higher risk attitude, bigger budgets and greater level of innovation.

As for the external environment, the speed of developments and the density of competition that the organization has to deal with, are determining factors. The stronger both aspects, the higher the level of required innovativeness and pro - activeness.

The organizational characteristics are the ones constraining or favouring the business development environment: the internal structure must evolve and accept the change so, that the new initiative can be incorporated, becoming part of the overall organization.

The involved aspects are the business structure, the available resources and the R&D characteristics (focus of research); of course, even the technological or market-oriented focus, the availability of networks and the presence of an

entrepreneurial environment are dimensions influencing the intensity of business development.

Once the organizational characteristics aligned with the new initiative, the most suitable business development type can be determined.

The next step is about the choice of the appropriate venturing portfolio. Here, once again, it depends on the rationale of the new initiative and on the level of innovation the company is searching for. For example

- − corporate incubators could be linked to an emphasis on entrepreneurial culture
- − internal ventures and venture partnering could be link to fast and frequent decision-making, as well as to partnerships and venture boards for governance

As a final step, the combination of the venturing portfolio and the choice of business development type, combined with the identification of problems to solve, can be used to set up a complete analysis of the target market and a complete business configuration.
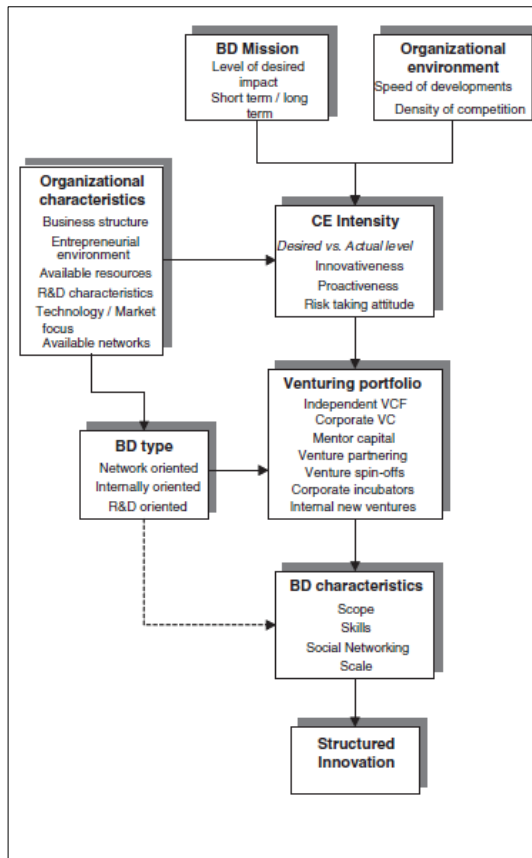
Figure 4.4 Guideline for Innovation (Uittenbogaard, Broens and Groen, 2005)

4.3 Integration between corporate strategy, competence building and business development

To survive in business environments characterized by disruptive changes, enterprises have to define new technological capabilities and explore new opportunities. This is the way to long run profits.

In this context, new business development as an organizational practice, can represent an effective carrier to build new competences.

The competitive advantage could lie in the inimitable way companies manage the development of innovation, through the definition of new ad hoc capabilities.

The interaction between business development practices, new competence building and corporate strategy makes the project successful and hard to replicate, therefore a source of sustainable profitability.

The business development put light into the gap, the misfit between current competences and those required to compete in the new segment or industry. The search and consequent development of new competences are a stimulus also for the extant strategy, offering new and potential perspectives.

Moreover, this dynamic interaction between competences and strategy implies that a firm's strategic vision actually is a moving target.

To solve this kind of duality – current strategy, new competences and future strategy, ambidexterity represents a possible answer.

Generally, to face innovation is not an easy operation. Radical innovations present the risk of transforming core competences into core rigidities (Leonard-Barton, 1992) and even the most successful companies – apart from a few exceptions – find problems at managing discontinuous and turning breakthrough innovations into long term growth (Christensen, 1997; Prahalad, 1998; Prahald &Hamel, 1990; Tushman & O'Reilly, 1996).

The question is why do some firms manage to profitably exploit non-traditional business opportunities and why do others appear to be bound to their existing and maturing set of business. Vanhaverbeke and Peeters (2005) have tried to look at this aspect.

Business development is such a proper process for a company to tackle the challenges posed by new technologies.

In front of a new technology, an organization has to develop new competences to meet the technological and commercial requirements of the growth opportunities.

Once again, if a dedicated team or unit will be in charge of it or if the company will delegate to an external organization, this depends on the intensity of the corporate entrepreneurship function and on the rationale of the project.

What is common to all the forms is that corporate venturing or whatever function is a driver for competence development.

Companies have to deepen their knowledge base in their core technologies to keep up with the competition in the current markets.

However, technologies mature and firms usually have to expand their technology base in other areas: new promising areas for which new capabilities and knowledge are required.

Relevant organizational challenges have to be faced by companies, if the most attractive growth opportunities lie outside the well-known applications or technologies.

The challenge derives from the fact that the decision to develop new businesses produces a misfit between the already existing competences and those required to rule the new market.

So, the business development activities are an organizational carrier through which new competences are developed or acquired: investments in R&D and in technology are necessary to stay ahead of competitors.

Technology pays off only if commercialized on the market. To do so, the company needs to collect people, resources and know-how focus on the common goal of commercialization of the new initiative.

Business development is the "movement" from idea phase to the full commercialization of a product or solution.

During this entrepreneurial process it is clear companies face problems and obstacles that have to be resolved. In turn, this boosts the company's knowledge and skills about markets or industry or technology. This is how business development functions as organizational carrier, supporting the development of firm's technological capabilities over time. By doing so, knowledge grows, the technology base expands and so new competences take substance.

Entering a new business requires for the development of new competences, as the company can no longer solely exploit its current competences. In addition, a strong in-house technological infrastructure is required, together with a strong external acquisition capability, so that internal knowledge can be mixed up with the external one. The exchange with the external environment is vital, since technological pace and complexity increase and companies have to complement internal development with input from the outside network.

Sometimes, semi-autonomous unit can show several advantages. For example, the autonomy lets the team free to explore or to get involved dedicated people to support the investigation of opportunities.

But there are examples of firms that failed at managing new business development. The autonomous business dedicated units have been crushed by the power mainstream businesses that are cash-generator and have shorter term goals focus. Business development units are by definition peripheral and so big efforts must carry on in order to convince the management or to make the business development team known within the organization or to find general support.

Fostering radical innovations and exploring unknown areas for the future growth of the company is at odds with the dominant logic within the company.

So for companies difficulties double; on one hand they have to keep their focus on the existing business, on the other hand they must support new initiatives without "clip the wings" but considering all the risks arising from operating in an ambiguous and uncertain environment.

If companies are able to maintain focus and coherence among the firm's activities they tend towards a balance made by exploration and exploitation (March, 1991; Benner & Tushman, 2002).

Long term involvement of firms in business development activities means that they have capabilities at recognizing opportunities and then transform them into competences. This can considered a dynamic capability driving to competitive advantage.

Long term involvement of firms in business development activities means that they are capable at handing the demands from mainstream businesses and requirements from new businesses.

Authors argue that successful business development activities, allowing organizations to detect new path creation and generating chances to grow for the future, are possible only if organizational routines or practices necessary for competence to build and strategy to define have been set up.

CHAPTER 5

LOCCIONI CASE STUDY: AN OVERVIEW AND THE DEVELOPMENT OF THE BUSINESS CONTINUITY PROJECT

5.1 Loccioni: brief history of the entrepreneurial adventure

Loccioni Group is a family company situated in Marche Region (Ancona, Italy) and established in 1968 by Enrico Loccioni. The Group has been developing measure and test solutions to improve the quality of products and processes for manufacturing and service industry. Specifically, Loccioni business sectors are: *Industry*: measure, assembly and quality control for industrial processes, products and buildings; *Mobility*: assembly, testing and quality control systems for automotive components; *Environment*: integrated solutions for environmental monitoring; *Energy*: integrated energy efficiency solutions, solutions for energy production from renewable sources and green IT; *Humancare*: automating and quality control solutions for health care. The history of the Group is rooted in the cultural heritage of Benedictine monks and sharecrop farmers within St. Clemente valley, where Enrico Loccioni's family belongs to. The deep relationship with such local farming tradition has had a strong influence on the Group business model and values development. In particular, from the agricultural community Enrico Loccioni inherited the habit of working in uncertainty of the seasons, the strength to restart again and again, the learning from imitation, the crop diversification to reduce the risk. Furthermore traditional values like obstinacy, will, parsimony, sense of proportion, caution not to waste, saving, solidarity, have established the basis of

Loccioni Group corporate culture, guiding the entrepreneur's view during the time.

Another fundamental influence in the history of the enterprise was due to the figure of some entrepreneurs, that Enrico Loccioni considers as models to follow: Aristide Merloni, because of «his courage in establishing something new», Enrico Mattei, for «his capacity of being a public man, going over mere profitable interests», Werner Von Siemens, due to «his ability of integrating people and technology, building a sustainable approach in all activities and towards employees, customers and suppliers», Robert Bosch, since «his enterprise model has been able to survive even after his death, showing the social orientation of its activities». Furthermore, a particular place in the entrepreneur inspirational background is taken by Camillo and Adriano Olivetti, because of their capacity to build and develop a person-centred and value-oriented company and promote social responsibility towards the territory and its community.

For the first 20 years, Loccioni Group has been engaged in the field of industrial electric plant engineering, carrying on activities at the service of industry. From the beginning, the idea of focusing on the competence of "measure" has brought the company to face different market challenges at the aim of quality improvement, rather than developing repetitive manufacturing production. The increasing necessity of acquiring new knowledge to be integrated in the solutions requested by customers, has been driving Loccioni Group to develop *projects* rather than *products*, creating a strong collaboration relationship with schools, universities and research centres, through which the Group had the possibility to acquire and practice new competences. In order to respond to various problems related to quality control, the enterprise started to apply the know-how of measurement to different business fields, diversifying its markets. In such a way,

the Group reached soon the international leadership in home appliances and car components testing, developing competences in the productive processes of automation technologies.

In the 90s the competence of measure began to be applied to telecommunications, ICT and environmental monitoring, defining even more clearly the organizational features of the Group. During this period, indeed, the company progressively assumed the traits of a "knowledge intensive organization" (Sveiby, 1992), solving complex problems which require creativity and diversified competences, developing a diffused leadership and a horizontal structure, investing in research and development, and establishing collaborative networks to acquire, diffuse and share knowledge among stakeholders.

Indeed, Summa was born exactly in 1992, thought as "company" within the company supporting the pure "production" activity.

It was (and it is) such an incubator, where young talented people are called to develop special projects dealing with evolving trends and changes directly linked to the overall contacts (suppliers, customers, universities, variety of stakeholders etc), in order to imagine and foresee the future, both in terms of technology and markets.

Within such a context, since 2000 new business challenges have been faced: the development of ICT measurement in the energy sector and the advancement of technological solution for healthcare, nutrition and wellness, led the Group to focus on sustainability, efficiency and energy self-sufficiency as one of the main fields to invest on. The realization of *Leaf Community*, an eco-sustainable completely integrated system of buildings and renewable energy sources, signed a crucial step in the making of *innovation* and *design of the future* as the Group key competitive advantage.

The historical evolution of the Group suggests how the acquisition, application, enrichment and renovation of employees' competences have been playing a crucial role for the enterprise success: «people knowledge, their knowhow and intellectual skills are the real heritage of the enterprise». This has implied the remarkable increase of Loccioni employees' educational level in time, the development of people training and talent management projects, the investments on R&D and innovation processes with consequent new knowledge generation, application and sharing. The successful use of people knowledge as technological innovation and business development driving force has brought the Group to increment its turnover by two and a half times from the beginning of 2000 to 2012 (Varvelli, 2014, p.8).

The idea of establishing its own activities on emerging quality measurement challenges, which evolve continuously, has been involving the necessity for the Group to maintain itself as a «young enterprise». This means remaining always available to renew and update the Group business units, according to changing requests coming from markets. To this purpose, then, it is fundamental to aim for recently graduated young employees, who invest their just acquired knowledge within the enterprise, transforming it in specific competences to realize innovative technological solutions. For this reason in the Loccioni model of "knowledge enterprise" the element of people – the ones to look for and how to get and train them – is the crucial point for the Group longevity and its sustainability in the time.

5.2 The Business Continuity project

In 2013 Loccioni Group laid the groundwork for a new industrial plan, an ambitious one.

The basic idea was that Summa, responsible for designing and expanding long term development, had to assure business continuity for the Group, actively contributing to the maintenance and development of markets, relations, people and methods through four functions.

F1. To maintain already well known customers, source of profit

F2. To develop new branches within already overseen markets

F3. To internationalize all the Group's businesses and to explore new geographical areas

F4. To develop new businesses

It was a kind of stress test and teams had the goal of selling and developing new know-how simultaneously.

Following the Group's approach, the logical flow of business development is divided in four different steps, with reference to a defined organizational model

1. Macro trends' analysis

Identification of all actual and future potential areas in which people are well disposed to invest money, for instance in primary or secondary needs

2. Definition of branches proving profitable for the Group

Extrapolating from a selection of industries, let's choose those showing higher possibilities for future and continuative businesses, revealing coherence with Loccioni values, not so far from the company's business model

3. Business model definition

Deeply understanding of what the company can sell, how to sell and the distinctive added value possessed by the Group with respect to competitors

4. Definition of the project

Mission, vision, goals, budget, activities, teams

All this must be supported by a dynamic, flexible and transversal organization, which makes people grow on, different departments, communicate and achieve of goals efficiently and efficaciously.

A short focus for each passage will follow.

With regard to macro trends and market perspectives, man has

- the necessity to live healthy

- the necessity to feed with quality and continuity

- the necessity to move safely, efficiently, comfortably

- the necessity to live comfortably

- the necessity to work smartly

Generally, these represent important aspects of everyday life and, in order to fulfil these kind of necessities, we are willing to spend part of our wealth.

Summa is in charge of collecting all the stimuli coming from internal and external networks in order to identify the macro trends and, subsequently, to select few branches on which company can focus resources, because of their potentiality.

In case info collected during the development of the projects prove inconsist with respect to the initial intuitions, the development project ends at the analytical phase and a new project can be once again analysed and potentially developed.

In parallel to the market, stimuli from internal and external technological networks must be picked up: Research for Innovation, Research and Development, European Community, international research centres, universities. This activity aims at determining macro trends of new technological competences that, once the company is able to absorb, will turn out to be crucial to solve costly and annoying problems, making a remarkable distinction from competitors

- sense

- robotics

- artificial vision

- smart automation

- hyperspectral vision

- artificial intelligence

- structures

- profilometry

The organizational model that best works is the "transversal" one, characterized by step by step projects, combining competences about both market and technology developments, looking for customers of high quality, technological innovations of high quality, products and services of high quality.

As for the definition of branches with business potentiality, among the different industries analysed, the company should focus on those which are aligned with Loccioni values and culture: history teaches that the most successful branches are the ones respecting the following peculiarities

- Technology, where there is appreciation for high technology measurements and automation

- Innovation, where products, solutions or processes often undergo a change and there is possibility to replicate solutions

- Money, with an high degree of investments that increases possibilities for the company to get some of them

- Big and International, it means that the potential customer works on multiple geographical areas and produces multiple products, presenting several business opportunities

– Global player, giving the possibility to develop Key Account Management logics, really efficient and effective for Loccioni values and skills

– High production volumes, it means that huge investments can be easily paid off thanks to big numbers

– Coherence with values and philosophy of Loccioni: high morality, little bureaucracy, no power games

Relative to the definition of the business model and plan, in order to launch a project for the development of a business, an operative one, on which the company invests people and resources, there is a need to previously define a model, that is the tool through which the company tries to go beyond all questions and suppositions about the market; it writes down potentialities, risks and requests of the reference market or industry.

The transversal team of business development is supposed to spend 12-24 months to discuss strategies, to visit and meet potential customers, partners, opinion leaders, institutions, consultants, studies and research centres in order to define the best business model.

The questions the team wants to answer to define the business model are

– What are we going to sell?

– To whom?

– Where?

– How?

– Why are we going to sell and potential re-sell?

The answers to the above questions are crucial to justify the technological investments the company wants to make

– What are we going to sell? Measurement solutions to increase quality

– To who? The best world players

- Where? Everywhere in the world

- How? There is the necessity to delineate the commercial model (value, services, international selling, strategic alliances) always in alignment with people and values of Loccioni Group (imagination, energy, responsibility, tradinnovation)

- Why are we going to sell and potential re-sell? Because in customers 'eyes the Group is able to create a higher value with respect to competitors: the importance to understand the reason why and the ability to propose solutions in advance.

While defining a business plan, business risk is very high because the team makes reference to intuitions drawing from macro trends; once feedbacks from the market reveal positive opportunities, in the following three years the business development team has to formalize all the aspects of the plan

- vision

- mission

- background of Loccioni

- target customers list

- analysis of critical problems

- analysis of strategical competences to apply

- selection of "Trojan" horses

- analysis of competitors

- analysis of strategical partners

- organizational team and members

- definition of activities

- definition of goals

– definition of budget

As for the organizational model, in order to face the different new market segments, mini teams – transversal between Summa and the business unit- are set up and have to develop new businesses in combination with the two areas of expertise. Each team is made by one person from Summa, in charge of relational and strategical business, the so called Business Developer (BD); one person from the business unit (BU) as key account manager referent (KAM), with a double perspective, market and technology; one person from the business unit as technical specialist, with a double perspective, market and technology.

These three people team are supported by another unit of people whose task is to support in terms of strategy and commercial politics, through a series of adjournments. Its composition is made by the General Manager, CTO, Sales Director, Research for Innovation Manager, Business Development Manager.

This unit can be named as "management".

By doing so, the operative team is directly involved in the customers and market development, possesses the autonomy to move and address specific interlocutors but, at the same time, is backed by the experiences and guide lines from the management.

Once the branch of business, in the meanwhile became sub –business unit- will have the "dignity" (in terms of number and sustainability) and a customers' portfolio to branch off, a spin-off with customers, solutions, competences and a management will generate. This is the actualization of business continuity.

5.3 The Business Development activity: the operations

In this section the activity operated by the business development team will be described, aiming at defining the steps that guided the definition of a new competence, necessary to fulfil the requests from a new markets.

In terms of macro processes, it is possible to divide the overall activity into 4 main steps

Analysis · Target Customers · Relationship Creation · Offering Management

Fig. 5.1 Milestones of the process

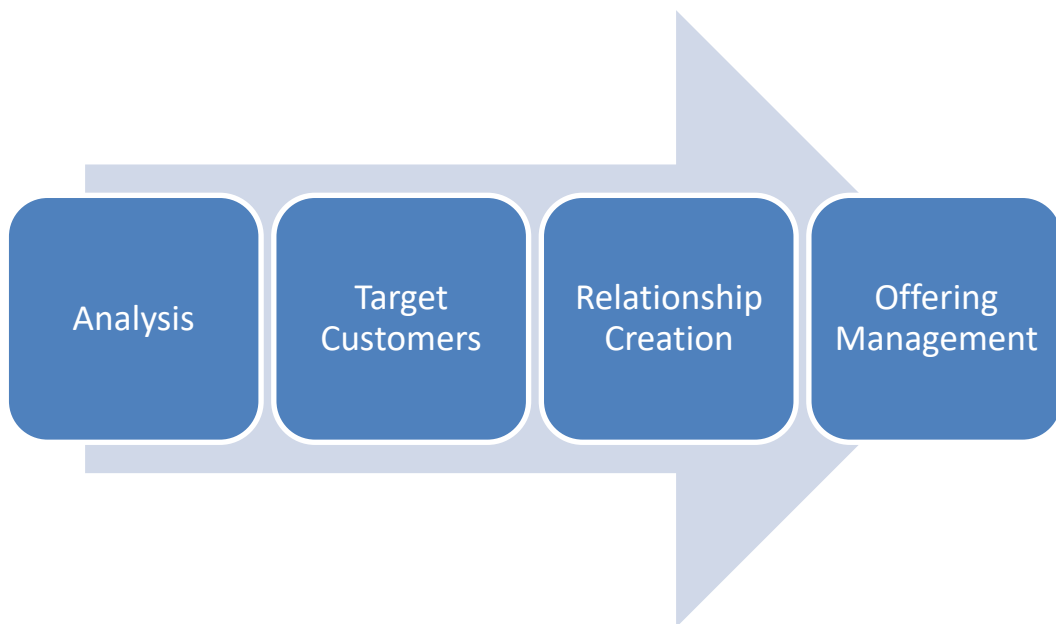Apart from the first part of analysis, totally in the hands of BD, the rest of the steps have been carried out in association between BD, KAM and the technical specialist.

Moreover, periodically, the team shared partial results and feedbacks from the markets with the management, so that every single person could both express personal opinions and be informed about the next steps.

5.3.1 Analysis

As for this first and preliminary part, the BD, as already said, has been responsible for writing and definition of market and customers' analysis.

The reference market, the new one to develop, was the Food and Beverage (F&B).

Considering the size of this huge industry and the preliminary suppositions (the ones coming from the macro trends), the criteria taken into account to make a first screening have been

- Overview of each sub-industry within the industry (i.e. Meat, Fish, etc.)
- Profit potentiality
- Innovation level
- Specific quality check requirements

The basic idea was to have strabismus: on one side the market and commercial issues, on the other one the technological scenario. By doing so, it was not only possible to try to have an overall control of the situation, but also to focus on areas matching technological and market's request.

Then, once a segment had been selected, the next step was an accurate and full-scale mapping of each market-customer profile. The extremely accurate mapping was necessary to understand the internal organization of the customer, the competences of each department and, mostly important, the roles of people operating in the areas of interest.

Hierarchy and distribution of competences are crucial to realize to which figures the team proposed the fact-finding meeting.

The decision making process represented the second fundamental aspect to reach, so that the team could structure the offering, following customer's timing and procedure.

Indeed, decision making process is a really free variable and it is not possible to define a single rule valid for every company. Moreover, big companies, with international offices, keep the final decision in the headquarter and so, dealing with foreign production plants, decision making process can last several months.

The full-scale mapping was characterized by a sum up of several aspects such as mission and company values, internal organization, turnover, range and production lines.

All this was combined with a geographical reproduction of plants distribution all over the world and, for each site, a description of products was attached.
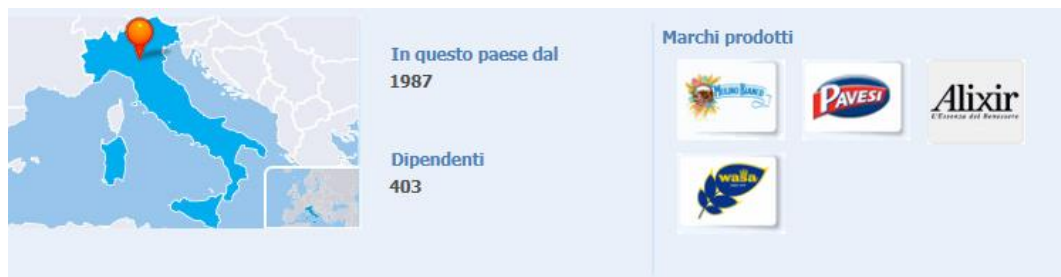
Fig. 5.2 Drawn from the market analysis

Afterwards, a more detailed part was dedicated to the analysis of the full-scale mapping of value chain, in addition to the strategic reasoning about customers, with a focus on how to start a long term relationship.

To define the value chain of food production, the general food production process has been sounded out. The idea was to get aware of all the operations so that, consequently, it would have been possible to define the quality and measurement problems of each step or sub-process.

Drawing from technical sources, the result was the following graph, showing the main stages and, for each one, the principal applications.

Packaging
-Tightness
-Integrity
-Data reading

Finished Product
-Aesthetical check
-Geometrical check
-Process check
-100% check

Processing
-Viscosity
-Mixture control
-Granulometry

Raw Materials
-Procurement
-Selections
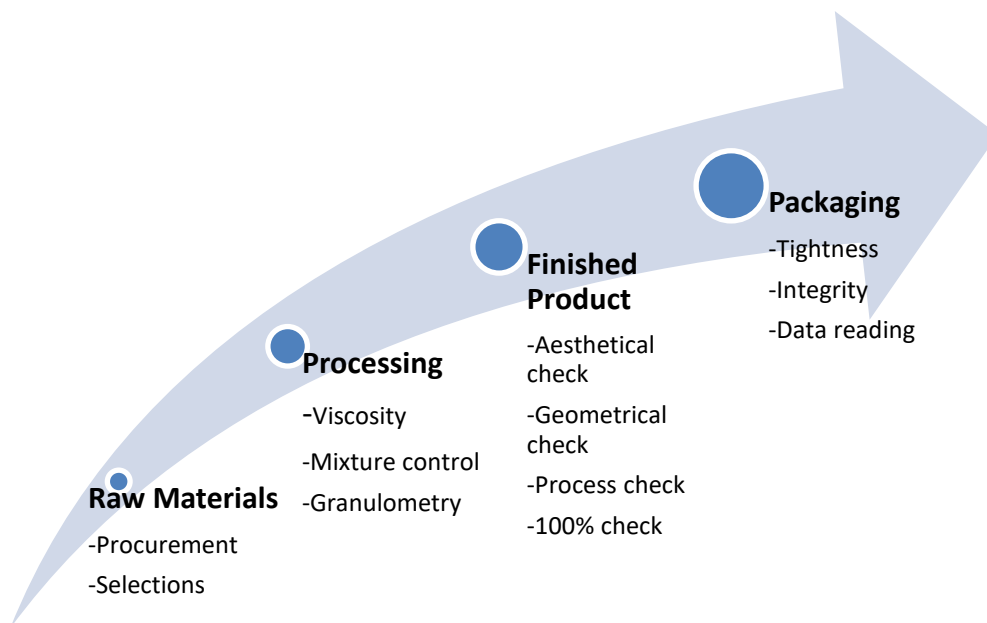
Fig. 5.3 Food value chain: open points for each step

The value chain knowledge allowed not only a good learning of food working principles, but, more important, to write down potential problems relative to each step of production.

It is important to say that, at the beginning of the project, problems have been collected by web and reference magazine analysis, also the result of internal brainstorming and discussion with senior figures from R&D; the direct contact with customers then helped to get more knowledge about that and to reorganize the list of annoying and costly problems, to correct mistakes and avoid partial or apparent problems. The main issues were

‒ Food Safety and Security

‒ Need for automation and substitution of manual checks

‒ Shortage of measurement systems for dough and mixture of ingredients

‒ Tightness of packaging

- Energy optimization of processes

- Aesthetical checks

- Mobile data reading

Still on the technical side, a parallel activity to the one referring to the collection of critical situations, was the reconstruction of competences' background of Loccioni.

This delicate part was really useful. On one hand it gave the possibility to put together many info from the past; as Loccioni, there is no technical database where one can find the list of all the projects and relative competences since 1968; new projects represent an occasion to refresh data and strengthen the historical memory of the company.

On the other one, maybe even more important, it helped the team to realize the starting point for the development of new competences for the new food solutions. Depending on the customers' request, the degree of newness can vary and to have a clear idea of the state of the art of internal knowledge is a great help to optimize the development time of solution.

- Electrical plant set up and production line automation
- NIR analyser
- Meat traceability
- Milk traceability
- Vision system for aesthetical quality check
- Industrial oven energy consumption control

Fig. 5.4 Background projects in the food area

5.3.2 Target Customers

This section was intended to narrow the scope and focus on target players with which starting interactions.

As already underlined, the target customer must be aligned with corporate values and present several positive elements to be considered as target.

Again, for each customer a detailed profile had been organized, containing all the info necessary to define the strategy.

In addition to the above mentioned data such as turnover, distribution pf plants, main figures and range of products, the even more interesting section of info was the one dedicated to the network surrounding the activity of the target company.

Many actors took part to the network and it was really helpful to divide them into categories, so to have different sources from which to draw. In particular

- Main universities, principally considering an European scenario, with the support of R4I

- Most important European Research Centres, in collaboration with R&D and RfI

- The world of automation suppliers: on the technical side with the support of the R&D, on the commercial one thanks to the KAM

- Suppliers, in turn, gave the possibility to enter their huge network made by several strategical actors providing technology for the sector of interest such as food machine constructors

- Events and trade exhibition

- Opinion leaders and VIP, coming from the food and technology environment

Beyond this, there was all the material previously collected through the reconstruction of the history of old projects, together with the professional

skillset and the personal and professional social network belonging to the Management.
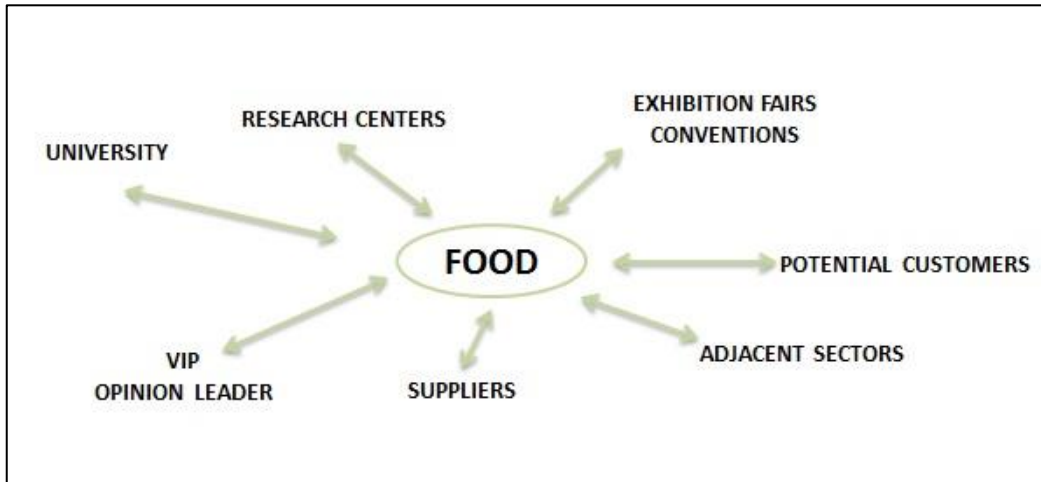
Fig. 5.5 Food Network

Other types of evaluations come after the network analysis.

It was important to have clear ideas because, considering the size of data, it could be possible to lose the control of the situation and get confused.

From a general analysis of customers then the focus shifted to a single account, in terms of strategic importance and management difficulty.

In particular, this focus could establish which accounts deserved particular attention and, consequently, a deeper analysis.

Difficulties could be a criteria on which the business development team could group customers, referring to the relationship's management, specificity of requirements or customers' behaviour.

Anyway, one customer is considered important because of great purchasing volumes, higher than ones made by others.

There are other features that can help to define the relevance of a customers.

The fact that this one is prestigious, a market or sector leader, are circumstances

that can lead the company to think that this customer is a strategical player, even if the amount of exchanges is not so high.

The prestige is the result of the good image that an organization is able to get through contacts and feedbacks by other customers.

Other factors that can contribute to the strategical importance can be summered up under the expression "general account desirability[1]".

It is the case, for instance, of relations that can help to diversify the company's activities, improve the technical or commercial competences, open to new markets, enhance relations with other customers and so on. The following table summarizes some of factors defining the importance of an account.

- Purchasing volume (quantity or value)
- Account potential
- Account prestige
- Customer leadership within the reference market
- General account desirability
    - Diversification of activities
    - Entrance to new markets
    - Improvement of technical and commercial competences
    - Improvement of relations with other customers

Fig. 5.6 Determinants of the strategical account importance (Marketing business-to-business .McGraw-Hill)

The second variable a company should consider in order to put all the analysis' efforts is defined as "difficulty of account management".

Elements that make the customer management difficult, even if they are many, of different nature and importance, can be led back to the following three

---

[1] Fiocca, R., Snehota, I., & Tunisini, A. (2009). *Marketing business-to-business* (pp. 3-305). McGraw-Hill.

categories: product's characteristics, customer 's characteristics and intensity of competition for the customer.

<div style="border:1px solid black; padding:10px;">

- Product features
  - Newness and complexity
- Account features
  - Customer's requests
  - Purchasing behaviour
  - Technical and commercial customer's competencies
  - Customer's goals
- Intensity of competition
  - Number of competitors
  - Competitors' strengths and weakness
  - Competitors' position with respect to the account

</div>

Fig. 5.7 Account management: difficulties (Marketing business-to-business .McGraw-Hill)

Product's characteristics are evaluated according to the capacities to satisfy specific customer's requirements more than objective characteristics of the product itself.

For instance, a machine can be considered really complex by a customer using this for the first time, while an already acquired customer would find this easy because he knows how the machine works.

Generally, the more complex the product, the more special the relation with the customer. In most of the cases, the supplier must stand side by side to the customer and help to learn how to use the machine or the installation.

Again, the relation is really critical and difficult at the first stages of product development, because the customer often does not know all the potentiality and is not able to obtain good results from the use of product.

As for the peculiarities of a single account, relevant differences among customers are typical of industrial markets.

Some can ask for different level of after – sale services or need for more technical info during the presentation of products.

The purchasing decision time can vary from company to company, even markedly.

The same is for the number of people involved in the decision process: sometimes the decision is in the hand of just one person, in other situations the purchase is defined with the approval of several company functions involved in the use of the product.

The heterogeneity of customers directly defines the major or minor difficulties relative to the relationship management. From this point of view, the formative function consisting of the identification of peculiar features of each customer operated by sales department it is extremely important.

A fundamental element linked to the difficulty of customer's management is represented by the powerful position owned in the market.

This occurs when customer's purchases represent a relevant percentage of sales of the industrial company; in the case of standard product, customers are able to switch to another supplier, without suffering from high exchange costs (Porter, 1985).

As a rule, the greater the power of the customer, the more complex the management of the relationship.

A "strong" customer can impose his rules in terms of purchasing procedures, in terms of payment and so on. In other circumstances, goals pursued by the customer turn out to be hurdles for the industrial company (the supplier). For instance, frequently the purchasing company splits purchases between multiple

suppliers: due to increasing competition, companies can strive for obtaining best purchasing conditions.

The number and the intensity of competition surrounding the account is the third element of management difficulty. The fiercer the competition, the harder the management. The number of competitors, their strengths and weaknesses, their position with respect to the desired account, become essential elements for the definition of the degree of difficulty of the relation.

Mixing these two variables - general account desirability and difficulty of account management, in a double entry matrix - the industrial company can have a clear and rapid picture of customers 'portfolio. Examining each position, it is possible to define which customers deserve a deeper analysis; generally, customers in box 1 and 2 can be considered object of a further analysis.

Strategical account importance

	high	low
high	1 «key» «difficult»	2 « not key» «difficult»
low	3 «key» «easy»	4 «not key» «easy»

Difficulties of account management

Fig. 5.8 Determinants for customers'selection ((Marketing business-to-business .McGraw-Hill)

Under a strategical point of view, another effort for the identification of further important data about specific accounts is represented by the analysis of the level

of attractiveness. In a nutshell, in order to understand and foresee the future trends of products, a company should carefully examine the evolution of customer's market. Thanks to this approach it possible to control the nature of products' demand, one of the most important factor in business to business environments.

Some of the collected data can be info and data published on the web or in official materials, the rest of info are the result of suppositions and ideas about the account.

Then, with the passage of time and with the intensification of the relationship, the factors listed and collected will be completed by opinions expressed directly by customers.

5.3.3 Relationship Creation

This part of the process marks the transition from the "passive" research to the "active" one, that is, once collected all the info about customers, the team is ready to go and visit the selected accounts.

This is a delicate phase because it is the starting point for the construction of mutual trust, the solid base to build up the long term relationship.

Usually, the first meeting is a sort of test to prove

– if the interlocutor is the right one, that is if he or she is in charge of competences coherent with Loccioni food targets

– if there is a real interest in expanding the supplier portfolio and therefore a concrete necessity about specific critical open points

– if the previous condition is met, the interlocutor(s) is likely to report about problems affecting the production line.

The real big problem is that customers disclose their own technologies really cautionallt, especially if the supplier is a completely new one. Of course they are really secretive and they do not want to share confidential info with "unknown" figures.

Given the fact that Loccioni presenting the company had no direct references about F&B, a huge preparation in terms of applications, machines and main operations linked to the food production has been fundamental to surprise the customers and, in a certain sense, "anticipate" potential problems, putting light on aspects strategically important for the supplier, that may be an hindrance for the customer production.

To give a good confidence outlook is already a first little step into the right direction. Moreover, the second big step that can be the next turning point for "winning" the customer's confidence, is the presentation of a good feasibility test.

Once the business development team cames back from a business trip, plans the official meeting to inform the rest of the figures involved in the project about the working process status of the team. Indeed,

- directly reporting to the management helped to re-define or adjust commercial politics
- directly reporting to technical specialists helped to clarify ideas about the design of feasibility test.

By the way, the business development team had five main ways through which update and keep any member of the team informed and aligned in terms of commercial strategy

1. The official monthly meeting with the management and all the people dealing with the food project

2. The daily communication, within the operative members, even informally (coffee break, for instance)

3. The phone call, on the spur of the moment, soon after the business meeting with potential customers

4. The written report, by the BD (in collaboration with the KAM and the specialist), after the business meeting with potential customers

5. The monthly report presenting the dashboard summarizing all the visits (indoor – outdoor) and follow – up activities, all the number related to the business (budget alignment, costs, margins).

Thanks to internal directions (both technical and commercial) and customer's main guide lines, the technical specialist, supported by the KAM and the R&D or RfI department, started the design of the feasibility test.

Since the starting point was already present in Loccioni technology, the innovation to pursue was an incremental one; depending on the degree of "newness", inherent to the customer's request , a person from R&D od RfI was involved

− If the application presented similarities to some previous customer's orders , it was R&D

− If the application had comparisons in pure technological projects and not directly connected with customer's demands, RfI.

Through the feasibility test the team gives substance to the hypothesis that intends to carry out, dealing with the definition of contents, related services, referent people etc. There is a sort of evaluation of expected benefits, identification of necessary tasks for the realization of the prototype and related costs, highlight of potential risks to face together with the assessment of the activities for the realization and implementation of the project.

The team builds up knowledge about the problem and conditions are created to reach a reasoned decision on the investment.

Basically, the feasibility test lowers the uncertainty of the project and provides the first directions to rule the complexity. Indeed it should increase confidence about investments' decisions and consequently favouring the focus on the project; it should help the construction of an overall vision, not only under a technological point of view; it should prove if initial suppositions are correct and enable the reconstruction of an already extensive knowledge; explanation, in-depth analysis of targets and expected benefits.
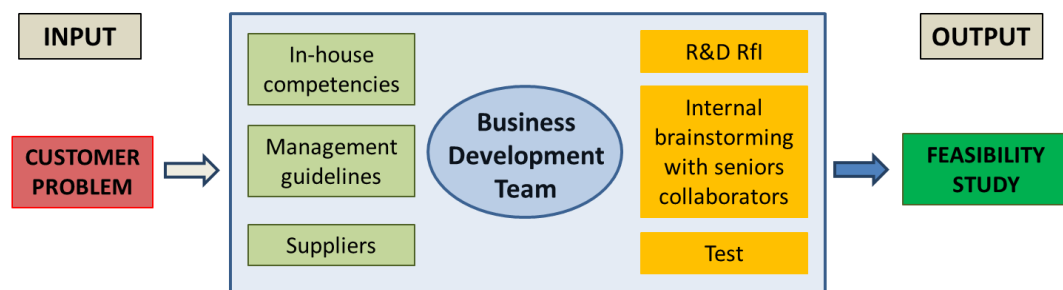
Fig. 5.9 Feasibility test procedure (own elaboration)

The preparation of feasibility test is a unique experience through which the team becomes aware of the distance between the actual situation and the desired one, that is the customer's satisfaction and the good result of the project.

"Distance" coveys the idea perfectly, because moving the first steps into a new market has a double goal:

    1. The team wants to complete optimally the project and obtain the customer's trust

    2. It wants to learn a new skill to sell to other players

It is an interval that must be filled up with new knowledge, both in terms of commercial strategies and technologies.

It is a learning acquisition that sees in the feasibility test the first chance to put in order all the well-known elements and, above all, the unknown ones, which will lead to the achievement of a new competence in a new market area.

Before analysing this aspect, that will be reviewed later, now the theme of the offering management will be taken into account to track operations that will help the company to assess the project and create an innovative solution.

5.3.4 Offering Management

It has been already highlighted that a solution, required by the customer, is given by the interaction between customer and supplier, within industrial environments.

In order to adapt the solution on the base of the customer specific demands, an active and pro-active approach is necessary, as for the supplier and the customer. The latter can do nothing but express requests, giving the supplier the "honour" to adapt the offering, or he can intervene more considerably on the process through a systematic interaction with the supplier.

With reference to the case study, the situation of relation between user – producer is the interaction driven[2] .

Here the reference situation is the one where the offering adaptation process is the result of interaction between the two counterparts who both play an active role.

---

2 Fiocca, R., Snehota, I., & Tunisini, A. (2009). *Marketing business-to-business* (pp. 3-305). McGraw-Hill.

It is possible to differentiate several different degrees of interaction and intensity of info exchange.

The *loose* situations, for instance, occur when both the user and the supplier drive the adaption process alternatively. They rule, separately, different and sequential steps of the development process driving to the problem solving. To better understand, it is like the two counterparts work on a semi-finished product; this last one is the collector for mutual knowledge and skills, but the two actors work on it in different steps of the development.

It is just a matter of punctual info exchange, aimed at requiring specific interventions on the product in question without any direct engagement or investigation of the particular knowledge of the counterpart.

The cooperative situations instead (*tight*) give rise to an intense interactive process of knowledge and info exchange between the user and the supplier.

Both the actors are interested in extending the area of shared knowledge and cooperate through a close, joint and long-lasting relationship.

During this period, a shared language is developed, mutual adaptation processes occur, routines take shape and shared objectives are defined; furthermore, an atmosphere based on trust emerges and this favour an higher sharing.

To better comprehend this last phase of the process of business development, it is useful to describe the relation between the Group and the first real customer.

It seemed reasonable to mention what happened between Loccioni and Lavazza, the most important Italian coffee producer.

This episode is taken into account because it represents the real first success relatively to the F&B market, and, furthermore, it was a case of close relationship between the customer and supplier. The collaboration made it possible to grow in terms of knowledge the new technologies, the new working

approaches and to let the team have concrete answers to all efforts previously made.

The Automation Fair of Parma 2013 edition was the occasion through which the two companies got in touch.

Lavazza' s Engineering Director and Loccioni's KAM met each other; this represents a fundamental "teaching", since is a confirmation that when the relationship starts from an high level, there are more business possibilities.

Indeed the Engineering Director is the perfect interlocutor; not only does he have in mind the situation of the production facilities but, at the same time, he is responsible for the definition of the innovation strategies.

Successively, two meetings occurred, one at Loccioni's headquarter, another at Lavazza 's production plant.

Basically, during these two first fact-finding meetings, the supplier (Loccioni) was interested in presenting the technology portfolio; the customer, instead, wanted to examine and better investigate the new actor, to see Loccioni's reliability and be opened to issues relative to the quality of products and production.

The business development team knew the difficulty of making the first step within a so well-known company such as Lavazza and, fittingly, in the first phase, it considered all the critical aspects presented by the customer. For two main reasons. First, it was really useful to make experience and become familiar with the language, aspects and elements typical of food (in this case coffee) machinery.

Secondly, it helped to redefine previously made analysis and started making more concrete generalizations, a sort of test proving if initial assumptions were true or not. As already said before, the business development process is a sort of learning by doing process.

The business development team, after several discussions with the management and technical specialists, gave up pure research and breakthrough innovation projects and opted for quality check oriented issues.

Indeed, the coffee producer asked Loccioni support for its most innovative and profitable products, the coffee capsules.

Lavazza had necessity to control the tightness of each single capsule, considering parameters of tenths of micron, impossible for the human eye and possible only with super high vision systems.

No supplier had been able to provide a reliable solution and Loccioni could be the right one to industrialize a custom application.

As the above mentioned procedure indicated, the natural consequence was the compilation of a feasibility study.

Just to realize the dimension of the difficulty of the elements to consider, the technical specifications were named "Moon's specifications" due to the fact that, until that moment, no solutions were found.

A prototype was set up at Loccioni R&D lab, ready to be supervised by the customer.

Indeed, the customer visited the lab and examined the prototypal machine. The two teams discussed about all the machine's functions and, afterwards, Loccioni's team was able to write an official offering that completely matched the customer's request.

Fig. 5.10 The prototype at Loccioni's R&D Lab

Unfortunately, this was not quite satisfactory; the customer was not completely confident since there was no previous experiences by Loccioni in similar food applications. As a result, the project went on a stand- by status and for several months the relationship was limited to frequent communications, without any consequences.

Since the coffee producer kept on launching new capsules, even more particular in terms of colours and graphic, the quality check stood out as a real big problem.

Under the supplier's point of view, the size and the dimension of the issue are key points in order to realize a satisfactory solution; if problems are linked to strategical products, under the customer's perspective, trust in the supplier becomes vital.

This conjunction made possible a renewal of the relationship and a new phase began, the try and buy one.

Indeed, the business development team went to Lavazza's plant to install the prototype and make in line tests.

Fig. 5.11 Lavazza's production plant: Loccioni system

It was a real production simulation, in order to check

- – Cycle time
- – Number of pieces/ seconds
- – Proper functioning of the camera
- – Proper images acquisition

If tests have given a positive response, the customer would have proceeded and made the order.

The interest of the project is given by a "double velocity relationship", meaning that the business development team worked always on two levels.

The "high side", represented by the customer's management, was incredibly important to be aligned with the investment strategy.

The "technical side" was important as much the previous one, where the connection between the two teams has been more visible, making possible to acquire new knowledge, through a series of "try" and "fail" operations and then to test the new knowledge functioning.

In October 2015, exactly after two years from the first official meeting, the customer made the order and officially Loccioni acquired its first customer in the F&B market.

Fig. 5.12 Loccioni and Lavazza after signing the contract

5.4 The Business Model

So far, it has been observed that when something new is developed, once the "form" is selected, a learning process shapes. This includes

- new info and data acquisition

- integration with the already existing ones

- compilation and definition of new strategies, based on the above mentioned knowledge.

These three main steps produce an output, collecting all this material. In this output the method allows to put in a row the info and to highlight the most important key notes.

Indeed, at a certain point of the route (still referring to the F&B experience), the team was able to elaborate a draft of a business model, where the initial assumptions and "presumptions", thought at the beginning of the Business Continuity project, were compared with the facts and episodes fruit of the business meetings and relationships with potential customers, as well as direct experiences on the market.

The business model, designed as a tool, is also a proof of the fact that business development, as a real activity, possesses its own dignity and presents tangible results, even if it made by intangible knowledge, especially in the case of a completely unknown market.

The starting point is undisclosed, the market unexplored and no references are present in the company's background.

Thanks to the "imperceptible push" by business development is possible to define the leitmotiv, the base on which new knowledge, leading to new competences, builds up.

Indeed, organizing all the info, in terms of time and quality (the distinction between true and false information, relevant from superficial information), a process can be outlined.

Mission and Vision	Network	Team
Value Preposition	Competences requested by the market	Problems expressed by potential customers
In-house Competences	Target Customers Target Industry	Budget

Fig. 4.13 Business Model: main topics

The business model, by Morris and Schindehutte, can be summarized on three levels.

At the most rudimentary level, business model is defined as "a statement of how a firm will make money and sustain its profit stream over time". At the operational level, business model refers to "the design of key interdependent systems that create and sustain a competitive business" . At the strategic level, business model emphasizes "overall direction in the firm's market positioning, interactions across organizational boundaries, and growth opportunities".

In a nutshell, the business model is a way to test if what a working team thinks of a specific issue (market, innovation, project, etc.), matches to reality.

It is the managerial equivalent of the scientific method.

It is impossible to separate it from the strategy, even if they are different concepts, because strategy is the glue holding together competences, assets and processes.

Anyway, the debate about the difference between strategy and business models has been vivid.

Some people use the terms "business model" and " strategy" as synonyms (Magretta, 2002). A review of the literature shows that the view that business models and strategy are linked but distinct is more common (Magretta, 2002; Mansfield and Fourie, 2004).

A practical distinction describes business models as a system that shows how the pieces of a business fit together, while strategy also includes competition (Magretta 2002).

In contrast, others understand the business model as an abstraction of a firm's strategy that may potentially apply to many firms (Seddon, Lewis et al. 2004). In general however, business model literature seems to fit the former definition better, because most of it focuses on describing the elements and relationships that outline how a company creates and markets value.

Beyond the fact that this tool is fundamental to fix the strategical mission of the company's project, in terms of vision, mission and a general idea of the value preposition, the business model, through the business development activity, helps to transform inputs to output.

The effort lies in the definition of methodologies and routines through which the company gets ideas about

- what the company knows and possesses
- what it does not

− how to use and understand strategical assets to extrapolate value from them.

Moreover, since the size of projects can be very large, it is difficult to take all the critical resources under control and many of them can be out of the direct control. As a consequence, the compilation and construction of the network becomes a source of innovation which the company cannot do without.

CHAPTER 6

ROUTINES' ANALYSIS: HOW EXPERIENCE LEADS TO COMPETENCE

In chapter six , through the guide lines showed by theory, the experience of the case study is analysed to see the implications and consequences caused by the set-up of a team and goals dedicated to the new ventures.

6.1 The comparison with the compression and experiential model

To give proof of this process, a series of interviews have been conducted, with the people involved in the project.

The idea was to give a concrete answer to confirm, tangibly, vision and mission by Business Continuity project – that is the part related to the coherence and alignment with the core identity – then to track the development of the new competence (for example the coffee capsule vision system), through the definition of several routines.

The outline of the process allowed to focus on the two nuclei of comprehension and deftness, where, once again, the routines are backed by the imperceptible push of business development.

Before focusing on the two moments of the competence development, it has been important to equate the business development experience of competence development with a process, that is a series of routines.

As a reference model, the compression and experiential strategy by Eisenhardt and Tabrizi (see chapter 1) has been considered.

Their main research question was "how do firms develop products quickly" and focused attention about product development processes.

The authors treat more traditional project management strategies (e.g. Clark and Fujimoto, 1991) as the compression strategy. They state that, in high-velocity environments at least, adaptation and flexibility are more important. They present evidence in favour of this experiential strategy and show that the compression strategy only seem advantage in mature industries.

Generally, looking at the literature, about quick product development, the tendency is to assert that increased planning, rigor distribution of tasks and well-defined goals facilitate the above mentioned process.

By Eisenhardt and Tabrizi, a step forward has been made and it has come to another study.

The compression strategy results to be more appropriate for predictable products in mature industries, where it is easier to understand the process, squeezing or compressing it in order to go faster.

The experiential strategy, instead, appears relevant for unpredictable projects, where there is uncertainty of data, ambiguity of info and product development needs flexibility and adaptation.

The study has been useful to identify the different steps of the process and, drawing from the this theory, it has been possible to verify

  − that it was possible to recognize in the real F&B experience what the theory stated

  − to check the weight of the two strategies in relation to the case study

  − to prepare the ground for the analysis of comprehension and deftness experience.

To do so, six interviews were conducted on site, in the company. The interviews can be considered as semi-structured, since they were based on a general interview guide.

The face - to – face interviews were audio-recorded and later transcribed. In addition, other significant contributors to the total dataset were secondary source material such as annual and monthly reports and confidential firm-internal data on profit margins.

Interviews were later individually coded for content, read in relation to one other, allowing general patterns to be detected (Strauss & Corbin, 1990), in a clustering process that identified eight key activities forming the basis of the process, the one that leads to the development of the new competence.

The respondents were high-level figures, representing several different and distinct organizational groupings within the firm: management, sales, research and development, sales and marketing.

They were asked to answer about the main stages of product development theorized by Eisenhardt and Tabrizi. Some are recognized as typical of the compression strategy, others from the experiential one.

Then a template has been set up where, for each step, the approval or disapproval by each respondent was recorded.

Experiential Strategy

    a) Multiple design iterations

    b) Extensive testing

    c) Less time between milestones

    d) Powerful project leader

Compression Strategy

    e) More time spent in planning

    f) Customer involvement

    g) Use of computer –aided- design

    h) Overlapping development steps

i) Multifunctional team

j) Greater Reward

In the following tab, on the left there are the roles of respondents while, up on the right, the letters belonging to each process' step.

	a	B	c	d	e	f	g	h	I	J
General Manager	X	X	-	-	-	X	X	-	X	-
CTO	X	X	-	-	-	X	X	X	X	-
Sales Manager	X	X	X	-	-	X	X	X	X	-
Bus.Inn Manager	X	X	-	-	-	X	X	X	X	-
KAM	X	X	X	-	X	X	X	X	X	-
Specialist	X	X	X	-	X	X	X	X	X	-

Looking at the tab, it appears that each step of the process received an answer (positive or negative), a confirmation that the match between the real experience and the literature reference occurred.

Among the contrast answers, it is interesting to consider "Less time between milestones", "Powerful project leader", "More time spent in planning" and "Overlapping development steps".

As for "Less time between milestones", this opens up a warm theme, the one linked to the discipline, strict planning activity and iron coordination, and so linked also to "More time spent in planning".

Drawing from the words by one of the key respondent, the Business Innovation manager, referring to the importance of planning meetings, focus moments and comparisons, *"Not very much, in the sense that apart from the phase where you have to make concretely the output, where you have promised something to the customer, the rest does not really matter"*.

Furthermore, by another one, the Sales Manager, *" (…) since it was a start-up (…), planning was general (…), we worked mostly on the "impact/feeling" rather than on a scheduled programme. For a start-up, without having done a previous deep and expensive analysis, it is normal procedure"*.

Basically, a non-confidence in the organization of precise agendas or calendars emerges, since it is conceived as no flexibility and responsiveness, rigidity and narrow minded. Working with the "new", the team must be ready to embrace any new opportunities or chances, so the respect of deadlines or fixed appointments is seen as an old way of thinking about market development, and, more important, as the old approach "we have always done in that way", that is completely wrong.

Differently, the methodical approach is appreciated once the customer has accepted the feasibility study, when the chain of activities, aimed at the assessment of the project (machine, system, etc.) starts up.

In this case, since more actors and money are involved, precision and punctuality become fundamental, in order to control the overall steps, the flows of info and, especially, to determine timing and respect it. This gives a good image of the company, considering the customer's point of view.

The vision is different by two operative figures, such as the Key Account Manager and the Technical Specialist.

According their vision, more time spent in planning is a strategic move, not only because it represents a common approach, easy to understand, but, mostly, because it could be a method through which managing resources and time more efficiently. Since people involved in the project were, at the same time, implicated on other markets and businesses, the lack of time and the bulk of info due to development activities generated moments of bewilderment and confusion, with negative consequences on strategy or customer management.

The organization and respect of fixed appointments (focus points, meeting etc.) must be seen as an occasion for stopping and thinking about the directions the team is following, more than a taking decision moment. Considering the size of this kind of projects or the number of people involved – directly or indirectly- the collective time helps to create points of reflection. Furthermore, this eases the creation of right conditions, allowing the team to work properly, thanks to the coordination of the Business Development, as collector of info and feedbacks from the market, and, more operationally, as "calendar" of the activities to be pursued.

Relatively to "Powerful project leader", about this point, all the respondents agreed on the fact that there was no project leader in terms of decisional power. Everyone, indeed, considered this aspect completely aligned with the corporate culture, telling that there was no need to have a leader but a reference person, without centralizing the decisional power on one person's hands but spreading it among the team members.

This is strictly linked to the flat hierarchy characterizing Loccioni, meaning that by its own structure, the attitude is on distributing competences and tasks, as well as responsibilities, trying to avoid the necessity to confer all the power on one person's hands.

Referring to "Overlapping development steps", again, since there is no strict hierarchy, it represents a natural consequence in terms of flexibility and availability typical of Loccioni collaborators.

Moreover, the technical background, possessed by the average of Loccioni collaborators, allows people operating in projects to handle specific situations (such as customers' requests, internal communication, several technical issues etc.) even if roles are different.

This produces an efficient management of time and increases the problem solving attitude of the team.

The projection towards customers by all the collaborators is such a "competence" that eases relations and, additionally, it helps the steps of the competence development to unfold.

On the other side, unfortunately, this can create confusion for customers, especially regarding to whom to address demands and requests on the internal level, of the delays and problems linked to decision making process.

Considering the rest of the answers, referring to "Multiple design iterations" and "Extensive testing", all respondents agreed with them.

This is true not only for this specific case study but it is recognizable in every project the company faces, because it belongs to the company set of values.

Pro-activity, the fact to propose more ideas about a single issue, and sustained attention on the testing phase, are convictions on which the company has always believed and built up its own history. This feedback showed no surprises.

Linking to the "Multifunctional team", once again, the respondents showed the same opinion about the approach and nature of the team.

Indeed, they considered the team between the technical and commercial side, slightly shifted on the sales and marketing, since the primary goal was the search

for opportunities and, in this first dimension, the necessity for a deep technical background became secondary.

The "Use of computer –aided –design" is an essential part of the Loccioni' s system, well-established one, favouring the "Extensive testing" and "Multiple design iterations" since long time. Nowadays it is one of the basic competences of each project manager or technician involved that are part of the Loccioni's team.

"Customer involvement", confirmed by all the respondents as one of the most important part of a project assessment, is another milestone of the company's culture and the most important strategical asset of the commercial policy.

Through this kind of involvement, it is possible to get in touch with the Loccioni overall projection towards customers, given the fact that it is like one of the member of the company, being part of the project from the design stage to the final one.

So, looking at the answers of key respondents, it is possible to identify the reference parameters indicated by Eisenhardt and Tabrizi, distinguishing the experiential and the compression model.

As for the former, three answers out of five are completely aligned ("Multiple design iterations", "Extensive testing" and "Multifunctional team") while "Frequent project milestones" and "Powerful project leader" recorded different opinions.

As for the leadership, there is agreement about the fact there is no leadership at all, meaning that there is a sort of distribution of responsibilities leading to a "shared leadership", with no centralization of decisional power in one's hands.

As for the respect of fixed milestones, here the concept of discipline and punctuality is seen as a limit to imagination, constraining the catch of opportunities.

The same agreement is recorded for the experiential model. Just one respondent, the General Manager, gave a negative answer about "Overlapping development steps" considering it as a superficial aspect, given the fact that pro-activity and customer orientation are characteristics belonging to every Loccioni collaborator.

No contrasting opinions about the function of the customer along the project development. It represents a sort of milestone of Loccioni working approach, it is vital for the proper assessment of the project, the condition sine qua none that gives the possibility to give added value to each order.

Still no difference among ideas linked to the "Greater reward" point. It is something really far from the company's philosophy, that is more oriented on the personal motivation, seen as the flame that pushes every person to do his or her personal best to make the customer satisfied and the company to grow.

Considering what emerges from the interviews, the description refers to the experiential model for all concerning the multiple design iterations and the extensive testing. Since the majority of the respondents rejected the importance of planning, this reinforces the similarity to the experiential model, showing similitudes with the high-tech markets, such as the one described by Eisenhardt and Tabrizi.

The company's intentions regarded the necessity to discover a niche market within the F&B industry, characterized by high-technological barrier and unsolved problems, beyond investment availability by companies.

The same mood is present in the computer industry analysed by by Eisenhardt and Tabrizi, with a quick evolving scientific and competitive base, modest capital intensity that, considered together, contribute to making this industry a high-velocity one, in which rapid pace is critical.

As for the comparison with the compression model, it is possible to affirm that considering the part of the process starting from the feasibility test to the project completion – the more consolidated one – this has the same features of the compression's.

It is a series of well- defined steps, so for the team is necessary to rationalize and squeeze the process in order to efficiently conclude the process.

Taking into account the whole dimension of the business development project, quickly build understanding and options, plus motivation and focus are the most outstanding aspects, putting light to the capacity to immediately responding to market's requests while remaining faithful to the strategy.

Bravery and entrepreneurial spirit are more important than technical solid backgrounds, resulting to imprison the company in an old mind set, the golden cage of "experience".

6.2 Comprehension and deftness: where they are, how they stimulate competences

Considering what emerged from the interviews, as for the flexibility approach, it is possible to compare the F&B project to the experiential model, since a variety of alternatives and time spent on testing potential results have been recognized as DNA of the company. There is no doubt.

The controversial opinions about the respect of fixed appointments or the importance of planning put light, instead, on this typical feature of the compression model.

Planning is one of the main competence belonging to Business Development and, taken differently from the idea of mental rigidity and inflexibility, turns out to be a crucial tool to

1. Bring the team into alignment
2. Efficiently use resources, since they are not so numerous and deployed on other projects.

Besides the nature of the process, it is interesting to see how routines, that have led to the development of knowledge, come alive.

Drowning from literature, the reference source is by Mc Grath, MacMillan and Venkataraman which define competence as the capacity to hit targets; it is like a long run to, the more you go, the higher the knowledge to get.

To ensure that the competence is advanced, two are the antecedents: the comprehension and deftness phases. Authors, moreover, through measurements, showed they can be calculated.

6.2.1 The comprehension phase

By the authors, comprehension is when the team "understands precisely what kind combinations of resources will allow it to achieve objectives".

Elements of individual know-how and skill become linked.

It is made by two parts; the first one, dealing with making experience and feeling at ease with goals and projects' targets: initiation of relationships, general events through which mixing theory (analysis of data or key facts) with real experiences so that it is possible to underline or reinforce objectives.

By doing so, it is feasible to collect all this experiences, by tracking that, realizing what is important, what to rule out, in order to succeed. The Business Model represents this "collection", helpful at realizing how far is the final goal.

In the literature, the reference foundation is the corporate venturing and innovation literature.

As for the case study, the comprehension phase is possible to locate in the following activities.

First of all, trying to be clear as much as possible, a good definition can summarize the comprehension concept is the team's confidence that they know and understand the most important drivers of the new initiative.

This common sense of awareness stands out after at least six months, after doing the analytical researches and collecting more theoretical data, when it is possible to match with concrete experiences.

In particular, when the niche market has been recognized within the industry, that is the quality check of 100% of packaged items.

This intuition triggered a chain of good operations because it helped to put in order all the info necessary to hit the target, that was not only realizing a good project but also combining it with customers' requests.

The temporal and logical sequence of steps was this

1 Preliminary Researches

-Industry Overview

-Identification of sub-industries

-Selection Criteria: Profitability potential, Innovation Level, Specific quality checks

-Customers and problems map

-Check of background competences

2 Matching Theory with Experience

-Business Meetings

-Customer Relationship Management

-Conventions and exhibition fairs

3 Niche Market

-Type of innovation: Radical, starting from in – house competences

-High technological barrier

-Unsolved problems

4 Proper re-definition of strategies

-Confidence and real awareness of the market's dynamics

-Capacity to listen and react to customers' demands

-Capacity to distinguish between true and false queries

-Capacity to focus strategical projects, both in terms of qualitative and quantitative added value.

It is between the third and fourth step that the team started an active role and defined the long way to realize systems checking 100% of packaged items, mixing the already obtained skills with the one emerging by go and visit customers, together with the selection of real difficult problems to solve.

6.2.2 The Deftness phase

This second antecedent of the competence definition is about the collective mind set the team take on, once targets and strategies are well defined.

It has nothing to do with the team spirit, as said before, it is more related to how the team grows and comprehends how to proceed smoothly, minimizing efforts.

Basically, when a group is deft its members will tend to have high confidence in each other.

In such situations, "(…) tasks may be delegated, monitoring may be fairly casual and detailed task planning can often be ignored".

It is clear that a deftness condition is like an equilibrium easily to recognize within groups used to work together, more difficult to reach by new initiative's team members.

When it comes to face new projects, people tend to double check and make use of a lot of information, hoping to find reference points on which build up convictions and strategies. Consequently, significant expenditure of energy and resources occur.

Anyway, this second antecedent is the other nucleus where competence shapes on; the relationships' dynamics and every day situations' management are fundamental experiences that create routines. These last ones produce the conditions and the atmosphere through which team members understand how to make use of personal skills, how to combine them with the other team members' and with external actors' ones.

Once again, in order to create a base of common thought, sharing ideas and team discussion are necessary to create the specific "mood".

This, in the F&B experience, was due to scheduled events, the fixed appointments that gave the opportunity to tell own opinions and sensations about the market and customers' needs, both in terms of investments and technology.

Since people had never worked together and got involved in other business units, scheduled occasions represented – month by month, meeting by meeting – the only way to align and define the method to apply.

In this sense, method is a synonym of planning. Just to be clear, in this first phase, with no background and no references to show to customers, specific

exercise and planning of activities, even the less significant, are really important to create conditions for deftness and so, for the competence to develop.

As for the specific case study, for instance, it has been really important to check up on the technological and commercial sphere simultaneously through constantly asking the following questions

-Is this customer's request a real annoying problem?

-Is it possible to give an economic value to this problem?

-Do other players, all over the world, have the same perception on this problem, so is it possible to replicate technologies?

Just these three questions generate an incredible different visions about strategies, especially in a multifunctional team, enriched by the Board, with its incredible high level vision.

Focus moments such as the scheduled events were turning point phases, where the team had the chance to listen to every one opinion and make the relative decision. This was an incredible chance to grow for the competence since, as follow up, the team had to react both as for the design of the solution and as for the customer relationship management.

Step by step, meeting after meeting, these routines led the team to develop a "collective mind" (Weick and Roberts, 1993) as evidenced by a proper intra and inter information flow, a good pattern of relationships, less confusion about roles and tasks, growing mutual trust.

Every focus moment was a source of new knowledge, partly given by previous experience by team members, partly given by data collection, partly given by customers' reactions.

The Business Development's task was to put in order all the info, generating a ranking of priorities, creating a common language, so as to build a historical memory of the state of the project's progress.

Moreover, the Business Development, acting as a "glue" of data and experiences, forming the above mentioned common basis of thought, became the foundation of the deftness condition, creating a sense of belonging to the project and the critical mass of thought that gave birth to the competence.

Competence is the final output, the result of this process unfolding ideally neatly.

It is a sort of test to see how well the project has performed, how well the team collaborated with respect to achieving objectives.

It is a tangible result, since it can reveal such a machine, an application or whatever form an added value operation can assume.

It is the proof the company grew on, had been capable to handle all the information and stepped forward innovation.

By using the business model as a measurement tool, the company can control if the initially fixed targets have been achieved: budget and revenue primarily, qualitative as well, such as coherence with the company's values and so on.

Furthermore, the competence is of great importance for the company to evolve but, even more important, an incredible tangible result and not economically intended.

The capacity to design a new solution and to break through a new market with it, it means that the whole system works, starting from the analytical step to the more operative one along the production line.

The coordination by the imperceptible push of the Business Development becomes a sort of method and approach that is possible to apply to all the new ventures, no matter the object of the research.

It represents an headlight for the company, in the endless sea of intangible info due to the development activities.

CONCLUSIONS

The work helped to think of innovation, considering what kind of transformation organizations face every day, dealing with ordinary problems linked to the management of new customers and new market's segments.

It is a more practical approach that helped to understand which could be the routines where innovation hides.

This can try to enrich the field of study of corporate venturing and innovation literature with a new empirical insight, shifting perspective from a vision focused on rationale for innovation and forms it can assume, on a real observation within organizations. Innovation is strategy; innovation is "physical actions", made by relations, experiences, ideas sharing, discussion, etc.

The experience within Gruppo Loccioni highlighted the efforts and complications typical of the business development, emphasizing its role as a guide line.

Indeed, to deeply consider the characteristics of innovative processes and their impact on companies, it is necessary to define what the technological change represents for companies.

It is important to analyse the problem with an empirical perspective, to see the procedures and tasks through which organizations grow and evolve; the exchange with the external environments and the internal dynamics as well.

The development of an innovation is characterized by the search for solutions of problems by which new rules emerge, new possibilities of applications unfold or new methods of research come to light.

On one hand, it becomes fundamental the comprehension of how the sum of internal competences and knowledge is able to fulfil the need for new solutions and ideas deriving from the market. On the other one, there must be an analysis

of the impact of the innovation's introduction on the above mentioned background of knowledge.

This vision shows a complement to the strategical analysis focus on competition and placement's issues; considering organizations as a collection of resources and competences, analysis of strategies stands out as an activity aimed at combining the resources and competences to maximize the added value to gain future profits.

By doing so, organizational learning processes are given more attention, especially about their implications in terms of routines and methods.

All this complex operations are the basis on which new businesses are built up, they are the preliminary assumptions necessary for giving guide lines for an enterprise to start a project.

Business Development (BD) is the function responsible for this, managing

− the technical dimension: consisting of all aspects referred to the discovering of new projects, development of them, engineering of new ideas of products or processes

− the commercial dimension: consisting of marketing mix definition, in order to exploit all the resources to get benefits from innovation.

Through the lens of BD, has been possible to track all the steps of the development of the new competence, the innovation's carrier, and see the approach, actors involved and implications.

As for the approach, a very important aspect is the one referred to the features of BD, seen as an imperceptible push and, at the same time, reference point for the team.

BD has the critical role of collector; for the rest of the team is the reference source for info but, at the same time, it is the main interlocutor to whom return each new update.

BD, in turn, has the duty to be accurate and precise in putting in order of priority activities and requests, managing the calendar and beating the rhythm.

The situation makes BD to have the "authoritative knowledge" on the matter and, in order to be incisive for giving the path of innovation, should be really severe on this.

Unfortunately, given the mixed nature of BD, made out of sales, marketing and technical skills, the team, sometimes, can have problems in recognizing an official role to it. This, consequently, gives to other team members a sort of freedom of avoiding procedures such as reporting, official communications and so on.

Instead, to be a useful function, BD needs to be the core of the project, because in the development phase, characterized by randomness of info, initiation of many relations, contacts, variety of opinions and many more, BD can provide a plan reassuring people that what they are doing is tracked, evaluated (through the focus moments and official internal meetings) and that they are producing intangible knowledge necessary for the competence to emerge.

Once again, it is an imperceptible push fostering team members to keep on investigating and managing customers' relations, simultaneously it collects data and fact to create an historical memory of every team member's experience on the market, fundamental to the set-up of the Business Model (BM).

The BM redaction is another important piece of the puzzle.

It fixes a series of targets that are really helpful to become aware of the state of the art of the development project.

As previously said, considering the circumstances in which new initiatives are undertaken (where info is either missing or difficult to interpret), the advantages coming from innovation are often recognized ex post. There is need of an intermediate construct which allowed to assess contemporaneously whether an initiative is making progress toward the creation of new advantages or, contrarily, whether it is going wrong or stuck.

The BM can fill this gap; the info collected by the BD progressively take shape by way of a plan, where qualitative and quantitative data are recorded. The more the experiences (business meetings, company visits, number of initiated relations, etc.), the more detailed the info.

This kind of tool is also a sort of indicator for investments of time and money dedicated to the new initiative, with respect to the ordinary core businesses.

Since people joining the new venture are part of other teams in other projects, the BM helps to compare partial results with time and money invested by the protagonists. It is a real interesting indicator that could help organizations to improve efficiency of project management, giving to the BM field of study new points of reflections, beyond the mere segmentation of markets and customers.

One of the main skills of BD is the capacity of

- thinking of customers' requests with the customer mind-set, in order to offer proper solutions
- thinking of customers' requests with the customer mind-set, examining all the in-house resources, external and potential, in order to offer proper solutions.

The overview of resources can lead the company to refresh and modernize already acquired resources and competences, or to develop new ones, starting up the car of innovation.

This results to be an ambidextrous approach: companies naturally are pushed to reflect on how exploiting already existing resources and, at the same time, exploring new potential ones.

This approach occurs not only in terms of technical resources, such as sectorial knowledge or specific competences (vision, robotics, etc.) but, very interesting, it reflects also on people.

First of all, as for Loccioni case, people within the company can be involved at the same time on new projects and mature ones; this is one aspect of ambidexterity, the fact that people have to embrace a double vision of markets and technology, always thinking of how to use the past to rule the future.

Secondly, on all the projects, senior and expertise people are supposed to work side by side with young collaborators, with no experience. This is another form of the ambidexterity phenomenon: mixing different visions (the "old" one and the "young" one), on the same topic, implies the creation of a solution that inevitably consists of some kind of heritage form the past (exploitation) and some new insights coming from the BD (exploration). Of course the degree of exploration and exploitation can vary, depending on the topic of subject, but the BD, as approach, has this duality.

Moreover, BD is a function of Loccioni and, of course, it reflects values and features that belong to a broader set of specific values.

Beyond this aspect, true and tangible, it is really typical of BD to have people with a sort of entrepreneurial attitude: to develop something new, curiosity and spirit of innovation are the base. When facing the "new", ambiguity and uncertainty of info emerge, so a great willpower and clear vision of activities are necessary.

BD triggers a process of auto – responsibility and auto – organization that turns out to ease conditions for ambidexterity to unfold, setting people free to express their innovative soul (exploration) while showing efficiency (exploitation). Of course, as said before, this is the reflection of a flexible leadership style, promoting cooperation between management and the rest of collaborators but, in the case of BD, this does show up, favouring an organizational learning process inclusive of ambidexterity.

Here organizational learning comes again, the procedure through which knowledge is absorbed and transformed into competence.

Relations, contacts, analysis, data, numbers, players etc. are nothing but intangible knowledge, tacit ones. These are the ingredients of the "new competence's recipe", that information used strategically to make sense of change, create new knowledge for innovation and then make decisions about the growth of the company.

BD is a sort of "simulator of growth" in the sense that enterprises test their own level of growth and potential increase joining smaller experiences of expansion and exploration of new business areas.

Just remember the concept behind Business Continuity project by Loccioni: a "stress test" , a simulation of engagement with new customers, a design of the relational and technological assets so that to guarantee the future.

By doing so, BD reveals also as a tool to convert knowledge that can push innovation and new solution development.

It is about tacit knowledge for two different reasons.

First of all, BD is a real interesting method to conduct researches about trends or to deepen certain topics of matter.

By the activities of the team, BD concretely goes to the market, relates with players and customers, and a lot of information - by way of tacit knowledge - can be gathered: on one hand there is the personal subjective know-how and insights of the team and market's players (customers, suppliers, opinion leaders and so on), on the other one, data and numbers coming from being immersed in an activity for an extended period of time.

BD can transform this amount of tacit knowledge into explicit one, by nurturing and cultivating.

The conversion is made by sharing the markets 'experiences, that is through observation and reflection of certain phenomena.

The market's experience are used to reflect and think of how they can be matched with the company's competences and capabilities; discussions, comparisons, researches and studies to come to an idea, a prototype for instance.

Then the idea is object of further discussions and briefings with the outside world, for example with potential customers or universities and research centres, depending on the nature of the project.

Finally, the experience has become the fruit of an interaction between the organization and the external environment, so the idea is now well defined and easy to transfer: it has assumed the form of explicit knowledge, with its own references, results and implications for the future.

It is the sense of BD as knowledge facilitator, helping to give concrete substance to the ocean of info, opinions and assumptions that are the base of each new development projects.

The experience within Gruppo Loccioni opened up this series of reflections about BD and its role as knowledge carrier.

As for the corporate venturing and innovation literature, the case study focuses the attention on the content of what really happens when companies embrace novelty, that is what an organization does in order to develop a new competence. BD has been used to investigate the topic and to put together strategical thoughts and operative actions.

This work has given the chance to BD to show a greater personality. It is not only a construct supporting choices and decisions, a pre-planned canvas to fill in order to lower risks, nor a simply outcome of a new initiative.

It has demonstrated to be part of the core of the company and to be an active mechanism of the complex competence development, not just a passive result. It is a collective moment made out of people and thoughts where, actively, strategy and future steps are planned.

Its implications with the organizational learning process can open to new reflections about the cognitive behaviours that manifest when organizations start up with a new business idea.

To conclude, by this experience it has been possible to recognize a certain degree of autonomy and identity of BD, as a discipline. It would be wrong to deny that it shows several weaknesses, but further steps have been taken, since it can be considered as a fulcrum of knowledge for new business venturing.

References

Argote, L., & Ingram, P. (2000). Knowledge transfer: A basis for competitive advantage in firms. *Organizational behavior and human decision processes*, *82*(1), 150-169.

Argyris, C. (1994). Education for leading-learning. *Organizational dynamics*,*21*(3), 5-17.

Argyris, C. (1994). Good communication that blocks learning. *Harvard Business Review*, *72*(4), 77-85.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of management*, *17*(1), 99-120.

Bastien, D. T., & Hostager, T. J. (1988). Jazz as a process of organizational innovation. *Communication Research*, *15*(5), 582-602.

Bastien, D. T., & Hostager, T. J. (1988). Jazz as a process of organizational innovation. *Communication Research*, *15*(5), 582-602.

Battistini, B., Hacklin, F., & Baschera, P. (2013). The state of corporate venturing: Insights from a Global Study. *Research-Technology Management*, *56*(1), 31-39.

Beckman, C. M. (2006). The influence of founding team company affiliations on firm behavior. *Academy of Management Journal*, *49*(4), 741-758.

Bhide, A. (2007). *Hustle as strategy*.

Birch, D. G. (1979). The job generation process.

Block, Z. and MacMillan, I.C. (1993) Corporate Venturing: Creating New Businesses within the Firm.Harvard Business School Press, Boston.

Brandt, S. C. (1987). *Entrepreneuring in established companies: Managing toward the year 2000*. Signet.

Brouwer, E., & Kleinknecht, A. (1996). Determinants of innovation: a microeconometric analysis of three alternative innovation output indicators. In *Determinants of innovation* (pp. 99-124). Palgrave Macmillan UK.

Brown, S. L., & Eisenhardt, K. M. (1995). Product development: Past research, present findings, and future directions. *Academy of management review*, *20*(2), 343-378.

Burgelman, R. A. (1983). A process model of internal corporate venturing in the diversified major firm. *Administrative Science Quarterly*, 223-244.

Burgelman, R. A. (1994). Fading memories: A process theory of strategic business exit in dynamic environments. *Administrative Science Quarterly*, 24-56.

Burns, T. E., & Stalker, G. M. (1961). The management of innovation. *University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship*.

Cappelletto, R., Floreani, J., Mason, M. C., & Beltrame, F. (2015). *Strumenti finanziari a supporto dello sviluppo delle PMI*. F. Angeli.

Carrier, C. (1996). Intrapreneurship in small businesses: an exploratory study. *Entrepreneurship: Theory and Practice*, *21*(1), 5-21.

Chesbrough, H., & Rosenbloom, R. S. (2002). The role of the business model in capturing value from innovation: evidence from Xerox Corporation's technology spin-off companies. *Industrial and corporate change*, *11*(3), 529-555.

Child, J., & McGrath, R. G. (2001). Organizations unfettered: Organizational form in an information-intensive economy. *Academy of management journal*, *44*(6), 1135-1148.

Clark, K. B., & Fujimoto, T. (1989). The power of product integrity. *Harvard business review*, *68*(6), 107-118.

Clark, K. B., & Fujimoto, T. (1989). The power of product integrity. *Harvard business review*, *68*(6), 107-118.

Clark, K. B., & Fujimoto, T. (1991). *Product development performance: Strategy, organization, and management in the world auto industry*. Harvard Business Press.

Collis, D. J., & Montgomery, C. A. (1995). Competing on Resources: Strategy in the 1990s.

Conner, K. R., & Prahalad, C. K. (1996). A resource-based theory of the firm: Knowledge versus opportunism. *Organization science*, *7*(5), 477-501.

Cordero, R. (1991). Managing for speed to avoid product obsolescence: A survey of techniques. *Journal of Product Innovation Management*, *8*(4), 283-294.

Cordero, R. (1991). Managing for speed to avoid product obsolescence: A survey of techniques. *Journal of Product Innovation Management*, *8*(4), 283-294.

Cottrell, T., & Nault, B. R. (2004). Product variety and firm survival in the microcomputer software industry. *Strategic Management Journal*, *25*(10), 1005-1025.

Covin, J. G., & Miles, M. P. (1999). Corporate entrepreneurship and the pursuit of competitive advantage. *Entrepreneurship: Theory and practice*, *23*(3), 47-47.

Covin, J. G., & Slevin, D. P. (1991). A conceptual model of entrepreneurship as firm behavior. *Entrepreneurship: Critical perspectives on business and management*, *3*.

Cyert, R. M., & March, J. G. (1963). A behavioral theory of the firm. *Englewood Cliffs, NJ*, *2*.

Day, D. L. (1994). Raising radicals: Different processes for championing innovative corporate ventures. *Organization science*, *5*(2), 148-172.

De Geus, Arie P. "Planning as learning." (1988): 70-74.

Dess, G. G., Ireland, R. D., Zahra, S. A., Floyd, S. W., Janney, J. J., & Lane, P. J. (2003). Emerging issues in corporate entrepreneurship. *Journal of management*, *29*(3), 351-378.

Dougherty, D. (1992). Interpretive barriers to successful product innovation in large firms. *Organization science*, *3*(2), 179-202.

Dougherty, D. (1992). Interpretive barriers to successful product innovation in large firms. *Organization science*, *3*(2), 179-202.

Dushnitsky, G. (2011). Riding the Next Wave of Corporate Venture Captial. *Business Strategy Review*, *22*(3), 44-49.

Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of management review*, *14*(1), 57-74.

Evald, M. R., & Senderovitz, M. (2013). Exploring Internal Corporate Venturing in SMEs: Effectuation at work in a new context. *Journal of Enterprising Culture*, *21*(03), 275-299.

Garvin D. A. (1993). Building a learning organization. *Harvard Business Review*, July-August.

Gersick, C. J. (1994). Pacing strategic change: The case of a new venture. *Academy of management journal*, *37*(1), 9-45.

Ghemawat, P., & Ricart Costa, J. E. (1993). The organizational tension between static and dynamic efficiency. *Strategic management journal*, *14*(S2), 59-73.

Gibson, C. B., & Birkinshaw, J. (2004). The antecedents, consequences, and mediating role of organizational ambidexterity. *Academy of management Jo*

Gold, B. (1987). Approaches to accelerating product and process development. *Journal of Product Innovation Management*, *4*(2), 81-88.

Govindarajan, V., & Trimble, C. (2005). Building breakthrough businesses within established organizations. *Harvard business review*, *83*(5), 58-68.

Grant, R. M. (1991). The resource-based theory of competitive advantage: implications for strategy formulation. *California management review*, *33*(3), 114-135.

Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic management journal*, *17*(S2), 109-122.

Gupta, A. K., & Wilemon, D. L. (1990). Accelerating the development of technology-based new products. *California management review*, *32*(2), 24-44.

Gupta, A. K., Raj, S. P., & Wilemon, D. (1986). A model for studying R&D. Marketing interface in the product innovation process. *the Journal of Marketing*, 7-17.

Gupta, A. K., Smith, K. G., & Shalley, C. E. (2006). The interplay between exploration and exploitation. *Academy of management journal*, *49*(4), 693-706.

Guth, W. D., & Ginsberg, A. (1990). Guest editors' introduction: Corporate entrepreneurship. *Strategic management journal*, *11*(5), 5-15.

Hamel G., and Prahalad C.K., (1989) "Strategic Intent" Harvard Business Review,May –June, 1989, Vol. 67. No. 3. pp63-78

He, Z. L., & Wong, P. K. (2004). Exploration vs. exploitation: An empirical test of the ambidexterity hypothesis. *Organization science*, *15*(4), 481-494.

Heinonen, J., & Toivonen, J. (2008). Corporate entrepreneurs or silent followers?. *Leadership & Organization Development Journal*, *29*(7), 583-599.

Helfat, C. E. (1997). Know-how and asset complementarity and dynamic capability accumulation: The case of R&D. *Strategic management journal*, 339-360.

Helfat, C. E., & Raubitschek, R. S. (2002). Product Sequencing. *The strategic management of intellectual capital and organizational knowledge*, 317.

Henderson, R., & Cockburn, I. (1994). Measuring competence? Exploring firm effects in pharmaceutical research. *Strategic management journal*, *15*(S1), 63-84.

Henderson, R., & Cockburn, I. (1994). Measuring competence? Exploring firm effects in pharmaceutical research. *Strategic management journal*, *15*(S1), 63-84.

Hitt, M. A., & Ireland, R. D. (2000). The intersection of entrepreneurship and strategic management research. *Handbook of entrepreneurship*, *45*, 63.

Hitt, M. A., Ireland, R. D., Camp, S. M., & Sexton, D. L. (2001). Strategic entrepreneurship: Entrepreneurial strategies for wealth creation. *Strategic management journal*, *22*(6-7), 479-491.

Holmqvist, M. (2004). Experiential learning processes of exploitation and exploration within and between organizations: An empirical study of product development. *Organization science*, *15*(1), 70-81.

Holmqvist, M. (2004). Experiential learning processes of exploitation and exploration within and between organizations: An empirical study of product development. *Organization science*, *15*(1), 70-81.

Huber, G. P. (1991). Organizational learning: The contributing processes and the literatures. *Organization science*, *2*(1), 88-115.

Iansiti, M. (1995). Technology integration: Managing technological evolution in a complex environment. *Research policy*, *24*(4), 521-542.

Judge, W. Q., & Miller, A. (1991). Antecedents and outcomes of decision speed in different environmental context. *Academy of Management Journal*, *34*(2), 449-463.

Kanter, R. M. (1984). *Change masters*. Simon and Schuster.

Katila, R., & Ahuja, G. (2002). Something old, something new: A longitudinal study of search behavior and new product introduction. *Academy of management journal*, *45*(6), 1183-1194.

Keil, T., McGrath, R. G., & Tukiainen, T. (2009). Gems from the ashes: Capability creation and transformation in internal corporate venturing. *Organization Science*, *20*(3), 601-620.

Khandwalla, P. N. (1987). Generators of pioneering-innovative management: Some Indian evidence. *Organization Studies*, *8*(1), 39-59.

Kim, D. H. (1998). The link between individual and organizational learning. *The strategic management of intellectual capital*, 41-62.

Kogut, B., & Zander, U. (1992). Knowledge of the firm, combinative capabilities, and the replication of technology. *Organization science*, *3*(3), 383-397.

Kuratko, D. F., Covin, J. G., & Garrett, R. P. (2009). Corporate venturing: Insights from actual performance. *Business Horizons*, *52*(5), 459-467.

Langer, E. J. (1975). The illusion of control. *Journal of personality and social psychology*, *32*(2), 311.

Lavie, D., & Rosenkopf, L. (2006). Balancing exploration and exploitation in alliance formation. *Academy of Management Journal*, *49*(4), 797-818.

Leonard—Barton, D. (1991). *The factory as a learning laboratory*.

Leonard-Barton, D. (1995). Wellsprings of knowledge: Building and sustaining the sources of innovation. *University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship*.

Lieberman, M. B. (1984). The learning curve and pricing in the chemical processing industries. *The RAND Journal of Economics*, *15*(2), 213-228.

Lovas, B., & Ghoshal, S. (1998). *Strategy as guided evolution*. INSEAD.

Lubatkin, M. H., Simsek, Z., Ling, Y., & Veiga, J. F. (2006). Ambidexterity and performance in small-to medium-sized firms: The pivotal role of top management team behavioral integration. *Journal of management*, *32*(5), 646-672.

Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of management Review*, *21*(1), 135-172.

Mabert, V. A., Muth, J. F., & Schmenner, R. W. (1992). Collapsing new product development times: six case studies. *Journal of Product Innovation Management*, *9*(3), 200-212.

Mabert, V. A., Muth, J. F., & Schmenner, R. W. (1992). Collapsing new product development times: six case studies. *Journal of Product Innovation Management*, *9*(3), 200-212.

Maine, E. (2008). Radical innovation through internal corporate venturing: Degussa's commercialization of nanomaterials. *R&d Management*, *38*(4), 359-371.

March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization science*, *2*(1), 71-87.

Markides, C., & Charitou, C. D. (2004). Competing with dual business models: A contingency approach. *The Academy of Management Executive*, *18*(3), 22-36.

Masini, A., Zollo, M., & van Wassenhove, L. (2004). Understanding exploration and exploitation in changing operating routines: The influence of industry and organizational traits. *London Business School: Operations and Technology Management Working Paper OTM*, 04-022.

McGrath, R. G. (2001). Exploratory learning, innovative capacity, and managerial oversight. *Academy of management journal*, *44*(1), 118-131.

McGrath, R. G., MacMillan, I. C., & Venkataraman, S. (1995). Defining and developing competence: A strategic process paradigm. *Strategic Management Journal*, *16*(4), 251-275.

Milgrom, P., & Roberts, J. (1990). The economics of modern manufacturing: Technology, strategy, and organization. *The American Economic Review*, 511-528.

Miller, D. (1983). The correlates of entrepreneurship in three types of firms. *Management science*, *29*(7), 770-791.

Miller, D., & Chen, M. J. (1994). Sources and consequences of competitive inertia: A study of the US airline industry. *Administrative science quarterly*, 1-23.

Morris, M., Kuratko, D., & Covin, J. (2010). *Corporate entrepreneurship & innovation*. Cengage Learning.

Mosakowski, E., & McKelvey, B. (1997). Predicting rent generation in competence-based competition. *Competence-based strategic management*, *65*, 65-85.

Murray, P., & Donegan, K. (2003). Empirical linkages between firm competencies and organisational learning. *The Learning Organization*, *10*(1), 51-62.

Naman, J. L., & Slevin, D. P. (1993). Entrepreneurship and the concept of fit: A model and empirical tests. *Strategic management journal*, *14*(2), 137-153.

Napp, J. J., & Minshall, T. (2011). Corporate venture capital investments for enhancing innovation: challenges and solutions. *Research-Technology Management*, *54*(2), 27-36.

Narayanan, V. K., Yang, Y., & Zahra, S. A. (2009). Corporate venturing and value creation: A review and proposed framework. *Research Policy*, *38*(1), 58-76.

Nelson, R. R. (1991). Why do firms differ, and how does it matter?. *Strategic management journal*, *12*(S2), 61-74.

Nelson, R. R., & Sidney, G. (1982). Winter. 1982. *An evolutionary theory of economic change*, 929-964.

Nelson, R. R., & Winter, S. G. (1982). The Schumpeterian tradeoff revisited. *The American Economic Review*, *72*(1), 114-132.

Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization science*, *5*(1), 14-37.

O'Reilly, C. A., & Tushman, M. L. (2008). Ambidexterity as a dynamic capability: Resolving the innovator's dilemma. *Research in organizational behavior*, *28*, 185-206.

Payne, J. W., Bettman, J. R., & Johnson, E. J. (1988). Adaptive strategy selection in decision making. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *14*(3), 534.

Penrose ET. 1959. The Theory of the Growth of the Firm. Oxford University Press: New York

Peter, Drucker F. "Innovation and entrepreneurship." *New York: Practice and Principles* (1985).

Peteraf, M. A. (1993). The cornerstones of competitive advantage: a resource-based view. *Strategic management journal*, *14*(3), 179-191.

Pinchot III, Gifford. "Intrapreneuring: Why you don't have to leave the corporation to become an entrepreneur." *University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship* (1985).

Pisano, G. P. (1994). Knowledge, integration, and the locus of learning: An empirical analysis of process development. *Strategic management journal*, *15*(S1), 85-100.

Porter, M. E. (1996). What is strategy?. *Published November*.

Prahalad, C. K., & Hamel, G. (1990). The core competence of the corporation.

Priem, R. L., & Butler, J. E. (2001). Is the resource-based "view" a useful perspective for strategic management research?. *Academy of management review*, *26*(1), 22-40.

Roberts, E. B., & Berry, C. A. (1984). Entering new businesses: selecting strategies for success.

Romanelli, E., & Tushman, M. L. (1994). Organizational transformation as punctuated equilibrium: An empirical test. *Academy of Management journal*, *37*(5), 1141-1166.

Rosenau, M. D. (1988). From experience: Faster new product development. *Journal of Product Innovation Management*, *5*(2), 150-153.

Rotemberg, J. J., & Saloner, G. (2000). Visionaries, managers, and strategic direction. *RAND Journal of Economics*, 693-716.

Rothaermel, F. T., & Deeds, D. L. (2004). Exploration and exploitation alliances in biotechnology: A system of new product development. *Strategic management journal*, *25*(3), 201-221.

Rothaermel, F. T., & Deeds, D. L. (2004). Exploration and exploitation alliances in biotechnology: A system of new product development. *Strategic management journal*, *25*(3), 201-221.

Schollhammer, H. (1982). Internal corporate entrepreneurship. *Encyclopedia of entrepreneurship*, *209*, 223.

Schumpeter, J. A. (1934). *The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle* (Vol. 55). Transaction publishers.

Senge, P. M. (1998). The leader's new work. *Leading organizations*, 439-457.

Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of management review*, *25*(1), 217-226.

Sharma, P., & Chrisman, S. J. J. (2007). Toward a reconciliation of the definitional issues in the field of corporate entrepreneurship*. In *Entrepreneurship* (pp. 83-103). Springer Berlin Heidelberg.

Sidhu, J. S., Volberda, H. W., & Commandeur, H. R. (2004). Exploring exploration orientation and its determinants: Some empirical evidence. *Journal of Management Studies*, *41*(6), 913-932.

Sitkin, S. B. (1992). LEARNING THROUGH FAILURE: THE STRATEGY or SMALLVLO'SSES. *Research in organizational behavior*, *14*, 231-266.

Smith, W. K., & Tushman, M. L. (2005). Managing strategic contradictions: A top management model for managing innovation streams. *Organization science*, *16*(5), 522-536.

Sorrentino, M., & Williams, M. L. (1995). Relatedness and corporate venturing: Does it really matter?. *Journal of Business Venturing*, *10*(1), 59-73.

Stalk Jr, G. (1988). Time—The Next Source of Competitive Advo nioge. *Harvard business review*, 41.

Stalk Jr, G., & Hout, T. M. (1990). Competing against time. *Research-Technology Management*, *33*(2), 19-24.

Stalk Jr, G., & Hout, T. M. (1990). Competing against time. *Research-Technology Management*, *33*(2), 19-24.

Sull, D. N., Tedlow, R. S., & Rosenbloom, R. S. (1997). Managerial commitments and technological change in the US tire industry. *Industrial and corporate change*, *6*(2), 461-500.

Teece, D. J. (1998). Research directions for knowledge management. *California management review*, *40*(3), 289-292.

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic management journal*, 509-533.

Tidd, J., Pavitt, K., & Bessant, J. (2001). *Managing innovation* (Vol. 3). Chichester: Wiley.

Tripsas, M., & Gavetti, G. (2000). Capabilities, cognition, and inertia: Evidence from digital imaging. *Strategic management journal*, *21*(10-11), 1147-1161.

Tushman, M. L., & O'Reilly, C. A. (1996). The ambidextrous organizations: Managing evolutionary and revolutionary change. *California management review*, *38*(4), 8-30.

Tushman, M. L., & O'Reilly, C. A. (1996). The ambidextrous organizations: Managing evolutionary and revolutionary change. *California management review*, *38*(4), 8-30.

Vanhaverbeke, W., & Peeters, N. (2005). Embracing innovation as strategy: corporate venturing, competence building and corporate strategy making. *Creativity and Innovation Management*, *14*(3), 246-257.

Venkatraman, N., Lee, C. H., & Iyer, B. (2007). Strategic ambidexterity and sales growth: A longitudinal test in the software sector. In *Unpublished Manuscript (earlier version presented at the Academy of Management Meetings, 2005)*.

Vesper, K. H. (1984). *Three faces of corporate entrepreneurship: A pilot study*. University of Washington. Graduate School of Business.

Waldrop, M. M., & Gleick, J. (1992). Complexity: the emerging science at the edge of order and chaos [M]. *info London: Viking, 1992*.

Wally, S., & Baum, J. R. (1994). Personal and structural determinants of the pace of strategic decision making. *Academy of Management journal*, *37*(4), 932-956.

Weick, K. E., & Roberts, K. H. (1993). Collective mind in organizations: Heedful interrelating on flight decks. *Administrative science quarterly*, 357-381.

Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic management journal*, *5*(2), 171-180.

Westerman, G., McFarlan, F. W., & Iansiti, M. (2006). Organization design and effectiveness over the innovation life cycle. *Organization Science*, *17*(2), 230-238.

Williamson, O. E. (1999). Strategy research: governance and competence perspectives. *Strategic management journal*, *20*(12), 1087-1108.

Womack, J. P., Jones, D. T., & Roos, D. (1990). *Machine that changed the world*. Simon and Schuster.

Zahra, S. A. (1993). A conceptual model of entrepreneurship as firm behavior: A critique and extension. *Entrepreneurship: Theory and Practice*, *17*(4), 5-22.

Zahra, S. A., & Covin, J. G. (1995). Contextual influences on the corporate entrepreneurship-performance relationship: A longitudinal analysis. *Journal of business venturing*, *10*(1), 43-58.

Zahra, S. A., Nielsen, A. P., & Bogner, W. C. (1999). Corporate entrepreneurship, knowledge, and competence development. *Entrepreneurship: Theory and Practice*, *23*(3), 169-169.

Zahra, S. A., Nielsen, A. P., & Bogner, W. C. (1999). Corporate entrepreneurship, knowledge, and competence development. *Entrepreneurship: Theory and Practice*, *23*(3), 169-169.

Zander, U., & Kogut, B. (1995). Knowledge and the speed of the transfer and imitation of organizational capabilities: An empirical test. *Organization science*, *6*(1), 76-92.

Zangiski, M. A. D. S. G., de Lima, E. P., & da Costa, S. E. G. (2013). Organizational competence building and development: Contributions to operations management. *International Journal of Production Economics*,*144*(1), 76-89.

Zollo, M., & Winter, S. G. (1999). *From organizational routines to dynamic capabilities* (p. 38). INSEAD.

Gündoğdu, M. Ç. (2012). Re-thinking entrepreneurship, intrapreneurship, and innovation: a multi-concept perspective. *Procedia-Social and Behavioral Sciences*, *41*, 296-303.

Sharma, P., & Chrisman, S. J. J. (2007). Toward a reconciliation of the definitional issues in the field of corporate entrepreneurship. In *Entrepreneurship* (pp. 83-103). Springer Berlin Heidelberg.

MacMillan, I. C., Block, Z., & Narasimha, P. S. (1986). Corporate venturing: Alternatives, obstacles encountered, and experience effects. *Journal of Business Venturing*, *1*(2), 177-191.

Day, G. S. (1994). The capabilities of market-driven organizations. *the Journal of Marketing*, 37-52.

Levitt, B., & March, J. G. (1988). Organizational learning. *Annual review of sociology*, 319-340.

Levinthal, D., & March, J. G. (1981). A model of adaptive organizational search. *Journal of Economic Behavior & Organization*, *2*(4), 307-333.

Winter, S. G. (1971). *Economic" natural selection" and the theory of the firm*(Doctoral dissertation, Yale University).

Sørensen, H. E. (2012). *Business Development: a market-oriented perspective*. John Wiley & Sons Ltd.

Narayanan, V. K., Yang, Y., & Zahra, S. A. (2009). Corporate venturing and value creation: A review and proposed framework. *Research Policy*, *38*(1), 58-76.

Barringer, B. R., & Bluedorn, A. C. (1999). The relationship between corporate entrepreneurship and strategic management. *Strategic Management Journal*, *20*(5), 421-444.

Kind, S., & Knyphausen-Aufseß, Z. (2007). What is' business development'? The case of biotechnology. *The Case of Biotechnology*.

Spar, D., & Bussgang, J. J. (1996). Ruling the net. *Harvard Business Review*, *74*(3), 125.

Noda, T. and Bower, J. L. 1996. Strategy making as iterated processes of resource allocation. Strategic Management Journal 17, 159–192.

O'Connor, G. C. and DeMartino, R. 2006. Organizing for radical innovation: an exploratory study of the structural aspects of RI management systems in large established firms. Journal of Product Innovation Management 23,475–497.

Bussgang, J. J., Eisenmann, T. R., Dillard, S., Nevins, K. and Ramani, P. 2013. The business development manager. Harvard Business School Background Note 812-107, March. (Revised from original December 2011 version.)

Ghemawat, P. 1991. Commitment: The Dynamic of Strategy. New York: Free Press.

Hrebiniak, L. G. 2005. Making Strategy Work. Philadelphia, PA: Wharton School Publishing.

Kanter, R. 1986. Supporting innovation and venture development in established companies. Journal of Business Venturing 1, 47–60.

Keil, T., Maula, M., Schildt, H. and Zahra, S. A. 2008. The effect of governance modes and relatedness of external business development activities on innovative performance. Strategic Management Journal 29, 895–907.

McGrath, R. G. 2001. Exploratory learning, innovative capacity and managerial oversight. Academy of Management Journal 44, 118–131.

Narayanan, V. K., Yang, Y. and Zahra, S. A. 2009. Corporate venturing and value creation: a review and proposed framework. Research Policy 38, 58–76.

Barringer, B. R. and Bluedorn, A. C. 1999. The relationship between corporate entrepreneurship and strategic management. Strategic Management Journal 20, 421–444.

Covin, J. G. and Miles, M. P. 2007. Strategic use of corporate venturing. Entrepreneurship Theory and Practice 31, 183–207.

Chesbrough, H. W. 2002. Making sense of corporate venture capital. Harvard Business Review 80, 90–99.

Hrebiniak, L. G. 2005. Making Strategy Work. Philadelphia, PA: Wharton School Publishing.

Uittenbogaard, B., Broens, L., & Groen, A. J. (2005). Towards a Guideline for Design of a Corporate Entrepreneurship Function for Business Development in Medium-Sized

Benner, M. J., & Tushman, M. L. (2003). Exploitation, exploration, and process management: The productivity dilemma revisited. *Academy of management review*, *28*(2), 238-256.

Sveiby, K. E. (2001). A knowledge-based theory of the firm to guide in strategy formulation. *Journal of intellectual capital*, *2*(4), 344-358.

Varvelli, M. R., & Varvelli, R. (2014). 2Km di futuro. L'impresa di seminare bellezza.

Schindehutte, M., & Morris, M. H. (2009). Advancing strategic entrepreneurship research: The role of complexity science in shifting the paradigm. *Entrepreneurship Theory and Practice*, *33*(1), 241-276.

Magretta, J. (2002). Why business models matter.

Mansfield, G. M., & Fourie, L. C. H. (2004). Strategy and business models-strange bedfellows? A case for convergence and its evolution into strategic architecture. *South African Journal of Business Management*, *1*.

Seddon, P. B., Lewis, G. P., Freeman, P., & Shanks, G. (2004). The case for viewing business models as abstractions of strategy. *The Communications of the Association for Information Systems*, *13*(1), 64.

Clark, K. B., & Fujimoto, T. (1991). *Product development performance: Strategy, organization, and management in the world auto industry*. Harvard Business Press.

Eisenhardt, K. M., & Tabrizi, B. N. (1995). Accelerating adaptive processes: Product innovation in the global computer industry. *Administrative science quarterly*, 84-110.

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research* (Vol. 15). Newbury Park, CA: Sage.

Siti

Mawson, J. 2011. Corporate venturing enters its golden age.Private Equity News, March 28. www.penews.com/today/index/content/4068295507

APPENDIX

BUSINESS DEVELOPMENT MANAGER

A)Introduction + Topic
Presentation: role and field of action
Business Development Manager. Mechanical Engineer
1)Among Loccioni Group values we have TRADINNOVAZIONE, where the idea of tradition is tied to innovation, a push towards the future. What does it mean for you?   Make innovation respecting cultural values by Loccioni: respect of people, respect of things, attention about wastefulness, keeping anchored to the territory. It's a change without changing values   2)in which way Loccioni looks at new markets/business? Which is the general rule – model, if exists   It's a mood, an approach that is not necessarily doing always in the same way but facing new problems with a variety of solutions. To evolve and change before stasis

B)Focus on the FORM of the new initiative (the corporate venturing / internal venturing
3)Will you please describe in what specific form of initiative does the company engage?   -internal vs external   -joint vs autonomous   We made business continuity because there is TRADINNOVAZIONE issue, we are not schegge impazzite. This has pros and cons. Benefits: the possibility to make use of all the cultural and technological background by Loccioni. Limits: within a complex organization you have more obstacles and less freedom. We worked as an internal structure, drawing from Loccioni competences, from already developed solutions/applications but the fact that we lost opportunities was due to the too strong relation with the core company. B-Ready project by Ferrero: we did not have the strength, we were not "bad" enough to give the project the right priority and so it was underdeveloped by those figure who could help us to win   4)which is the mission of the initiative?   First of all, on a start-up project vison and mission are dynamic, because it is like you make a movie, you would like to be like this then you go to the market and see that the world begins after Loccioni gates. Vision and mission must be adapted during the development of the project. Mission: imagining a growing need for quality, we believe we have the competences that can support the quality check of food production   4a)which is the objective?   4b)which is the vision?   The idea is to both develop something new and spend already existing competences ; if you go to a new market with known competences maybe someone will give you trust; new market with a new competence it's harder, it's hard that someone will trust you. For sure the first option it was the one where we mostly invested; indeed, the opportunities we had dealt with vision – already existing competences on other segments. Now we made small experiences with hyperspectral imaging, a new one, but it is more complicated to interact with a new customer through a new competence   5)Will you please describe the venture relationship to the parent corporation?   6)Which is the position in the technology-market matrix?   -market   -technology   7)Will you please mention the roles of the team member?   8)Given the roles, how would you describe the "nature" / "attitude" of the venture team: sales, multifunctional, R&D?   Multifunctional, absolutely   9)How would you describe the innovation you want to reach?   -radical   -incremental   Incremental

C)COMPETENCE SELECTION

10)Will you please describe how you analysed the internal competences, necessary for the definition of the ideal conditions to start interacting with the new market (in terms of technology -state of the art or past experiences / previous projects etc)

11)Will you please describe how you "approached" the new competences concept?

Comprehension phase: *"ability to reliably and consistently meet or exceed its objectives": it is the process by which those pursuing an initiative come to understand precisely what combinations of resources will allow it to achieve objectives.*

We tried to realize which could be the customers' requirements, listening to the customers, going to their place and takin notes of their problems, critical and expensive problems of production and industrial processes. Once we identified that problems – problems that changed during the development of the process, visit after visit, contacts after contact , it is a dynamic process – through our multifunctional team we created a sort of package of knowledge. there were people with experience, representing our historical memory, younger people bringing enthusiasm and dynamism, energy. We draw from personal background. Unfortunately within the Group, being dynamic and fast, there is no a database, a category system of competences … the oddity of our Group and so you have to ask to people- our historical memory about competences. Thank to "senior" people we put together all the competences, then we put them into categories and placed into case history –real one and potential case history - . we took our competences and we put on already existing applications/activities or we put them into potential applications that we were capable to develop. We put the competences into the customer's problems, the critical and expensive problems.

there is no podium, all of them are important.

You have a series of important opportunities, coherent with Loccioni spirit and relationships that can bring you to other opportunities –maybe not and a series of targets to respect. You have to work on all these 3 sides. They are mutually linked.

1. opportunities/customers 'requests
2. relations
3. macro targets

For example, how much was important

12)(the importance of)target goals?

13)understanding of the roles and relationships inside the market (i.e. who drives the innovation etc)?

14)customers need?

15)the competition faced in filling the need?

16)the benefit of company's offering?

17)risks of company's offering?

18how to price the offering?

19)key operations need to be carried out?

20)factors interfering with company's operations?

D)COMPETENCE DEVELOPMENT

Deftness also, meant as a process creating working relationships which allows those responsible for the initiative to execute in light of the comprehension → emergence of "a collective mind" in which activities performed by a group are interrelated so that desirable outcomes may be achieved and undesirable outcomes avoided.

21)Will you please describe , in detail and mentioning the main steps, how did the team organize the activities once the new application/technology/competence revealed?

You go and visit the customer, you want to meet him/her

You visit him several times, you start a trustworthy relationship and he will feel at ease to tell you his critical and expensive problems

Once he told you so, you start thinking about potential solutions to propose, based on our competences

Brainstorming with the business development team, senior and junior figures

3 or 4 potential hypothesis, different hypothesis

You go back to your customer and try to understand which competence can match the problem

Screening of solutions, you keep just one solution

R&D lab prepares a feasibility test, you ask the customer to pay for it because it means that the customer is investing on it, it is not about the amount of money/the economic value

If the test works you prepare a technical –commercial offering

You try to convince the customer you are the best

You do the project, trying to entirely satisfy the customer

At the end you verify that the economical analysis you made is coherent with the realized project, that is you worked on a technology within an industry that turns out to be economically sustainable

You made profit!

21a)distribution and organization of the tasks/activities

More than competences it was based on the personal approach, based on personality; as Loccioni, people feel free to express themselves, great responsibility on the project but freedom to move. It' s more on how you are than on what you studied

22)given your role, could you please describe your activity

23)updates and meetings / group alignment: how did you inform each other about results, info etc?

Two approaches

1. systematic: once per month we met, coherently with availability of team members
2. informal: it's when you work side by side, take coffee together, open space

it's about the personality: if you want to meet .. go and do it

Compression vs experiential model

Compression

24)Could you please describe the time dedicated to the **planning** of the activities, review and re-planning?

Not very much, in the sense that apart from the phase where you have to make concretely the output, where you have promised something to the customer, the rest does not really matter. It depends on the case: you can make a plan in order to have a method or an approach, to find opportunities but it is the opportunity that knocks at your door and you must be ready to take it: this is really hard to plan

25)**customer / (supplier) involvement**, in the entire project / selected steps of the project?

Basically you have to conquest the trust. If he/she trusts you, he/she will tell you the problems. Relationships strengthens if you get him involved

26)**reduction of wait time**: if it has been possible to shorten some steps, (maybe someone has held multiple roles?

We have lot of flexibility but there is no strength by the team to break up with the extra team constraints in order to allows the structure to be real flexible. Within constraints we are flexible but it is not enough because the structure must be flexible as well

27)**multifunctional team**: degree of integration between technical part, marketing and manufacturing?

Ok the integration but still within constraints; it is a pioneering project, the one that are "operative" are on fire but we must transfer this sensation to the others – we must do more – more internal politics and sometimes there is need to drop the bomb, to break free from constraints

28)**greater reward**: any motivational issue , for instance?

No, as Group philosophy we have no rewards for accomplishing goals because personal growth does not depend on the result of a project but rests on personal approach. To give value only to results it's not typical of Loccioni, it would increase rigidity, I would only mind my business, no team spirit. Anyway, goals and approaches are important

Experiential

29)**more design iterations**: Did the team face multiple design iterations? (the importance of alternative designs) . Can you please describe an example.

The approach would be always to propose more solutions, creativity is always good. It depends on the technical quality of people sitting on the brainstorming table, we must be good at getting dedicated people involved at the right moment

30)**more time spent in testing**. As for the testing phase, how much has been important for the success of the project? How many time did the team some testing on a project? Examples

Not so important, it is just the result of what has been done before. You think that is everything about testing, you are wrong. It is like when you do not respect the deadlines of works for the new house and you think that fault belongs to painters.

31)**less time between milestones / frequent milestones (i.e. formal project review points)**. Has the meeting/updates/review etc. agenda been strictly followed? Did the team members always respected their roles or there were episodes in which some activities were crossed?   No systematic respect of milestones   The approach has changed during the months … lot depended on the team leader, on the willingness to organize. In the process of auto -responsibility we failed   32)**greater power of the project leader.** Was it clear, since the beginning of the project, who ruled the team? (linked also to the previous question about the hierarchy/clarity of roles within the team)   Theoretically the business developer was the leader. But, you know, sometimes the official leader is not the "real "one, that is the one who drives. It is the approach that makes leadership, not the role. The important is that leadership occurs
Thanks and close down

CTO

A)Introduction + Topic
Presentation: role and field of action   My working experience began 33 years ago (the first engineer employed by Mr. Loccioni), and at that time the working personnel was formed by 5/6 persons. I started as electrical safety developer, then I continued as software and plc developer, later as chief orders responsible , successively I was R&D first group coordinator and since 1992 with summa I performed as project manager in technology, today CTO.
1)Among Loccioni Group values we have   TRADINNOVAZIONE, where the idea of tradition is tied to innovation, a push towards the future. What does it mean for you?   To change youth mistakes with elderly ones. It is somehow innovation not following the common trend, but trying to give the performance standards of our actions, otherwise the risk is useless innovation. The processing is long….results come with time and it must have strong roots in the past in order to last in future. It is not an isolated episode. It is obvious that future projects have their past background.   2)in which way Loccioni looks at new markets/business? Which is the general rule – model, if exists   How to classify new opportunities   Consolidated skills   New skills-to develop   Existing customers   New customers   4 squares with working team in each one   New customer =even with no skill   New customer= with skill –business development-in house skills on new markets   Old customer + new skills= R&D   Old skills in old customers = core business   Here how we organize new skills   Team food= business development
B)Focus on the FORM of the new initiative (the corporate venturing / internal venturing
3)Will you please describe in what specific form of initiative does the company engage?   -internal vs external   -joint vs autonomous   In Summa business development means a certain degree of autonomy from the usual business trends, in order to concentrate on new opportunities with someone dedicated to such task possibly with the support of people involved in the core. Therefore need of autonomy and freedom of exploring and collecting information by the team is mandatory. The wide autonomy in the explorative stage is integrated by the screening of opportunities together with the board.   Team must be autonomous as well, in asking help to the already present competencies of the structure, having the possibility of being helped by structured persons on call.   The parent company did not guarantee any result in such a sector, nonetheless a certain amount of

autonomy was left and this helped us to have a better overlook of this world and thus we found interesting opportunities too.

4)which is the mission of the initiative?

To start a new business enterprise in line with Loccioni group trends.

4a)which is the objective?

4b)which is the vision?

To become the best in control and measurements quality.

5)Will you please describe the venture relationship to the parent corporation?

6)Which is the position in the technology-market matrix?

-market

-technology

Maybe the structure had no selling projects, neither be super technicians….. be a plain research and listening structure, just to collect needs over which dispute.

7)Will you please mention the roles of the team member?

8)Given the roles, how would you describe the "nature" / "attitude" of the venture team: sales, multifunctional, R&D?

Maybe the structure had no selling projects, neither be super technicians….. be a plain research and listening structure, just to collect needs over which dispute.

9)How would you describe the innovation you want to reach?

-radical

-incremental

What choice the customer makes, we do not decide in advance, may be both things may happen

C)COMPETENCE SELECTION

10)Will you please describe how you analysed the internal competences, necessary for the definition of the ideal conditions to start interacting with the new market (in terms of technology -state of the art or past experiences / previous projects etc.)

11)Will you please describe how you "approached" the new competences concept?

Comprehension phase: *"ability to reliably and consistently meet or exceed its objectives": it is the process by which those pursuing an initiative come to understand precisely what combinations of resources will allow it to achieve objectives.*

We do not have a data base on skill structures etc., confrontation with reference people who know the working environment, inside the key wards. " How would you do?" it is a very personal relation, it goes through reference people, their opinion is being asked whether inside the organization right skills may be found for particular projects etc. If not found, whether he knows someone who may have the skill and organize a data base on it.

1.customer's requests triggers the whole process 2. Coherence is our goal 3. Relation network, we need someone to solve the problem. Timing is valuable just as funnel: problem-coherence-network….

For example, how much was important

12)(the importance of)target goals?

13)understanding of the roles and relationships inside the market (i.e. who drives the innovation etc)?

14)customers need?

15)the competition faced in filling the need?

16)the benefit of company's offering?

17)risks of company's offering?

18)how to price the offering?

19)key operations need to be carried out?

20)factors interfering with company's operations?

D)COMPETENCE DEVELOPMENT

Deftness also, meant as a process creating working relationships which allows those responsible for the initiative to execute in light of the comprehension → emergence of "a collective mind" in which activities performed by a group are interrelated so that desirable outcomes may be achieved and undesirable outcomes avoided.

21)Will you please describe , in detail and mentioning the main steps, how did the team organize the

activities once the new application/technology/competence revealed?

Just take Mutti, innovation at high levels, as a matter of fact we started a feasibility study, we are not sure it will work. The moment a need arises-this starts with a series of meetings. At the beginning Francesco Mutti started saying: how interesting, how beautiful but nothing was really defined. 2 step : let's go physically and start talking with the technicians and try to focus on the priorities and feasibility for us to find a new solution without massive investments –just as it already had happened by them. Once we got to the point (solution) we decided and discovered that it was a RFI problem, we assigned ,together with the team, the task to a dedicated person, with whom we reached a possible technical solution, improved with time…..the person in charge continues to elaborate on it, network is activated-for example we started with furnishers etc … we formulated several other options in order to find spare parts at better price.

21a)distribution and organization of the tasks/activities

Sulle competenze delle persone, poi quando si fa qualcosa di completamente nuovo si tiene conto sia delle attitudini personali che delle competenze

On personal skills, when a new approach is dealt with, personal attitudinal skills are being examined

22)given your role, could you please describe your activity

23)updates and meetings / group alignment: how did you inform each other about results, info etc?

The main goal was business development sessions ; reports; client visiting reports, informal conversations during coffee breaks etc.. tell each other personal experiences etc.. what already happened.

Compression vs experiential model

Compression

24)Could you please describe the time dedicated to the **planning** of the activities, review and re-planning?

Initially, at the mouth of the funnel it is mostly important to do the right things after considering ideas and opportunities, it is a waste of time to talk on how to correct wrong decisions, there is no need of great supervisors, the essential point is to find the solution. This action has a low cost on the whole and means no waste of time and not distraction of people's attention to problem solving.

25)**customer / (supplier) involvement**, in the entire project / selected steps of the project?

It is fundamental, the customer takes part to the processing as a team member, if not it is difficult not to mistake

26)**reduction of wait time**: if it has been possible to shorten some steps, (maybe someone has held multiple roles?

The problem arises when resources are not always available although the team efficiency , such resources already eploited in other projects

27)**multifunctional team**: degree of integration between technical part, marketing and manufacturing?

Migliorabile, c'è stata, un livello appena sufficiente

28)**greater reward**: any motivational issue , for instance?

Not at all

Experiential

29)**more design iterations**: Did the team face multiple design iterations? (the importance of alternative designs) . Can you please describe an example.

Yes, we have considered at least 2/3 different alternatives, alternative quotations have been offered and together with the client we have chosen the best offer and cost

30)**more time spent in testing**. As for the testing phase, how much has been important for the success of the project? How many time did the team some testing on a project? Examples

This is highly conditioning because once the production starts….it is risky. An experimental procedure is found with the customer approval without productions risks. Testing without process chooses the right methodology that allows an accurate trial without great risks for the customer. Next year the production line starts with low risks

31)**less time between milestones / frequent milestones (i.e. formal project review points)**. Has the meeting/updates/review etc. agenda been strictly followed? Did the team members always respected their roles or there were episodes in which some activities were crossed?

The initial part has been more creative, later when a convergence has been reached, everything becomes more formal

32)**greater power of the project leader.** Was it clear, since the beginning of the project, who ruled the

team? (linked also to the previous question about the hierarchy/clarity of roles within the team)
It was not clear, here to be fussy is a common attitude, by us never everything is definitive, when we start off there was a pool of experts to decide, but the process responsible was absent, there were quite a few stakeholders.
Thanks and close down

GENERAL MANAGER

A)Introduction + Topic
Presentation: role and field of action
Actual role , General Manager
The 10th of April i have celebrated the 25th anniversary. In the classic path of Loccioni enterprise vision 25 years ago in Loccioni there where 200 people: GI with its technical people for electric plants stuff , AEA instead was going towards the engineering section. Enrico said" ok Engineers but we need personnel graduated from other backgrounds" . There was shortage of Control & Programming areas.
1)Among Loccioni Group values we have   TRADINNOVAZIONE, where the idea of tradition is tied to innovation, a push towards the future. What does it mean for you?
2)in which way Loccioni looks at new markets/business? Which is the general rule – model, if exists
More than on Tradinnovazione I usually work on young company topic. I repeat such as slogan also at conferences etc. The other companies have a core business, so you can recognize them because they do only extractor fan etc. we as Loccioni differentiate because we have a core competence. This was told by Luca Paolazzi, Director of Confindustria Study Centre when he analysed the successful Italian enterprises all over the world. The ones that had great products performed very well but the ones able to go "upstairs" had no core business but core competences, in our case measure and quality check.
What does young company mean? Trying to keep young in all the measurement technologies but it has nothing to do with age, people get confused by this .. it is about asking if historical competence has projections and potential on the future or you are making business only with your past . An example is the home appliances. Are you trying to sell your measurement competences on a world horizon, on market segments that did not exist 10 yrs ago but nowadays need measurements?
Historically we passed from measure applied to products, then on processes and then applied on a PROBLEM , security problem (let's look at FELIX or APOTECA). From an intuition to law-maker problem. Where a huge risk is present , new business raises. We have to discriminate whether the problem origin lies in security, law/regulation area or in comfort and wellness for people and planet itself. Young on the technology side, on markets' segments, young at the world presence: this is the energy of our company, proactivity on face new markets, new sectors … the new market is a consequence, it is the humus that makes you a champion.
It's a mood, an approach that is not necessarily doing always in the same way but facing new problems with a variety of solutions. To evolve and change before stasis
B)Focus on the FORM of the new initiative (the corporate venturing / internal venturing
3)Will you please describe in what specific form of initiative does the company engage?
-internal vs external
-joint vs autonomous
If I think of food group my mind goes to our Open Company mission: before going directly onto business , we did a very good job on the network. It has been done an exceptional market analysis to see where the link lies between the market and Loccioni group.
Good job at the "start-up" level, for instance as for aeronautics, we started from a customer while on food we worked as a "manual", as the literature suggests, that is from analysis and reflections from the market. At the end, what really matters is: in this market, measurement's needs are real, exist, are critical and so can be crucial for customers to start working with Loccioni?
Relationships are fundamental, also Prof. Gregori said: from marketing to customers, from customers to

relationships in the sense that around a customer you have to develop a huge network of contacts and other relations to find the right interlocutors.

4)which is the mission of the initiative?

4a)which is the objective?

4b)which is the vision?

To create the classical start-up, go and investigate to figure out requirements and problems. The new problem

5)Will you please describe the venture relationship to the parent corporation?

Personally I think it was a good case because there was a dedicated team, autonomous and at the same time quite integrated

1. when it was time to create a prototype the team had people already with business experiences and so they could give a robust support
2. look at our sales manager. The start -up theory logics: you need to have someone that wakes up in the morning with ONE PROBLEM , you cannot involve people that the same time have several problems to solve , you must have the capacity to involve people from the company with the right competences at the right moment

6)Which is the position in the technology-market matrix?

-market

-technology

A new market. The dream is: all our core technology helps us to set upon new segments

7)Will you please mention the roles of the team member?

Kam, business development, R&D: when you have that 2/3 dedicated people –one focus on relations etc… I would say that if you have no technical competences is almost better in the sense that you can put all efforts on relationships field and by doing so you have a new technical expert who exploits R&D and PM competences. Therefore, it is in the capability of the team to enable climbing on board of this new enterprise, slowly all the other people. To do so you need a strong internal motivation, a HEART working daily on new prospects

8)Given the roles, how would you describe the "nature" / "attitude" of the venture team: sales, multifunctional, R&D?

More relational, multifunctional

9)How would you describe the innovation you want to reach?

-radical

-incremental

Innovation on Food: Very new in terms of sector, again on the young company topic: can I –in the next 3 years – open a start up in a new market? Will I be a player among the most important ones? Innovation lies there. In terms of overall innovation, I would say Incremental: you will work on a new segment. We possess R&D labs, R&I labs, so you try to start from something you already have. Starting with a completely new technology is very hard.

C)COMPETENCE SELECTION

10)Will you please describe how you analysed the internal competences, necessary for the definition of the ideal conditions to start interacting with the new market (in terms of technology -state of the art or past experiences / previous projects etc)

I think about "the dream", the idea that I can put the measure competence on 10 different technologies: when you go to a new segment you should try to "sell" all the know-how we have developed in the last 48 years. By doing so, more than focusing on applications for customers you really see how you can apply technology , in a greater vision

11)Will you please describe how you "approached" the new competences concept?

Comprehension phase: *"ability to reliably and consistently meet or exceed its objectives": it is the process by which those pursuing an initiative come to understand precisely what combinations of resources will allow it to achieve objectives.*

it is about the relationship with the customer, basically it is about getting the customers' interest and bring them to our company, no matter if we have no references on food but to show them the potential we

have. From the relation you pass to the customers' need: the guest is at our place, he/she sees our technology … and at the end the customer will tell of his/her problems.

When you face a new market, if you insert TRUST in the relationships with the customer, the technological problem will emerge. The customer becomes protagonist and thus work commissions for the next four years are granted

For example, how much was important

12)(the importance of)target goals?

13)understanding of the roles and relationships inside the market (i.e. who drives the innovation etc)?

14)customers need?

15)the competition faced in filling the need?

16)the benefit of company's offering?

17)risks of company's offering?

18how to price the offering?

19)key operations need to be carried out?

20)factors interfering with company's operations?

D)COMPETENCE DEVELOPMENT

Deftness also, meant as a process creating working relationships which allows those responsible for the initiative to execute in light of the comprehension → emergence of "a collective mind" in which activities performed by a group are interrelated so that desirable outcomes may be achieved and undesirable outcomes avoided.

21)Will you please describe , in detail and mentioning the main steps, how did the team organize the activities once the new application/technology/competence revealed?

Once you have created the "embryo of confidence", customers will present a problem that we could solve –ideally – thanks to our 48 years old experience.

Customers is a market for us, a big customer indeed, international-a player with wide outcomes, an important counterpart who needs measurement solutions etc. in other words he is the market.. Our effort is to create business development within this customer market

- Find a pioneer whose competence finds inside the customer context the right intuition, understands which problems to be solved in view of the future success
- He (pioneer) must be projected to a higher level in problem solving, mainly from a technical point of view. His self-confidence will help to replicate in a new global standard, the solution worldwide, in all the plants

You have to identify the right interlocutors, make a good communication of what you did in terms of solutions and "climb the pyramid" within the customer's structure

21a)distribution and organization of the tasks/activities

More than competences it was based on the personal approach, based on personality; as Loccioni, people feel free to express themselves, great responsibility on the project but freedom to move. It' s more on how you are than on what you studied

22)given your role, could you please describe your activity

High level activity, aligned with Summa's mission: never give up. Be aware that you're entering a new sector, it will take maybe years before you identify profitable projects … it is important to know it takes 3 to 5 years to start moving, good results will follow within 10 years.

If you spend time with the most important players, don't worry because something will work out.

Then important is the communication support too, when customers visit our company we must create the conditions to make them be relaxed and feel important at the same time cuddling the customer requires a big effort by the whole team.

23)updates and meetings / group alignment: how did you inform each other about results, info etc?

Compression vs experiential model

Reports and monthly meetings

Compression

24)Could you please describe the time dedicated to the **planning** of the activities, review and re-planning?

25)**customer / (supplier) involvement**, in the entire project / selected steps of the project?

26)**reduction of wait time**: if it has been possible to shorten some steps, (maybe someone has held

multiple roles?

27) **multifunctional team**: degree of integration between technical part, marketing and manufacturing?

28) **greater reward**: any motivational issue , for instance?

The multifunctional team is fundamental. There is who studies the company profile, organizations ecc afterwards comes who is managing customers' relations, stimulate their interest etc. the multifunctional team in the start-up stage is fundamental

Finally, just remember, the protagonist is the customer: Loccioni is at the service of an industry, to highlight problems to solve

Planning: in this preliminary stage / start-up stage it does not reward, serendipity rewards much more

Experiential

29) **more design iterations**: Did the team face multiple design iterations? (the importance of alternative designs) . Can you please describe an example.

30) **more time spent in testing**. As for the testing phase, how much has been important for the success of the project? How many time did the team some testing on a project? Examples

31) **less time between milestones / frequent milestones (i.e. formal project review points)**. Has the meeting/updates/review etc. agenda been strictly followed? Did the team members always respected their roles or there were episodes in which some activities were crossed?

32) **greater power of the project leader.** Was it clear, since the beginning of the project, who ruled the team? (linked also to the previous question about the hierarchy/clarity of roles within the team)

Testing is fundamental, if you go on a new sector and you do not start from your own core competence to see if you can start giving added value at the end it would be too hard.

I lived all the start-up experience with Giovanni Pollucci, we had to write the rules.. just to say that flexibility is important when working on new sectors, you cannot imagine what the outcome will be, you can try to plan but is an unknown world, thus you need the capacity to question yourself and put in discussion your choices, you need to be ready and re- start gain with new ideas and exploit opportunities.

Leadership: in all Loccioni's project there is a interactive/shared leadership. Given the fact that nothing is clear and definitive in an embryo stage I would rely on a shared leadership with different competences but I am not able to say who manages all this. Then, when the real business emerges, it is not anymore just a starting but it becomes a specific real operative team…

Thanks and close down

KAM

A)Introduction + Topic
Presentation: role and field of action Loccioni Group KAM, I am part of the sales team. It is 9 years since I am in LG, the last 7 I have been PM and PE, dealing with operational and technical management aspects. I am a mechanical engineer, 34 years old
1)Among Loccioni Group values we have TRADINNOVAZIONE, where the idea of tradition is tied to innovation, a push towards the future. What does it mean for you? The approach to the spirit of Tradinnovazione is to face new challenges, new applications, new working methods, keeping in mind the values of tradition as work ethic, work commitment and working effort, under 2 points of view: the method and the relations. For instance, under the methodological/strategic point of view I mean "the differentiation"; ethical point of view: working commitment seen as a sort of realization and life sustainment, relationships: fostering relationships in order to create a business network, Tradinnovazione is a value applied to every field of business everlasting action, both sales and technical departments, not stuck in traditional sectors but thinking of business as a flowing /never ending change
2)in which way Loccioni looks at new markets/business? Which is the general rule – model, if exists

Probably historically it has assumed different forms , in the last years, also due to the board' will , it became something more structured; in the Business Continuity project, for instance, potential final markets have been analysed, in terms of numbers, strategy, potential, a sort of comparison between Loccioni and markets' trends, market's habits. Just think of markets such as food and pharma, avio and electronics, putting light into markets' trends and lifestyles etc. strategical areas have been identified. Focused on these areas, dedicated teams have been built up, we can define this kind of activity "scouting/exploration", teams characterized by a mix of sales/marketing + technical + R&D competences in order to keep up with these shifting markets. Indeed these are high technological markets and dedicated teams are necessary to investigate the potential, key points between Loccioni and the referent market, relationships than can be started or which are the already existing links that can be exploited for entering the new market and trying to define embryonal business strategy or business approach.

B)Focus on the FORM of the new initiative (the corporate venturing / internal venturing

3)Will you please describe in what specific form of initiative does the company engage?
-internal vs external
-joint vs autonomous
The team was quite autonomous , in terms of analysis and market's investigation but highly dependent on the parent company/ the core company in terms of resources and strategy's decisions and comparisons. So "operative autonomy" but "resource dependency" "strategy dependency". We shared targets with the board. The daily activity belonged to the team plus a recurring updating with the board.
4)which is the mission of the initiative?
the mission of food team was to analyse the food market and define potential strategies/ application fields for Loccioni, in order to enter the market; first find and define first applications, then construction of a commercial proposal for the food market
4a)which is the objective?
The objective is to create something new, given that food area was not included in Loccioni historical business areas. Indeed, during the development of the activity, we realized that it was necessary to develop something completely new , starting from the base competences of Loccioni but writing down /reinventing a completely new proposal
 4b)which is the vision?
5)Will you please describe the venture relationship to the parent corporation?
6)Which is the position in the technology-market matrix?
-market
-technology
Matrix market /technology : Loccioni, with food, placed into **new market** and **intermediate-new technology:** several competences already were within the group, it was necessary to reorganize them to have new solutions but it was a new project
Vision: at the beginning there was a research activity followed by the generation/initiation of customers' relationships in the reference market. First of all analysis of the variety of segments of various industries (i.e. how food industry is); from this analysis several industries have been selected, the ones closer to Loccioni, richer in terms of profitability and more attractive in terms of technology. On these industries the first contacts have been generated and then a network of competences has been set up to match and verify if there could be positive feedbacks between the sectors and Loccioni. Then, new possible solutions have been studied, a communication strategy has been set up, coherent with the strategy so that , little by little, we could focus on specific applications, as well some specific and well defined competences
7)Will you please mention the roles of the team member?
Nathalie was in charge for the business development, she was responsible for the marketing and relationships management, the traid union of the project; I was in charge of the commercial area, Matteo Antonini , together with other figures, was in the R&D group, dealing with the technical part, both in terms of analysis and feasibility studies, technical proposals. This team periodically confronted itself with the board about progress and development of the business development activity
8)Given the roles, how would you describe the "nature" / "attitude" of the venture team: sales, multifunctional, R&D?
I should say in the middle between multifunctional and commercial, less technical; multifunctional.

9)How would you describe the innovation you want to reach?

-radical

-incremental

Principally a radical innovation, to avoid direct competition with already present actors in the market, owners of well- established solutions that can be updated with incremental innovations. In our strategy, to enter the market, we wanted to find space , a niche where to propose a radical innovation

C)COMPETENCE SELECTION

10)Will you please describe how you analysed the internal competences, necessary for the definition of the ideal conditions to start interacting with the new market (in terms of technology -state of the art or past experiences / previous projects etc.)

It is difficult, since there was no formal and unique moment in which this analysis had been conducted a priori, we proceeded with the try and fail approach. The first unrefined analysis, the one common to all the new markets to explore business continuity project, was to put together a market commercial component with a technical one to give to the project a vision and a sensitivity on the two sides. Then, gradually, with more experience, we focused through the analysis of the already present technological competences to see which we could (or we could not) recover and adapt to this new sectors. In some cases we seeked technologies not available in the house or not fully familiar, moreover interesting to be acquired and studied for specific research projects. Learning by doing.

11)Will you please describe how you "approached" the new competences concept?

Comprehension phase: ***"ability to reliably and consistently meet or exceed its objectives": it is the process by which those pursuing an initiative come to understand precisely what combinations of resources will allow it to achieve objectives.***

For example, how much was important

12)(the importance of)target goals?

13)understanding of the roles and relationships inside the market (i.e. who drives the innovation etc)?

14)customers need?

15)the competition faced in filling the need?

16)the benefit of company's offering?

17)risks of company's offering?

18how to price the offering?

19)key operations need to be carried out?

20)factors interfering with company's operations?

Thinking of my personal experience, I believe that this kind of process – since it is a new born activity – it has been shortly structured and that the results' analysis has been conducted only a posteriori.

A first important element was the attention we gave to the relationship aspect as first move to enter a new market, to start doing something , moving the first steps, taking all initial and available opportunities, even if at the beginning they seem far from what we do or not completely coherent. Starting from zero point, it is really better to do something concrete rather than long analysis on the paper, starting interrelate with the real world so that new experience can be gained and we can have a more complete perception of the state of the art of the sector. By doing so, it allows to collect direct info from the market or to register weak signs that are impossible to figure out from reports or analytical analysis.

Then it is possible to check the differences within the same industry: two companies dealing with the same activity they can do it in a very disparate way, you can be aware of it only if you are dealing in the market. From this you can have a cyclical method made by: try, results' analysis, refocus of the method through which we want to hit the targets and then new tour of experiences and approaches.

This method can be applied to the commercial/sales and communication sectors: we started with presentations to potential customers and partners, presenting the Loccioni Group as we were used to do in other sectors, the historical ones let's say but we realised that some key words, some key applications that were milestones in other sectors, in this new experience were misleading. This gave us the possibility to correct and to be more incisive.

Once you get familiar with the industry, it is important to be confident in terms of technology and try to propose a breakthrough proposal, something that can change the rules of the game or that can allow the company to substitute certain players of the industry or create new market 'spaces.

In this process, to find the right partners is pivotal, partners with set up mutual benefits development activities, especially for B2B companies , sensitive to innovation.

So , **first phase** – maybe more dispersive - **info collection** and **network creation. Second phase:** cyclical activity of strategy, competences and communication **improvement.** Third phase: once key and disruptive (with respect to status quo)applications have been identified, we **look for partners that can be useful to spread and develop the innovation, those who can be references** to spend on other segments or markets. During the development phase these tools are useful to specify roles, activities, relationships within the market and then the team can track customers 'requirements so that the a tracking document can be prepared and used for future other customers' demands

1. Relations
2. Customers' requests
3. Macro targets

Without relationships it would result in a sterile output, not so incisive, as an external office. Secondly, following the customers' request the business can be set up. These requirements must be well analysed, to avoid useless activities. Third, once you select the concrete problems and wishes of customers , a technical and commercial proposal will be sent to the customer but this must be coherent with the macro targets , especially in the long time period one, in order to construct robust relationships.

D)COMPETENCE DEVELOPMENT

Deftness also, meant as a process creating working relationships which allows those responsible for the initiative to execute in light of the comprehension → emergence of "a collective mind" in which activities performed by a group are interrelated so that desirable outcomes may be achieved and undesirable outcomes avoided.

21)Will you please describe , in detail and mentioning the main steps, how did the team organize the activities once the new application/technology/competence revealed?

Thinking of our past activity, the monthly updating was the most formal and regular comparison. In addition, other updating meetings occurred more frequent and intermediate, at least weekly meetings not in fixed days, also in view of incoming events ,depending also on personal agendas. The other quite systematic routine was the one related to the contacts scouting, backed mainly by Nathalie: first company visiting, self-introduction to target companies, identification of potential opportunity or request of specific problems development then discussion with the R&D on feasibility or specific studies. So: contact, collection of info and requirements, offering preparation, offering discussion with the customer.

21a)distribution and organization of the tasks/activities

Basically according to the personal background/competences; for instance, Business Development: relations management, market analysis, customer identification, contacts etc.

22)given your role, could you please describe your activity

Sales/Commercial, generation of the commercial relationship, group presentation and offering presentation in terms of competences and applications, collection of operative info about the customer, customer data-> info about the organization, people and key roles. Technical people instead are concerned on the feasibility analysis, how to face the customers' requirements under a technical point of view, which solutions to propose

23)updates and meetings / group alignment: how did you inform each other about results, info etc.?

Compression vs experiential model

Compression

24)Could you please describe the time dedicated to the **planning** of the activities, review and re-planning?

25)**customer / (supplier) involvement**, in the entire project / selected steps of the project?

26)**reduction of wait time**: if it has been possible to shorten some steps, (maybe someone has held multiple roles?

27)**multifunctional team**: degree of integration between technical part, marketing and manufacturing?

28)**greater reward**: any motivational issue , for instance?

The activity of **planning** and review planning has been done during the monthly updating meetings.

The monthly reports showed what experiences and activities were carried out, including eventual yearly

achievement goals both qualitative and quantitative.

In practical terms of hours spent in this activity, perhaps were quite limited, 2/3 h per month , in addition the operative activity was based mostly on daily planning. What we have done could have been more important. Planning activity could have driven activity more continuously . We have to consider also the fact that the resources involved were provided by the main activities of the parent company has obstructed this aspect. Probably by focusing resources extensively or exclusively on the would help to have a more uniform development of the activities. Furthermore the limited time spent in these activities has shifted the attention to tackle the opportunities and needs of the moment instead of stopping to reflect and plan for the future

Customer involvement: we did so, probably with a more commercial approach, based on the exploitation, than a strategical one. Probably it would have been important- at certain stage- to use a "higher level" approach with some strategic customers and not a strictly commercial approach. With Lavazza, for instance, when we passed from a pure commercial discussion on applications and systems to a broader vision, we found a technology partner to grow together.

As for the **roles**, there was a bit of cross contamination, a mutual involvement that helped to provide for resource shortage, for example. I think of my role, not only when I was involved in other commercial projects but at the beginning of 2013 when I had to conclude the project managements tasks. In this case, Business Development as more operational and really close to the KAM activity represented a big support. As I told you before, maybe the possibility to have dedicated resources would be helpful.

Multifunctionality: high degree of integration, due also to the small dimension of the team, not structured, with the possibility of fast comparison and discussions .. since we are not a multinational enterprise, to be close to each other made the team results really efficient

Reward: no reward but personal motivation , taking care of the strategic role of business continuity project, when you reach your goal is not only a personal victory but is a team success. When we got the first order by Lavazza we were really proud of that, many people lost their hope along the years… the parent company never mentioned rewards or carrier jumps , maybe could help, I do not know. Energy and motivation are inside , it is hard to extrapolate them with tools

Experiential

29)**more design iterations**: Did the team face multiple design iterations? (the importance of alternative designs) . Can you please describe an example.

It comes to my mind the Grow On project and the several solutions for tightness of packaging. Several potential technologies have been analysed, then two have been selected, some set up tests have been done to check the applicability. To be sincere it was a good parallel design job to evaluate not only feasibility but also which was the best technology

30)**more time spent in testing**. As for the testing phase, how much has been important for the success of the project? How many time did the team some testing on a project? Examples

An example, Lavazza project, there have been so many testing phases, at our place but also at customer's production site, really relevant from a technical point of view – to identify the solution and its working operation – from a commercial point of view to foster the relationship and to create good conditions for trust to grow. Along the production line the customer perceives the concrete ability of the supplier

31)**less time between milestones / frequent milestones (i.e. formal project review points)**. Has the meeting/updates/review etc. agenda been strictly followed? Did the team members always respected their roles or there were episodes in which some activities were crossed?

The degree of flexibility has been high, as for the monthly meeting the frequency was constant, at some periods maybe the management was less present and less focused on the project. Meetings were useful as alignment for the operative teams but there has been a sort of disconnection with respect to the management that have should keep on verifying and elaborate strategies for the project

32)**greater power of the project leader.** Was it clear, since the beginning of the project, who ruled the team? (linked also to the previous question about the hierarchy/clarity of roles within the team)

Not so clear, there have been ambiguous phases. The project leaders whose decision were strategical was not so aligned with the team and decisions were often postponed due to the misalignment between management and the operative team

Thanks and close down

R&D

A)Introduction + Topic
Presentation: role and field of action It is 6 years and a half since I am in Loccioni; the last 6 years I have worked as R&D, the last "half" I switched to PM, in the business unit Industry
1)Among Loccioni Group values we have TRADINNOVAZIONE, where the idea of tradition is tied to innovation, a push towards the future. What does it mean for you? New is a re-interpretation or a push and adaptation of what already exists, to face and to "dive" keeping anchored to a solid base that is represented by tradition and past. At the competence level: re-use and re-invest already existing competences on new markets so going beyond through mature and past experience, the one gained in consolidated markets.
2)in which way Loccioni looks at new markets/business? Which is the general rule – model, if exists One rule could be to understand if it is worthy to go to that new markets, trying to understand through the analysis if there could be space for us then; on the practical side, go and visit companies and new customers in order to find new requirements/needs
B)Focus on the FORM of the new initiative (the corporate venturing / internal venturing
3)Will you please describe in what specific form of initiative does the company engage? -internal vs external -joint vs autonomous We managed the activity with partial autonomy, freed from the company. For instance, a team has been set up, responsible for all the new businesses, the Business Development team, with dedicated people that worked vertically on new single business (let's look at food). Some resources have been drawn from other departments, already extant and so they kept up other activities. The result was a mixed team, partially autonomous and focus on a new business It was a team internal to Loccioni On the autonomy point of view I say "partially" in the sense that initiatives were taken by the operative team but always approved by the board that coordinated all the business development teams 4)which is the mission of the initiative? To develop a new business on the food area, to earn some millions of euro 4a)which is the objective? 4b)which is the vision? To create something new even if the initial base was not completely new but a re-interpretation and re-investment of already existing competences 5)Will you please describe the venture relationship to the parent corporation? Periodical meetings, where the operative side of the team told the Board about opportunities, investments, strategies; the Board gave feedbacks on how to proceed, how to change strategy, how to deal with customers, how to deal with specific situations etc. 6)Which is the position in the technology-market matrix? -market -technology 7)Will you please mention the roles of the team member? Nathalie was in charge of all the business development activities, trying to collect high level contacts, taking care of preliminary phase, before the commercial phase, I mean; Battistioni was responsible for the commercial activities, Matteo and Paolo followed the technical part (R&D team) with feasibility tests, project engineering operations etc. 8)Given the roles, how would you describe the "nature" / "attitude" of the venture team: sales, multifunctional, R&D?

Multifunctional

9)How would you describe the innovation you want to reach?

-radical

-incremental

Of course incremental, to face step by step; indeed our strategy is to try to approach a market with our already existing competences and then to propose to join projects where we can try new competences, niche competences, completely new ones. The development of a new competence is a step by step process, starting from the old competences, always.

C)COMPETENCE SELECTION

10)Will you please describe how you analysed the internal competences, necessary for the definition of the ideal conditions to start interacting with the new market (in terms of technology -state of the art or past experiences / previous projects etc.)

First of all we reflected on how could be the starting point competences.. we did not know this but we tried to figure it out talking directly with customers. Secondly, the part relative to the understand of our in house competences, it has been done not in a scientific way but based on our past experiences, on previous projects, discussing with internal people belonging to the production or R&D that already took part to similar new projects.

The definition of competences to apply to new markets started from analysis and evaluations. You realize customers 'requirements, to see if they can be considered a priority.

Second, to know who we are, that is to develop competences aligned with our company philosophy: an example, when we realized that most of the business in the food industry referred to machine production, packaging machines .. and Loccioni is not interested in developing a competence like this, because we are "followers" and it is out of our field of action, our nature.

Third, understanding which are competences that can lead to profitable markets. Comparisons between segments with high marginality and small volumes, or high volumes but low added value applications etc. By doing so, we figured out that the competence of artificial vision could be good for the food industry but less profitable with respect to other technologies such as tightness control of the packaging.

11)Will you please describe how you "approached" the new competences concept?

Comprehension phase: ***"ability to reliably and consistently meet or exceed its objectives": it is the process by which those pursuing an initiative come to understand precisely what combinations of resources will allow it to achieve objectives.***

For example ,how much was important

12)(the importance of)target goals?

13)understanding of the roles and relationships inside the market (i.e. who drives the innovation etc)?

14)customers need?

15)the competition faced in filling the need?

16)the benefit of company's offering?

17)risks of company's offering?

18how to price the offering?

19)key operations need to be carried out?

20)factors interfering with company's operations?

D)COMPETENCE DEVELOPMENT

Deftness also, meant as a process creating working relationships which allows those responsible for the initiative to execute in light of the comprehension → emergence of "a collective mind" in which activities performed by a group are interrelated so that desirable outcomes may be achieved and undesirable outcomes avoided.

21)Will you please describe , in detail and mentioning the main steps, how did the team organize the activities once the new application/technology/competence revealed?

Once we defined the competences to develop, what we did was a parallel activity between marketing/ contacts management/commercial side and the technical/R&D one.

I say "parallel" because on one hand, the commercial hand, we had a confirmation of the importance of a particular technology to develop (that there was a concrete opportunity and so it was good to involve the

R&D team); on the other hand the R&D team then proved with feasibility tests and general research activity that it was possible to create that competence (always backed by customers'need).

This culminated in the presentation of a technical -commercial offering to the customer: you have something concrete on hands, tested as well, that has significance also under a commercial point of view because it comes directly from a customer/market's request.

As often it happens in our enterprise, this process was not faced in a structured way, following a paradigm for example, but it was done in an experiential way: it is like you have a black box that receives a stimulus from the outside- that is the customer's input – from which the team tries to extract a technical-commercial proposal

21a)distribution and organization of the tasks/activities

Generally, everyone was chosen based on his/her personal skills and competences but no one denied the possibility to mix up roles; I mean that every team member was able to manage quite everything

22)given your role, could you please describe your activity

As an R&D member, I gave contributions in terms of technical competences but I take care also of customers 'relationship aspects.

For instance: I directly spoke with Ferrero about the specifications of the vision applications for their production lines

Technical example: laboratories test, development of the tightness check system

23)updates and meetings / group alignment: how did you inform each other about results, info etc?

A continuous update, except for monthly meetings with the Board. We directly updated with each other after a company's visit, lab test result, a new contact etc so also here with no structure but according to specific event

Compression vs experiential model

Compression

24)Could you please describe the time dedicated to the **planning** of the activities, review and re-planning?

Personally i think that planning does not really matter, for sure it could be developed in a better way.

I would have preferred it was planned more clearly, to have a clear idea of the amount of resources shared with other activities, in terms of quantification of hours and effort to devote.

25)**customer / (supplier) involvement**, in the entire project / selected steps of the project?

let's say that customer's involvement was really important in the preliminary phase: it helps us to realize and screening competences. In the intermediate phase it was less important, the activity was more focused on the evaluations – an internal study – then in the final phase we re-started working side by side with the customer that really gives support because it brings you to the real world. Generally the relationship with the customer is a close relationship, along all the project … maybe it is too close because then we risked to pay attention only to the customers' requests and we lose autonomy and the general awareness of where we have to invest or where we have to focus etc

the customer involvement is important but not so determinant. I would involve the customer depending on the project stage , on specific steps: initial phase and conclusive phase, it helps to avoid auto-celebration but leaves space to the company to make analysis and to work practically on the application/project

26)**reduction of wait time**: if it has been possible to shorten some steps, (maybe someone has held multiple roles?

27)**multifunctional team**: degree of integration between technical part, marketing and manufacturing?

Certainly there has been good integration between marketing and technical part; later, between technical part and production. Example: Lavazza case, in the first part we noticed integration between commercial and marketing, then the feasibility study by R&D followed. At the end, the input by the production stood out.

28)**greater reward**: any motivational issue , for instance?

No, only motivational reasons.

Experiential

29)**more design iterations**: Did the team face multiple design iterations? (the importance of alternative designs) . Can you please describe an example.

Considering the catch of a single opportunity, I would say yes, it is in Loccioni's spirit to propose sevral different technological solutions

30)**more time spent in testing**. As for the testing phase, how much has been important for the success of the project? How many time did the team some testing on a project? Examples

Certainly, the testing is really important; once again about Lavazza: before the offical order, a long testing phase occured, final testing at the customer's site; this meant huge investiments both in terms of technology and relations

31)**less time between milestones / frequent milestones (i.e. formal project review points)**. Has the meeting/updates/review etc. agenda been strictly followed? Did the team members always respected their roles or there were episodes in which some activities were crossed?

Let's say that the formal meeting was the monthly one but the other meetings cannot be considered as milestones ; our informal meetings were a sort of updating. Milestones never been defined since the beginning.

32)**greater power of the project leader.** Was it clear, since the beginning of the project, who ruled the team? (linked also to the previous question about the hierarchy/clarity of roles within the team)

It was not defined since the beginning; there was the Business Developer as reference point but the team has no complete autonomy. I would say no.

Thanks and close down

SALES MANAGER

A)Introduction + Topic

Presentation: role and field of action

I was the first employee of 2001, exactly January the 3rd 2001. When I arrived it was the time of the first assembly lines, a very critical moment. I began as PM for Delphi, then Key Account and today I am the Sales Manager for Mobility and Industry business unit

1)Among Loccioni Group values we have TRADINNOVAZIONE, where the idea of tradition is tied to innovation, a push towards the future. What does it mean for you?

2)in which way Loccioni looks at new markets/business? Which is the general rule – model, if exists

Remain deeply anchored to our competences- our base, what we have developed as technology , but looking at the future because innovation is not only in terms of technology .. it is a mistake thinking of it only in terms of technology. Tradinnovazione: stick to the markets like actual fishy lakes and looking towards the ones that will become fishy Under a technical point of view: innovation must take into account also the historical competences.

B)Focus on the FORM of the new initiative (the corporate venturing / internal venturing

3)Will you please describe in what specific form of initiative does the company engage?

-internal vs external

-joint vs autonomous

About food, I have always believed on that but on something I had to change opinion. It is a huge industry, it was normal to think to have some crumbs left for us. Considering that everyone has to eat, we are so many people… optimization o quality selection will emerge as main goals. It's a market that is worth watching, this was the preamble with which I looked at the market 3 years ago. I had to face reality … I thought they invested more on quality; to be honest the general trend is good ingredient in the production line is equal to good output.

Most of the investments are made by taking as reference the aesthetical quality of products, the maquillage not the contents. For Lavazza we check the quality of the packaging.

This is a due long and proper introduction. We approached the market with the proper curiosity. The food group, an internal section of Loccioni group, in harmony with the rest of the structure. The degree of autonomy, it's typical of our tradition: wide autonomy, with respect to the surrounding environment.

4)which is the mission of the initiative?

Our mission is: wellness of people, product improvement aimed to people wellness

4a)which is the objective?

a Loccioni device in every production line

4b)which is the vision? → how and why does the company engage in venturing

5)Will you please describe the venture relationship to the parent corporation?

i think communication has been always good and correct; the commercial part of the team- marketing but also the technical side – had great autonomy … I have to say that it was a well -structured team, people with good marketing skills, keeping contacts with the market; the Key Account, with good technical skills, capable of managing negotiation, problems and relative solutions and then Matteo, R&D, the specialist. The team operated with autonomy, there was no need to show everyday guide lines. Sometime someone of the board felt not so informed .. but it is ok, we are becoming a complex organization

6)Which is the position in the technology-market matrix?

-market

-technology

New market with wide big eyes, we start trying to specialize our already known competences on a new market with ears apt to collect hints for developing new things

7)Will you please mention the roles of the team member?

8)Given the roles, how would you describe the "nature" / "attitude" of the venture team: sales, multifunctional, R&D?

Sales spirit but technical as well … if multifunctional is considered as a mix of these 2 , it is multifunctional. In our context it is hard to sell without a technical contents, no it is not hard … it is impossible.

9)How would you describe the innovation you want to reach?

-radical

-incremental

incremental, for us … for the customer it seems radical, sometimes the radical approach can scare the customer, innovation is often misunderstood, especially if it's radical

C)COMPETENCE SELECTION

10)Will you please describe how you analysed the internal competences, necessary for the definition of the ideal conditions to start interacting with the new market (in terms of technology -state of the art or past experiences / previous projects etc)

The first approach was always to propose mature competences (for us) into new market, then it was normal that talking daily with customers new things stood out, aspects that stimulated people technical imagination. This is how innovation works at our place.

In this start-up phase you "shoot for the moon" … wide selection of customers means that you take into account every aspects, you offer the best you can. To obtain someone's approval at this stage is never easy. Afterwards you go for technical details.

1. Relations
2. Customers
3. Macro Goals

11)Will you please describe how you "approached" the new competences concept?

Comprehension phase: *"ability to reliably and consistently meet or exceed its objectives": it is the process by which those pursuing an initiative come to understand precisely what combinations of resources will allow it to achieve objectives.*

For example, how much was important

12)(the importance of)target goals?

13)understanding of the roles and relationships inside the market (i.e. who drives the innovation etc)?

14)customers need?

15)the competition faced in filling the need?

16)the benefit of company's offering?

17)risks of company's offering?

18how to price the offering?

19)key operations need to be carried out?

20)factors interfering with company's operations?

D)COMPETENCE DEVELOPMENT
Deftness also, meant as a process creating working relationships which allows those responsible for the initiative to execute in light of the comprehension → emergence of "a collective mind" in which activities performed by a group are interrelated so that desirable outcomes may be achieved and undesirable outcomes avoided.

21)Will you please describe , in detail and mentioning the main steps, how did the team organize the activities once the new application/technology/competence revealed?

The call, after the customer's visit, as report is the most beautiful and most direct way… but also the less structured. The reporting activity was always complete, giving us a clear picture on what the team did, saw, next steps done and customers' follow up.

21a)distribution and organization of the tasks/activities

Depending on the background; this is true for the technical part, for the less technical activity we made the project according to the available resources/people. There was this opportunity and so when you deal with non –technical people personal characteristics are more important than skills

22)given your role, could you please describe your activity

I gave suggestions. My role, at the beginning when there was no team at all, was Ferrero Key Account Manager. Once the team has been set up I gave up this activity. I have done very little: reading reports, taking part to the meetings, discussions and suggestions about the strategy

23)updates and meetings / group alignment: how did you inform each other about results, info etc?

Compression vs experiential model

<u>Compression</u>

24)Could you please describe the time dedicated to the **planning** of the activities, review and re-planning?

25)**customer / (supplier) involvement**, in the entire project / selected steps of the project?

26)**reduction of wait time**: if it has been possible to shorten some steps, (maybe someone has held multiple roles?

27)**multifunctional team**: degree of integration between technical part, marketing and manufacturing?

28)**greater reward**: any motivational issue , for instance?

No **reward** … apart from the personal ambition to achieve certain goals.

Planning: since it was a start-up, we were not sure of what we were doing, it was an unknown market …planning was general, we defined some targets, reasonable targets – number of visits, orders etc- everything without a scientific base because it was just important to have a programme more than planning, to bit rhythm .. planning is hard … we worked mostly on the "impact/feeling" rather than on a scheduled programme. For a start-up, without having done a previous deep and expensive analysis, it is normal procedure

Customer involvement: crucial, turning point, both for start-up and mature business. Amazing was how the team succeeded in tickling the curiosity of the customer, having answers, fixing appointments … fundamental. It is where we played the most difficult game

Reduction of waiting time: we often found out that we are faster than the customer; although the majority of people are involved in other activities and none is engaged (100%) totally to such project, yet we were able to fulfil the customers' request in time and accurately. Often the customer is late, let's look at Lavazza

Integration: high level of integration, exceptional collaborative team belonging. There were not many chances of integration with the organization's departments because of the scarcity of customers' scarcity orders

<u>Experiential</u>

29)**more design iterations**: Did the team face multiple design iterations? (the importance of alternative designs) . Can you please describe an example.

30)**more time spent in testing**. As for the testing phase, how much has been important for the success of the project? How many time did the team some testing on a project? Examples

31)**less time between milestones / frequent milestones (i.e. formal project review points)**. Has the meeting/updates/review etc. agenda been strictly followed? Did the team members always respected their roles or there were episodes in which some activities were crossed?

32)**greater power of the project leader.** Was it clear, since the beginning of the project, who ruled the

team? (linked also to the previous question about the hierarchy/clarity of roles within the team)

Alternatives: by our own nature we are used to propose several solutions for one problem, in this specific case it is true. We started talking with customers that do not know Loccioni, who already have well-known suppliers dedicated to specific production process stages. We started from a problem and it is clear that we proposed to customers a variety of solutions. We present ourselves as "problem solvers" of high problems and together with the customer we did a lot of brainstorming activity

Testing: a crucial test, first at our site then at the customer's plant. Testing both in Ferrero and Lavazza showed that it was possible to solve the problem: in this first phase when you enter the market it is quite important to show and prove that what we did it WORKS!

Milestones: we were really flexible following the customer, on the reactivity we rule!

Leadership: in Loccioni is shared and fluid, reference people of the project were clear. It has never been necessary to sort out who would be the decision maker: if every member is motivated, leadership can be shared and be fluid

Thanks and close down