

Development of Sustainable Products: Analysis of the Implications on the Management of Technological Innovation Projects of a Brazilian Company

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ABSTRACT

Nowadays the productive sector increasingly regards environmental issues as opportunities for business based on innovations geared towards the production of sustainable products. However, companies seeking to incorporate the principles of sustainable development into their innovation strategies, are forced to redesign their innovation management processes. This paper analyzes the implications that the development of sustainable products brings to the management of technological innovation projects. With this in mind, it examines the case of Natura, a cosmetic sector company which uses Amazonian biodiversity ingredients in its products in a sustainable manner. The analysis was based on primary data obtained from interviews with Natura's R&D and Marketing personnel. The results show that Natura promotes sustainability through the market conception of their products. In order to accomplish this, the company applied totally new routines and tools to the implementation of its innovation projects, such as handling the acquisition of Amazonian diversity ingredients, networking with a view to technological cooperation and adaptation a "funnel" of innovation approach in order to strategically align the generation, selection and implementation of their sustainable products on the market.

I. INTRODUCTION

Nowadays the productive sector increasingly regards environmental issues as opportunities for business based on innovations geared towards the production of sustainable products and environmentally more appropriate processes, associating values of environmental, social and economical sustainability to the company's image and reputation. It guarantees a growth in trust before its market (Corazza, 1996; Faria, 2000). In that context, the companies look to substitute the reactive posture for a pro-active strategy of approach in their economics, environmental and managerial aspects (Miles & Covin, 2000; Sharma 2000).

One of the sectors in that we found experiences of that type is the personal hygiene, perfumery and cosmetics, through a strategy guided for the incorporation of natural ingredients in their products under a sustainable perspective. In that sense, it is requested for guarantee the environmental preservation in the extraction of the raw materials and the economical and social maintenance of the communities responsible for the extraction and handling of those ingredients, promoting in this way, sustainability through the products introduced at the market.

The incorporation of that strategy by the companies doesn't follow a creation, implementation and impact standards over its markets. It's exactly the point where the company can differ, creating heterogeneity among the competitor's companies of its sector. However, companies seeking to incorporate the principles of sustainable development into their innovation strategies are forced to redesign their innovation management processes.

In that context this article intends to analyze the implications that the development of sustainable products brings to the management of technological innovation projects. For that, the text explores the case of Natura, a Brazilian company of the cosmetic sector that

incorporates in a sustainable way ingredients of the Brazilian biodiversity in their products. The structure of this paper results from the doctorate research developed by author, through the secondary data searching based in the company and its industry. Equally there was the search of primary data, obtained during interviews accomplished in the year of 2006 with professionals of the Products Development and the Marketing areas of Natura, which analyzed the practices of management and execution of the projects based on the principles of sustainability.

II. INNOVATION PROCESS, MANAGEMENT OF INNOVATION PROJECTS AND DEVELOPMENT OF SUSTAINABLE PRODUCTS

As starting point, this section approaches the positioning of the projects management aggregated to an integrated approach to the innovation process management. It also discusses the main approaches in management of innovation projects, as well as their critical factors for implementation. Finally, it intends to disclose the development of products and the innovation projects management, analyzing the implications of the sustainable development of technological innovation projects.

A. Start point for management of innovation projects: the management of innovation process

In order to analyze the implications that the development of sustainable products brings to the management of technological innovation projects, it is preliminarily necessary to place the management of projects inside of an integrated approach of management of the innovation process.

The management of the technological innovation process aspire the coordination, mobilization and integration of the resources and internal actors (direction of the company, R&D, marketing, operations, human resources, financial, new businesses) with the external actors to the company (customers, suppliers, players, research institutions, fomentation institutions), to explore technological and market opportunities, aligned to the corporate strategic priorities (Tidd, Bessant and Pavitt, 2005).

The integrated approach of the innovation management process developed by Quadros (2005), has its base in the recent literature of the technological management, guided for the improvements of the technological innovation processes that lead it to a more extensive process of innovation management, in contraposition to a limited vision of technological management as a activity restricted to the R&D department or engineering area of the company (Tidd, Bessant e Pavitt, 2005; Dodgson, 2000; Burgelman, Maidique e Wheelwright, 2003). This model comprehends the following (sub) processes or critical stages that follow a logical chain, but not necessarily time-sequential (Quadros and Vilha, 2006):

1. *Mapping/opportunities searching*, including identification tools of market and strategic opportunities, regulatory and competitive environment monitoring, creating a intelligent database that provide the generation of new innovation projects.
2. *Strategic selection of the opportunities*, understanding management tools of innovation projects portfolio in an aligned way to the company's objectives and strategic targets. That is the stage in that the great lines or programs of the projects portfolio are defined in agreement to the company's strategic priorities.

3. *Mobilization of internal and external sources*, understanding support tools to the decision regarding the outsourcing or incorporation of R&D, as the mapping of external and internal competencies and the evaluation of the R&D's location. Other critical element of the mobilization phase is the engineering of innovation financing.

4. *Implementation* of the innovation projects, understanding tools of strategic alignment regarding execution of the projects, such as the stage-gate approach (Cooper et al. 2001) or innovation funnel, besides organizational and structural procedures necessary to the creation of favorable technological innovation atmosphere - as the organization of cross-functional teams that promote the innovation through remuneration systems. Also in that stage the tools of external partnerships management, financing of innovation and intellectual property are clearly defined.

5. *Evaluation* of the innovation management process, understanding the accomplishment of metric through indicators of results, impact processes quality over the organization, consumers and environment.

The management of innovation projects is an important element of the (sub) implementation process in the model of innovation management process presented above. It is responsible for systematizing the process of innovation development for its insertion in the market. In spite of, in order to be effectively utilized, this tool needs to be managed in alignment with the nature of the sector as well with the company's strategic priorities. In highly competitive sectors that demand quickness in the development process of product innovation (such as the case of personal hygiene, perfumery and cosmetics sector), the task of management behind new products implementation projects in the market become still more complex, demanding a more refined systematization fundamentally aligned to the company's competitive strategies, better comprehended below.

B. Innovation Projects Management: essential approaches and critical factors to implementation

We pointed out in the item A of this section that as the sector competitive pattern intensifies, more quickness in the development of innovation products is required, causing diffusion of the called Methodologies of Projects, whose objective is to find sequences of stages and activities considered more rational to develop a product (Rozenfeld *et al.*, 2006)

In order to facilitate the articulation among the market needs, the technological possibilities and the competencies of the company, another influence of the company's competitive pattern intensification treats the importance of the company's board of directors involvement in the alignment of products' innovation development strategies along with the competitive strategies of the company, involving efforts of marketing and technological nature (Cheng, 2000).

That new product's development process point of view is found in the approaches of *Stage-Gate* and *Funnel of Innovation*, developed among the end of the 80th and final of the 90th. Such tools are used to help in the generation, selection and implementation of new innovation projects (Rozenfeld *et al.*, 2006).

The first approach "*Stage-Gate*" (developed by Cooper & Associates Consultants Inc.) has five stages for a new product development (starting from analysis of opportunities, going to

the products' launch in the market) and it is very employed in sectors of high technological complexity, as the one of machines, pharmaceutical and automobilist. Among each one of the five mentioned stages there is a moment of decision regard to the project's continuity. This moment is called *gates*. If the idea is going to be disapproved in one of these gates, the same can be immediately interrupted (Cooper, Edgett and Kleinschmidt, 2002).

The work is accomplished by a cross-functional team (involving marketing, R&D, manufacturing/operation, supply-chain), that attempt to bring a group of ideas for each gate before the project pass to the following stage. Each stage understands practices well defined and evaluation criteria, being taken into account: i) needs of the potential consumers and market risks of the project; ii) opportunities, risks and technological problems; iii) strategic contribution of the project; and iv) financial result of the project. At this point the main decisions relative to the project are: to let to pass, to cancel, to await or to recycle.

The second approach "*Funnel of Innovation*" (developed by Clark and Wheelwright, 1993), is largely employed in the consumption goods industries, where to volume of ideas for new products tends to be very larger. In that sense, the innovation teams, through phases and evaluations, try to reduce the number of ideas, prioritizing efforts in those with larger success probability in the market (Gavira *et al*, 2006). This approach was implemented in the new products development process of the company object of case's study of this work: Natura, and that it will be better detailed in the section III of this paper.

The funnel is formed by five elements, two of which are out of the funnel: in the entrance they are the innovation proposals or ideas to be evaluated. In the other extreme they are the goods and services to be released in the market. Beyond of those elements, inside of the funnel there are three phase-key, each one separated for a point of decision regard to continue or no (go-no-go), also called *gates* (Figure 1) (Ganguly, 1999).

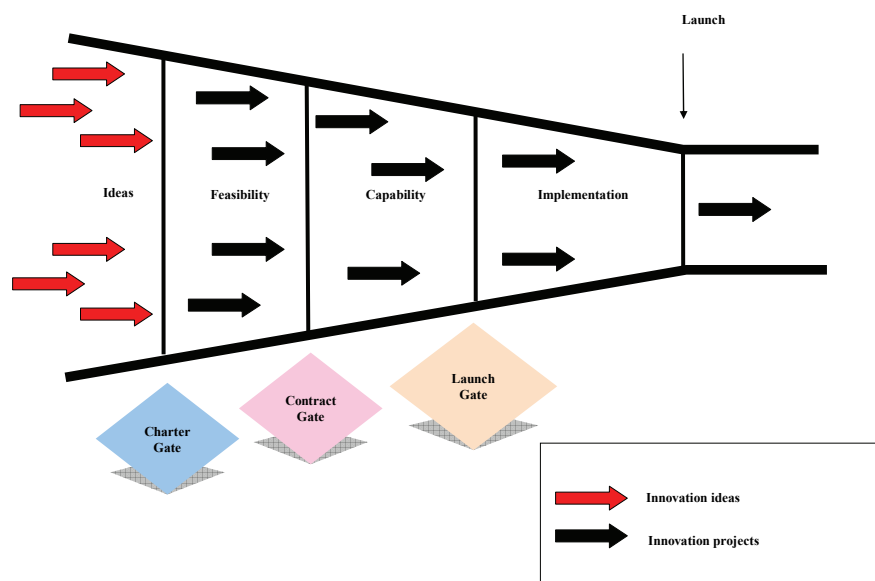


Figure 1: "Funnel of Innovation" approach for innovation projects management

In the first phase of the funnel (*Ideas*), the ideas are refined and the initial technical and market concepts are developed. Consumer's needs are identified and the idea passes through a portfolio evaluation. Besides, it is identified the potential of brand extension, as well as a previous evaluation based on financial criteria and appropriate use of resources, generating a Reporting plan. Based in the elaborated document the first *gate* happens, denominated *Charter Gate*, in that the managers decide about the continuity of the project (Gavira *et al*, 2006).

In the second phase (*Feasibility*), the mix of products to be developed is refined and consumers are better quantified. Products performance potential is evaluated, as well the technical and financial viability, and a revision of the current technology and strategy. After these evaluations the capital proposal is elaborated for posterior approval. Again these collected information become criteria of decision for the next *gate*, "The Contract Gate"(Gavira *et al*, 2006).

The third phase is *Capability*, in that the capital is available through implementation of a proposal of capital. With the financial resource available, the commercial plan and the marketing/product mix is prepared, which is submitted to the approval of the functional areas involved for release it in the market. After the survey of these data, the third *gate* is accomplished, and denominated "*Launch Gate*", becoming the last decision related to the project's continuity or interruption.(Gavira *et al*, 2006).

In the fourth phase (*Implementation*), operation proposal and consolidation of the documents for release is prepared. Finally, in fifth and last phase (*Launch*), as soon the product is launched a monitoring of the performance and the analysis of the consumers and other players answer is put in practice. (Gavira *et al*, 2006).

For Clark and Wheelwright (1993), the development of the funnel has three critical ways: i) the management rules that are related to the involvement and the attribution regard to the responsibility in projects approval among the executives of different levels of decision; ii) the competition among projects; and iii) the mix of projects, in way to build distinctive market positions.

Additionally, other critical aspect of the approach point that in practice the funnel is relatively different from the theory. Usually the companies don't have just one funnel, but several ones, each one with their own ideas and inputs in the process development. Some of these small funnels are important and strongly connected, while others are isolated in a particular world, compromising the decision process of project's selection and development continuity (Gavira *et al*, 2006). However when well managed and structured, the Funnel of Innovation disciplines the initial generation of ideas, choice of priorities, anticipate commercial and technological impasses, stimulates the multi-functional integration and allows making combinations between technological and market needs and opportunities.

C. Sustainable products development and the management of innovation projects

We emphasized previously that the more and more intense competitor's pressure associated to the possibility each time more reduced of differentiations among the businesses, creates a necessity of accomplishing new points of view of the current businesses and also visualize new technological and market opportunities.

Researches in strategic management¹ shows that the social and environmental themes influences the definition of marketing and commercial strategies, as a result of a larger consumer's expectation and understanding regard products environmentally correct and actions socially responsible, that can occur from small improvements in the routine activities to great modifications in the products, processes and in company's reputation and image (Vilha and Quadros, 2006).

Several competitive strategies have been developed starting from the premises of the sustainable development. However just a few focus an important aspect under the implementation point of view: the innovation projects. In spite of, we need to emphasize that the debate about the relationship between sustainability and projects management is absolutely new. It becomes clearly when addressing no trivial subjects in the organizations, such as develop and manage innovation projects that align the three dimensions of the sustainable development: social, environmental and economical (Ethos, 2006).

The recent literature shows the stakeholders influence (primary and intermediate suppliers, government, customers, society) in the development and evaluation phases of R&D projects (Miller, 1995; Tipping *et al.*, 1995; Coombs *et al.*, 1998), offering a form of analyzing the interference of the principles of the sustainable development regards the innovation projects management.

Alternatively, it is possible to verify in the following proposal the implications of the sustainable development on the innovation projects establishing development and evaluation criteria of the projects that extrapolate the economical aspect and also involve the analysis of social and environmental aspects (Figure 2).

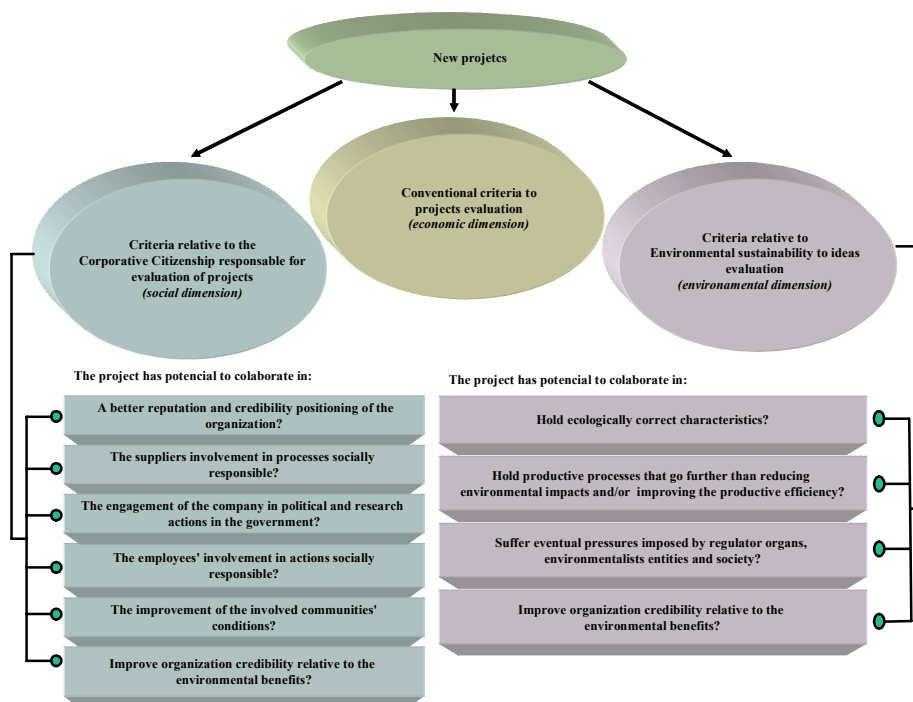


Figure 2: Criteria of development and evaluation of projects under a sustainable development perspective

For the social dimension, it is possible to submit in the development and evaluation phases of new projects criteria under the perspective of the business citizenship responsible for the objective of verifying if the same ones should collaborate to: i) a better reputation and credibility positioning of the organization; ii) the suppliers involvement in processes socially responsible; iii) the engagement of the company in political and research actions in the government; iv) the employees' involvement in actions socially responsible; v) the improvement of the involved community's conditions; vi) to promote actions and campaigns socially responsible in the society.

In relation to the environmental dimension, the new projects are developed and evaluated under criteria based on the environmental sustainability with the objective of verifying if the same ones should collaborate to: i) hold ecologically correct characteristics; ii) hold productive processes that go further than reducing environmental impacts and/or improving the productive efficiency; iii) suffer eventual pressures imposed by regulator organs, environmentalists entities and society; and iv) improve organization credibility relative to the environmental benefits.

In this proposal it's important to point out that the answers to the social and environmental criteria above described are not an easy task. It doesn't eliminate the need to pursue its application for obtaining businesses opportunities based in the sustainable development.

III. DEVELOPMENT OF SUSTAINABLE PRODUCTS AND THE MANAGEMENT OF INNOVATION PROJECTS: THE EXPERIENCE OF NATURA

A. The brazilian industry of Personal Hygiene, Perfumery, Cosmetics and the Natura

The Brazilian market of personal hygiene products, perfumery and cosmetics are quite representative, since it was valuate in US\$ 15, 4 billion in 2005, occupying to 4th. position in the world market (ABIHPEC, 2007). There are 1.415 companies acting in the sector in Brazil. Fifteen of that companies represent 73, 4% of total revenue with liquid revenue of US\$ 47.1 millions (ABIHPEC, 2007).

In that sector we can find a great heterogeneity of companies. Some of that are big multinationals provided with many resources such as Johnson & Johnson, Colgate-Palmolive, Procter & Gamble and Unilever. In the other hand, we can find Natura and O Boticário, the national ones stand out as great companies and the medium/small ones like Davene, Juruá, Chamma da Amazônia e Farmaervas (Vilha and Quadros, 2006).

It's notable the fact of the multinational companies does not accomplish significant expenses in the activities of products new development and local productive innovation capability, being limited, largely to the adaptation of imported technology. Brazilian characteristics and preferences of consumption could be factors of motivation; at least, adaptation of "global products" to the local market, what doesn't occurs (Vieira, 2003).

An emerging tendency in the industry of personal hygiene, perfumery and cosmetics is the fact that some Brazilian companies are incorporating ingredients of Amazonian biodiversity – extracted from leaves, trunks, roots, seeds or fruits - as raw materials of their products, with the strong international demand¹ in mind or in response to the strong competition between local an multinational markets (Vilha and Quadros, 2006).

To these companies, the practice of the sustainability is characterized by a productive process based in the preservation of the nature through the use of natural resources in a no predatory way and attributing respect to the local communities (primary suppliers). Besides, in this context, technological innovations of products happens not only under the technological point of view, but also in its own concept - that fundamentally aim to promote the sustainability, as it is the case of the company Natura.

Natura is an open capital company founded in 1969 that produces and markets cosmetics through direct sale. In 2005 the gross revenue was US\$ 1.53 million, with a portfolio containing 600 produced products, embracing operations in Argentina, Chile, Peru, Bolivia, Venezuela, Mexico and France. The company counts with approximately 4.128 collaborators and 519.000 consultants for direct sale. In Brazil, their main players are the multinationals Avon, L'Oreal, and Johnson & Johnson; and the national O Boticário.

Since its foundation the objective was manufacture and sell products that were produced with high quality and competitive price's natural formulas. In the end of the decade of 90, the company launched a line of products called Ekos, deciding to promote a substantive upgrade in its competitiveness, through the management of their resources and innovative capability returned to the manufacturing of products under the perspective of the sustainability. In the Ekos line, the products are biodegradable, decomposed in the nature in up to 28 days. The packages are renewable; the flasks are resin made, with a percentage of recycled material, with refill options for all of the products of the line. Now the company has other product lines that make use of the of the Brazilian biodiversity sustainable ingredients, like Chronos line (dedicated for face skin care), Diversa line (dedicated to make-up).

In this way, the company built the largest center of cosmetic's Innovation and R&D in South America (placed in São Paulo city), launching around 200 products per year. In addition, it structured the innovation vice-presidency, separating the Research and Development area in three boards of directors: Research and Technology; Products Development; Technical Services. Also, as part of the innovation vice-presidency the company maintain the Marketing Management, responsible for the creation of new concepts and products aligned with the company's faiths and values. (Figure 3) (Natura, 2006).

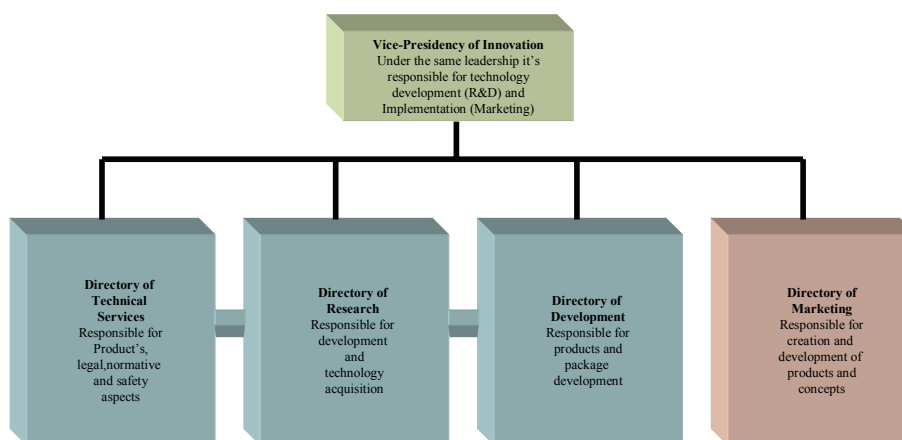


Figure 3: Natura's Vice-Presidency of Innovation Structure

The teams of the Development Directory work directly with the teams of the Research Directory and they have common access to the information about new technologies and products. The Marketing Directory works directly with the Development Directory, leading the products' new projects. The Marketing Directory has a minor interface with the Directory of Research. The Research Directory maintains a strong synergy with the company's Technical Services Directory (that treats of regulation and quality topics).

The Development Directory is structured in a vertical and functional category of products: face and sun-protection; bath; make-up; body; hair; and perfumery. In that scope there is also an area that serves horizontally all products managements: packing. The categories of products are structured in sub-categories and below them there are the lines of products.

B. Alignment of the businesses strategy with sustainable products development

In Brasil, Natura was pioneer in the development of sustainable products, through the launch of the line of products Natura Ekos. In that context, the sustainable development is integral part of the businesses strategy and source of competitive differentiation for the company, expressed in their organizational values, as visualize their products as a knowledge form and personal improvement, stimulating interpersonal relationships and good interacting with the world (emphasized by the slogan: "well-being well").

Nowadays, the company manufactures other lines of sustainable products using ingredients of the biodiversity, as for instance, the Diversa line (of make-up), that make use of a tree called Candeia as raw material extracted in a sustainable way, and the use of renewable packages as well. According to accomplished interviews, the objective of Natura is equalizing the sustainability strategy in other lines of products that presently are not been worth directly of that strategy. In that sense, Natura intends to use the practice of the sustainability as main platform in all their lines of products.

C. The Innovation Funnel for projects management

The cycle of Natura's products development is of approximately 1 year (from briefing to the launch in the market - including production and initial stock to supply the high demand characteristic of new products). Natura makes use of the Funnel concept to structure their research projects (Funnel of Technology) and development projects as well (Funnel of Innovation).

When involving professionals of the Research, Development and Marketing Directory (generally led by the Marketing area) the Funnel of Innovation is operated under a horizontal and multifunctional logic inside the company. The company's Funnel of Innovation phases are very similar those described by Ganguly (identified in the section II of this paper).

In the first phase of the funnel, called by the company by *briefing*, the ideas for development of a new product with the biodiversity ingredients can appear from a market signaling identified by the Marketing or Research area that can offer a new solution for the Development and Marketing areas based in a structured process of the Funnel of technology.

This process begins with the knowledge searching in the Brazilian universities, suppliers, popular research and company's accumulated data about medicinal flora. This knowledge is qualified to feed a database of botanical ingredients. Afterwards, a discerning analysis of the researched botanical assets was in according to phitochemical, safety and effectiveness criterions to compose the final products of the company. The ingredients that assist such criteria are approved and become disposable for been used in the process of new products development and certification for sustainable supply; the no approved ingredients continue feeding the database of the company. The development of new technologies, in the Funnel of Technology extent, is going until the point in that the technology is robust enough to enter in the process of innovation development, through the Funnel of Innovation approach.

In the second phase, called by the company by *design of the prototype and technical viability*, Natura accomplishes the conversion of the technology in prototype, defining the technical concept and better qualifying the market target in that it operates - characterized as 'Masstige' (that is, prestige products for the masses), to adapt their new innovation projects. That market segment is disposed to pay higher prices for this kind of differentiated products.

According to accomplished interviews, Natura doesn't use biodiversity ingredients to compose partially their products. Those raw materials has predominant weight in the products composition produced by the company, turning the structuring and management of the sustainability chain process much more complex if compared to the personal hygiene, perfumery and traditional cosmetic chain management, where synthetic ingredients are bought from great chemical multinational companies and delivered practically in the buyer's door.

In that context, under the point of view of their plantings and handlings, in order to the process of development of their products won't be affected by the complexity of obtaining those raw materials in a sustainable way, Natura also accomplishes a refined viability evaluation regards to the ingredients supply systematic with their suppliers.

In the third phase of the company's funnel, called *design of the prototype and financial viability*, Natura accomplishes a more refined analysis of financial viability of their innovation projects. Furthermore, seek the improvement of the linked subjects to the product and the market to facilitate the structuring of the executive plan of the product's launch in the market.

In the fourth phase, called *executive plan*, gets ready the executive project's plan, involving elements of commercial analysis and other element's control of the marketing mix, as the price, the promotion and the distribution system for the product's launch.

Finally, in the last phase of the company's funnel called *availability*, Natura accomplishes the product's launch in the market, sustained fundamentally by the *door-to-door* sale system, that aids in the fortification of the company's products portfolio and allows better proliferation of the product's launch - that happen every 21 days, according to accomplished interviews.

The choice of the system door-to-door for new product's launch is seen as strategic for Natura, when considering that: i) the company's new products proliferation easiness would be practically impossible if the product's sale was conventional (that happens in gondolas of hypermarkets, drugstores, stores), would be necessary lots of investments in conventional media and distribution systems to accompany the frequency of product's launches that the system door-to-door can offer; ii) due to the inevitable consumers difficulties to distinguish the conventional practices of the effectively sustainable ones, the door-to-door system allows a much better contact with the consumer through their consultants, trained to expose the products based in sustainable practices.

D. The evaluations in the Innovation Funnel and the product's portfolio

As already stood out in the item C of this section, the development of robust technologies accomplished by the Directory of Research is fundamental to the process of new product's development, accomplished by the Directory of Development. However, guarantee of relevance in the technology's actions integration along with the Development area, happens through the participation of the Development area professionals in the Research area projects. In that context, the Development area managers participate in the Research area's technology projects. In this way, the Development Director is part of the committee that makes the gate-keeping in the company's Funnel of Technology.

The management of project's development in the pipe-line and the project's prioritizing within the same line of products are done simultaneously in the Funnel of Innovation, that accomplishes weekly meetings - one for each line of products. The director of Development is the *gate-keeper* in the Funnel of Innovation. So, the Funnel of Innovation, besides doing project's sequencing *go/kill*, also works as a first prioritizing in the comparison among projects of a same line of products. In that sense, in the most elementary level (disposition and comparison of a certain line projects) the entrance of the Funnel also operates under logic for portfolio management.

The interviewees indicated that those periodic, frequent and wide meetings give consistency to the product's portfolio and also to the integration among the Research and Development areas (and those with the Marketing area). The interviewees also showed that the company doesn't work with technology roadmaps or construction of scenarios, so for the current company size, it is possible to drive the portfolio of products with meetings and a lot of

informal contact. Nevertheless, as the business grows and internationalized, the tendency to that process formalization will be fundamental.

E. Critical aspects of the sustainable product's development

The Natura's option in working with ingredients of the biodiversity involves no trivial technological options if compared to the technological platforms from the traditional products. In the traditional products development, subjects as standardization of the produced lots and management of the ingredients supply chain are more standardized and known by the industry.

For the development of sustainable products, the Development area needs to manage the standardization attributes of the final products, as for example, color alterations that happen due to variations proceeding from the harvest time or from the nature of the extracted ingredient. The variation of those products in the produced lots is communicated to the consumers, but it is not a trivial task. Before that, it is necessary to research robust biodiversity's ingredients to reach a more consistent and aligned development processes to fits the market demands.

Another challenge is related to the company's option in working with ingredients of the biodiversity in a predominant way in the composition of their products. In that sense, Natura necessarily needs to look for primary suppliers (from native communities) that work with ingredients whose cultivation process happens in a systematic way; as well as industrial suppliers (that work directly with the native communities), for manage the cultivation and handling process in a sustainable way.

Finally, another critical aspect when developing products under the sustainability perspective is connected to the primary supplier's dependence on the Natura's production demand. According to accomplished interviews, the company is attentive to that variable and it already has politics of extension for the use of the biodiversity ingredients in another product's lines.

IV. CONCLUSIONS

Based in the Natura's performance trajectory shown in the paper, we saw that the internalization process of the sustainability principles involved no trivial technological options if compared to the technological platforms of the traditional products. The development of sustainable products becomes an even more complex task of innovation project's management. It demanded a more refined systematization, fundamentally aligned to the company's business strategy.

Natura has been use of the Innovation's Funnel approach to structure and manage projects of product's development, with very similar phases to those described by Ganguly (1999). That approach is very employed in consumption goods industries, where the volume of ideas for new products tends to be very larger, demanding a process of reduction and prioritizing of ideas with larger success possibility in the market.

Furthermore, the innovation project management involves critical functions of the company, as the Research, Development and Marketing areas. Clark and Wheelwright (1993) believe in

the success of projects formed by multidisciplinary teams, assembling different competencies to make possible the innovation with success in the market.

Also it was possible to verify in the innovation project management some criteria that analyze social and environmental project's aspects under the perspective of the sustainable development. Under the environmental point of view, the solutions brought by the Technology's Funnel from the Research area, for subsequent conversion in projects made by the Development area contemplate: i) environmentally correct characteristics, using the biodiversity ingredients in a sustainable way; ii) processes that extrapolate the environmental impact reduction and that promote the sustainability; and iii) groups of interest involvement, as the no governmental organizations ones for the process of sustainable supplying certification

In the social perspective, the solutions contemplate: i) use of the biodiversity ingredients with processes socially responsible close to the local extractive communities (primary suppliers); ii) cooperation with Brazilian universities and institutes for medicinal flora researches; and iii) better positioning of the company's reputation and credibility, when having the possibility to communicate to the market the characteristics of the product based on sustainable practices. In that context, the innovation projects under the perspective of the sustainable development allow to present to the consumers the values of the company and the actions it promotes around that cause.

The pipe-line and of project's development management inside a same line of products are done simultaneously in the company's Funnel of Innovation. The formalization absence of a specific tool for the portfolio management and the use of an project's management logic of approach to operate the company's portfolio can be characterized as limiter factors of the process, having in mind that the task of project's prioritizing in the the company's portfolio and also the allocation of resources in the established priorities demands a dedicated platform and a specific logic of management (Cooper; Edgett, Kleinschmidt, 2001).

Another process limiting factor is the Development Director presence in all the weekly management meetings. These meetings treat about the priorities among projects of a product line and also about priorities among different lines, as well as presence in the bi-monthly meetings of the strategic plan of innovation, besides the meetings of the Funnel of Technology. Those facts evidence the centralization of the company's Development activities decision process. For Clark and Wheelwright (1993), the rules of management are one of the ways that must be critically analyzed ever time the Innovation Funnel is developed. Such rules are related to the involvement and responsibility attribution of the project's approval among the executives of different decision levels.

The main challenges of the Development area pointed by the interviewees are connected to the need to develop sustainable products so attractive as the synthesis products, and also coherence to communicate the company's sustainability practices in counterpart to the "natural" appeal presented in a lot of company's products of this sector as part of their marketing instrument, using this tool to promote consumers' attraction (Vilha and Quadros, 2006).

Another challenge pointed in interviews is related to the need to manager the final products standardization attributes, viewing the use of natural ingredients in high proportions in their

compositions that promote variations proceeding from the harvest or from the extracted ingredient nature.

Finally, it is worth to stand out as critical function for Natura: looking for primary suppliers (native communities) that work with ingredients whose cultivation process happens in a systematic way as well as industrial suppliers (that work directly with the native communities), for manager the cultivation and handling in a sustainable way.

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¹ In the North American and European markets, the consumers recognize and they are disposed to pay more for the “environmentally correct” products.