



## Integrating R&D and marketing for success in product innovation: an experience by a manufacturer of cosmetic raw materials

Eduardo Pinheiro Gondim de Vasconcellos<sup>[a]</sup>, Fabiano Gregolin<sup>[b]</sup>

<sup>[a]</sup> Full Professor -Business Administration Department of the University of Sao Paulo (USP), São Paulo, Brazil. E-mail:epgdvasc@gmail.com

<sup>[b]</sup> Master in Business Administration - Sao Paulo State Technological College, Santana de Parnaíba, SP, Brazil. E-mail: fabianogregolin@gmail.com

### Abstract

In order to increase chances of success and reduce uncertainty and failure along the launch process of new products, especially innovative ones, it is important that the R&D and the Marketing departments of an organization work in an integrated manner. In this context, the present study sought to identify the level of integration between the R&D and Marketing departments of a Brazilian manufacturer of cosmetic raw materials. The aims were: to find the determinants of the level of required integration; to point out the determinants of the level of achieved integration; to determine the level of importance of each analyzed item; and to diagnose the elements to be dealt with primarily, based on the model proposed by Gupta, Raj and Wilemon. The data consisted of collected material: first, meetings were held with the R&D and Marketing director; and once the data collection instrument had been elaborated with closed questions, answers were obtained by the supervisors, managers and senior managers of the company. After data analysis, tables were organized to show the determinants of required integration level, achieved integration level, and representativeness, valuation and results of the company's integration level. The results show an active and productive integration and allow one to infer the company makes efforts to create and foster integration between the departments. Nonetheless, there is space for improvements. The study's limitations stem from the impossibility to generalize the results due to the method used and due to the fact that the research was conducted in one company only.

**Keywords:** Integration between Departments. Innovation Process. Marketing. Innovation. manufacturer.

## Introduction

The globalized market, marked by intense technological advance, speed of change in the most diverse areas and transformations in modes of consumption, have imposed a new dynamic on organizations when it comes to developing and launching new products.

In order to meet, adapt, and survive in this new environment, organizations must direct their efforts to formulate a competitive strategy to relate the company with its environment. Since the organizational environment is very broad and encompasses both social and economic aspects, the main aspect to be considered are the industries with which it competes (PORTER, 2004).

In this context, one way to stand out among competitors is through innovation. Innovation has the power to redefine an industry and is not limited to growth and survival, but includes the ability to decisively influence the direction of the industry (DAVILA; EPSTEIN; SHELTON; 2007).

In this respect, a division of tasks seems to be rational. Developmental stages of innovation would be left to scientists hired to develop and maintain technology, whereas everything related to making such innovation available to the market would be under the responsibility of the Marketing department (GRIFFIN; HAUSER; 1996).

Integration between the R&D and Marketing departments is a recurring theme in discussions on innovation management. Many academic and marketing studies have been conducted aiming at understanding the main factors accounting for the success or failure in the integration between departments, and special attention has been given to the relationship between the R&D and the Marketing departments (SMETS; LANGERAK; RIJSDIJK; 2013; GRIFFIN; HAUSER; 1996; BROCKHOFF; CHAKRABARTI; 1988).

Over the last five years, a Brazilian manufacturer of cosmetic raw materials has made efforts to integrate its R&D and Marketing departments through procedural and behavioral initiatives. In this context, the present study aims to identify the level of integration of the company's R&D and Marketing departments. The objectives include: to find the determinants of the level of required integration; to point out the determinants of the level of achieved integration; to determine the level of importance of each analyzed item; and to diagnose the elements to be primarily dealt with.

In order to meet the proposed objectives, the theoretical basis used for identifying the level of Integration between the R&D and the Marketing departments was the model proposed by Gupta, Raj and Wilemon (1986), who have proposed a model for studying the interface between R&D and Marketing and who pointed out some key concepts for its understanding.

The study involved the participation of fifteen collaborators from the raw materials manufacturer - ten from the R&D department and five from the Marketing department.

The following was conducted: Face-to-face and interactive collective meetings, individual distance meetings, and sending and receiving questionnaires. Aiming at validating the results, a meeting with the innovation director was held to collect the criticisms and suggestions, which were incorporated to the research after evaluation.

It was possible to verify that the levels of required and achieved integration were practically the same. Results suggest that the company's efforts to foster and

develop integration between departments is present, active and productive, even though some elements may be improved.

### **Review-of-Literature**

Technological innovation may provide the potential needed to change the status of Companies and nations. It may contribute to increased sales and profits, as well as to the well-being and security of the individual and of the nation. Innovation is comprised of two parts: generating an idea or invention and the conversion of such invention into a business or its application to something useful (ROBERTS, 2007).

In this respect, dividing tasks seems rational. Developmental stages of innovation should be left to scientists hired to develop and maintain technology, whereas everything related to making such innovation available to the market should be under the responsibility of the Marketing department. Over time, by following this pattern, the two groups grew apart, becoming experts in their own function and unaware of the importance and competitive differential their integrated work could bring to the company (GRIFFIN; HAUSER; 1996).

The lack of integration between the R&D and the Marketing departments is pointed out in many studies as one of the main factors accounting for the failure in the development of new products. Although integration between departments is perceived as essential in the success of developing new products, the level of integration is still low (GUPTA, ROGERS, 1991; GUPTA, RAJ, WILEMON, 1986; OFEK, SARVARY, 2003; BROCKHOFF, CHAKRABARTI, 1988).

In today's competitive environment, successful companies are the ones that develop products and services that meet their consumers' needs and demands better than their competitors. Satisfying customer needs is, in effect, a prerequisite for the viability of an industry and the companies within it (PORTER, 1989).

The more innovative the product development project, the greater the need for integration between the R&D and the Marketing areas (FAIN, KLINE, DUHOVNIK, 2011).

In most organizations, Marketing departments perceive R&D as an unfocused, secondary and scientific function. In contrast, R&D departments perceive Marketing as being too focused on financial returns and customer satisfaction, giving little or no importance to technical barriers.

Kahn and Mentzer (1998) suggest that interaction alone does not seem to have a direct effect on the success of the performance. In fact, the lack of a positive relationship would affect the process. They propose that by simply increasing the number of meetings and/or documentation of information exchange between departments would not result in improved performances or integration level. Instead, they propose that it may be appropriate to use interaction to establish a contact and then let collaboration itself conduct the integration process.

Integration between R&D and Marketing is critical in the development of new products (FAIN, KLINE, DUHOVNIK, 2011). Developing new products requires the participation of several areas within the company, involving people with different knowledge, skills, competencies and resources.

Cooperation between the two departments should be fostered by companies that seek a competitive advantage and market leadership (GRIFFIN; HAUSER, 1996).

Song and Parry (1993) argue that several studies point to the fact that the best results in new product design come from companies where the R&D and the Marketing departments have a harmonic relationship. Mutual respect and trust are essential factors in this interrelationship.

Presumably, the Marketing department holds information related to the market. Marketing professionals do not create needs, rather they identify them. Alongside other influential forces in society, such professionals influence desires (KOTLER, 2000). The R&D department is made up of scientists hired to maintain and develop technology. R&D may be responsible for establishing long-term research lines, keeping abreast of competitive technologies, identifying and correcting design flaws for future versions of the product, and so on. Responsibilities of the R&D and Marketing departments in new product developments are neither independent nor static, making it difficult to analyze them separately (GRIFFIN, HAUSER, 1996).

In the 1970s Souder and Chakrabarti (1978) identified that the problem of collaboration between functionally differentiated groups, such as R&D and Marketing, is imminent. In their research, they pointed out that the main factors causing conflicts among subunits are: mutual dependence on tasks, task-related asymmetry, differences in reward criteria, functional specialization, dependency on common resources, and ambiguities in job descriptions and expectations from these subunits. Reciprocal actions by the various sectors are necessary to achieve common organizational goals. Furthermore, some organizational factors indicate the need for integration between various departments. Under such circumstances, integration between functionally separated groups becomes a necessity.

Even if the success of innovation is closely linked to the success in R&D and Marketing integration, the level of integration must be proportional to the innovation strategy and to the perceived environmental uncertainties.

In 1995, Griffin and Hauser from The International Center for Research on the Management of Technology (MIT Sloan) developed a relevant academic research review where they examine the impact of communication, cooperation, and integration between R&D and Marketing on new product development. Griffin and Hauser related the impact of cooperation with the level of organizational success advocating that companies believe cooperation to be important and that they have been taking steps to improve it. In this context, they point out some communication barriers to cooperation. Among the main ones they list: personality, culture and worldview, language, organization of responsibilities, and physical barriers. When linking empirical with scientific evidence, they conclude that communication between R&D and Marketing is key to success in new product development that will generate competitive advantage, and that those barriers must be eliminated or at least circumvented if the company wishes to remain profitable in the long run.

Gupta, Raj and Wilemon (1986) propose a model for studying the interface between R&D and Marketing and point out some key concepts for its understanding:

- How much integration is required? The level of integration between R&D and Marketing will depend on the strategy adopted for the new products and on the perceived environmental uncertainty;
- How much integration is achieved? The company's ability to achieve integration is affected by two factors: organizational factors and sociocultural factors;

- Integration and innovation success: The discrepancy between the ideal required integration level and what is actually achieved may hinder innovation success.

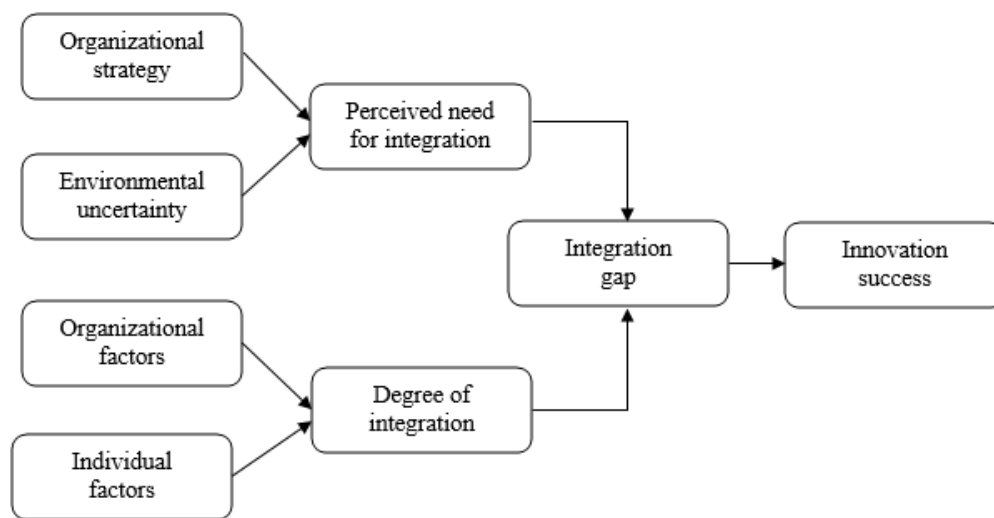


Figure 1 – R&D and Marketing integration model

Source: Gupta, Raj, Wilemon, 1986, p.8.

Figure 1 outlines the approach of a model aimed at solving the problem of R&D and Marketing integration, based on the identification of organizational strategies, environmental uncertainties, organizational innovation context, and Sociocultural differences between managers, technicians and experts.

Once these points have been identified, an analysis is conducted to reveal the degree of perceived required integration, as well as the degree of achieved integration. The difference between the two values, i.e., the difference between the degree of required integration and the degree of achieved integration, results in the integration gap. This gap is precisely where the company must direct its efforts to allow the equalization between the required and the actual integration.

The authors also point out the relevance of seeking answers to a preponderant question in this context: to what extent can the environment determine the actions of the organization and to what extent can the organization influence the environment? (GUPTA, RAJ, WILEMON, 1986).

## Methodology

Several methodological procedures were adopted to reach the objectives of the research. Preliminary, face-to-face and distance meetings were held with the manager responsible for the R&D and Marketing departments. Based on information from the meetings and the conceptual model by Gupta, Raj and Wilemon (1986), a data collection instrument was developed. Next, the collected data was analyzed and the considerations were elaborated.

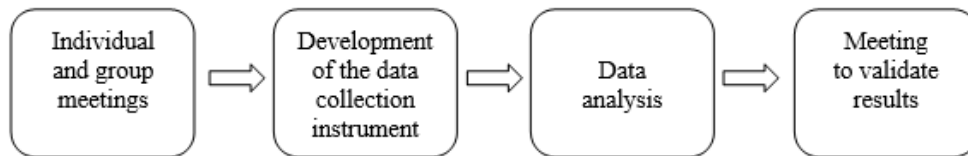


Figure 2 – Research stages  
Source: elaborated by the authors

The first step of the field research was to hold meetings with the innovation director and members of the R&D and Marketing departments, who presented their expectations, syllogisms and the options regarding the research objectives.

The closed-ended questionnaire based on Gupta, Raj and Wilemon's model (1986) was made available electronically to be answered individually and in an isolated manner, so as to minimize interference and influences by hierarchical superiors and peers.

Participating in this research stage were all employees with supervisory, senior management and management positions at the cosmetic raw materials manufacturer, totaling fifteen individuals – ten from the R&D and five from the Marketing department.

The third stage consisted of compiling the collected data and their analysis based on the conceptual model.

In order to validate the results obtained, a meeting was held with the company's innovation director to gather suggestions and criticisms, which were included in the research after evaluation.

## Discussion

The company under study is a cosmetic raw materials manufacturer. Founded over 10 years ago, it has launched more than 200 products in the pharmaceutical and cosmetic areas. In addition to developing partnerships with researchers from two major universities, the company operates with an open innovation model that allows strategic alliances both within Brazil and abroad. Its products and services are commercialized in over 50 countries.

Up until the end of 2011 the Marketing and R&D areas were separated and did not show great interaction. From 2012, the decision to unify the areas under a single directorate was made. In 2014, the areas were again separated and showed no integration until the beginning of 2015. From that date, great effort was made to foster interaction between the areas through procedural and behavioral initiatives. From the procedural point of view, a series of practices were established to make market evaluation compulsory prior to the initiation of research projects. Such analysis corresponds to the market intelligence performed by the Marketing department. After gathering information such as predictions on investment returns, target costs and competitors, among countless others, the project is ranked and then directed to the R&D team, if approved. From the behavioral point of view, the management of both areas has been making efforts to create an environment of greater harmony, trust and transparency, so that the flow of information is more efficient and differences in perception and concepts are minimized.

### Determinants of required integration level

The effects of both strategy and environment were analyzed to determine the required integration level. The first question asked regarded the organizational strategy adopted by the company.

Freeman (1974) and Parker (1978) state that there are six major types of innovation strategies available to companies: offensive, defensive, imitative, dependent, traditional and opportunistic. In the development of their model, Gupta, Raj and Wilemon (1986) propose that innovation strategy types can be better understood through Miles and Snow's (1978) proposal. However, they do not rule out the validity and relevance of the innovation strategy types pointed out by Freeman and Parker, used in this study. Result analysis shows that the company adopts the imitative strategy. This strategy model involves following the leader. R&D activities revolve around scientific and technical areas. Subordinate, subcontracted or satellite companies usually follow the strategy of other dominant companies. Changes are initiated by dominant customers or by companies to which they supply products or services.

The second question concerned the ability of the company to anticipate environmental uncertainties, a factor that plays a significant role in the need for integration between R&D and Marketing in new product development. It is the ability to anticipate the effects of environmental uncertainties on the organizational structure in order to deal with the different levels of information processing requirements. Gupta, Raj and Wilemon (1986) point out that high environmental uncertainty tends to require more information processing capacity and greater integration between departments. On the other hand, a stable environment poses less threat, making organizations more predictable. Companies with lower uncertainty levels may be effective even if they have a lower degree of integration between their departments. Table 1 shows the company's ability to anticipate change.

Table 1 – Ability to anticipate change

ABILITY	SCORE
Change of strategy	7
Change in competition	6
Change in technology	5
New consumer demands	6
Emergence of new competitors	5
New regulatory restrictions	7
Changes in Product Design	7

Source: elaborated by the authors

Note: 1=lowest ability; 10=highest ability

Porter (2004, p. 3) states that “The essence of formulating a competitive strategy is to relate a company to its environment”. He also highlights the broadness of the relevant environment in this analysis, which involves social and economic forces. According to Mintzberg (2009, 32) “although the formulas for strategic change may be easily developed, its management is difficult, especially when it involves changes in perspective”. Table 1 shows that, on a scale of 1 to 10, the company's ability to anticipate change in strategy is 7. This may mean the company has the ability to an-



anticipate strategic changes to be adopted in order to maintain its competitiveness in the market. As discussed by Porter and Mintzberg, in order to adapt to the market, companies may decide to change their strategy. In that sense, the company studied is perceived by its employees as having a good capacity to anticipate change.

Another ability to anticipate change that was studied regards competition. Porter (2004, p.18) states that “for most industries a firm's competitive moves have noticeable effects on its competitors and may therefore incite retaliation or efforts to contain such moves”. The author points this out as a pattern of action and reaction in the market, in other words, this may mean that in order to remain competitive or even just remain in the market, companies must act and react to actions by their competitors. The company under study scored 6 for this ability, as indicated in table 1. This means that its potential to anticipate changes may need to be improved. In the introductory part of this paper we pointed out that some characteristics of the globalized market – i.e. the intense technological advance, speed of change in the most diverse areas and transformation in consumption patterns – have imposed a new dynamic in the development and launching of new products by organizations. From this perspective, it is reasonable to say that the company needs to improve such capacity. However, if one takes into account the fact that the company's strategy is imitative, i.e. it follows the market, one may conclude that its response power is greater than its power to anticipate competitive change.

As for ability to anticipate changes in technology, the company scored 5. Possible definitions for technology are many and they complement each other. One of the most respected definitions is the one by Unesco: “technology is the set of scientific or empirical knowledge directly applicable to the production or improvement of goods or services” (REIS, 2008, p. 31). Technology is closely related to experience, practice, and to the improvement of means of generation of products and/or services. According to Dosi (1988) the development and generation of technology encompass using knowledge generated from previous experiences, whether tacit or explicit, with the objective of generating economic goods. Nonetheless, new technologies are enhanced, developed and made available in the market at such speed and intensity that simply ignoring them may represent the end of an organization. In this sense, it is imperative that companies are aware of and direct their efforts to anticipating technological changes in the market. This is especially true for cosmetic raw materials and pharmaceutical excipients manufacturers, as is the case of the company under study. Being perceived by its members as average in this respect, the company should reconsider its abilities if it seeks to stand out in this area.

The ability to anticipate new consumer demands was another aspect investigated in this research. The company scored 6 in the evaluation. As it has large cosmetics manufacturers and pharmaceutical industries as customers, this point draws attention. The Brazilian Association of Personal Hygiene, Perfumery and Cosmetics industry (ABIHPEC) publishes an evolutionary history of the industry on an annual basis, as well as a general profile of the industry in the previous year. This document presents information on the Brazilian market size, its ranking in the world, the evolution of the sector, the growth of the sector x economic growth, comparative indexes of prices, foreign trade, among others. The 2015 edition stated that the Brazilian Personal Hygiene, Perfumery and Cosmetics industry presented an average deflated



compound growth close to 10% per year in the last 19 years, going from a net turnover of R\$ 4.9 billion in 1996 to R\$ 43.2 billion in 2014, which represents an exponential growth (ABIHPEC, 2015). The same yearbook indicates that one of the main causes for this result is the constant launch of products that increasingly meet market demands, marked by both national and international influences. This scenario presupposes increasingly demanding consumers with regard to product periodicity and variability. Considering that the company under study scored 6 for its ability to anticipate new consumers' demands, it is reasonable to say that this aspect needs be improved if the company wishes to meet its consumer's demands' in the best possible way.

Next, the questioning concerned the company's ability to anticipate the emergence of new competitors. According to Porter (2004, p.95) "competitive moves are also games of delicacy". They demand analysis, attention and care with the competition. He further states that: "the game can be structured and the moves chosen and executed so as to maximize the outcome, regardless of the resources at hand". Porter proposes an analysis of actions by competitors, emphasizing that they may or may not be threatening. The company may not always have sufficient resources to ensure its position in the market is maintained. However, it is essential the company creates actions to protect it. The company under study scored 6 in this regard, which means there may still be actions to be taken.

Regulatory restrictions were another point addressed by the research. Regulations and standards are factors that should be taken seriously by any company wanting to remain legally active. The great challenge and perhaps the great differential of organizations is its potential to address these changes as quickly as possible. By developing its potential to anticipate such changes, the company has a greater chance of standing out and meeting new requirements and restrictions before its competitors. The company scored 7 under this aspect, which may mean it is on the right track in this regard.

To complete the survey on the level of required integration, the company's ability to anticipate change in product design was evaluated. The company was also well rated for this aspect (7), which means that it has been making efforts in this regard.

### **Determinants of achieved integration level**

Gupta, Raj and Wilemon (1986) state that organizations must collect and process environmental information during the innovation process. They point that organizational structure is a critical variable to determine the processing potential between departments and the environment. They also emphasize that organizational structure may facilitate or hinder integration, especially from the point of view of innovation.

To determine the level of integration achieved between the R&D and Marketing departments a series of organizational and personality factors must be analyzed. These factors can be classified into three categories: (I) effects of organizational structure; (ii) senior management attitudes towards the integration between R&D and Marketing and their facilitating actions; and (iii) Sociocultural differences be-

tween R&D and Marketing managers involved in new product development (GUPTA, RAJ, WILEMON, 1986).

Analyzing the effect of organizational structure, more specifically complexity, the company scored 7.

Complexity is based on the number of experts, the more experts there are, the greater the complexity of the department. From the behavioral point of view, the greater the number of people, the greater the positive or negative effect on the result. According to Robbins, Judge and Sobral (2010, p.278), group size undoubtedly affects its performance, "but the effect depends on the dependent variables considered". They also argue that smaller groups are faster at executing tasks, but when the issue regards problem solving, larger groups achieve more consistent results. The authors also state that individuals are complex by nature, each with their own personal background, which makes them unique. This alone is quite challenging for managers. Score 7 under this aspect points to relatively high department complexities, which require great efforts to be managed.

The greater the number of people, the greater the bureaucratic complexity to manage them. Formality, another aspect evaluated under the level of achieved integration by the company, is the emphasis given by the organization on following rules and procedures when carrying out its activities (GUPTA, RAJ, WILEMON, 1986). Formality may be a facilitator or a barrier to organizations. It serves as bureaucratic control, which at a certain level favors the development of activities; on the other hand, when there is too much rigidity or excess of formality, development can be compromised. The studied company scored 7 in this regard, which means its level of formality might need adjustments.

Centralization is analyzed based on authority hierarchy and degree of participation in the decision. The lower the participation of departmental members in decision-making, the greater the level of centralization. The company was rated at 6, which demonstrates that decision making is shared in the organization.

When analyzing the effect of senior managers' individual factors on the innovation process, it is assumed that their role must be to encourage entrepreneurial behavior, supporting new ideas and taking risks. Thus senior management's attitudes when performing these roles are of paramount importance to foster integration between departments (GUPTA, RAJ, WILEMON, 1986). To analyze such individual factors, this research evaluates the risk aspect. This means analyzing how senior managers share risk-taking, how encouraging they are and whether they are tolerant to early failure. Another factor of analysis was the establishment of a rewards system by the departments in a collaborative way, and finally, the degree of promotion adopted by the senior manager with regard to the need for integration between departments. The scores obtained by the company under study were respectively: 6, 1 and 10. This means that senior managers from the R&D and Marketing departments assume a certain level of risk, however, this aspect needs to be further improved. Much attention should be given to the establishment of rewards by departments in a collaborative manner, since their score was extremely low, showing that a punctual and brief action is necessary to develop this aspect. Contrary to the establishment of rewards in a collaborative way by departments, the promotion of integration between departments is a fact exploited to the maximum by senior managers.

To finish the analysis of managers' individual factors, an evaluation of the role of socio-cultural differences was carried out. As mentioned in the review-of-literature, departments usually have distinct interests, which are characteristic of each area. The sociocultural profiles of department members may vary considerably from department to department. Even within the same department these differences are commonly present. In this regard, two aspects were analyzed: senior managers' professional and time.

The company scored 7 for both orientations. This means that senior managers have a good degree of identification with the group. They are highly committed to their skills and competencies and seek social support from professional colleagues both inside and outside the organization. As far as managers' time orientation goes, the study shows that managers from both R&D and Marketing departments have good levels of long-term orientation.

Gupta, Raj, Wilemon (1986) argue that normally R&D and Marketing managers have different time orientations – they state that R&D managers often show long-term orientation and Marketing managers short-term orientation. This research verified that the company studied does not show such disparity.

To complete the analysis of the integration level of the company studied, the table below was created, showing the weighted averages and the results obtained.

Table 2 –Representativeness, valuation and results of the integration level

		EVALUATED ITEM	IM-PORTANCE	SCORE	TOTAL	
<b>REQUIRED INTE-GRATION</b>	Ability to anticipate Changes	Change of strategy	5	7	35	
		Change in competition	3	6	18	
		Change in technology	4	5	20	
		New consumer demands	5	6	30	
		Emergence of new competitors	4	5	20	
		New regulatory restrictions	2	7	14	
		Changes in Product Design	3	7	21	
<b>WEIGHTED AVERAGE</b>					<b>22,6</b>	
<b>ACHIEVED INTEGRATION</b>	Organizational Structure	Regarding complexity	3	7	21	
		Regarding formality	3	7	21	
		Regarding centralization	5	6	30	
	Individual factors-senior manager role	Risks	4	6	24	
		Rewards	3	1	3	
		Promotion of Integration	5	10	50	
		Professional orientation	4	7	28	
		Long-term orientation	3	7	21	
	<b>WEIGHTED AVERAGE</b>					<b>24,8</b>

Source: elaborated by the authors

Column "Importance" represents the value attributed by the company to the importance of each item evaluated, which ranged from 1 to 5. Column "Score", which ranges from 1 to 10, effectively represents the score attributed by each employee to the items analyzed.

It is possible to notice that the degrees of required and achieved integrations are practically the same. Gupta, Raj, Wilemon (1986) state that several studies concluded that innovation success is based on a combination of technical feasibility and recognition and market demand interpretation. According to this conception, it is verified that the technical area - R&D - and the marketing area - Marketing - develop their activities in an integrated way and in alignment with the objectives of the organization.

### **Conclusion**

Information exchange across the sectors of a company usually present a great challenge. Getting departments to work in an integrated way is even harder. Given the high degree of uncertainty inherent to the process of new product development, such exchange and integration present an arduous task for managers.

Since the 1970s, there have been several and profitable studies showing that collaboration between R&D and Marketing have a direct effect on results obtained by organizations. The strands of these studies range from the search to understand the integration process to the capacity of companies to create competitive advantage by adopting this practice. In general, such integration has proven to be a path that enables organizations to improve their results, reduce uncertainties, decrease innovation failure rates and become more competitive.

The Marketing department channels market demands into the company so that the R&D department is able to work more assertively, thus breaking the paradigm that it is a secondary, scientific and unfocused department.

In this context, the present research sought to analyze the integration between the areas of R&D and Marketing in a cosmetic raw materials manufacturer for successful product innovation. It was possible to infer the specificities of R&D and Marketing departments, and the need for joint, integrated actions aligned with innovation strategies and perceived environmental uncertainties. The company showed active and productive efforts to create and develop integration between departments, although some elements may be improved.

This study offers both theoretical and practical contributions to the product innovation process. From the theoretical point of view, this is due to the fact that the study gathers relevant information for the area, which was used as the basis for the study, and among which the proposal by Gupta, Raj, Wilemon (1986) deserves a special mention. From the practical point of view, this research contributes to the decision-making process by managers from the studied company and also serves as a source of information for companies intending to foster or improve integration in their R&D and Marketing departments.

## References

- ABIHPEC PUBLICAÇÃO ANUAL: panorama do setor 2015. Available at: <<https://www.abihpec.org.br/novo/wp-content/uploads/2015-PANORAMA-DO-SETOR-PORTUGUÊS-11ago2015.pdf>>. Accessed on: 17 Nov. 2015.
- BROCKHOFF, K; CHAKRABARTI, A. K. R&D/Marketing linkage and innovation strategy: Some West German experience. **Engineering Management, IEEE Transactions on**, v. 35, n. 3, p. 167-174, 1988.
- DAVILA, T; EPSTEIN, M. J; SHELTON, R. D. **As regras da Inovação: como gerenciar, como medir e como lucrar**. Porto Alegre: Bookman, 2007.
- DOSI, G. Sources, procedures and microeconomic effects of innovation, **Journal of Economic Literature**, vol. XXVI, pp. 1120-1171, 1988.
- FAIN, N; KLINE, M; DUHOVNIK, J. Integrating R&D and marketing in new product development. **Strojniški vestnik-Journal of Mechanical Engineering**, v. 57, n. 7-8, p. 599-609, 2011.
- FREEMAN, C. Innovation and the strategy of the firm. **The Economics of Industrial Innovation**. Harmondsworth: Penguin Books, 1974.
- GIL, A. C. **Como elaborar projetos de Pesquisa**. 4. ed. São Paulo: Atlas, 2002
- GRIFFIN, A.; HAUSER, J. R. Integrating R&D and Marketing: A Review and Analysis of the Literature. **Journal of Product Innovation Management**, v. 13, n. 3, p. 191-215, 1996.
- GUPTA, A. K.; ROGERS, E. M. Internal marketing: integrating R&D and Marketing within the organization. **Journal of Services Marketing**, v. 5, n. 2, p. 55-68, 1991.
- GUPTA, A. K.; RAJ, S. P.; WILEMON, D. A model for studying R&D. Marketing interface in the product innovation process. **The Journal of Marketing**, p. 7-17, 1986.
- KAHN, K. B.; MENTZER, J. T. Marketing's integration with other departments. **Journal of Business Research**, v. 42, n. 1, p. 53-62, 1998.
- KOTLER, P. **Administração de Marketing: a edição do novo milênio**. 10. ed. São Paulo: Prentice-Hall, 2000.
- MILES, R. E.; SNOW, C. C. **Organizational Strategy, Structure, and Process**, New York: McGraw-Hill, 1978.
- MINTZBERG, H. **Safari de estratégia: um roteiro pela selva do planejamento estratégico**. Porto Alegre: Bookman, 2010.
- OFEK, E; SARVARY, M; R&D, Marketing, and the success of next-generation products. **Marketing Science**, v. 22, n. 3, p. 355-370, 2003.
- Parker, J. E. S. **The economics of innovation: the national and multinational enterprise in technological change**. New York: Longman, 1978.
- PORTER, M E. **Estratégia Competitiva: técnica para análise de indústrias e da concorrência**. Rio de Janeiro: Elsevier, 2004.
- REIS, D. R. **Gestão da inovação tecnológica**. 2. ed. Barueri, SP: Manole, 2008.
- ROBERTS, E. B. Managing invention and innovation. **Research-Technology Management**, v. 50, n. 1, p. 35-54, 2007.
- ROBBINS, S. P.; JUDGE; T. A.; SOBRAL, F. **Comportamento Organizacional: teoria e prática no contexto brasileiro**. 14. ed. São Paulo: Pearson Prentice Hall, 2010.

SMETS, L. P. M.; LANGERAK, F.; RIJSDIJK, S. A. Shouldn't Customers Control Customized Product Development? **Journal of Product Innovation Management**, v. 30, n. 2, p. 1-12, 2013.

SONG, X. M; PARRY, M. E. How the Japanese manage the R&D-Marketing interface. **Research Technology Management**, v. 36, n. 4, p. 32, 1993.

SOUDER, W. E.; CHAKRABARTI, A. K. The R&D/Marketing interface: results from an empirical study of innovation projects. **Engineering Management, IEEE Transactions** on, n. 4, p. 88-93, 1978.

Received: 02/26/2017

Approved: 05/15/2017