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Master of Science in Management and Industrial Engineering

**PRODUCT INNOVATION IN CHILDHOOD MARKET:
BABYLANDIA PROJECT – ATTRACTIVENESS AND
COMPETITIVENESS ANALYSIS**

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Abstract (English)

The product innovation

The new product development methods have been changing a lot during last years, because they has passed from a product-oriented approach to a customer-oriented approach. Such a change has become necessary because of the changed role of the consumer, which is not anymore a passive character but an active and informed actor that can choose with awareness among different offers. However, the real implementation of a customer-oriented approach is very rare and presents very important problems. The increasing technological development, globalization, customization, competition, and in general consumer power of last years has complicated the situation even more.

Such an evolution has made the companies pay a high attention to the change and knowledge management in order to substain their competitive advantage, by exploiting the consumer collaboration. Such a collaboration in the new product development process is called value co-creation. The Internet represents a very important enabler in order to develop a dialogue with the consumer.

In the light of such an instable and quickly changing context, even the customer-oriented approach is no longer suitable, because the missing involvement of the consumer into the central value realization phase does not allow the company to understand the current changes and thus involve the supply of a value that can be appreciated only in a short time horizon. Hence, it is fundamental to anticipate as much as possible the potential constraints and opportunities that could show up in the future: such a mechanism is called “anticipation principle”. In order to complete such an approach it is useful to apply the principles of the so called “flexible development process”, so that the value evolves according to the market, by extending the concept phase and making it parallel to the implementation phase for an initial period.

The Babylandia project and the analysis made

The Babylandia project is in the context described above and it is related to the development of innovative products for children that are designed in order to answer in the best way to their real needs and at the same time that rely on a high quality level, an absolute safety, and a complete usability by the children themselves. The product developed are the “piece of furniture that grows with the child” by Caremi Franco S.r.l., the “ergonomic seat” by Fumagalli S.r.l., the “luminous floor” by Combustion & Energy - LuxSolar

S.r.l., and the “shell bed” by Soliani EMC S.r.l.. Such companies can exploit the collaboration with Parà S.p.A., for the supply of fabrics, with Politecnico di Milano, for the consultancy, with Centro tessile Cotoniero e Abbigliamento S.p.A., for the fabric testing, and with the Happy Child kindergarten, for the tests with children.

The main objective of the analysis made is to study the attractiveness of the market and the compatibility of the innovative products compared to the companies that propose them and the needs of the sector.

Hence, the starting point is the macro analysis of the market, which is made in order to understand the real opportunities and constraints related to the products developed that can arise; a demand estimate is then made in order to complete such a qualitative analysis, in order to understand the real dimensions of the businesses and thus to forecast the necessary investments.

The analyses made contribute to define the attractiveness of the market sector and it is then joined with an analysis of the compatibility of the businesses with the companies, in order to have a complete scenario of the success possibilities. The aspects related to the attractiveness and to the compatibility are then jointly analyzed through a matrix. Once the businesses and the market segments addressed have been analyzed from a macro viewpoint, the focus moves on the demand from a micro viewpoint, trying to understand the consumer needs and to notice the possible reaction to the values developed. The techniques used are the blogosphere analysis and the focus group for the market of families, while the interview with Architect Erba for the market of kindergartens. The micro analysis is then completed through the “stimulus/response” model, used to explore the stimuli to which the consumers are exposed and the consequent reactions, and the purchasing process analysis in terms of phases and roles.

The last step of the study made represents the guidelines for the Go To Market plan, with regard to the value distribution and communication, so that the top managements of the companies involved can rely on an explorative research about products that still present some problems, especially with regard to the market response. Moreover, it proposes some synergies with other companies involved in Babylandia project.

The results of this first analysis phase show very large markets with regards to the piece of furniture, the floor, and the bed, while a niche market with regard to the seat. However, such sectors are characterized by a very low or even decreasing consumption trend (-2% from 2008 to 2009), because of the still existing crisis, and by few opportunities. The broadened competition is very intense, for the markets of both families and kindergartens, because it is composed by a very variegated offer of products for children. Of course, such a consideration is not valid for the Fumagalli seat, because of its peculiarity, because it is exclusively addressed to disabled children.

The coherence level of the products with the companies that propose them is medium and the main problem is related to the inadequacy of the distribution channels.

The needs are weakly felt and the sentences noticed in the focus group confirm this trend, with the Caremi piece of furniture in a slightly better position compared to the other products. The product acceptance level is also quite negative, mainly because of the product design and the high price. With regard to the market of kindergartens, the acceptance level is higher for the “piece of furniture that grows with the child” and the “luminous floor”, but the need perception level is again medium-low. In this case the peculiarity of Fumagalli's market can be noticed, because there are purchases extremely specialized from the medical point of view that also present some ethical implications.

Moreover, the synergies between the companies could foster the development of a common brand in order to extend the brand knowledge in a more effective way, increase the bargaining power with respect to the suppliers, and improve the offering, maybe by opening single brand stores.

Abstract (Italian)

L'innovazione di prodotto

Le logiche di sviluppo di nuovi prodotti hanno subito un notevole cambiamento negli ultimi anni, passando da un approccio product-oriented ad un approccio customer-oriented. Tale cambiamento si è reso necessario a causa del ruolo mutato del consumatore, il quale non è più un soggetto passivo ma un attore attivo e informato, in grado di scegliere con consapevolezza tra diverse offerte. L'effettiva implementazione di un approccio customer-oriented è tuttavia molto rara e presenta delle criticità molto importanti. Il crescere dello sviluppo tecnologico, della globalizzazione, della customizzazione, della competizione ed in generale del potere dei consumatori degli ultimi anni non ha fatto altro che complicare la situazione.

Tale evoluzione ha spinto le aziende a prestare molta attenzione alla gestione del cambiamento e delle conoscenze in modo da sostenere il proprio vantaggio competitivo, sfruttando anche la collaborazione del consumatore. Tale collaborazione nello sviluppo di nuovi prodotti prende il nome di co-creazione del valore. Internet, a tal proposito, rappresenta un abilitatore molto importante per sviluppare un dialogo con il consumatore.

A fronte di un contesto instabile e rapidamente mutevole come quello descritto, anche l'approccio customer-oriented non è più considerabile adatto, in quanto il mancato coinvolgimento del consumatore nella fase centrale di realizzazione del prodotto o servizio ha come effetto l'estraneità dell'azienda ai cambiamenti in atto e quindi la fornitura di un valore apprezzabile solo in un orizzonte temporale ridotto. Risulta quindi fondamentale anticipare quanto più possibile i possibili vincoli ma anche le possibili opportunità che si possono presentare: tale meccanismo prende il nome di "principio di anticipazione". Per integrare un approccio di questo tipo è utile applicare i principi del "processo di sviluppo flessibile", affinché il valore evolva di pari passo con il mercato, estendendo la fase di concept e rendendola per un certo periodo iniziale parallela alla fase di implementazione.

Il progetto Babylandia e l'analisi effettuata

Nel contesto sopra descritto, si inserisce il progetto Babylandia, il quale è legato allo sviluppo di prodotti per l'infanzia innovativi, progettati per rispondere in maniera ottimale ai bisogni propri dei bambini

potendo contare contemporaneamente su un alto livello qualitativo, sull'assoluta sicurezza e sulla piena usabilità da parte dei bambini stessi. I prodotti sviluppati sono il “mobile che cresce con il bambino” di Caremi Franco S.r.l., la “seduta ergonomica” di Fumagalli S.r.l., il “pavimento luminoso” di Combustion & Energy - LuxSolar S.r.l. ed il “letto a conchiglia” di Soliani EMC S.r.l.. Tali aziende possono avvalersi della collaborazione di Parà S.p.A., per la fornitura di tessuti, del Politecnico di Milano, per la consulenza, del Centro tessile Cotoniero e Abbigliamento S.p.A., per i test sui tessuti, e della catena di asili e scuole materne Happy Child, per i test con i bambini.

L'obiettivo principale che si prefigge l'analisi effettuata è costituito dallo studio dell'attrattività di mercato e della compatibilità dei prodotti innovativi rispetto alle aziende che li propongono e rispetto ai bisogni del settore di riferimento.

Il punto di partenza è quindi costituito dall'analisi macro del mercato, effettuata per capire effettivamente le opportunità ed i limiti che possono sorgere nei confronti dei prodotti sviluppati; per integrare e completare questa analisi di tipo qualitativo è stata anche svolta una stima della domanda, per capire quali siano effettivamente le dimensioni del business e di conseguenza prevedere gli investimenti necessari.

Le analisi effettuate contribuiscono a definire l'attrattività del settore di mercato, la quale è stata affiancata dall'analisi della compatibilità dei business con le aziende stesse, per avere una visione completa delle possibilità di successo. Gli aspetti relativi all'attrattività ed alla compatibilità vengono successivamente analizzati congiuntamente attraverso una matrice. Una volta analizzati i business e i settori di mercato verso cui indirizzarli dal punto di vista macro, lo studio ha spostato il proprio focus sulla domanda a livello micro, facendo emergere i bisogni dei consumatori e cercando di rilevare le possibili reazioni alla proposta dei valori sviluppati. Le tecniche utilizzate a tal proposito sono la blogosfera e il focus group per il mercato delle famiglie, mentre l'intervista all'Architetto Erba per quanto riguarda il mercato delle scuole materne. L'analisi micro della domanda è stata completata quindi con il modello “stimolo/risposta”, utilizzato per indagare gli stimoli a cui i consumatori potrebbero essere sottoposti e le reazioni conseguenti, e con l'analisi del processo d'acquisto in termini di fasi e ruoli.

L'ultimo passaggio dello studio effettuato rappresenta la definizione delle linee guida per il piano di Go To Market, con riferimento alla commercializzazione ed al piano di comunicazione del valore, in modo che i vertici delle aziende studiate possano contare su una ricerca esplorativa riguardo prodotti che presentano ancora diverse criticità, soprattutto dal punto di vista della risposta del mercato. Vengono inoltre proposte delle sinergie con altre aziende partecipanti al progetto Babylandia.

I risultati dello studio parlano di mercati molto estesi per quanto riguarda il mobile, il pavimento e il letto mentre di un mercato assolutamente di nicchia per quanto riguarda la seduta. È altrettanto vero però che tali settori sono caratterizzati da una crescita dei consumi molto bassa o addirittura in calo (- 2% nei

consumi dal 2008 al 2009), a causa della crisi ancora in atto, e da limitate opportunità. Anche analizzando il mercato dal punto di vista della concorrenza, si evince che la competizione allargata è molto intensa, sia per il mercato delle famiglie che per il mercato delle scuole materne, in quanto costituita da un'offerta molto variegata di prodotti per bambini. Tale considerazione naturalmente viene meno per la particolarità della seduta di Fumagalli, in quanto destinata esclusivamente ai bambini disabili. Il livello di coerenza dei prodotti con le aziende che li propongono è comunque medio e la criticità maggiore è legata all'inadeguatezza dei canali distributivi.

I bisogni sono poco sentiti e le frasi rilevate nel focus group confermano tale tendenza, con il mobile di Caremi in una posizione leggermente migliore. Anche per quanto riguarda il livello di accettazione dei prodotti, i responsi sono stati abbastanza negativi, con un basso gradimento causato principalmente dall'aspetto e dal prezzo alto. Per quanto riguarda il mercato delle scuole materne, il livello di accettazione è più alto nel caso del "mobile che cresce con il bambino" e del "pavimento luminoso", anche se il livello di percezione dei bisogni rimane medio-basso. A tal proposito è emersa la particolarità del mercato di Fumagalli, in quanto si tratta di acquisti estremamente specializzati dal punto di vista medico e che presentano anche delle implicazioni dal punto di vista etico.

La sinergia tra le aziende potrebbe favorire inoltre lo sviluppo di un brand comune in modo da estendere con maggiore efficacia ed efficienza la conoscenza di ognuno dei prodotti, aumentare il proprio potere contrattuale nei confronti dei fornitori ed arricchire l'offerta, magari aprendo anche punti vendita di proprietà.

CHAPTER 1: ANALYSIS OF THE LITERATURE

Product innovation

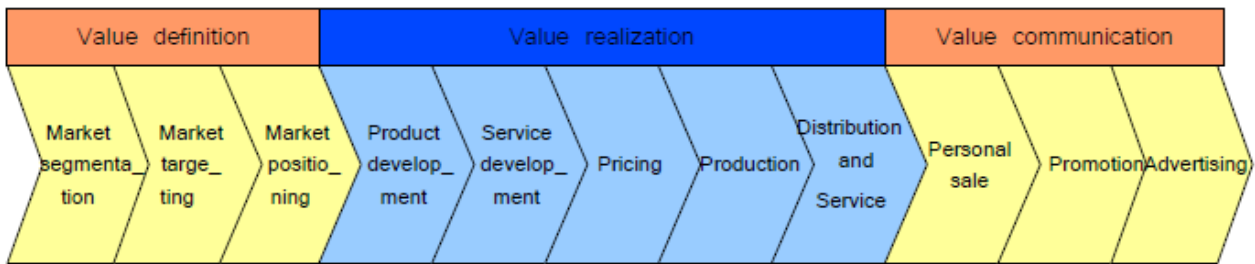
The Babylandia project concerns the creation of products for children that have a high innovative level; at the same time, such products must be child-friendly and accessible by young people and not only by adults. Such a characteristic is possible only through a company approach that considers the customer as the centre of new product development process, adapting the technological innovation to it. Such an approach is called customer-oriented approach.

1.1 The customer-oriented approach

In the past, during '60s, the product was at the centre of the production process and, as stated by Sissors (1966), companies used to put all their efforts in the simple production of the item. In those days, as asserted by Needham (1969), the customers were divided into categories and the idea that the behaviors related to purchasing phases were homogeneous was very popular. In the following years, the customer became more and more important and, as specified by Belk (1975), it started to consider products as objects that can be judged and that can be substituted by better ones. The consumers, according to Luft e Kakkar (1976), began to consider the possible alternatives from their own point of view, by keeping in mind the context of use that they experienced personally or, as defined by Stout (1977), choosing according to future applications. Then in the 80's, as stated by Rifkin (2000), goods turned into platforms for service management and services became the driving force behind global economy. In that context, establishing a relationship with the final consumer is vital. In fact, the definitive passage of company philosophy from product-oriented to customer-oriented dates back to those days.

The customer-oriented approach is a company philosophy that puts the customer at the centre of the value creation process. According to Kotler and Keller (2006), the idea behind such an approach consists in a change in the traditional sequence of activities for the making of a product or the supplying of a service, considering the consumer and his needs as the most important aspect of the whole operative process and involving all company functions. As stressed by Brady and Cronin (2001), an efficient organizational structure that aims at the satisfaction of customer needs must have a culture oriented to the market; in this case, as said by Dobni (2000), the word "organization" refers to the team that goes from workers to top management. The final target is, according to Hartline (2000), to make a product or to supply a service with a better quality, considered as the correspondence to customer needs.

The new flow of activities according to customer-oriented approach can be defined as the sequence of three macro-phases.



Picture 1 The traditional customer-oriented process creation. Source: Lanning M.J. e Michaels E.G. (1988). A business is a Value Delivery System

The first phase is the value definition, composed by market segmentation, targeting and positioning. After that the value can be realized, by means of product or service development, by defining the features. The marketing concept of value for the customer has been studied far-back: for example Zeithaml (1988) says that the value perceived by the customer is expressed by the global valuation of product utility based on the perception of what is received and what is given. In fact Rao and Monroe (1989) say that the value perceived by the customer comes from the comparison between the value attributed to the product (good or service) as a whole and the total cost, monetary and not monetary, related to it, generating in this way a trade-off between perceived quality and price. In conclusion, it is possible to come to a common definition in which the value perception for the customer comes from the comparison between the advantages received from a particular good or service and the privations (monetary and not monetary) needed to obtain and use those advantages (Valdani (1989), Bolton e Drew (1991), Busacca (1994)); that perception affects the customer's propensity to purchase (Chapman e Wahlers (1999), Dodds (1991), Grewal (1998)) and the following re-purchase intentions, as said by Patterson e Spreng (1997). The third and last phase is about the communication of the value created, through promotion and distribution channels.

Theoretically such an approach is applied by most companies even if partially and with compromises. The result is that only few realities can fully exploit the contact with customer in order to make a product that is completely aligned with market needs. The main limits are the potential customer's extraneousness of the central development and production phase, the company's impossibility to fully control the distributors, the difficulty in finding latent needs, and the lack of personalization. These limits have become a big problem during last years, when the technological development, the globalization, the customization, the competition, and in general the customer power have reached very high levels, as noticed by Kotler and Keller (2006).

	Customers as a Passive Audience			Customers as Active Players
	Persuading predetermined groups of buyers	Transacting with individual buyers	Lifetime bonds with individual customers	Customers as cocreators of value
Time frame	1970s, early 1980s	Late 1980s and early 1990s	1990s	Beyond 2000
Nature of business exchange and role of customer	Customers are seen as passive buyers with a predetermined role of consumption.			Customers are part of the enhanced network; they cocreate and extract business value. They are collaborators, codevelopers, and competitors.
Managerial mind-set	The customer is an average statistic; groups of buyers are predetermined by the company.	The customer is an individual statistic in a transaction.	The customer is a person; cultivate trust and relationships.	The customer is not only an individual but also part of an emergent social and cultural fabric.
Company's Interaction with customers, and development of products and services	Traditional market research and inquiries; products and services are created without much feedback.	Shift from selling to helping customers via help desks, call centers, and customer service programs; identify problems from customers, then redesign products and services based on that feedback.	Providing for customers through observation of users; identify solutions from lead users, and reconfigure products and services based on deep understanding of customers.	Customers are codevelopers of personalized experiences. Companies and lead customers have joint roles in education, shaping expectations, and cocreating market acceptance for products and services.
Purpose and flow of communication	Gain access to and target predetermined groups of buyers. One-way communication.	Database marketing; two-way communication.	Relationship marketing; two-way communication and access.	Active dialogue with customers to shape expectations and create buzz. Multilevel access and communication.

Picture 2 The Evolution and transformation of Customers. Source: Prahalad C.K., Ramaswamy V. Co-opting Customer Competence. Harvard Business Review. (2000).

1.2 The value co-creation

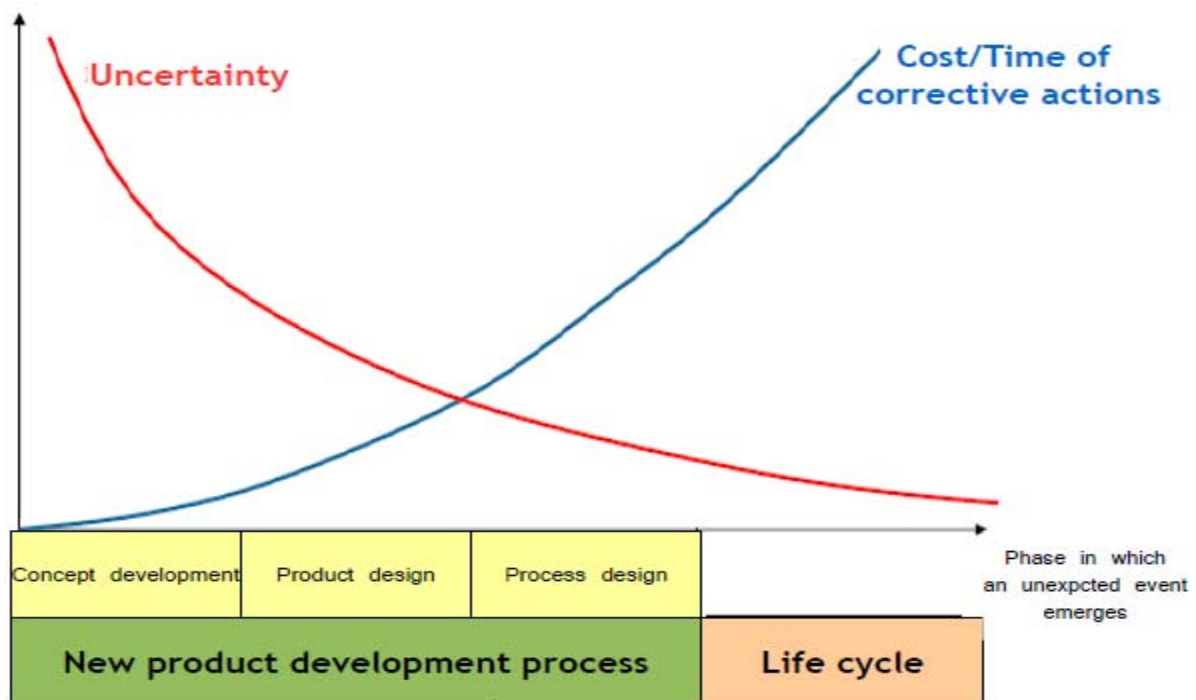
According to Prusak (1997), due to the transforming socio-economical context of last years companies have necessarily moved the focus on change and knowledge management, in order to create and sustain a competitive advantage. The customer role also changed, as stated by Prahalad and Ramaswamy (2004): from isolated to connected, from unaware to informed, from passive to active. In fact, customers can now reach a very high quantity of information, coming from all over the world, which allow them to take more conscious decisions; such a possibility of exchanging opinions and judgements with other consumers independently of the company can influence the demand in a bigger and bigger way, because the consumers can encourage each other to spread their ideas. Moreover, the technological development has enabled the market to autonomously test and develop products, affecting the new product development process. The collaboration with partners or, as said by Brandenburger and Nalebuff (1996), even with competitors, is an important means for companies in a world more and more based on interaction nets, as stated by Gulati and colleagues (2000). This concept is part of the so called “relationship marketing”, that is to say the building of lasting and mutually satisfying relationships with consumers, studied by Foss and Stone (2001), and with suppliers and distributors, in order to gain and maintain their preference and loyalty, as said by Peck and colleagues (1999). In particular, according to Prahalad and Ramaswamy (2004), during

last years the tendency to collaborate with consumers has increased, giving benefits in several firm processes and most of all in the joint value creation, called value co-creation, through product innovation. In fact, one of the advantages noticed by Matthing and colleagues (2004) is the opportunity of understanding and anticipate latent customer needs. The value co-creation in general happens into consumer communities, a group of consumers that share a culture with norms, values, identities and the same interests and objectives.

Thanks to the Internet, a network that is according to Afuha (2003) open to almost everybody, cheap, and very widespread, the trade-off between richness and extension of the information collected has become less important, as said by Evans and Wurster (1999). According to Kozinets (1999), through the Internet is thus possible to examine more deeply the social dimensions of consumer knowledge, activating virtual communities; moreover, Hagel and Singer (1999) add that every person can choose with flexibility the involvement level in that process. In fact, according to Sawhney and colleagues (2005), that kind of mechanisms guarantees extraordinary results, because the sense of belonging strengthens social relationships and brand loyalty, increasing the individual will to share his own knowledge with the company. However, in order to be effective the Internet must be considered as an integrated platform used to involve the market in different ways, such as virtual communities, surveys, or forums, with different objectives, concerning both new product contents and new product development process. Those solutions must inevitably come along with changes in company organization, in order to guarantee support and accurate results management. According to Prahalad and Ramaswamy (2000), the interaction with consumers, apart from being a fundamental passage into the creation of a new product or service that can be appreciated by the market, can be considered as a source of competences that can complete the company's ones. In order to exploit this opportunity it is necessary to encourage an active dialogue both on customer and company side, to create and mobilize consumer communities, to consider market diversities, and to co-create and manage customized experiences. In addition to dialogue the value co-creation process needs to be based on three other fundamental pillars: access to company's knowledge, risk assessment, and transparency. Said that, by the co-creation of an online valuable experience you can involve the consumer into new product development process. Lamberti and Noci (2007) say that such a process in general starts from an online experience proposal that considers the characteristics of potential visitors and that dynamically evolves in order to obtain a deeper involvement, a higher propensity to share information, and a higher satisfaction.

1.3 New product development process

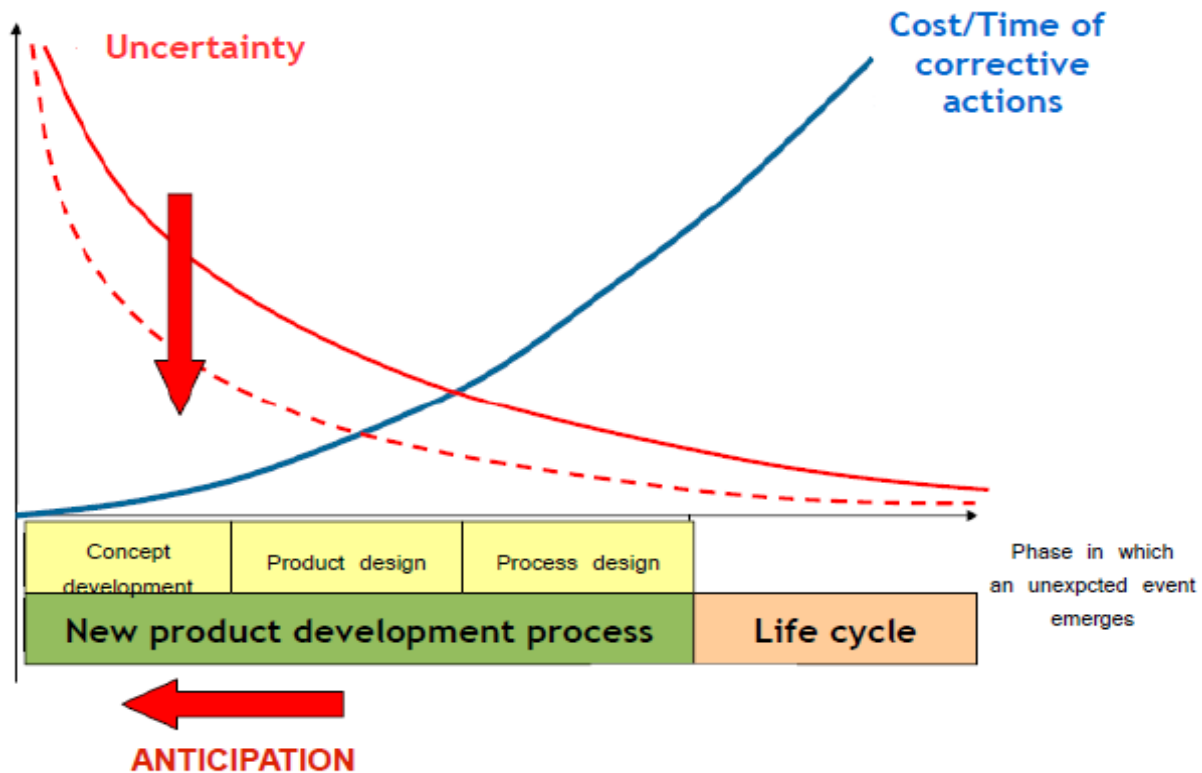
As explained, the new product development process in the best cases considers the consumer and his needs only in the initial phase, ignoring completely the production phase, when the project is “frozen” and can not change according to market stimuli anymore. As said by Verganti (1998), that process can be suitable only in an extremely stable context, that is in a context where it is reasonable to foresee a constant evolution of the situation, which allows the company to exploit the investment made. However, in general the situation is different: there is a high level of initial instability that lead to a complete transformation of the context for which the product was conceived, guaranteeing to the company returns on investment only for a limited period of time. According to Cooper and Klein Schmidt (1994), such an initial uncertainty decreases with the progress of the project, through knowledge generation and problem solving until the marketing of the final product; on the other side, as Verganti (2005) notices, time and cost of corrective interventions drastically increase at the same time.



Picture 3 The fundamental laws of projectual processes: uncertainty and increase of temp and cost of change. Source: Verganti Roberto. *Le nuove sfide per l'innovazione di prodotti e servizi*. (2005)

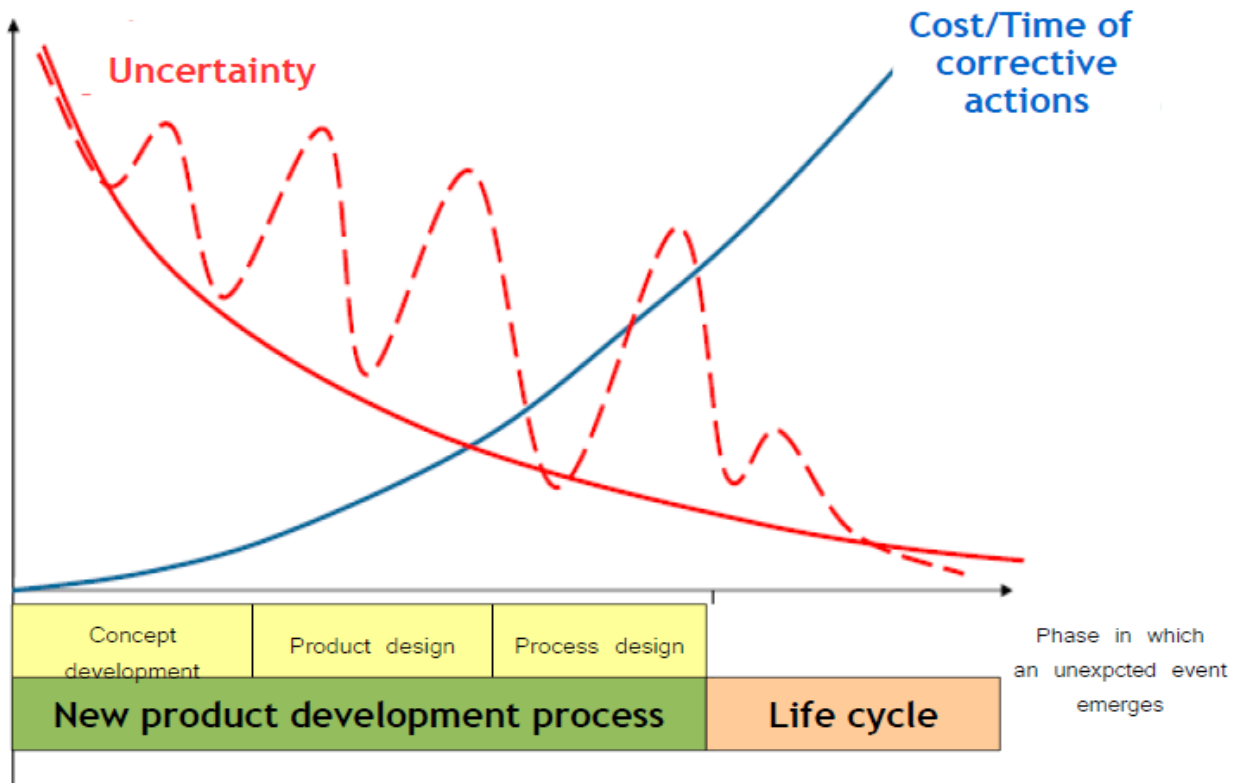
Hence, it is very important to anticipate as much as possible the constraints and the limits as well as the opportunities that might be showing up, in order to anticipate knowledge and reduce initial uncertainty. For that reason, it is necessary to apply the “anticipation principle”, introduced by Cooper and Klein Schmidt (1994), in order to manage in the best way possible the development of an innovative product and to react quickly to context change. From the operational point of view, the most suitable solutions are the

teamwork, the early involvement of all actors participating to the project, including the most important suppliers, as stated by Liker and colleagues (1996), or the productive functions, as Jurgens (1995) says, the comparison with past experiences, if possible according to the innovation level, and the employment of particular techniques, such as Quality Function Deployment and Design For Assembly, as stated by Hauser and Clausing (1988), or Life Cycle Costing by Blanchard (1979).



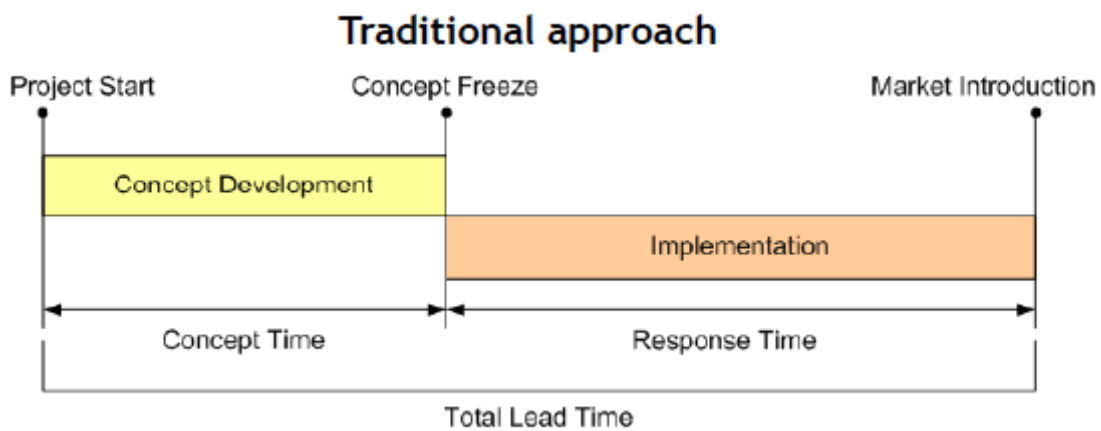
Picture 4 Anticipation principle. Source: Verganti Roberto. *Le nuove sfide per l'innovazione di prodotti e servizi*. (2005)

In this respect, one of the most used process control techniques is called “stage-gate” and was proposed by Cooper (1990). Such a technique is based on the sequential anticipation of the most important decisions related to the project, in particular those linked to the concept, which are the ones that would create more problems in case of change during the most advanced phases, as said by Clark and Wheelwright (1993). Between two stages you put a gate, which is closed when all the possible future implications of the stage that is finishing have been anticipated, freezing it. However, according to Iansiti (1997), such a mechanism is no more sufficient in contexts characterized by a high uncertainty and unpredictability level, like the actual one, where the birth of innovative phenomena concerns diverse fields and, most of all, happens quickly and unexpectedly. In fact, in such a scenario, it is wrong to think that the frozen conditions can remain valuable until the end of the project.



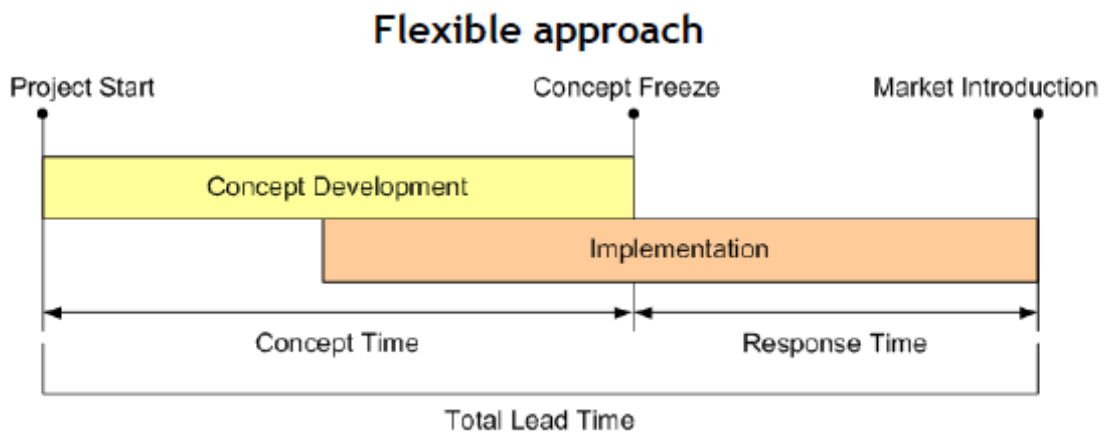
Picture 5 Discontinuity in context factors. Source: Verganti Roberto. *Le nuove sfide per l'innovazione di prodotti e servizi.* (2005)

In that case, Verganti (2005) says that it is necessary to adopt a flexible development process in order to involve the customer as a team member starting from the concept phase, thus making the product evolve according to the market. Such an objective implies the abandonment of the traditional approach, in which there is an initial phase of concept development listening to market needs that ends with the freezing of the concept and it is completely divided from the production phase, totally unaware of market response.



Picture 6 Traditional approach to product development. Source: Iansiti Marco, MacCormack Alan. (1997). *Developing products on Internet time.* Harvard Business Review

On the opposite, the flexible approach states that the time period in which the concept can be developed continues even during the first activities of the production phase, in a parallel way, by introducing corrective actions that need reduced time and cost according to the raising of knowledge, as said by Thomke (1997). In that way, by the means of virtual design systems or of rapid prototyping, technique studied by Bullinger and colleagues (1995), the customer can become a team member of the project, personally testing the product and starting to get used to the innovation, as stated by Von Hippel (1994).



Picture 7 Flexible approach to product development. Source: Iansiti Marco, MacCormack Alan (1997). *Developing Products on Internet time*. Harvard Business Review

CHAPTER 2: THE BABYLANDIA PROJECT – COMPANIES

In the following chapter the analysis will focus on the companies and on the products developed for Babylandia project. In particular in the first part the characteristics of the companies involved will be described, by showing briefly their story and by specifying the strategy, the current product range, the customers and the market, the internal organizational structure, and the business processes. In this way it is possible to build a complete picture of the situation of the companies in the phase before the new product concept definition.

In the second part the focus will move on the concepts of the products developed.

2.1 The companies involved

2.1.1. Caremi

Company history

Franco Caremi Srl Arredamenti is a company specialized in the production of bedrooms for adults and children present on the market since 1953. The founder, Mr. Franco Caremi, started his business in a small workshop as an artisan. His entrepreneurial capacities has been allowing a continuous development of product innovation and quality and, at the same time, of production area until nowadays, when the company occupies a 3500 mq area including a showroom and a textile department.

Company strategy

The strategy of this family business has always been based on the features coming from the entrepreneurial nature that has characterized the company's birth: in particular the most important values are related to the intuition and the experience of the top management. The company is focused on both the traditional product idea that is characterised by a very high quality level and the continuous innovation in terms of design and assembling convenience. The distinctive and strong point on which the company plays is the completely custom-made production of the items in the catalogue¹: the job order is made with the additional changes that the customer wants. Caremi is specialized in hand-made small bedrooms that can have a life cycle between 15 years² and 30 years³ by means of a right maintenance, because of the high quality of the products.

Customers and reference market

¹ It means in terms of dimensions and compositions, not in terms of colours and material used.




² The life cycle lasts about 15 years when the purchase of a small bedroom is made for the needs of a child (example: bridge wardrobe, medium desk, ecc) that with the adolescence develops other needs, determining the purchase of a new bedroom (change of the bed, desk, wardrobes).

³ The life cycle lasts about 30 years for the purchase of bedrooms already suitable for the needs of an adult.

Caremi's reference market is mainly constituted by Lombardy: in fact, the company relies on about 300 retailers placed in the Northern Italy. The main reason related to the narrowness of the served market is related to the business sector, the handmade small bedrooms, which is hard to serve because of the small quantities demanded and the assembly phase complexity. However, during last years Caremi's market has also included the Ticino canton and the Central Italy thanks to the opening of a point of sale in Rome (the company also relies on another single brand point of sale placed in Bergamo). Moreover, the company has just started to work in the contract channel too, which concerns the making of large quantities of products that are made with new materials such as plates and particular varnished woods for hotels and ships.

Company product portfolio

The product portfolio is constituted by six categories:

CATEGORY	CHARACTERISTICS	
<p>Wardrobes and bookshelves</p>	<p>Caremi presents a catalogue of closets able to satisfy very diverse needs. Nine measures for height (from 34,5 cm to 290,5 cm) and three for width (45, 60 and 90 cm) are available. The closets can have sliding doors or traditional doors in order to adapt to every situation. You can choose between four finishes and sixteen colours for doors. Furthermore, you can have custom-made manufacturing for a complete suitability to available spaces.</p> <p>Thanks to CAD design and to advanced CNC machineries the company can make closets for mansards and attics.</p>	
<p>Small bedrooms</p>	<p>Thanks to the complete modularity of the elements and to the possibility to make custom-made cuts and special elements you can put Caremi small bedrooms in any place and in any space.</p>	
<p>Beds</p>	<p>Range of filled beds with entirely removable lining that allows an absolutely planning freedom by adapting the products to customer needs. In addition to standard measures that goes from the single bed (200 x 90 cm) to the single and a half bed (200 x 120 cm), to the classic double bed (200 x 160 cm), and to</p>	




	the extra double bed (200 x 180 cm), the design department makes possible the production of any intermediate measure.	
Jolly	Beds with entirely removable lining that have three standard structures with 21 diverse accessories; there is the possibility of using each headboard belonging to “beds” category by maintaining the componibility characteristics and providing diverse solutions in order to satisfy customer needs.	
Sprung bed bases	Three different typologies of sprung bed bases such as orthopedic flat surface, sprung bed base with slats and sprung bed base with slats and electric movement in order to satisfy the tastes and needs of the diverse customers.	
Filled sofa-beds	Series of sofa-beds with entirely removable lining characterized by an opening mechanisms that allows the total disappearance of the seat pillows and transforms the sofa in a bed provided with a 12 cm spring mattress. Another important characteristic of the sofa-beds is the presence of a electro-welded sprung bed base that guarantees a long life and a high comfort.	

Table 1 - Caremi product portfolio

The assortment is high with respect to the furniture and bedroom sector; in fact all the possible product categories are included: wardrobes, beds, and sofa-beds for both children and adults. The combination possibilities are almost countless thanks to the fact that most elements are modular and present several models, decorations, and finishes.

The Caremi product portfolio is divided into three catalogues, according to the different nature:




CATALOGUE	CHARACTERISTICS	
<p>Al Quadrato</p>	<p>Catalogue mostly composed by closets and shelves. A lot of products with nine diverse measures in height, width, and depth are exposed. The offer is integrated with the possibility of choice between five different essences for structures, several colours and finishes for the front face, supplied with different door closing systems.</p> <p>The catalogue includes 15 product lines: from “Soluzione 36” to “Soluzione 50”.</p>	
<p>ABC</p>	<p>There are bedrooms and small bedrooms characterized by a strongly functional diversified production that associates to the classic pillars for wardrobes a series of solutions with sliding or rotating doors, bridge elements, platforms, beds, bunk beds, sliding or folding beds, small stairs and protections, desks, chairs, and small armchairs. The coloration is therefore a predominant feature with a large range of laminated, textiles, and methacrylates. There are also many metal details, diverse possibilities for handles, and a wide range of door models, for endless possible combinations.</p> <p>The catalogue includes 18 product lines: from “Composizione 01” to “Composizione 18”.</p>	
<p>Morfeo</p>	<p>Catalogue completely dedicated to beds, provided in different forms and typologies: filled, “a sommier”, and with container. In addition to standard beds there are the so called “jolly” bed, which are single filled beds with several composition possibilities that can be used as beds or as sofas.</p> <p>The catalogue includes four product lines: Terra, Aria, Acqua, and Fire.</p>	

Table 2 - Caremi's catalogues

As you can understand from the product portfolio analysis and the consultation of the catalogues, the product range is medium-high, because there are several product lines for every category and for every line it is possible to choose dimensions, finishes, and other customizable elements. In particular, with regard to the category of furniture for children⁴, the company already has in its product portfolio, in addition to the wardrobes for small bedrooms, a piece of furniture that looks like a chest of drawers-bedside table (ABC catalogue) and that can be easily moved thanks to external wheels. The product has a rectangular basis and can be custom-made; furthermore, it can be adapted to the customer needs because you can choose among four colours for the basic structure and among 16 colours for the drawers and/or the doors. In addition to the colour personalization, the customer can also change the handles, according to different dimensions and typologies: such a possibility allows an easy and effective customization of the front face of the piece of furniture.

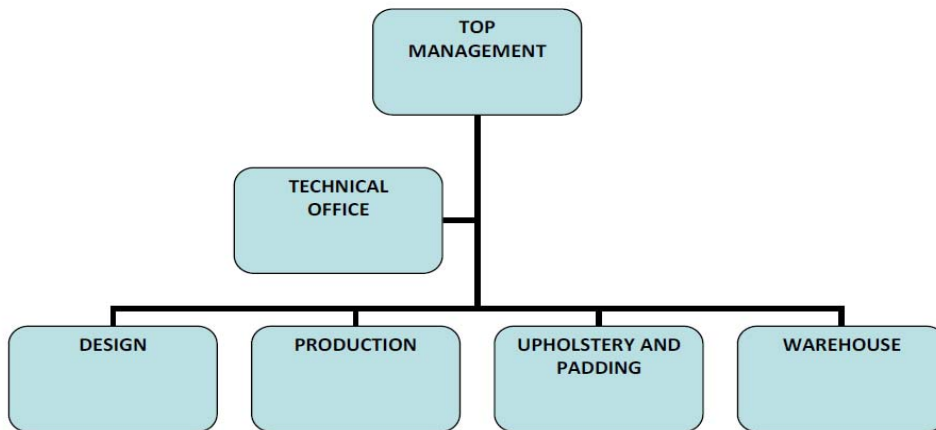


Picture 8 The chests of drawers-bedside table from Caremi's ABC catalogues

Organizational structure

The organizational structure can not be considered fixed and unchanging because of the family company nature; however there are well distinct departments where 19 people work. The top management is composed by the three Caremi brothers that are equally partners and owners of the firm. Two brothers head the technical department and the production area, while the third one manages the strategic-administrative area. The technical department deals with the relationships with the main customers, such as the contract channel, and the suppliers. The administrative department also manages the commercial area and the order processing. The design department is managed by Giuseppe, one of the two brothers that work in the technical department, who deals with the product line restyling every two or three years. The production department counts 13 people and has the cutting, bordering, and finishing phases; the products made are stocked in a warehouse until the distribution. The company do not currently have a marketing department.

⁴ Considering that the concept by Caremi is the “piece of furniture that grows with the child”, the analysis focuses on the piece of furniture that currently are on a catalogue of the company product portfolio.



Picture 9 Caremi's organization chart

Business processes

The new development process starts when the commercial-administrative department⁵ receives an order and forwards it to the technical department, which deals with the project phase. The department guarantee a continuous product development in terms of design and assembling convenience, keeping the high quality level as a fundamental characteristic. The production process starts from semi-finished products made of laminated chipboard, which are 3 x 2 meter-large panels, and several hardware such as legs, wheels, boxes for drawers and tracks. In particular the panels are externally supplied by raw materials companies and are internally cut by the company according to the dimensions needed. The first activity of the production phase is the cutting: the panels are cut by means of a specialized machine and then pass through another machine in order to be cut more precisely, on a 1/10 mm scale. Afterward the panels are bordered and, if necessary, pierced with a specific machine (this operation is made if the product is meant to have external wheels or internal shelves). After the material finishing phase there is the composition phase of the “special pieces”, such as drawers, doors, handles, and semi-finished products. Products such as beds or sofas also pass through the covering and filling department. Once packaged, in general the product is directly delivered to the customer; if not delivered, it is stocked into the warehouse for a brief period of time. In order to improve the quality and the industrial aspects of production, without missing the customization, the company has bought machines for the production department that are more and more complex and technologically advanced. In fact, all the machines for the treatment of wood are controlled through a PC and guarantee the millimetric precision and the product repeatability. According to the customer there are different production times: for generic customers the time horizon goes from 30 to 45 days, while for the needs of contract customers in general the time horizon is less than 30 days.

⁵ The main tasks of this department are the order processing and the analysis of the company accounting.

2.1.2. Fumagalli

Company history

Fumagalli s.r.l. is a family business with a precise and enduring market philosophy based on three aspects: efficacy, sensitivity, and high respect for human being. The business is divided into five departments: aids for people with motor disabilities; rehabilitation equipment and specialistic furniture; psychomotricity and pediatric rehabilitation equipment; aids for the management of the patients kept in bed either at home or at the hospital; research, formation, and culture. One of the keys of the solid and increasing success that has been characterizing this company is probably related to both the quality of production and service to customers and the quality of the workplace. Such a high service quality means high carefulness in retailer selection and training in order to guarantee the best possible use of their products.

The administrative and productive structure is located in Ponte Lambro, in Como province. Fumagalli is helped by three external companies and by a network of suppliers for the making of final products, semi-finished products, and components. However, all the production processes are directly controlled by Fumagalli Produzioni, firm belonging to Fumagalli group that deals with the productive function management. The company works in all divisions and in all phases or processes according to ISO 9001-2000 quality system. Every year an inspection is made by the certifying agencies and it always ends with positive result, without any nonconformity note nor any recommendation.

Company strategy

The strategy has always been based on the three fundamental aspects of the company philosophy: efficacy, sensitivity, and high respect for human being. In fact the Fumagalli family is directly involved in the continuous improvement of both production and customer service quality and of workplace quality; this aspect is considered fundamental for a careful work in order to answer effectively to customer needs.

One of the company's strengths is related to the particular attention given to the scientific part of the business, that is to the clinical valuations and to the medical studies made in collaboration with "La Nostra Famiglia" and "Villa Beretta". The aim of the two structures is to develop knowledge and competences that can contribute to prevent the different typologies of physical, psychic, and sensorial disability, to limit their consequences, and to supply the society with scientifically validated standard procedures and methodologies of rehabilitation, abilitation, health care, education, and social intervention.



The Fumagalli's focus on the scientific side of the business constitutes the basis for the development of an important competitive differential and it is fundamental for the new product project and retailer selection phase. Hence, the retailers must be trained in order to have all the information about medical aspects and product use previously developed.

Customers and reference market

The main markets served by Fumagalli are the hospitals, the psychomotricity, and the orthopedics. The first area refers to all those structures that accommodate people with different disability degrees and that depend on the public administration; the second area (psychomotricity) refers to the kindergarten market, for both normodotated and disabled children; finally, aids and orthopedics market addresses both rehabilitation centres and final consumers. Inside the company every market is represented by a dedicated commercial department. Fumagalli in Italy has a total of 180 well selected and trained retailers.

Company product portfolio

Fumagalli's product portfolio is constituted by five principal divisions; every division is composed by products with different characteristics:

DIVISION	PRODUCT PORTFOLIO	
<p>Aids</p>	<p>Pushchair for postural control; polyfunctional chairs; postural units for pelvis; complete systems for children's, teenagers', and adults' seated posture; specific postural systems for sanitary functions; stabilizers for supine, prone, and erect posture and for mobility; deambulatory stabilizers for children, teenagers, and adults; belts for seated posture and bed; lifters, body harnesses, and litters; antidecubitus pillows; materassi e traverse antidecubitus mattress and drawsheets, mattress cover; protections and antidecubitus postural pillows; bed protections; protection helmets and functional helmets.</p>	
<p>Rehabilitation and specialistic furniture</p>	<p>Small beds and equipment for rehabilitative gyms; sanitary furniture for specialistic ward and for communities; furniture for fisiokinesiterapeutical offices.</p>	









<p>Child and environment</p>	<p>There are child-friendly lines and products such as: “buono a sapersi” (information supply about materials and products, help in article choice); “morbide forme” (soft bags); soft pillows; “amici animali” (fluffy toys for riding and lulling); “morbido riposo” (soft nests for relaxing); reading corners; soft walls; mirrors and blackboards; soft floors; AIREX rugs; “morbidi per... correre” (big tracks for young boys); “attività motorie” (objects for training); “dentro e fuori” (elements for the experimentation of definite space); “costruire” (modular elements for buildings); “sedersi” (chairs); “un arredo morbido” (soft furniture); “bebè percorsi” and “un angolo per ascoltare” (curtains for the creation of separated spaces).</p>	
<p>Hospital Care</p>	<p>Lifters, body harnesses, and litters; antidecubitus pillows; protections and antidecubitus postural pillows; bed protections.</p>	
<p>Research, Formation, and Culture</p>	<p>There are elements such as events, studies and publications by Fumagalli Ricerca e Cultura.</p>	

Table 3 - The product portfolio of Fumagalli

With respect to the market of equipment for disabled people, the product assortment level of Fumagalli company can be considered medium-high: in fact there are different products, more or less specialistic, that address different typologies of users, such as adults and children, normodotated and disabled, and different typologies of places and situations, such as private houses, kindergartens, retirement houses, and hospitals. Moreover, in addition to the products offered by the company, there also is a very important part dedicated to research activities and to publications related to the sector: this part is complementary to the product portfolio.

In particular, focusing on seats⁶ for disabled children (inside the category of aids), there are eleven product lines:

LINEA	TARGET	CHARACTERISTICS	
Panda Futura	Children until 14 years old.	Seat characterised by easiness of use, it has been designed to adapt to the diverse child daily needs: from active exercise con full movement freedom to relax. In fact it allows the child to keep both seated and flat position or other positions functional to specific needs. The Panda Futura line has two product codes: Panda Futura and Panda Futura High Low, which is different from the first one for the possibility of change the height through a gas or an electric mechanism.	
Panda Active	Children until 14 years old.	The seat allows an excellent support to the pelvis, leaving the superior part of the trunk free to do different activities using arms. The Panda Active line is composed by two product codes: polyfunctional high seat and sitting unit.	
Emineo	Teenagers and adults until 140 kg of weight.	It is a polyfunctional system designed to optimize the residual self-pushing possibilities of the user and it is characterised by manageability, functionality, and comfort. The Emineo line is composed by two models: classic and manoeuvreable.	
X: Panda	Children in the development age with serious disabilities.	It is a dynamic seating system capable of giving an important control to the pelvis and freedom to arms.	
Hoggy Bingo	Children until 12 years old.	Complete postural system, constituted by an armchair and equipped with transpiring and comfortable filling and folding, manageable, and robust basis for external use.	

⁶ The focus on the seats for disabled children is related to the fact that the company is making for Babylandia project a product that belongs to that category, thus a detailed analysis is necessary.




<p>Mitico child</p>	<p>Children from 2 to 5 years old.</p>	<p>It is a trunk support unit equipped with arms and constituted by a chair with inclinable back formed by transversal support elements, which are arranged to postural personalization, united by a rigid central structure. The unit offers a high degree of support and personalization, combined with a good comfort thanks to the different layers that form the filling.</p>	
<p>Wombat</p>	<p>Children from 12 months old to 12 years.</p>	<p>It is an active postural system that facilitates the daily activities execution permitting an easy reaching of the different surfaces.</p>	
<p>Mitico evolution</p>	<p>Children until 12 years old.</p>	<p>Designed for children that need a modular postural unit that can be used both internally and externally, it guarantees the support and the control of a suitable posture allowing a good possibility for exploring and getting in touch with the surrounding environment.</p>	
<p>Panther</p>	<p>Children until 14 years old.</p>	<p>Complete postural system designed for children that can obtain the seating position only with suitable postural aids and that can use their arms to move autonomously. The Panther line is supplied in two models: classic and manoeuvrable.</p>	
<p>Cirrus Junior</p>	<p>Teenager and adults until 170 kg of weight</p>	<p>It is a complete postural solution designed for people that can obtain the seating position only with suitable postural aids. The Cirrus Junior line has two models: classic and manoeuvrable.</p>	
<p>Cheetah</p>	<p>Children from 2 to 14 years old.</p>	<p>It is an active postural basculant pram: it is dynamic, strong, and manageable and can be adapted and personalized following the physiological evolution of growth. The Cheetah line is distributed in the models with three or four wheels.</p>	

Table 4 - The product lines of Fumagalli : focus on the seats

All product lines have different dimensions in order to be suitable to children needs: hence, the seats try to guarantee the perfect adaptation to the body. Every line also has a set of accessories and interchangeable parts for the personalization of the seat according to user needs, tastes, and functionality objectives. All these elements contribute to create a high level product range.

Organizational structure

Fumagalli's organizational structure is composed by two principal units: production unit and distribution unit. The first one deals with the physical realization of part of the articles in the catalogue and with the control of those given in outsourcing; the second one has the task of managing the organization of the distribution channels of Fumagalli products and of those products with a different brand that are managed by the company (for example: R82, Handicare, Airex, Asklè, Molift, and Topro). The distribution unit is supported by three different commercial departments, divided by the reference market area: hospitals and communities, psychomotricity, aids and orthopedics. This organization allows the company to be nearer the customer and to give an offering that is modelled in a better way on the needs of the different market areas.

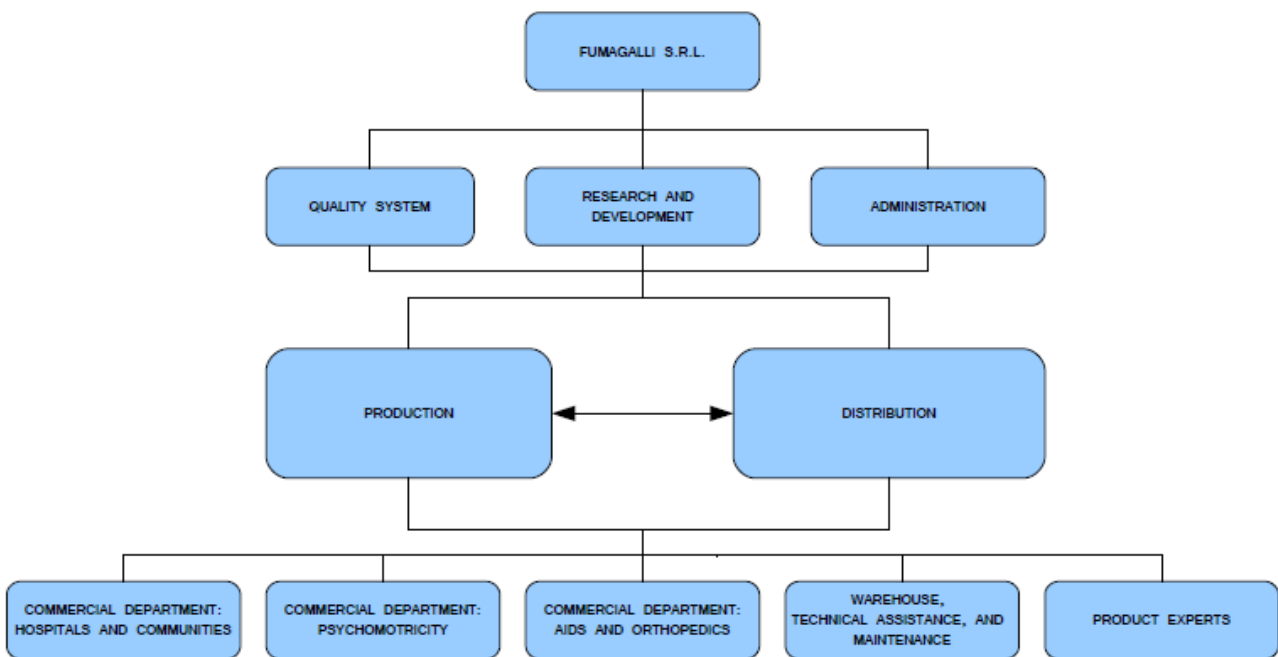
The unit called “Magazzino, assistenza tecnica e manutenzione” (“Warehouse, technical assistance, and maintenance”) deals with the operational aspects of distribution: it is not contacted directly by the customer but by one of the commercial departments listed before and it has the task of dealing with logistics, mailing, technical assistance, maintenance, products given back or to be repaired. The study and the management of products so different is faced by a mixed team composed by people with specific competences: two engineers, a bioengineer, two orthopedical technicians, two rehabilitation therapists, a graduated in sports science, two architects, and a building surveyor. Furthermore, the team also relies on the competences developed in years of experience by Fumagalli's qualified staff, on the product experts' specialisation of foreign companies that are represented in Italy by Fumagalli, and on the consultancy given by important external actors: three medical specialists, two therapists, a legal expert, and an office specialised in public purchasing practices and in relationships with public administrations.

Quality management is managed by another unit, called “Sistema di Qualità” (“Quality System”). Such a division is strategically very important: in fact it is responsible for possible nonconformities, it receives

warnings about malfunctions or about the missed abidance by procedures or by what is stated on official documents, and it informs about corporate quality⁷ procedures.

Research and development unit (“Valutazione, sviluppo e ricerca”) deals with the analysis of new products and new features, with the interpretation of technical norms, with CE marking, with testing and valuation systems of products and of the studies developed on the different devices.

Then there is the administrative unit that deals with all the issues related to financial and administrative processes such as the management of liquidity or of accounting, budgeting, and fiscal fulfilment.



Picture 10 Organizational structure of Fumagalli

Business processes

The new product development process starts from the identification of a particular medical issue to be elaborated; the studies related are made by research and development unit by the means of a bibliography analysis. Once the market segment to address and the strategy to be used are decided, a mixed team is composed in order to deal with the customer needs understanding, the related clinical valuations, and the product technical features. Then the results obtained are published and presented and the commercialization and distribution phases take place thanks to the commercial department. Design and production process (including activities as project, bill of material, production phases management, and even packaging) are entirely proceduralized and managed using computer devices and are directly controlled by the company.

⁷ The company has to work in all divisions and in all phases and processes according to the quality system related to ISO 9001-2000 norms.

Valuation and test routines are particularly strict and meticulous and are internally managed by the company, with suitable tools for usual tests: load resistance, wear resistance, stability valuation, verification of indentation index (for fillings), material and product contact pressure test (by Tek Scan system); prototypes and samples are also tested by external qualified laboratories (Catas, Lapi). The computerization level of Fumagalli is very high: every workstation is networked; every process (including activities as order acceptance and confirmation, warehouse and given back products management, and breakdown rate valuation) is completely computerized. A very sophisticated design station is available for the realization of projects and information pack.

Considering that the market sector addressed by Fumagalli is a very specialised niche, the commercial organisation is consequently specific for every division: hospitals and communities, psychomotricity, and aids and orthopedics. What is in common between all the divisions is the extreme carefulness in giving to any retailer the possibility of distributing Fumagalli products: even the best aids or the best-performing equipment may be underused or badly used if they are not adequately supplied, installed or taught. Hence, there is a restricted network of Fumagalli retailers in Italy, each of which has to attend a pretty hard formation and training program and has to be controlled by the company punctually.

2.1.3. LuxSolar

Company history

Combustion and Energy srl – Luxsolar was born in 1985 and specialized in the production of highly sophisticated equipments for big dimension automation and illumination for the petrochemical sector. In order to satisfy the increasing demand of LED (Light Emitting Diode) illumination systems, C&E in 2005 used its technical know-how in creating LuxSolar (LXS), brand belonging to the group, specialized in the production of special lights for the aeronautical and industrial sector. LuxSolar research has allowed the company to produce and install high intensity LED signallers, used to advert the presence of radars, pylons, GSM and radio/TV antennas, crane, windpower generator, and buildings. The experience made in directed stream illumination systems for the aeronautical use also has great potentialities in the civilian applications, from dangerous places (emergency ways, tunnels, and galleries) to those with large attendance (bridges, ports, and airports). For this reason LuxSolar is making high investments in such sectors, for both technology and design, using RGB three-colour LED. Nowadays LuxSolar can offer to the customers the possibility to light the buildings with particular tones or to vary the light colour according to the time of the day or to the weather.

Company strategy

LuxSolar found the company strategy on the production of high quality articles that are technologically up-to-date, by offering to the customer a product installation service. Such a quality level is certified by the Icao⁸ and Atex⁹ norms, which are both very restrictive and imply the use of high quality components¹⁰ bought from the most important suppliers. Hence, the needs are fully satisfied thanks to a specific knowledge joined with a large experience and to a pricing that is coherent with the market. In this way the company gives to the products an important value added.

From the technical point of view, LuxSolar uses for its light models the heat dissipation principle, in making products such as Jo, constituted by a chimney with internal vertical wings that dissipate the heat made by the LEDs.

Moreover, in order to keep the pace of the continuous evolution of LED technology, the company has made some light absorption optical systems, according to a principle that allows the control of the design and the new mould production costs.

Customers and reference market

The company's reference market is currently the one of LED signallers, through the supply of such materials to petrochemical and energy companies that use LuxSolar products in order to increase the safety level, by indicating the presence of possible obstacles to small and big aircrafts. The company currently has about twenty habitual customers placed in several countries; the main customers are in Europe, while the other ones are in the Middle East, Brazil, and India. The company does not rely on a staff of salesmen that propose the products on the national territory directly to distributors, but it has started to increase the brand knowledge in the foreign countries by means of a network of affiliated companies. LuxSolar promotes its products in magazines mainly specialized in the aeronautical sector.

⁸ International regulations.

⁹ Certification of use for products in potentially explosive places.

¹⁰ Special borosilicate glass, antideflagrant boxes, professional LEDs.

Company product portfolio

The company product portfolio is made of two main categories, according to the technology use: lights for aircraft signalling and LED lighting systems.

The first one is divided into seven product lines according to the LED typology used, Table 5 shows the details:



LINE	CHARACTERISTICS	
Liol-A	Acronym of Low Intensity Obstruction Light, they are low intensity red lights; the light intensity is lower than 10 Candles.	
Liol-B	It differs from the Liol-A for the light intensity, which is higher than 32 Candles in this case.	
Miol-C	Acronym of Medium Intensity Obstruction Light, they are red lights with a light intensity of 2000 Candles.	
Miol-B	It differs from the Miol-C for the characteristic of emitting red lights that are flashing and not steady.	
Miol-A	White lights that have a 20000-Candle light intensity during the day and a 2000-Candle light intensity during the night.	
Dual Miol-AB	White and red high intensity flashing lights; the light intensity is about 20000 Candles during the day and 2000 Candles during the night.	
Dual Miol-AC	It differs from the Dual Miol-AB for the characteristic of emitting lights that are steady and not flashing.	

Table 5 - The product portfolio of Luxsolar aircrafts signalling lights

The second category includes LED illumination systems designed for several uses, such as the automotive sector. There are two product lines:



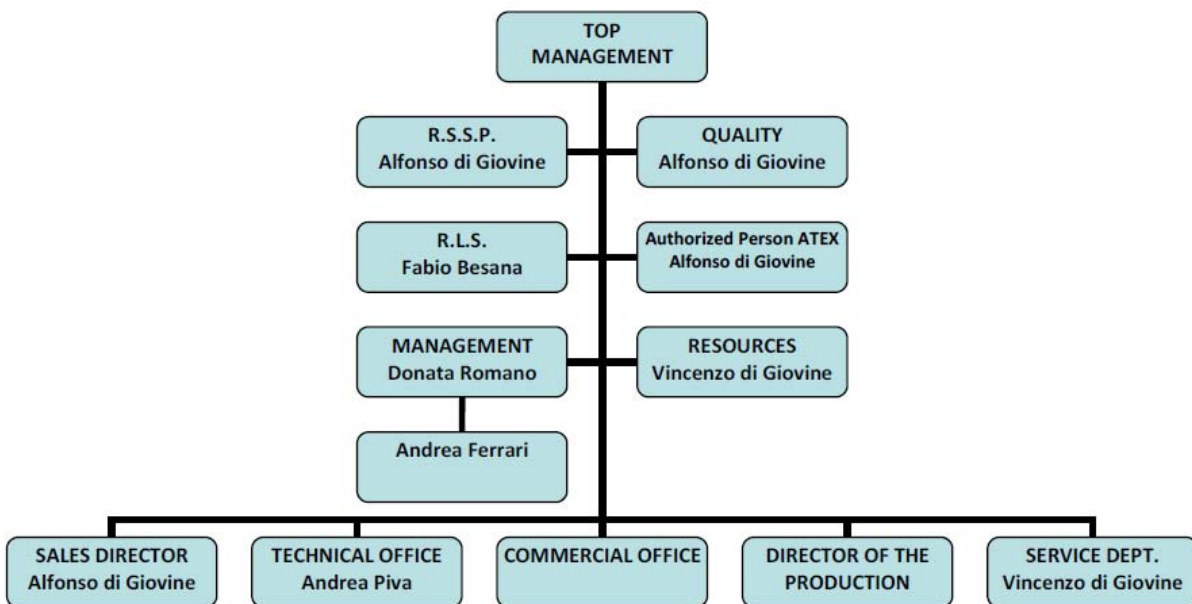
LINE	CHARACTERISTICS	
<p>Architectural lighting</p>	<p>Steady white lights characterized by a long life cycle and a low maintenance need. In addition to the length/cost ratio, in particular the lamps Jo (picture to side) can reflect the light downwards, modulate the emission of light energy making different chromatic tones, and absolutely respect the existing buildings, renewing the artistic side.</p>	
<p>Reflectors</p>	<p>Steady white light characterized by a medium-long life cycle and small dimensions. An example of the category is the Led-Work Florence (first picture to side), which emits a light that is suitable for the illumination of agricultural means, diggers, trucks, and off-road vehicles.</p> <p>Another example is the Esaed (second picture to side), 30-cm neutral white steady light suitable for the lighting of small-medium work area.</p>	

Table 6 - Product portfolio of Luxolar of the illumination systems

The relatively limited assortment of the product portfolio must be considered in the light of the quite recent LED illumination technology discover, which thus needs a continuous research and development effort and would be too onerous to be made on a bigger catalogue for a small company such as LuxSolar. For the product range the considerations are the same; moreover, there are not already lots of possible uses of the technology to arrange several product lines.

Organizational structure

The internal organization of LuxSolar is very simple, direct consequence of the family nature that characterizes it. The managerial staff is composed by the Prevention and Protection Service Manager (R.S.P.P.), the Quality Manager, and an Atex authorized person; all the three roles are controlled by Alfonso Di Giovine. Vincenzo Di Giovine is the manager of the company resources, Donata Romano of the administration, and Fabio Besana is the Representant of the Workers for the Safety (R.L.S.). The structure is composed by five main functions: the Sales Function, the Production, and the Service are directly managed by the founder and his family, while in the Technical Department and the Purchasing Department there are four people: two project managers and two qualified technicians. In the entire company there are eleven people and from time to time some external specialized workers are consulted about technical, administrative, financial, or strategic problems especially during the new product concept and design phase.

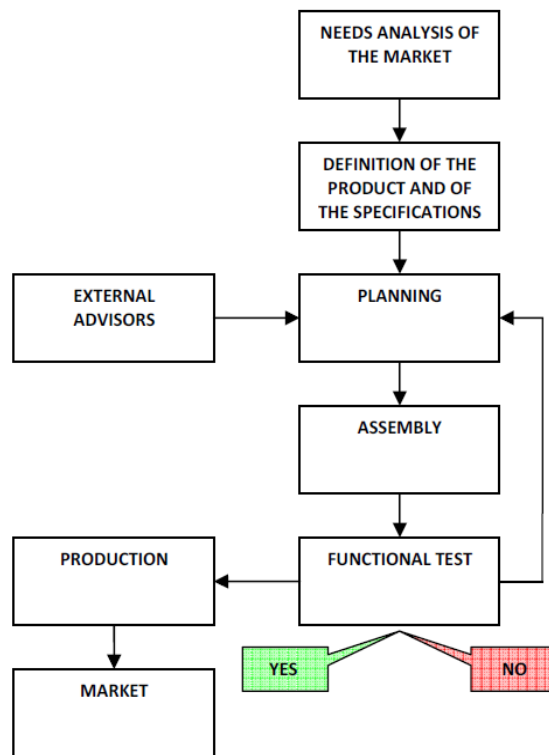


Picture 11 Organizational chart of LuxSolar

Business processes

The core business process of LuxSolar is related to the design and production of new light elements. With regard to the exploratory and preparatory phase, the company management internally analyzes the market needs in order to make an effective product. Once the market has been analyzed, the following phase is the definition of the technical features related to the product made by the technical department; during this phase the company defines the characteristics that the product will have, aiming at satisfying the market needs. The design phase is consequently made. Such a phase is separately managed by external

consultants, who make the parts of the new product, called “semiprocessed products”. This strategic choice aims both at protecting the company know-how and at limiting the bargaining and the decisional power that a single supplier would have if the whole project realization was given to him. The assembly phase happens inside the company laboratories, where all the semiprocessed products made by the external consultants are joined. The last step is the functional test of the finished product: once the functionality is established, the object can be mass-produced and marketed.



Picture 12 New product development process of Luxsolar

2.1.4. Soliani

Company history

Soliani EMC S.r.l. is a company founded by the engineer Ivano Soliani in 1998 in Como; in Soliani moved the S.I.R.I. S.a.s., one of the first Italian producer of shielding articles. In fact thanks to it the first antistatic products in Italy were made for the supply of important companies, such as Olivetti, Bosch, and Electron. The range of metal mesh gaskets was widen through high electric conductivity expanded and spun materials. Moreover, the first shielded glasses were produced for the military sector. In fact, in 1985 Soliani started a period of collaboration with the military sector for the supply of gaskets, electric panels for ships, applications for tanks, and shielding of rooms for the Italian Navy with nichel treated conductive

fabric. Such a partnership allowed Soliani to obtain the first qualifications, such as NATO¹¹ and AQAP4 Aeritalia¹². In 1986 the international contacts with foreign producers started and in so doing the company could widen the product range with new raw materials. Through the electrically conductive silicones the opportunity of supplying gaskets for the aerospace sector was exploited. In 1994 S.I.R.I. signed an agreement for the exclusive supply permission of shielding for the military sector and for the selling of copper, copper-silver, and silver based conductive paints. In 1998 the S.I.R.I. S.a.s. was merged with Soliani EMC S.r.l., which also has its base in Como. In 2000, the first dismountable shielded room was made through conductive fabric, with dimensions of 7x5x3 meters. In 2001 the extrusion of nichel, silver, and silver-aluminium based electrically conductive silicone was started. Soliani has activated an open and constructive collaboration with the partners, which will be more and more involved in the development of potential uses of several materials for the electromagnetic shielding. The high quality and technological development level of Soliani products is certified by several documents: Aeritalia acknowledgement declaration, the NATO qualification given by the Italian Ministry of Defence, the Vertical Burn Work Sheet, the Conformity Declaration to the 2002/95/CE European Directive, the ISO 9001.

Company strategy

The main company strategy has been the same since S.I.R.I.'s foundation and it aims at developing products that are suitable for the needs of a larger and larger market, from Italy to Europe and the World, by cooperating with research institutes and laboratories, in order to supply the highest quality and technological development possible. Hence, the focus is on the research and development activity in order to supply a value that is recognized by a niche market and push the sales volume to the background. Such a strategy has as direct consequence the development and the sale of an augmented product that is a “technological solution”. In fact, in addition to the product Soliani sells a series of information and services such as the technological know-how explanation, specific presentations, use advices and parameters, certifications, and, if requested, the installation. Such a customized and complete offering constitutes the value added and the competitive differential of the company.

Customers and reference market

The customers of Soliani are big companies, in general placed in foreign countries; in fact, the company is present in four continents and twenty countries, such as Italy, Germany, United Kingdom, United States, Brazil, Russia, China, India, and Australia. The relationships with the Italian customers are very lasting, in some cases for more than 30 years. In general they are companies that focus on the telecommunication sector and that started a relationship with Soliani for projects that concern different kinds of productions.

¹¹ Permission to supply products/services to NATO bases.

¹² Permission to supply products/services to Aeritalia, aerospace engineering company now part of Alenia Aeronautica.

Nowadays, the company mainly works in eight sectors: military, medical, aeronautical, train, automation and robot, civilian and military telecommunication, naval, and spatial sector.

In addition to Business-to-Business supplies, Soliani deals with orders made by single consumers (Business-to-Consumer) that need such solutions for a problem of electromagnetic hypersensitivity. In this case the consumer gets to know the company thanks to the word-of-mouth or after reading an article about the company in a health magazine. Soliani offers to those people a consultancy service in order to make customized products that will be tested by the customer himself with the help of his doctor.

Company product portfolio

Soliani's product portfolio is very varied because of the different technologies used, even if it satisfies a single need, which is the protection from the electromagnetic radiation. However, you can find three main product categories:

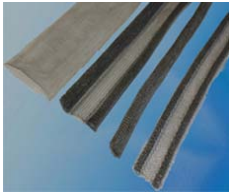

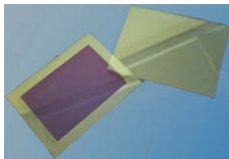
DIVISION	CHARACTERISTICS	
Electrically conductive gaskets	Gaskets that guarantee the electrical continuity between the components. In this category there are the following products: EMI/RFI shielding gaskets, EMI/EMC fingers strip, IP65 vulcanized gaskets, EMI/EMC electrically conductive silicones, EMC/NBC conductive EPDM gaskets, EMI/EMC shielding gaskets for connectors, thermally conductive silicones, conductive silicone automatic deposition, conductive stickers and sealants.	
Shielding rooms	Rooms that allows the protection of a plant from the external electromagnetic radiation or the isolation of the interferences generated by the plant itself. In this category there are: EMI/EMC conductive and shielding fabrics, conductive non-fabric, EMI/EMC conductive tapes, cable shielding, EMI/EMC shielding bellows, shielded honeycombs, shielded rooms, ESD antistatic tiles, radar-absorbent materials, EMC electrically conductive paints.	
Glasses	There are electrically conductive glasses that work as a shield.	

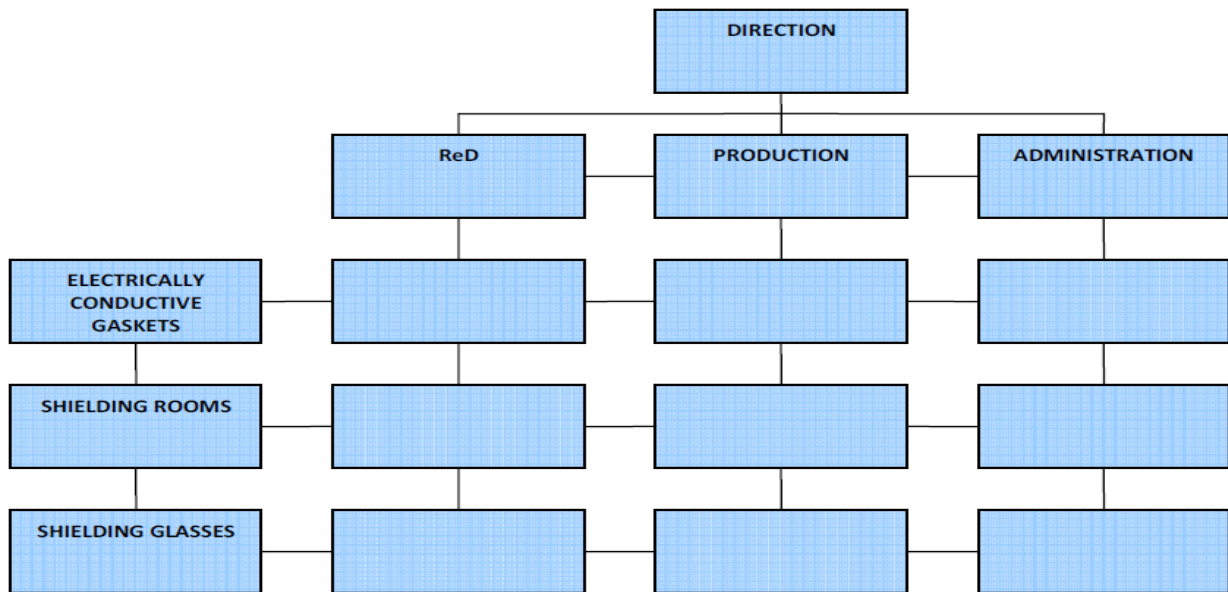
Table 7 - Product portfolio of Soliani

The product assortment can be considered as medium-high, because there are only three different categories of shielding elements; however, in each category there are product lines based on different technologies, which contribute to make a quite wide range of solutions.

Organizational structure

Soliani has developed an organizational structure that can be compared in good approximation to a matrix (see Figure 7): in fact it is composed by three divisions related to the product characterization (conductive gaskets, shielding rooms, and shielding glasses) and by three functions (production, research and development¹³, and administration¹⁴).

Such an organization allows the company to maintain a high specialization level in every product category and also guarantees collaboration and uniformity inside every function. Another advantage related to the matrix structure is the flexibility: in fact it is possible to adapt in an effective way to the needs of the single customer, by creating a dedicated project team. In this way the company can also develop an high innovation rate. There also is a warehouse that is separately managed; there is not a real marketing department, whose functions are managed by the top management.



Picture 13 The organizational structure of Soliani

Business processes

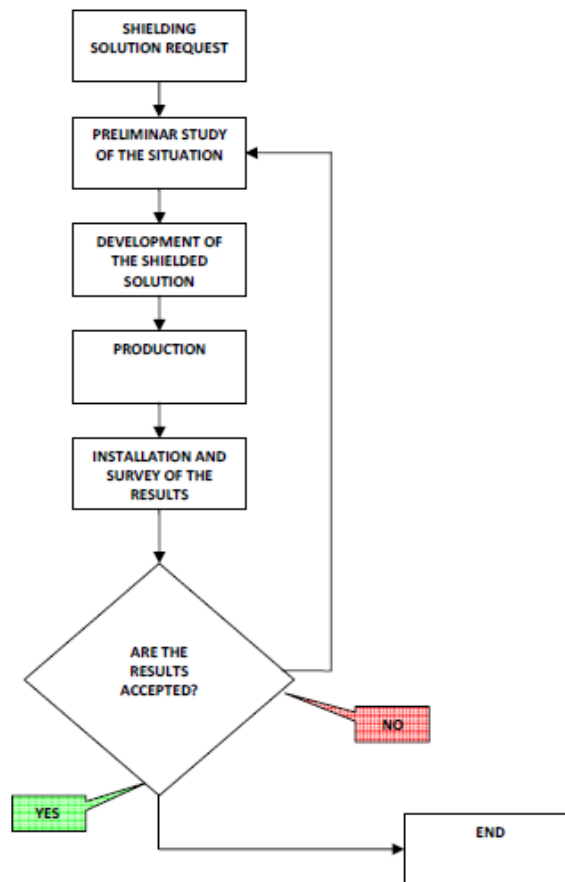
As noticed before, the main strenght of the company is to design and make highly customized solutions for the customer: hence the company philosophy is reflected by its business processes, which have a variable length according to the customer needs. For the most standardized products the project length is about 2-3

¹³ The research and development department also deals with the product project and the technological solutions.

¹⁴ The administration department manages the qualifications and the certifications and values the customer offerings.

months, while in case of more complex orders, which require a structured initial test and study phase, the project can last a year.

The company does all the activities internally from the raw materials acceptance, which are conveniently treated in order to give them the shielding properties. In fact, they are standard materials to which the company applies conductive wires in order to develop electrical conductivity between all the parts and thus achieve the required electromagnetical protection function. After accepting the order, the process that happens is quite simple: the order is evaluated by both the technical department¹⁵ and the administrative function, whose joint involvement is useful in order to evaluate both the technical and the economic feasibility of the solution. After the approval of the two actors, the project passes to the production. The process ends with the possible installation of the solution. It is important to remember that Soliani also deals with the preliminary tests and the technical parameter verifications of the starting and the final situation after the installation of the solution: such a process aims at attesting the results coming from the solution installed. Once the final parameters are obtained, in collaboration with the customer the company decides whether to confirm the result obtained or to generate a new project in order to obtain more effective parameters.



Picture 14 The new product development process of Soliani

¹⁵ The technical department is inside the R&D function.

2.1.5. Parà

Company history

Parà S.p.a. is an industrial group born in 1920 near Milan. It is composed by five companies that have been producing for three generations designer and high technical quality fabrics that are used for sunshades, for internal and external furniture, and in the nautical sector. Parà's trademark is definitely related to the "Made in Italy" denomination, because the production cycle is fully controlled through a complete verticalization. The second distinctive element is related to the ethical conscience that characterizes it, by aiming at the environment protection and the effective use of the natural resources.

Company strategy

Parà's strategy aims at the creation of high quality and performance curtains; the company's brand has reached a position in the customer's mind characterised by an intrinsic level of sure reliability and product solidity. In addition to the qualitative objectives there are a constant propensity to innovation and a carefulness of its Italian stylistic identity. Parà sells to distributors and, in order to satisfy the customer needs, aims at having a very reactive sales management, with delivery times lower than 24 hours. The company does not work to order, but has in the warehouse almost all the fabrics included in the catalogues, keeping a continuous production during the year in order to face in a better way the periods that have peaks in the orders, such as the months between June and September and the Spring.

Customers and reference market

The business sectors in which Parà works can be divided into three categories: the Tempotest brand is the leader in Europe in the sunshade sector, Tempotest Marine is a product line studied for the nautical sector, Tempotest Home is a product line specifically studied for the internal and external house furnishing.

In particular with regard to the furniture sector, the company is very strong in some European markets, such as England and France, which are markets that give more importance to the quality of the fabrics for house furniture than Italy. In that context Parà has about 600 customers.

The company also occupies an important competitive position in Europe with regards to the cellulosic fabrics; such an importance is reflected in the sales of products related to outdoor use such as pillows and chairs for the pool side and the garden, while the sales of sunshades is considered important especially for the national market. The market of Parà is mainly made by about fifteen products, characterised by classic colours (white, grey, and black), declined in several tones and fabrics. Those categories are produced and stocked in large quantities, in order to promptly satisfy the customer needs.

The design is considered as a fundamental factor for the internal and external furniture, especially in case of printing on materials; in fact, the company has in its catalogues complete collections of linen, cotton, and mixed fabrics suitable for the printing. Another service offered by the company, especially to the most important customers, is the exclusive carrying out of particular patterns on their fabrics.

Company product portfolio

The product portfolio of Parà is divided into three big areas according to the use destination of the fabrics.




DIVISION	CHARACTERISTICS	
Sunshades	Tempotest fabrics can offer a UV-ray protection and reduce the perceived temperature; they can also partially impede the natural dirt formation and are water- and oil-repellent and dimensionally well stable.	
Nautical Sector	Fabric line made with the same material (acrylic fiber) of the sunshades, from which differs for the different finishings, treatments, and constructions; the main characteristics of the Tempotest Marine fabrics is the repellence to water and to mineral and vegetal oils; they are transpiring, resistant, and elastic and they are suitable for different uses.	
Internal and external furniture	There are fabrics based on the drivers that inspire all company products: design, fashion, technical quality, and performance. Thanks to both the internal design department and the collaborations with famous stylists, the company aims at interpreting in the best way the tastes and the trends, anticipating thus the current furniture fashion. Moreover, the fabrics used maintain the characteristics of resistance and protection from UV rays, wheater conditions, and mildews.	

Table 8 - Product portfolio of Parà

The assortment of Parà's product portfolio is medium-high because, although the development of the fabrics is parallel and similar, there are three different product categories and each category can exploit in the best way the characteristics of the material chosen. Every fabric typology presents ad-hoc strenghts studied according to the use destination in order to guarantee a high quality level. With regard to the

Tempotest Home category¹⁶, there are six product lines, differentiated according to the aesthetical and design characteristics.







CATALOGUE	NUMBER OF CODES	CATALOGUE COVER
Tempotest Home	76 codes	
Black & White	89 codes	
Jacquard	76 codes	
Double & Soft	51 codes	
Positano	12 codes	
Sand	35 codes	

Table 9 - Tempotest home catalogues

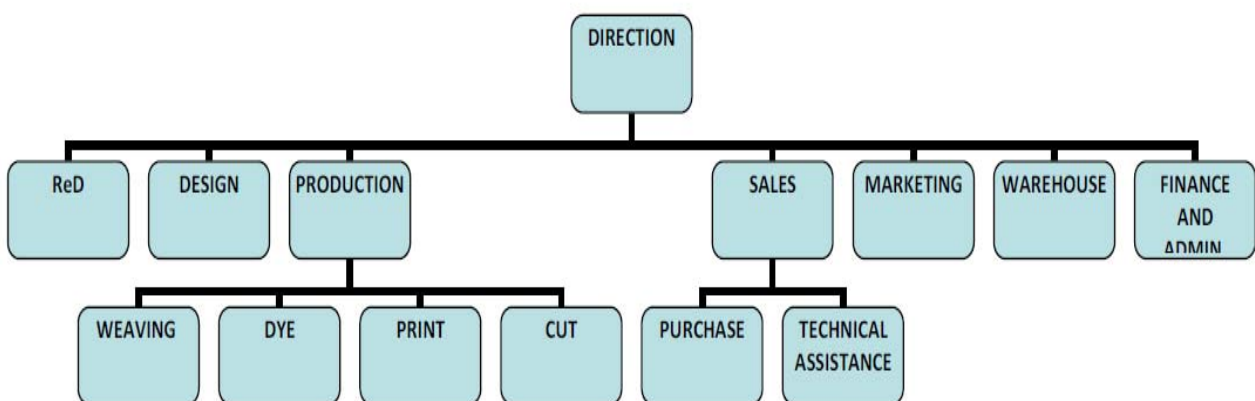
¹⁶ The focus is on this category because the new concept made for Babylandia project belongs to this section.

The product range can be considered large thanks to the abundance of product lines and codes.

Organizational structure

Parà's organizational structure is functional: such a structure is typically oriented to a stable market, whose good and service demand is almost constant. The Research and Development, Production¹⁷, and Design functions are very important, because they are responsible of the most important principles of the company: innovation and quality. The Commercial department is also important, because it is responsible of the sales and has to sustain the possible assistance demands. Moreover, there is a Marketing department and an Administration-Finance department that support the company strategy valuations: constant investments in communications and marketing currently allows Parà to be the reference point of the high range market. The means of communication used by the company are mainly the TV channels (for example Mediaset and satellite TV channels; in this second case it has specific spots on channels such as Nuvolari, Nautica, Leonardo arredamento, and Alice cucina), the press, through magazines related to the furnishing (Cose di casa and Ville e giardini) and nautical magazines. Parà also uses the Web a lot, through a user-friendly website that offers several informations and gives a general description of the company, a corporate blog that is quite famous, but rarely commented, and a YouTube channel with some istituzional videos. Moreover, the company controls its positioning on Google.

Finally, there is the warehouse, fundamental elements in order of answer promptly to orders.



Picture 15 Organizational structure of Parà

¹⁷ The products are stocked in a warehouse.

Business processes

With regard to the business processes, Parà stands out in the market for a recognized competence as a producer of high quality fabrics, rigorously Made in Italy, characterised by a total control of the production cycle, which is fully verticalized. Such a process starts with the order acceptance, which is then passed to the commercial direction. If the material is already stocked and available, then the following steps are the packaging and the delivery¹⁸. On the other side, if the material is a particular product or simply is not available in the warehouse, the real production process starts.

The order is passed to the production scheduling and then, in 48 hours at maximum, the order production is planned, by giving a precise valuation of the total lead time. If the schedule does not satisfy the customer, then the order comes back to the scheduling, which tries to reduce the production time, if possible. Once the production scheduling is confirmed, the scheduling correspondent decides to which loom address the the order and the processing phase starts. The following phases are the weaving, the colouring, and the printing; then the fabrics are cut in 40, 50, or 60-meter dimensions, according to their weight, because you can not sell quantities that are too heavy.

The products are stocked already divided in bolts, which are packaged and directly delivered to the customer by means of trucks with already scheduled departures, in case of foreign customer, or forwarders, in case of Italian customer.

¹⁸ The delivery process is arranged with the customer: the transport with trucks is often managed by the customer.

CHAPTER 3: THE DEVELOPMENT OF THE PRODUCTS

The Babylandia project includes the creation and the development of child-friendly spaces, used for some purposes such as the daily life, the sleep, the game and the learning. Such spaces are made up of products with which the child enter directly in contact and thus they must be conceived and developed on the basis of children tastes and needs. The final goal is a product that grows with the child, during the different development phases like an integrant part of the daily activities and not only like an object created by adults in a different and extraneous world.

In this chapter the birth of the different product concepts will be described, highlighting the needs to satisfy and the evolution of the same in order to be able to get the final prototypes.

Birth and evolution of the products concepts

The starting point of the creation process is constituted by the end-user needs. The goal is to provide them with a recognized value that effectively responds to their needs and that is suitable to the circumstances it is addressed to. The gathering and the elaboration of the necessary elements for the definition of the characteristics is inspired by the participatory design concept: such a concept is based on the involvement of the end-user starting from the planning phase, through the study of the concept and the use of product in the everyday life, in order to understand the needs to be satisfied.

In the case of Babylandia project, all the companies involved perform this process through their own resources and competences so that the product will be suitable for the market and at the same time it will be coherent with their corporate nature. In other words, the needs are explored and then satisfied through the product aspects that better represent the specific assets of the company. The synergies between companies can also allow a high quality level through the exploitation of the single competitive advantages.

After the explanation of the concepts, the description of the physical, technological and design characteristics of the prototypes can be made, in order to understand how the companies will try to satisfy the needs identified.

3.1. Piece of furniture that grows with your child: Franco Caremi s.r.l.

Need analysis

The elements that furnish the children's bedrooms are often made and created for the adults' world and then adapted with some changes to the children's worlds. Such a process has as a result the child's impossibility of personally using the furniture, thus the objects are considered as extraneous elements from the point of view of the children. Moreover, during the child growth, the way to perceive the environment, the capacities, tastes and habits change quickly. The furniture purchased in the childhood can be unsuitable after few years of use.

The concept

The concept realized by Caremi is related to "piece of furniture that grows with the child": it is a modular piece of furniture, adaptable to different environments and different contexts of use, easy to be used by children and customizable. In this way the appearance is also always adaptable to the growth phase of the child. The production phase also takes into account the environmental sustainability with regard to technologies and materials.

The initial project concerned the creation of a furniture that can transform according to the different domestic uses (bedroom and kitchen) and that is adaptable to the context of kindergartens as a container of toys or other materials. The containers are modular and variable in terms of dimensions, coherently with the modus operandi of the company, which produces tailor-made solutions. The idea of the furniture initially had a lightweight aluminium structure internally covered with fabrics of various patterns. In order to make it more beautiful, the company has also arranged the possibility of inserting into the object some coloured lights. Two other possibilities were also valued: the possibility of external wood covering for a domestic use and an adjustable front opening through an electric or mechanic roll-up shutter. All the options, except the last one, have been abandoned because the company have chosen to create a completely transparent furniture, which is an innovative idea in order to capture the children's curiosity. Then, the company added to the prototype some external holes for the support feet or eventually for small wheels, in order to improve the portability. Internally, the product has been meant to have small holes for the application of shelves. On the external part two transparent membranes were added, which could contain some pictures in order to obtain a higher customization level. The front opening is a roll-up shutter and it is considered the real innovation of the product; it is a push opening system transparent and made of plastic material, with an opening angle of 360°. Through such an opening system, the furniture may be used both vertically and horizontally, in order to increase the versatility and the durability.

The prototype's dimensions are 100 x 40 x 40 cm with two square sides and completely rounded edges for safety reasons. There also is a bigger version with the dimensions of 130 x 190 x 60 cm characterized by the same physical and geometrical characteristics.



Picture 16 The prototype made by Caremi

The plastic surface is white, except on the four corners where there are some aluminium inserts for the wheels' positioning. The surface can be coloured with pens. On the opposite rectangular faces, there are a transparent part and a sliding opening system also transparent that might move all around the furniture.

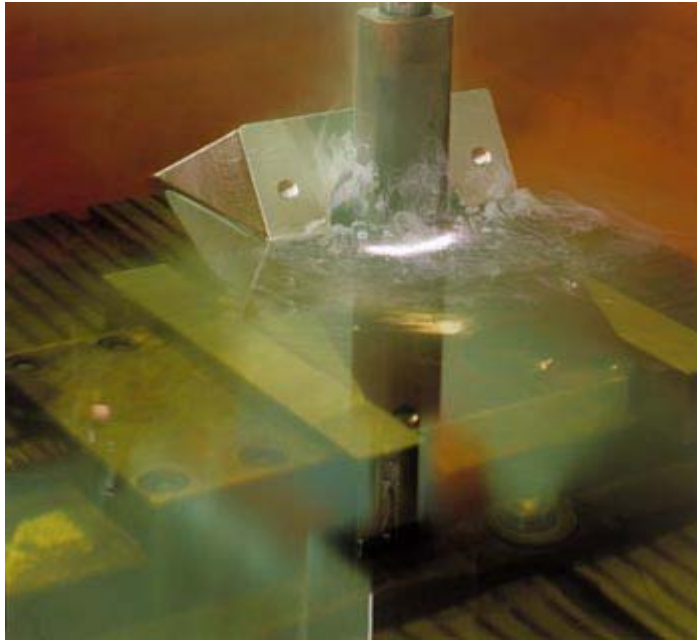


Picture 17 Wheels inclusion in the prototype

The backbone is made of aluminium through the technique of wire EDM¹⁹. It's a processing technology for chip removal based on erosive properties of electrical discharges. Thanks to the particular principle, such a technology is able to work only highly conductive materials, basically metals. The manufacturing happens through the approach of a tool, defined electrode, to the material ready to be processed. This action is

¹⁹ Wire-cut Electrical Discharge Machining.

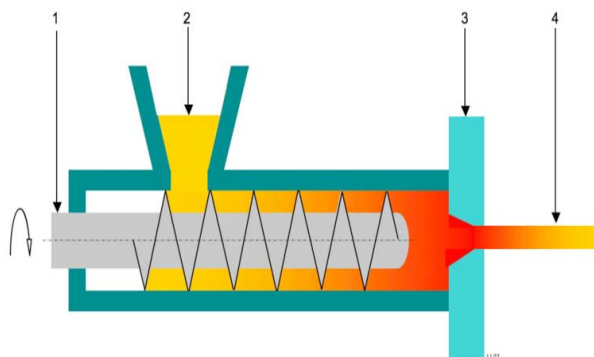
made in an environment filled with a dielectric liquid. The electrode has a “negative” shape compared to the shape to be obtained. Negative polarity is supplied to the piece, because negatively charged material suffers greater erosion. When electrode and piece are sufficiently close, between the two some discharges develop and erode the piece in a complementary way compared to the shape of electrode.



Picture 18 EDM wire representation

For the production of the final product the extrusion technique was chosen in place of wire EDM. The extrusion is an industrial production process consisting in making the material in a party status pass by compression through a gauge (matrix or chain) for reproducing the external shape of the piece.

1. Screw, 2. Loading hopper, 3. Chain, 4. Extruded product.



Picture 19 Representation of an extrusion technique - Source: Internet

The objective of the company for the production phase is to provide a lighter product version, thanks to the use of the extrusion process technology, that will be completely transparent, except for the aluminium uprights, that will have the possibility of customization through small exchangeable adhesive films, which can also be downloaded through the Internet, that can be hung up the wall, and that can be dismantled in order to reclaim and maybe sell separately some elements.

During the meeting with the top management in the early days of November, many changes emerged about the design of the piece of furniture. The greater difference with regard to the initial idea is the opening system. The shutter idea was abandoned and the company designed for the new prototype a conveyor belt, which can move on the entire perimeter of the object. In this way the use of the object can be easy and immediate also for the child. The conveyor belt should have the characteristic to remain unvaried over time, that is without the possibility to change dimensions, by stretching or shrinking. The structure that support the object is composed by four aluminium rolls, on which bearings have been applied in order to allow the belt's sliding. The caps on the corners changed compared to the first prototype, in shape and composition. In fact they will be plastic, composed by thin layers, and the shape will pass from a 1/8 of ball to a small bevelled parallelepiped in order to maintain the safety properties. The rigid elements that complete the object are the side perpendicular to the roller and the back. Caremi has thought that those parts should be covered with coloured fabric, in order to give a more pleasant look and at the same time a pattern to the product. The possibility to apply to the object the material realized for the Soliani "shell bed"'s structure was also considered; however, the idea has been abandoned because of the characteristics of the object; in fact, in order to preserve the properties of covering and shielding it is necessary to maintain the structural continuity in order not to break the protection zone. The angulars at the extremities of the structure jut out compared to the rollers of a length from 1 cm to 1.5 cm, which is space that allows the application of a particular covering, realized with different surfaces, coloured or with patterns, made of synthetic leather, or that represent elements like wood, leather or similar. The covering is composed by a superficial thin layer (thickness: 1-2 mm), and a heavy, soft, light and flexible layer (thickness: 1cm).

Through all those changes, the furniture acquires flexibility, lightness and safety, but at the same time, loses in transparency. The new product is also much more easy to be assembled. The customer can easily assemble it in their homes, by using only the explanations supplied and a screwdriver; in fact all the junctions are modular and can be joined by screws of the same size. The tubes of the structure are also always adjustable and extendable in order to simplify the assembly phase of the object. The sizes of the product are variable according to customer needs, in order to fully satisfy the requests.

3.2. Ergonomic seat: Fumagalli s.r.l.

Need analysis

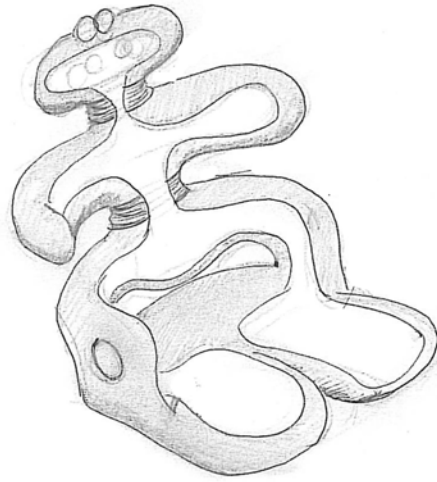
The problem that often prevents the correct integration in a social context of the disabled child is represented not only by the physical difficulty but also by the sensation of diversity due to the situation of the child. Such a sensation is accentuated by the too formal and medical look of the aids that are daily used, mainly the seats and prams. The medical nature is also reflected in two other aspects that also contribute to accentuate the uncomfortableness of the disabled child: the use difficulty and the lack of versatility. Sometimes, those types of tools have a complicated regulation system. This fact further complicates the child's integration into the community, because he has to rely on the parents or even the orthopaedic technician in order to do different activities. Moreover, the functional chairs for seating systems or prams are designed only for the basic use, that is to seat in a healthy position, without considering other activities that a child may do during the day, so that the child could be constrained.

The concept

Fumagalli designed seat by focusing on two fundamental aspects that are difficult to find together in one product: the versatility and the design. The design has the goal to make the child and the people around feel more comfortable, in order to facilitate their integration and sociality. However, such esthetical solutions must be conciliated with a versatility that allows the seat use in different environments²⁰ and for different activities. Both features must be developed while maintaining the same easiness of use, so that the seat is daily adjustable by the users.

The product is a postural and multifunctional seat for tetraplegic children from 3 months to 12 years. Designed for an internal use, it could also be used outdoors but only for small periods of time. It is made in three measures, in order to fit in the best way possible to the different physical conformations.

²⁰ The product is basically designed for the indoor use.



Picture 20 Initial draft of the seat.

The structure is like a classic seat for disabled people with the addition of regulations for the width, the depth, the height, and the back or arms inclination. The head rest is integrated but at the same time adjustable in height and the side supports are collapsible. All the regulations are easily modifiable through a single point of the seat even if the child is seated.



Picture 21 Virtual representation of the seat.



Picture 22 Virtual representation of the seat's split.

The structure's prototype is coated with the Parà's tissue. For the end product, the company will coat the seat with a more pleasant and soft tissue with elastic properties. All can be integrated with some accessories and appendixes thought for different activities.



Picture 23 Virtual representation of the seating system (without coating).

3.3. The "Luminous floor": LuxSolar

Need analysis

The dark (and the development of the concept of sleep) is one of the fundamental concept that every child has to face in the early months of his life. The different intensity of lights are in fact linked by the child to stimuli of different nature that goes from moments of activity to the time of rest.

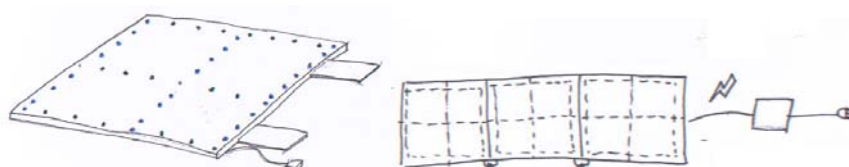
The fun is a concept that the child develops from the first moments of his life and it is an essential tool for the development. In fact, all the things that the child learns can be transmitted more effectively through the game, because in this way the child is not tired nor rejects them, but rather feel encouraged.

The concept

LuxSolar wants to exploits its experience in creating systems composed by LED lighting in order to provide a product that can be used by the child in an interactive way, in different environments, within different functionalities depending on different daily moments.

The evolution of the concept has gone through different phases characterized by different shapes, functionalities and technologies, while maintaining the same nature. The first idea developed and exposed in June (2009) was related to a plastic tile with crystal surface, because crystal is considered the best transparent material available in the market; but it was also found to be too hard and slippery, then not suitable for the childhood context. In order to work those problems out, the company decided to use plastic material for the surface too. The tiles that are now sell in the market are already chromium-plated, but LuxSolar found a company that can realize a transparent tile, which is the fundamental condition for the application of LED lights in order to create light paths. The components were designed like pieces of a puzzle: the pieces fit together and compose the floor.

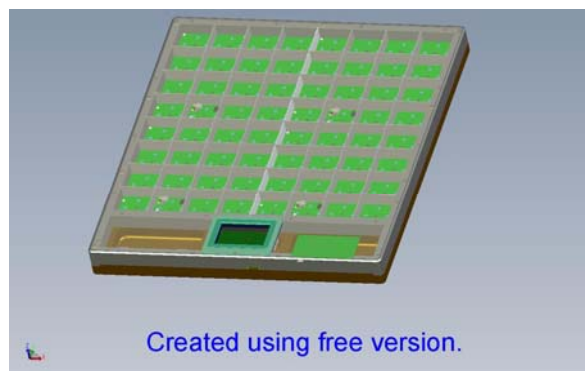
In November 2009 the concept has undergone further developments: the product is still a modular tile but now is bendable and can be connected in sequence with the use of Velcro's "joints" that provide the flexibility to the elements; inside the object, some LEDs are connected to the input current generator. The product should be used indoors and should be able to involve the child in recreational and educational activities, in order to stimulate him according to the environment in which the child is. The system is also reconfigurable according to the physical and cultural development of children.



Picture 24 Initial draft of the tile - November 2009

The product is constituted by very low intensity LED lights (the colours are white, blue, green and red), integrated inside modular strips/tile of silicone, which are 3 mm thick. The tile must be connected to a generator in order to feed the LEDs that switch on and off according to ad-hoc programs already planned by the control panel.

In April 2010 the final configuration shows a plastic tile with the dimension of 730 x 630 mm, and 25 mm thick. The weight is 2 kg per tile. It is composed by 8 x 8 smaller sub-tiles arranged in a matrix. All the sub-tiles will have under their surface a capacitive touch multi sensor²¹ and RGB LEDs for the coloured-light creations. Under the opal translucent cover there will be a keyboard with tactile sensor that enables interactions between the child's hand and each of the boxes below, for a 64 sensorial groups in total. In this way the user could create different forms and configurations according to which groups are lit and which are not. The microprocessor allows to start the softwares through a display and USB inputs; in the early phase the software will be based on sounds (animal or other) and colours.



Picture 25 Virtual tile representation - Source: Lucsolar

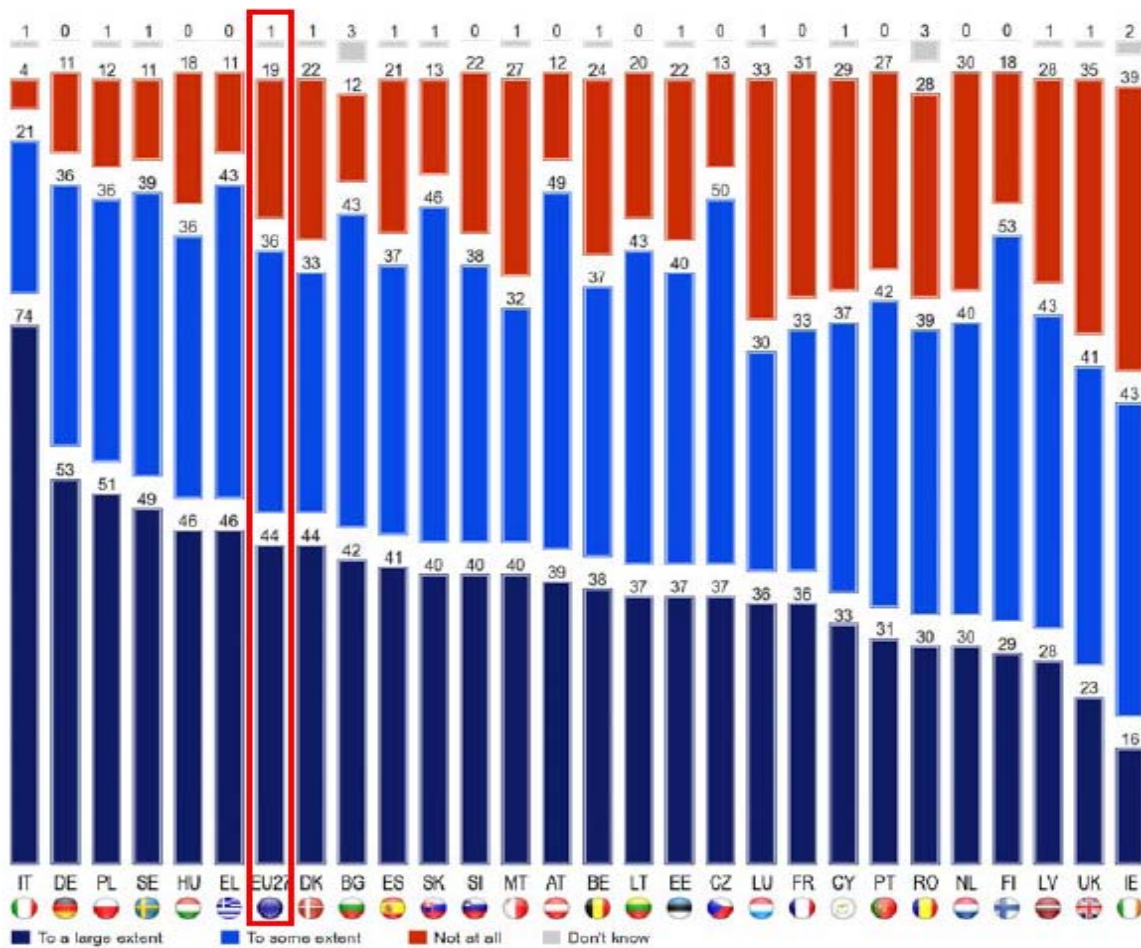
The evolution of the concept has included new features such as: multifunctionality (the LEDs integrated into the tile helps the creation of a relaxing or a exciting mood); interactivity, in fact by touching the tiles you can start a mechanism of cause and effect that stimulates the logic and memory functions of the child; and the usability as a game, thanks to the possibility of installing the favourite games

²¹ A system that can replace a button with a mechanism based on pressure and not based on the shift of the button.

3.4. Shell Bed: Soliani EMC s.r.l.

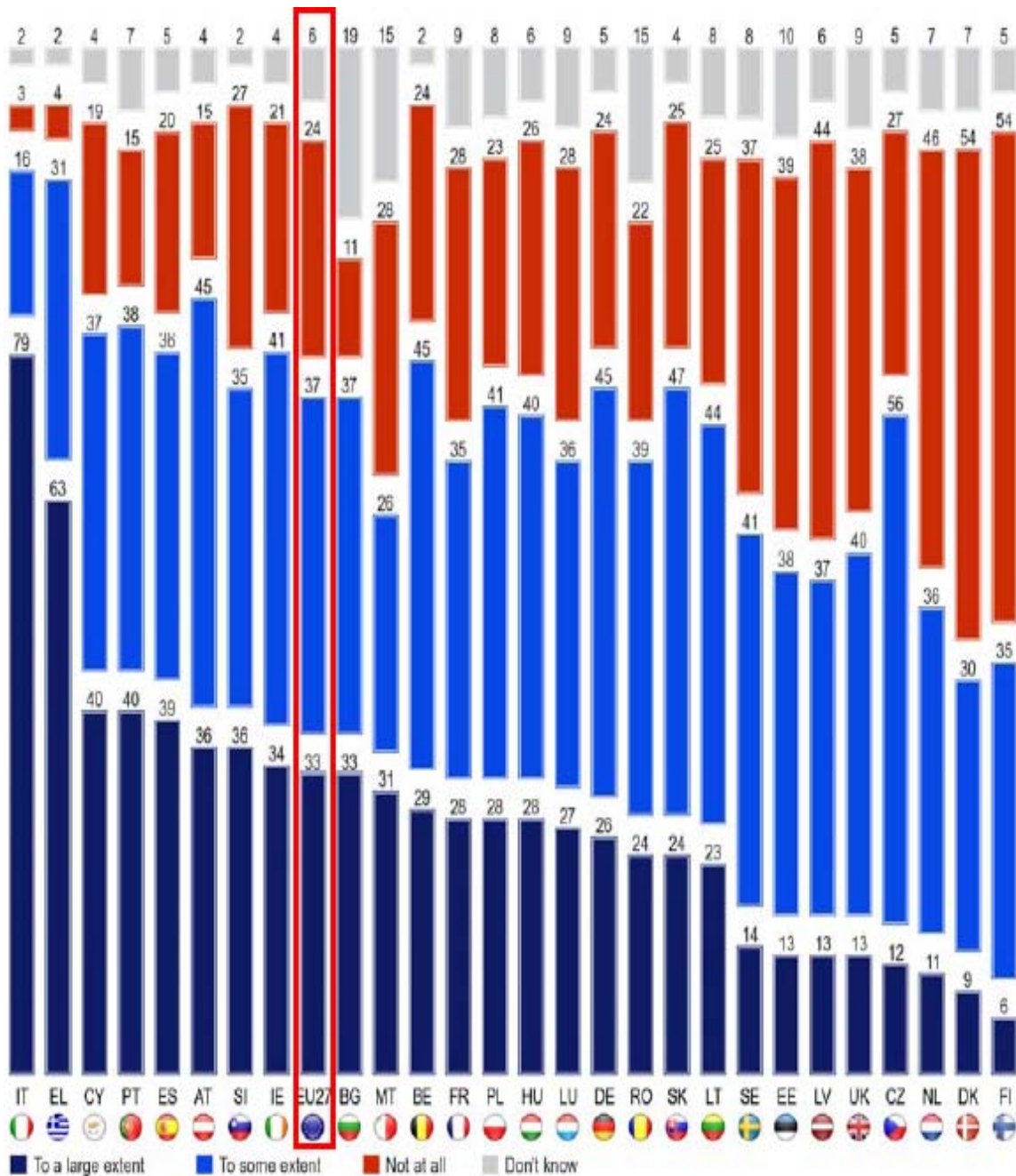
Need analysis

During last years, into the public opinion, the awareness of other types of pollution in addition to the atmospheric one is growing. In particular, a new awareness has arisen: first of the noise pollution and then of the electromagnetic pollution. According to a research carried out by the European Union, through the Eurobarometer channel, more than four out of ten people think that the noise is able to affect the human health, with an increase of 3% from 2006 to 2010. It is also interesting to note how the most worried interviewed are the Italian ones, more than seven out of ten, for an increase of about 14%.



Picture 26 Reviews of the noise effects on human health - Source: Electromagnetic Fields, Special Eurobarometer 347 - European Commission, June 2010

With regard to the electromagnetic pollution, the most worrying sources are considered in order: high voltage lines, antennas of mobile operators, mobile phones, computer, and appliances. The highest concern rate is again recorded in Italy and it goes from 79% to 53% of people that think that it could have serious effects on health, with an increase of about 45% in the case of computers (13% for the high voltage lines, 11% for the antennas, 13% for the mobile phones)²².



Picture 27 Reviews on the antennas effect for mobile phones on human health - Source: Electromagnetic Fields, Special Eurobarometer 347 - European Commission, June 2010

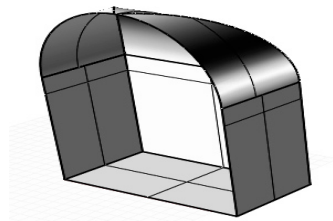
²² Source: Electromagnetic Fields, Special Eurobarometer 347 – European Commission, June 2010.

The concept

The concept of the “shell bed” made by Soliani was born from the safety needs related to the protection from noise and electromagnetic pollution: the idea is to apply the ten-year company insulation experience to a product that can enter into the child’s daily life and that can reduce the problems due to the pollution. In fact the children are the most susceptible people to that kind of waves, which are generated by any electrical device, due to their still developing nervous system, to their higher conductivity of brain tissue, to the head dimension, and to the more years of exposure compared to adults' ones²³.

The objective is to develop a product that on one side has the function of protecting the child from those type of pollution and on the other side is not considered by the child as an unfamiliar object but that is rather a suitable and stimulant product.

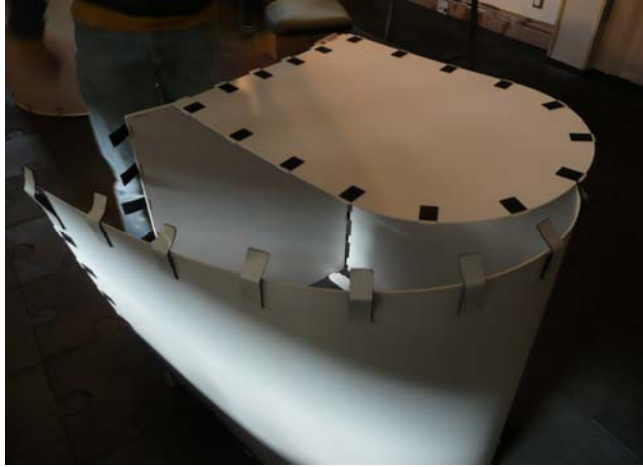
Through the “shell bed” words is defined the aluminium frame of the product, which have a parallelepipedal form opened on the front side and curved on the upper side. The head of the child is positioned into the structure during the sleep while his view remains free like in the capotte of a stroller.



Picture 28 Structure Idea of the Shell Bed - Source: Soliani EMC

The combined use of an internal layer of soundproofing material and an external layer of shielding material can thus to provide protection from both noise and electromagnetic pollution. In this respect, the electrical continuity between the different parts of the frame is necessary in order to have the effect of electromagnetic field absorption. The structure has a covering treated with zinc and not nickel in order to avoid allergy problems, and it is easily removable, foldable, lightweight and portable.

²³ Leeka Kheifets, PhD, Department of Epidemiology, University of California School of Public Health, Los Angeles, California; Michael Repacholi, PhD, Rick Saunders, PhD, Emilie van Deventer, PhD, Radiation and Environmental Health, World Health Organization, Geneva, Switzerland.



Picture 29 The structure of the "Shell bed"

It is also possible to cover the structure, internally and externally, with a hygienic and durable fabric made by Parà. The next phase of the product development process will be related to the improvement of design and look. The fabric is also customizable with adhesive applications and is fixed to the internal structure through Velcro²⁴.



Picture 30 The adhesive applications

²⁴ By the means of Velcro the fabric can be easily cleaned or replaced.

3.5. Parà: The new tissue

Need analysis

Independently of the situation, the fabric used for children's product must have some particular characteristics that are not so essential for adults. In particular, technical and aesthetic characteristics should guarantee the pleasantness and also a high safety and hygienic level. The focus is on the tactile sensations: in fact for the child in the early years of life they are very important in order to discover the world, hence the fabric should be soft and pleasant to the touch, in order to achieve a high level of satisfaction. With respect to the visual aspect, the colours and the pictures that characterize the fabric should be able to stimulate the imagination of the child, almost like a game. From the technical point of view, indeed, the fabric must be hygienic and safe²⁵ in order to protect the child's still developing immune system and guarantee a safe environment.

The concept

The fabric developed by Parà is made of dyed polyester yarn: the dye is added before the extrusion, thus avoiding the impact on the manufacturing process waste water. The fabric was already present in some products of the company at the beginning of Babylandia project but did not develop any particular characteristic. It was chosen not only for its resistance to seam but also for the light stability property. It was developed in two different weights: a heavier one (360 grams) to be allocated to the interior of the Caremi piece of furniture²⁶ and a lighter one (320 grams) for the Fumagalli seat. The real innovative characteristic of the product is the anti-flammability: through the help of Centrocot (Centro Tessile Cotoniero e Abbigliamento S.p.a.), several tests and experiments have been performed in order to achieve the certification. Such a characteristic is fundamental because the fabric will be used in a context with children. After that, other features that made the tissue anti-bacterial and anti-mite have been developed, which are also suitable for children with allergies and increase the hygienic level.

²⁵ Refers to characteristics as resistance to heat, friction, bacteria, mites and stains.

²⁶ The idea was abandoned for the decision of Caremi to develop a completely transparent furniture.

The characteristics of the Parà tissue, verified by the Centrocot refer to the following parameters:

CHARACTERISTIC	RESULT
Rub resistance	Test of Martindale >20.000 turns
Fire resistance	Category: class 1
Antibacteria	Characteristic obtain with natural substances
Anti-stain	Low adhesion of the material that dirty and easy stain removal
Oil-repellence	5 out of 6
Water repellency	5 out of 6
Picture and print	Made by the design department with special dyes that don't affect the fire resistance of the fabric

Table 10 - Characteristics and results of the tissue of Parà



Picture 31 Parà: tissue idea

CHAPTER 4: OBJECTIVES AND METHODOLOGY

The aim of the paper, which is to analyze the development and the marketing of innovative products, is very complex and can be divided in diverse sub-objectives. Such objectives will be described in this chapter by explaining the phases and the structure of the analysis. After that, the focus will move on the operational level, by explaining the methodologies used and defining the contribution of each one to the final aim. Doing so, a framework of reference can be made in order to specify in detail the whole thesis process and highlighting the flow of activities.

4.1. Definition of objectives

The new product development process needs the definition and the understanding of several variables that are critical for the success of the business. Such variables, which can be internal or external to the company, controllable or incontrollable, must be considered from the first activities of concept definition until the final distribution phase, in order to supply to the market in an efficient way a value that can be recognized and appreciated. The analysis of those variables constitutes the group of sub-objectives into which the thesis work is divided: in fact each of them gives an indication to the company about the direction to follow, in order to make an offering that is modelled on customer needs and at the same time that is convenient to the company itself.

An analysis of this kind is developed for each Babylandia product, aiming at understanding in particular the business dimensions, the advantages, the disadvantages, and at carrying out a Go To Market plan. The objectives are the following ones:

- Macro analysis of the market

One of the first steps in order to analyze a company or a business is certainly the study of the current situation of the context. The word “context” is related to the market segment that is addressed and to the environment where it belongs to, including all the actors that are present.

In this case the analysis addresses both the market of families and the market kindergartens, highlighting all the differences.

- Market quantification

Once you have understood the qualitative characteristics of the environment and of the market in which you work it is necessary to give a quantitative dimension to the business that you are about to develop, by defining the boundaries of the market segment that you want to address. Doing so, you can subsequently

take decisions in a wiser way, considering the return on the investment that you expect. Through a demand estimation the companies of project Babylandia can thus decide how many and which resources allocate to the development of the products, assigning to them the right place inside their own investments.

Understanding in detail the market addressed is the fundamental basis in order to assess the good quality of the product development process. In fact, on that basis you can make an initial estimation of the impact of Babylandia project on the company itself.

- Competition analysis

The entry in a new market by a company or the development of a new product in a market already known needs an estimation of the dynamics that could develop in the interaction with other competing companies.

The objective of competition analysis is to consider the real company development potentialities in the chosen segment through the study of the competitive situation of the company itself and highlighting the opportunities and the risks that could raise.

- A synthetic view: market attractiveness and compatibility

The indications drawn from the analysis done are summarized into two main dimensions, which are market attractiveness and compatibility, and studied first separately and then jointly through a matrix. In this way it is possible to give an overall judgement of the businesses proposed, both from the point of view of market potentialities and of company characteristics, highlighting the coherence level with the situation of the company itself.

- Demand micro analysis

Once developed a detailed analysis of the target market for every company, it is necessary to deepen the study by considering the consumer as an individual with his own characteristics. This analysis, which follows and completes the macro analysis from a logical point of view, aims at understanding the final consumer needs, analyzing his buying behavior and the response to the external stimuli.

The needs analysis in particular is a careful research on clear and latent needs that make the consumer look for a particular value recognized in a particular product. Only through the analysis of what lies at the root of the purchasing decision you can supply a product that can be appreciated by the final user and you can identify the market in more specific terms. Moreover, it is fundamental to understand the consumer "education" level and how the above-mentioned needs evolve, by noticing possible future needs that are rising up and thus investment opportunities.

In the case of Babylandia project you must distinguish between the real children's needs and the parents' opinions/needs, because these last ones are the decisors and buyers even if they are not the direct users.

In addition to needs, which can be considered as a starting point, it is important to understand the mechanisms that rule the process through which the single consumer decides to make a purchase. This analysis thus pass through the definition and the study of the factors that influence the process, of the phases and of the actors that take part in it.

By going into the characteristics of the consumer that the marketing effort addresses it is possible to model the offering, communicating and supplying a value that is more and more suitable to final consumer's thoughts and world.

- Go To Market plan

Once you have carried out an analysis about the environment and the market in which the company acts, from both a macro and a micro viewpoint, and about the compatibility of the company itself with the internal situation and the needs that it wants to satisfy, it is necessary to study the operational variables. It is the definition of the promotion and distribution system on which the marketing of the product is based. The companies of Babylandia project should verify what is the best way to supply the final consumer with the new products, by playing on levers that are fully controllable.

4.2. Methodology used

The tools that have been used for the execution of the thesis work are mainly four: analysis models, interviews and focus group, blogosphere analysis and ethnographic analysis. Each of these four methodology types contributes in a complementary way to the achievement of different objectives, by giving an overview from different points of view on the same aspects and strengthening the validity of the analysis.

4.2.1. Analysis model

In order to achieve the objectives defined, an important part of the thesis is constituted by the application of analysis models. They are patterns for the comprehension of particular characteristics that have the advantage to be standardized and recognized; through such patterns it is thus possible to develop a study that is effective, robust, and more understandable.

The first objective and starting point is the macro analysis of the market. Before the definition of the market itself it is necessary to study the environment in which is set, that is to say the general context and the actors that are involved, in order to verify the present influences. The analysis models used are the following ones:

- **PEST analysis**

PEST analysis, studied by Narayanan and Fahey (2001), is a model used in the exploration of macro environment that considers the following set of variables:

- P: political and institutional environment
- E: economic and financial environment
- S: demographic and socio-cultural profile
- T: technology

- **“6 O” model**

The macro environment analysis is completed with the real definition of the market through the “6 O” model, described by Kotler and colleagues (1992). This model is based on the joint analysis of six qualitative variables strictly related to the market.

1. Occupants
2. Offering
3. Occasions
4. Organization
5. Objectives
6. Operations

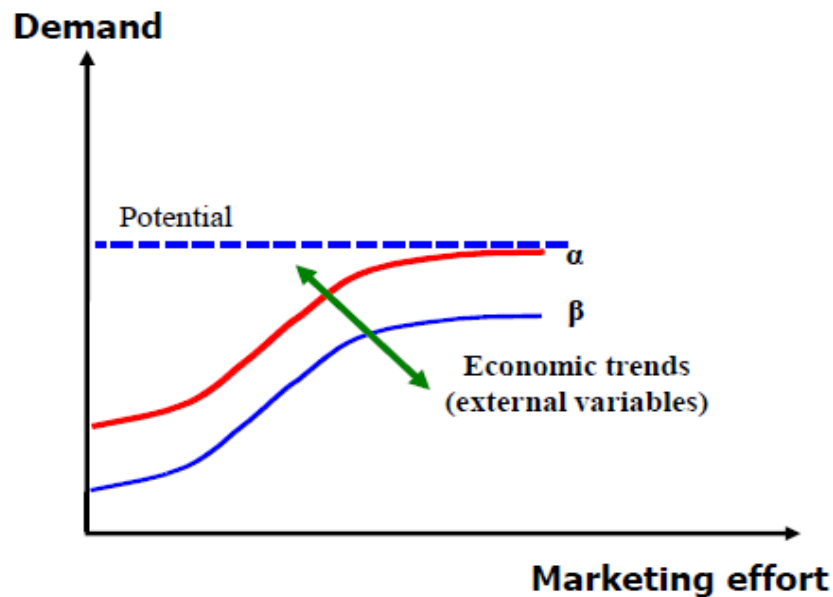
After the description of the market from a qualitative point of view there is the **market quantification**, in order to define the boundaries of the business of every company. In this way it is possible to estimate the demand and to verify possible potentialities for future expansions.

- **Demand estimate**

Estimating the demand of a market means forecasting the possible demand for a particular product. The demand varies according to market dimensions, which are:

- **Potential market**: it is made by all those consumers that can constitute the target of the offering according to their socio-demographic characteristics. It is the level of demand that would correspond to a very high marketing effort, tending to infinite. Thus, it is the maximum market dimension that is possible in a given environmental situation; in fact there are also

variables that are external to the company and that are not controllable: those variables decide the trend of the current and potential demand according to the marketing effort.



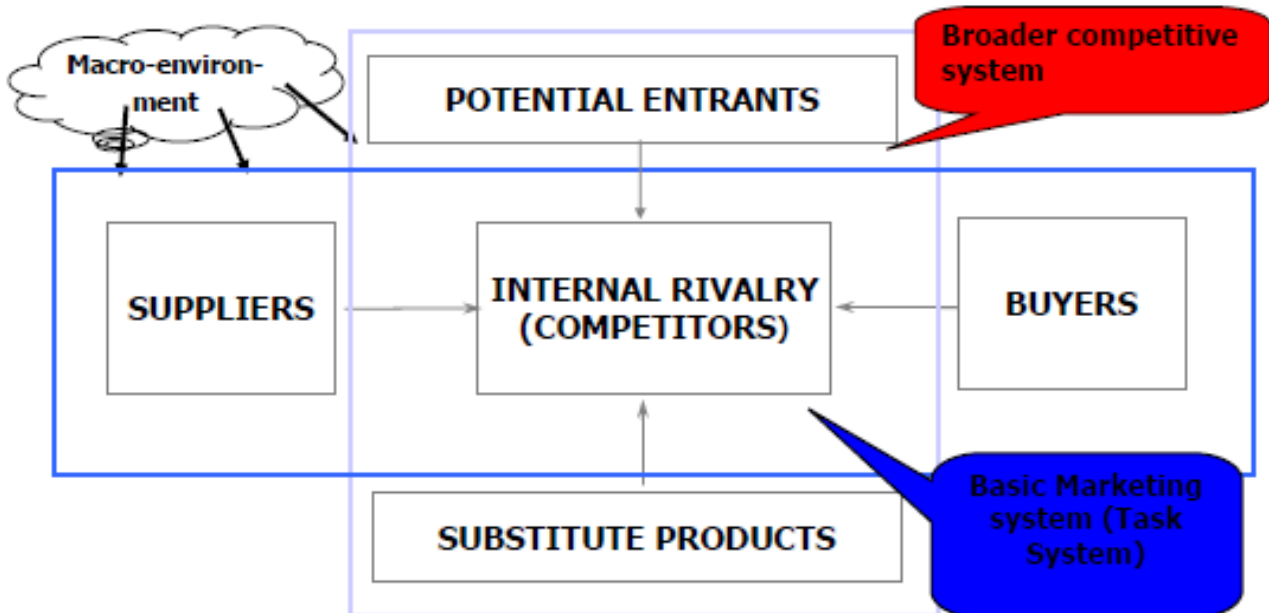
Picture 32 Relation between demand, decision variables and environmental variables - Source: Kotler, Marketing Management 12th edition, 2006

- Available market: it is composed by the consumers that are able to buy the product and actually express their purchase intention. It is a part of the potential market because in addition to socio-demographic characteristics there is another necessary requirement, the possibility to reach the offer.
- Served market: it is the part of the available market to which the company addresses its marketing effort. It is the target consumers that you want to become customers.

In addition to macro analysis and quantification, one of the main aspects to be considered about the market is the competition. The model used to study it is the following one:

- **Five competitive forces model**

The five competitive forces model by Porter (1980) is one of the most popular tools for the valuation of opportunities and threats coming from the competitive situation. As the name says, the model is based on the analysis of the five forces that constitute the competitive environment in which the company acts and on the assessment of their intensity.



Picture 33 Five competition forces model. Source: Porter, *Competitive strategy: Techniques for Analyzing Industries and Competitors* (1982)

By means of the models displayed the market can be described in a qualitative and quantitative way giving thus an objective representation of the current status; in order to understand how much that situation is positive for the entry in the market of new products you need an ***attractiveness analysis***. There are four main macro variables:

- Market dimension

The company needs to verify the real market dimension, in order to be fully aware of the extent of the segment that is about to address and to propose its offering to.

- Market growth

The analysis of current, past and future trends is fundamental in order to determine the entry strategy and the possible future actions.

- Market profitability

It is important to have a judgement of the success possibilities of the business from the profitability viewpoint, in order to decide if and how address the market in an effective and efficient way according to the response obtained.

- Broad competition

it is fundamental to analyze the presence of current or future competing products, which have similar characteristics or anyway satisfy the same needs.

The attractiveness analysis alone is not sufficient in order to give a judgement on the introduction of a new product on the market because it concerns considerations external to the company, which do not take into account the internal situation. In fact, a product may be well accepted by the market and survive to competition, but at the same time may be not coherent with the company nature, leading to internal problems. For this reason, it is also necessary an internal analysis that aims at assessing the compatibility of the new product development project. The lower the coherence, the bigger the problems that the company will have, independently from the market sector the product is addressed to. The variables considered are the following ones:

- Resources and competences

When a company decides to develop a new product it should first of all evaluate whether it is able to do that or not, in other words whether it has the necessary resources and competences or not. In order to understand that it is useful to analyze the product portfolio, which is what the company is currently able to do. Moreover, once established the real possibility of starting a new business, it is important to understand which position and which role it can assume with respect to the existing ones, in order to verify the side effects.

- Company structure

Another important internal characteristic to be analyzed is the company structure: in this case the objective is to understand whether it can face the change from an organizational point of view or not, and, if not, which modifications are required.

- Investments

Every company has to make different investments, which have different time horizons and need different economic efforts for further developments. In the case of the introduction of a new business, first of all it is important to understand the feasibility and then whether it is coherent and compatible with the investments already decided.

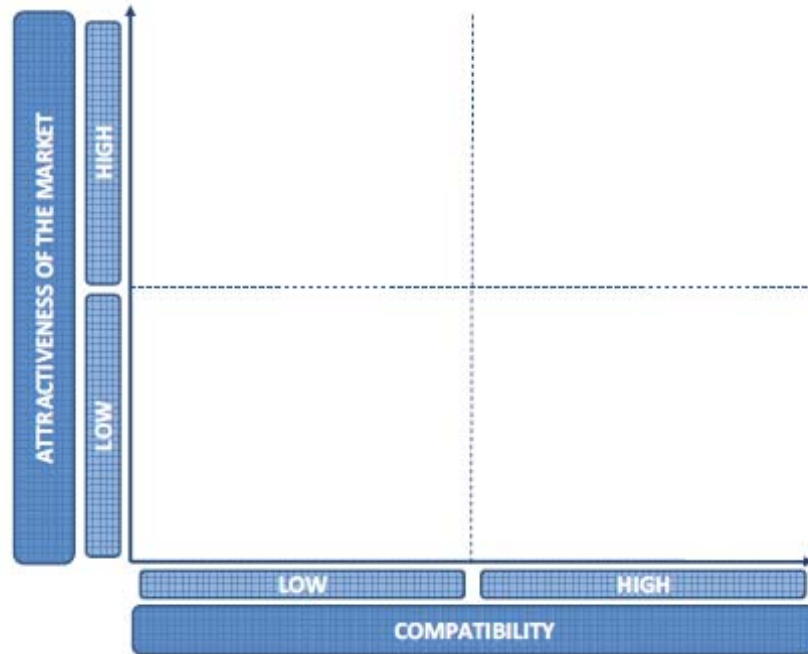
- Medium-long term objectives

The objectives with the longest time horizon constitute the guidelines for the future development of the company and its activities. The decisions taken have to be necessarily coherent with those guidelines, in order to not pervert the company nature and allow that a single business takes a different direction from the company's one becoming an alien element.

The attractiveness and compatibility analyses can now be compared, giving a final assessment of the success possibilities of the project. Those aspects are jointly considered through the compatibility/attractiveness matrix.

- **Compatibility/attractiveness matrix**

This matrix has the compatibility of the new product with the company on the x-axis, defined in two values, high or low, according to the compatibility analysis; on the y-axis there is the attractiveness level, considered high or low according to the attractiveness analysis. Hence, there are four quadrants, given by the combinations of the two values: the one at the top right (high compatibility; high attractiveness) represents the best businesses while the quadrant at the bottom left (low compatibility; low attractiveness) represents the worst businesses.



Picture 34 The Compatibility-Attractiveness matrix

- First quadrant: low compatibility and low attractiveness

It is the worst positioning: there are activities extraneous to the company that are addressed to a low profitable market. You should stop them because the current situation of the market has several disadvantages even after a high initial investment made in order to develop the suitable company assets.

- Second quadrant: high compatibility and low attractiveness

The products in this position have the advantage of being coherent with company activities but also the disadvantage of being addressed to a very competitive market with few opportunities. Hence, it is necessary a very good product development in order to exploit a competitive advantage.

- Third quadrant: low compatibility and high attractiveness

If a business is positioned in this quadrant it means that it was conceived for a profitable market sector but also that it needs assets that the company do not currently have. Hence, the success can be achieved only with a high initial investment, provided that the company is able to exploit the market opportunities.

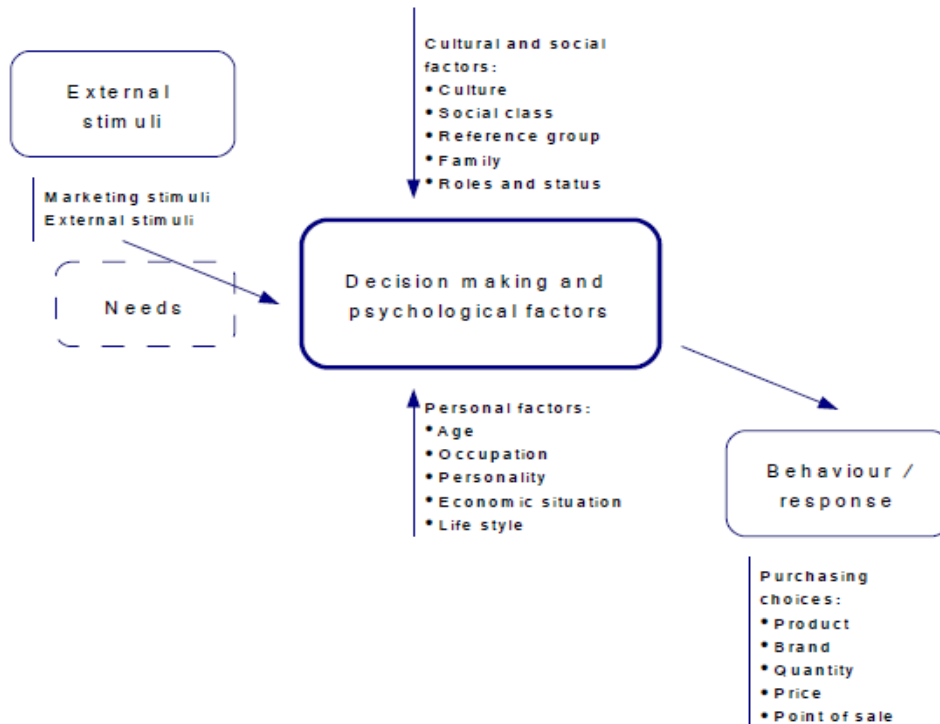
- Forth quadrant: high compatibility and high attractiveness

In this quadrant there are the activities that are very coherent with the company and that address a very profitable market. There are thus good success possibilities even with relatively low investments.

Concerning the demand micro analysis, one of the most important aspects to be studied is the purchasing process: in order to do that the model used is the “stimulus-response” model, described by Kerin and colleagues (2002).

● **“Stimulus-response” model**

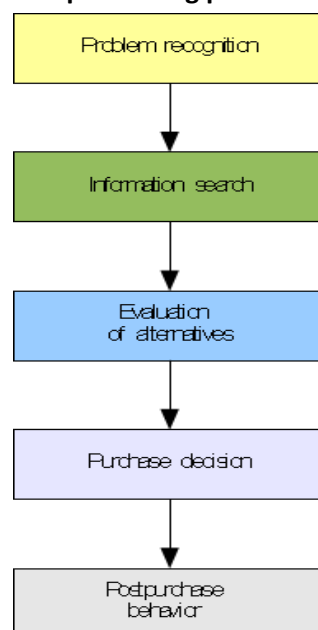
Through this model it is possible to better understand the dynamics that rule the purchasing decision, giving to the marketing function very important information.



Picture 35 "Stimulus Response" model - Source: Kerin, Berkovitz, Hartley and Rudelius. Marketing 7th edition (2002)

In order to analyze also the phases and the roles of the purchasing process the two following models by Kotler (2006) are used.

● **Five phases model of consumer purchasing process**



Picture 36 Five phases model of consumer purchasing process - Source: Kotler, Marketing Management 12th edition (2006)

- **Purchasing process roles**

Inside the purchasing process there are different roles often played by different people:

- Initiator
- Influencer
- Decisor
- Buyer
- User

4.2.2. Blogosphere Analysis

The increasing and widespread diffusion of the Internet and in particular of blogs constitutes an interesting stock of customer opinions and thoughts. The study of the blogosphere is therefore an important methodology in order to understand which **needs** are present and most felt by the market, which ones are satisfied and in which way.

The analysis starts from a semantic map where are identified some keywords that refer to the needs that Babylandia products want to satisfy; after that for every need some other keywords that directly refer to the new product are searched, in order to identify the main blogs and analyze the most pertaining posts.

There are two final objectives: on one hand to verify whether the needs that are at the bottom of the new development process are felt by the market; on the other hand to reveal possible latent needs that are not satisfied.

4.2.3.1. Interviews to the companies

The competitive analysis of a company or a system of companies must necessarily imply the knowledge of the company itself: only in this way you can highlight the strengths to exploit and the weaknesses to protect. Hence it is very important to consult the companies involved in the project also in order to **qualify the market** through their experience. By means of the interviews it is possible to collect data about the **buying process** too.

The interview made to Happy Child purchasing manager has the double objective of verifying the possibility of entry into the kindergarten market according to its particular **needs** and at the same time of understanding the possible **acceptance level**.

4.2.3.2. Focus Group

The focus group, considered by Kotler and Keller (2006) as one of the best techniques for the gathering of market data, is applied through the participation of some parents of children that constitute the target of Babylandia project offering. The objective is to notice which are the needs that are already emerged and which are still latent but could emerge in the future; once those needs are identified, the analysis aims at understanding whether and how they are satisfied, through which ways and products. Then after that the prototypes are shown and the main characteristics are explained, the parents' reaction are tested, estimating the acceptance level.

4.2.4. Ethnographic analysis – Pleasantness test

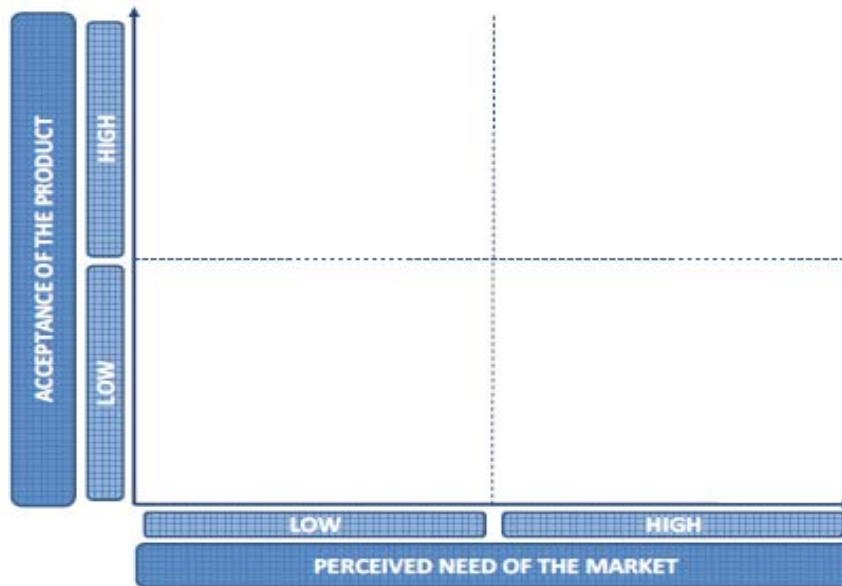
In the process that leads from the concept to the final offering definition, the views of the future users are fundamental in order to model it as much as possible on their needs. Especially in the case of children, the observation of how they use the products developed for Babylandia project is very important: on one hand because they have not already an accurate language and so they could not be able to express themselves in the best way; on the other hand because it is necessary that the products are made according to children's needs and not, as it often happens, made for the adults and then adapted to childhood world.

By means of the ethnographic analysis, in this case a pleasantness test, there is the possibility to notice which are the real needs and acceptance level of children, because this technique is based on the direct observation of the product used in the daily life. In this way the observer can understand how the observed interacts with the object and the surrounding environment, how he behaves, and the feelings expressed. The surplus value of this methodology is thus the direct observation of product strenghts and consumer needs during the use of it. Once analyzed the needs and acceptance levels, the two aspects are considered contemporaneously, giving an overall valuation of the possible market response to the marketing of products belonging to Babylandia project.

- **Perceived needs/acceptance level matrix**

The matrix has on x-axis the needs perception level while on y-axis the product acceptance level. The value of the two axes is defined as high or low, according in the first case to the blogosphere analysis and to the focus group while in the second case according to the focus group only. Concerning the kindergarten market, for both axes it is used the interview to Happy Child purchasing manager.

Hence, there are four big quadrants, made by the combination of the two values.



Picture 37 Perceived needs/Acceptance level

- First quadrant: low needs perception and low acceptance level

It is the worst positioning: there are products that aim at satisfying needs that are low perceived by the consumer through a product that is not appreciated. The better solution in this case is to abandon the product or to develop a new product according to what consumer feels and thinks starting from the concept.

- Second quadrant: high needs perception and low acceptance level

The products in this position are developed to satisfy needs that are really felt by the consumer but they do that with a solution that is not appreciated. In this case the company should change the features of the product according to consumer tastes; however it should also consider the assets that can exploit and the investments necessary.

- Third quadrant: low needs perception and high acceptance level

If a product is positioned in this quadrant it means that it is very appreciated by the consumer but that do not satisfy an important need. This characteristic can be suitable in case of impulsive purchasing or low price products; in other cases, the company should apply the know-how or the technology developed to a product that can satisfy a need present in the market.

- Forth quadrant: high needs perception and high acceptance level

It is the best case: in this quadrant there are products that satisfy a need present in the market and that are appreciated by the consumer. There is a high success probability, even if the product has a high price.

5 MARKET EVALUATION – CAREMI

In the following chapters the analysis will focus on the effects of the businesses related to Babylandia project on the market and on the companies involved; such an analysis will be made according to the reference framework explained in the chapter before. The study will take into account such a scheme in applying the techniques described, according to the different products and market segments, and obtaining in this way a deeper and more complete analysis.

Such an analysis starts from the study of the current market situation, both from a qualitative and quantitative point of view, in order to have an overall description of the scenario in which the companies will work. Through the 5 competitive forces model will also be analyzed the competition dynamics that develops in those segments, in order to define an attractiveness level. At the same time the coherence of the businesses with the internal situation of the company will be valued; in this way it will be possible to have a first overall judgement of the success possibilities of the product.

Then the focus moves on the comprehension of the mechanism that determine the product purchase. The study of the emerged and latent needs is a fundamental part of the thesis in order to evaluate the possible response of the market and it is made through techniques such as the interviews, the focus group, or the analysis of the blogosphere. In this respect the different actors and phases are investigated, in addition to the use of the “stimulus/response” model in order to better understand the reactions of the consumer to the external stimuli.

5.1 Macro analysis of the market

The research on the “piece of furniture that grows with the child” is carried out considering children from 0 to 12 years as target range, even if it could be used by children over twelve years old thanks to its features of versatility and adaptability, which will be analysed.

The first level of the analysis deals with the company macro environment, that is every external factors exerting influence on it. The first method used is PEST analysis.

5.1.1 Macro environment analysis

This analysis is about political, economical, social and technological factors in the setting where Caremi operates: they could have some results on the development of the “Piece of furniture that grows with the child” and on the company behaviour.

FACTORS	MARKET OF FAMILIES	MARKET OF KINDERGARDENS
Political	<ul style="list-style-type: none"> European law UNI EN 14749 (minimum safety requirements and proof method for these products)²⁷. 	<ul style="list-style-type: none"> Legislative Decree, 6 September 2005 n° 206 “CONSUMPTION CODE”, Italian transposition of the European Directive 95/2001 (safety for the marketed products)²⁸.
Economical	<ul style="list-style-type: none"> Furniture system: significant fall in demand (sales: -17,6%, export sales: - 21,6%)²⁹. Context wood-building furniture: the situation was not better compared to last years. Furniture and construction industries have been hit by a recession that has affected all. 	
Social	<ul style="list-style-type: none"> Population growth: the annual average rate of change calculated between 2001 and 2008 is 0,7 % and in the same period the population has grown from 57 to more than 60 million of resident. Number of families: families are about 24 million and 905 thousand; the average number of the members in a family is 2,4 and it is constant from 2008. Number of births: increasing, 576 thousand in the 2008, birth rate equal to 9,6 per thousand. 12 thousand more than in 2007. Attendance of school facilities: children attending kindergartens, nursery schools or a regular courses of study are 6.542.329; especially, the children attending the kindergartens or the nursery schools are 1.974.302. 	
Technological	<p>3 main classes of technological innovations:</p> <ul style="list-style-type: none"> Flexible automation³⁰. Lean Production³¹ 	

²⁷ The Italian laws that rules the market of furniture for children are not particularly restrictive, the most considering is the safety for the product structure and its use: they are important laws to protect children. Into the family market the European law UNI EN 14749 is considered more important for the safety during the realisation of furniture, giving the possibility to the companies of getting a valid certificate at a European level. The tests have to check the existence of the minimum parameters concerning to the resistance and duration features of the finished product.

²⁸ Into the nursery school market, the law rules the chemical and inflammable features, requested for every material, and it decides safety production requirements.

²⁹ Source: Istat 2009. On the home front the situation was not better, due to several factors like the stop of the property market and the lack of trust in business.

³⁰ Internet article: Qui-impresa-Il sole 24 ore – 2009 a technology able to get productivity improvements, increasing the competition between companies. It is based on the use of industrial robot able to make faster change in production.

³¹ Form of production of Japanese origin (inspired by element from Toyota Production System): it uses total quality and del "just in time" devices. This innovation takes several positive changes, a reduction of complexity for the production, which becomes more flexible, and, consequently, an optimal use of the fittings; a reduction of the timing of stock and of the design errors, with the consequent improvement of supplies.

	<ul style="list-style-type: none"> • Increasing attention to the environment³²
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Table 11 - PEST analysis applied to Caremi

With regard to the PEST analysis, the market addressed by the “piece of furniture that grows with the child” can be considered as wide, but it has several negative features at the moment. The most clear features concern the recession of last years: the result has been a total turnover of approximately 12 billion euros, 19,4% less than 2008; exports (-24,4 %) are only 9% of sales, while internal consumptions have shown a reduction of -18,9 %³³. The decline in sales has created a radical decrease of the companies savings. Families are likely to buy lower price goods at the expense of quality.

5.1.2 Market qualification

The “6 O” model is useful in order to classify target markets according to a gross level. It is based on the analysis of six variables, which are related to the context to be analysed. The study of the model is divided according to the two reference markets.

	MARKET OF FAMILIES	MARKET OF KINDERGARTENS
Offering	<ul style="list-style-type: none"> • A piece of furniture that grows with the child 	<ul style="list-style-type: none"> • A modular and flexible piece of furniture
Occupants	<ul style="list-style-type: none"> • Parents (especially mothers) 	<ul style="list-style-type: none"> • Kindergartens' purchasing managers
Objectives	<ul style="list-style-type: none"> • Independent use • Growth • Design • Safety 	<ul style="list-style-type: none"> • Quality/price ratio • Safety
Occasions	<ul style="list-style-type: none"> • Development of the need: first months of the child life or substitution of existing furniture • Wearing effect of time 	<ul style="list-style-type: none"> • Development of the need: opening of the kindergarten or renewal of existing furniture
Organization³⁴	<ul style="list-style-type: none"> • Parents: decision makers and buyers • Child: the main figure, who uses the 	<ul style="list-style-type: none"> • Purchasing manager: initiator, decision maker, and buyer

³² In this regard, there is the eco-technology: the use of electricity and heat produced by burning of wood waste and ecological panels, 100% made with wood-recycling material, used for production of furniture, coatings, fireproof fittings, walls and furniture for public places.

³³ Source: Istat 2009.

³⁴ These features are expanding in the analysis fo buying process.

	<ul style="list-style-type: none"> product Second level figures: relatives, as grandparents, uncles, aunts 	<ul style="list-style-type: none"> Child: user Second level figures as teachers or parents: influencers
Operations	<ul style="list-style-type: none"> Canonical channels: retailers and two single brand shops Future distribution channel: the Internet, by making a website where customers can exchange information, confront themselves and buy elements, thus creating an active community 	<ul style="list-style-type: none"> Main distribution channel: B2B distributors, with the help of catalogues and specialized magazines

Table 12 – The model of "6 O" applied to Caremi

With regard to the **offering**, in the market of families, the complexity and variety of increasing requests for furniture has led Caremi to suggest a new element, that could “grow” according to the child. Instead in the market of kindergartens it is important that the “piece of furniture that grows with the child” is modular, flexible, and adaptable to several contexts in a simple way; hence, it could be used for different purposes, for example like a toy container.

With regard to the **occupants**, they are extremely different into the two market. In the market of families, parents are the people who mainly express the demand: mothers are the main figures who buy for their children and decide without their help. In the market of kindergartens the occupants are the purchasing managers: they search something that could last in time, with an innovative design but suitable with the context, and that has some functional and safety characteristics, based on the needs of children.

With regard to the **objectives**, in the market of families the main ones are: the independent use by the child; the “growth” of the piece of furniture according to the child and his changing needs; a design with interchangeable features that is customizable by the child. In the market of kindergartens the quality/price ratio is important: in fact they need a quality product that is not too expensive. Both the markets share the most important objective, that is the safety of the child: the product has to be safe, without corners, with sliding doors or side opening easy to open, and does not create situation that could be harmful to the child. The **occasions** in the market of families are several: the purchasing process takes place in the first months of child’s life or can occur at a later time, when there is the need to change, for example when the piece of furniture is old, not more functional or aesthetically unpleasant. Instead, in the market of kindergartens, the need is mainly in the moment the school starts its activity or when it decides to renew the structure.

The most interesting suggestions that arise from the analysis of the market with this kind of model concerns the differences between the two contexts: the most significant difference is represented by the distribution channel. For the market of families, the company has thought to use the eCommerce: with its help you can more easily recognize the buyer's feelings, by using the increasing success of the electronic trade, and you can create a community in order to satisfy every kind of questions, interests and matters. For the market of kindergartens the company relies on the traditional distribution channels.

The objective related to the purchase changes. Families buy the product in order to satisfy an effective need, to have furniture suitable to the child and which could "grow" with him. Kindergartens want to increase the level of the service offered by the structure.

5.2 Market quantification

After making a description in qualitative terms the analysis passes to the quantification of the market, distinguishing the demand estimate according to the two markets.

5.2.1 Demand estimate

This analysis implies the division of the market in three macro-areas.

Market of families

Potential market

The potential market consists in the number of families in Italy with at least one child aged between 0 and 14. Through the analysis of Istat data, from the national census in 2001³⁵, the total number of family is 22 million. The percentage of families without children is 19%, while the one with children aged between 0 and 14 is 14%.

Territory	Italy					
	Year	2006	2007	2008	2009	2010
Type of the indicator						
Percentage of the population between 0-14 years (al 1° January)		14,1	14,1	14	14	14
Percentage of population between 15-64 years (al 1° January)		66,2	66	65,9	65,8	65,7
Percentage of population over 65 years (al 1° January)		19,7	19,9	20	20,1	20,2
Average age(al 1° January)		43	43	43	43	43

Table 13 – Age of the population as a percentage – Source: www.istat.it

$$22.000.000 * (1-0,19) * 0,14 = 2.500.000$$

Multiplying the data you get the number of families in Italy with at least a child aged between 0 and 14: about 2.500.000.

³⁵ Istat census is done every ten years, so 2001 data are latest available.

Available market

To identify the available market you should remove from the total population the percentage of that part without a sufficient level of income needed to buy the product.

We have to decrease the previous obtained number:

year	2009			
Judgment on the economic resources	excellent	adequate	poor	Absolutely unsatisfying
Territory				
Italy	0,9	52,9	39	6,7

Table 14 – Distribution of Italian population by income (Source ISTAT 2010)

The values of the families with good and adequate economical resources are summed with the previous values and then multiplied for the number of families in Italy with at least a child aged between 0 and 14.

$$2.500.000 * 0,538 = 1.345.000$$

This is the number of families in Italy with a child aged between 0 and 14, that are able to buy the product.

Served market

The marketing of Caremi will be through two one-brand shops, in Bergamo and Rome, and through eCommerce channel.

The served market is composed by the families with a child aged between 0 and 14 that are economically able to buy the product, that live in those areas where the shops are, and that have the Internet.

The first category of families is determined from Istat data (2001 last Censis done), who estimated the resident population in the Roma and Bergamo territories. The result is of about **5.000.000** people.

Assuming that the percentage of families present on Italian soil (38% of the totality of the population) remains the same also for the two areas mentioned above, the number of families present in Roma and Bergamo is computed.

$$5.000.000 * 0,38 = 1.900.000 \text{ families}$$

At this point, the same procedure is applied in order to estimate the number of families that is living on the Italian soil and that have children aged between 0 and 14 years. From this group the families without any child have been removed (19% of the total), and only the families with a target age child are to take into consideration (14%). The result obtained is:

$$1.900.000 * (1 - 0,19) * 0,14 = 215.460 \text{ families}$$

In order to obtain the real number of the customers that reach the company’s offer through this channel it is necessary to take into account that not all the families will be economically able to reach the offer.

$$215.460 * 0,538 = 115.900 \text{ famiglie}$$

The value obtained must be added to the relative value of the second category of families, calculated through the number of people that use the Internet and buy and sell online. According to Istat 2010 report, such a number is constituted by the 36,9% of the Italian population, equal to about 22 million people. Only the 22,7%³⁶ of that group, has made a purchase through the network over the past 12 months. Such data allows to quantify the number of families:

$$1.345.000 * 0.369 * 0,227 = 112.600$$

The value is added to the estimate made related to the number of families that can reach the offer through the two shops of Caremi, obtaining the served market.

$$115.900 + 112.600 = 228.500 \text{ families}$$

The value represents the number of families present on the Italian soil with a child aged between 0 and 14 years that are economically able to reach the product through the use of the Internet or directly in the shops situated in Rome and Bergamo.

Market of kindergartens

Potential market

With regard to the market of kindergartens it is enough to have the whole number of kindergartens, that is the schools attended by children between 3 and 6 years old on the territory in order to define the potential market.

	Territory	
	Italy	
	Scolastic order	
	childhood	
	Management of the school	
	total	
	2007	2008
Year of closure of the school term		
Type of data		
number of schools	24848	24727
Number of classrooms	73161	73050
Registered male and female	1652689	1655386
Registered female	795066	797433

Table 15 - School attendance of children aged between 3 to 6 years

The total of kindergartens on our territory in the 2008 was 24.727: this value represents the potential market of Caremi.

³⁶ Dato Istat report web 2010

Available market

In order to identify the available market is necessary to consider that the product of Caremi is situated in a Medium-high price position. For that reason, is possible to say that the structure with an higher income, with an higher budget disposition and a wider decisional power, may achieve in a better way the offer of Caremi. For the estimation only the private kindergartens present on the Italian soil were considered.

SCHOLASTIC YEAR	KINDERGARTENS		PRIMARIES		SEC. I GRADE		SEC. II GRADE		TOTAL		% OF THE TOTAL	
	SCHOOL	PUPILS	SCHOOL	PUPILS	SCHOOL	PUPILS	SCHOOL	PUPILS	SCHOOL	PUPILS	SCHOOL	PUPILS
2001/02	-	-	-	-	-	-	-	-	-	-	-	-
2002/03	-	-	-	-	-	-	-	-	-	-	-	-
2003/04	8336	467131	1676	192734	682	129435	1468	129435	12162	853726	21%	9,65%
2004/05	8396	492387	1647	193024	682	65403	1446	125719	12171	876533	21,1%	9,86%
2005/06	8394	498073	1571	190327	676	65818	1399	130096	12039	884311	20,9%	9,93%
2006/07	8810	521258	1606	196776	673	66627	1443	135553	12532	920214	21,76%	10,39%

Table 16 - Statistics related to the private kindergartens in Italy

Through such data, the number of private kindergartens present in Italy can be estimated. In the biennium 2006/2007 was equal to 8.810: such value is the available market.

Served Market

For the definition of the served market in the market of kindergartens, the field of application of Caremi is reduced to the only kindergartens school situated in Lombardy. This restriction is motivated by the fact that the company is currently present in the market of furniture through retailers, distributors, and a single brand shop mainly in Lombardy.

REGIONS	KINDERGARTENS					PRIMARY SCHOOL				
	SCHOOL	SECTION	CHILDREN		Teachers	SCHOOL	CLASS	PUPILS		Teachers
			Male and female	Female				Male and female	Female	
Piemonte	498	1.298	31.560	15.454	1.997	78	512	10.991	5.379	1.728
Valle d'Aosta/Vallée d'Aoste	9	23	513	239	48	3	15	346	170	49
Lombardia	1.621	5.708	141.113	68.553	10.059	240	1.782	38.366	18.566	6.522
Trentino-Alto Adige	167	470	10.294	4.989	926	10	67	1.477	716	251
<i>Bozano/Bozen</i>	4	10	183	90	22	1	15	358	183	23
<i>Trento</i>	163	460	10.111	4.899	904	9	52	1.119	533	251
Veneto	1.110	3.719	86.420	42.030	5.331	101	637	13.240	6.542	2.228
Friuli-Venezia Giulia	150	469	10.420	5.102	720	22	124	2.258	1.061	446
Liguria	203	481	10.907	5.241	796	54	304	6.231	3.095	446
Emilia-Romagna	552	1.510	37.157	18.053	2.898	79	530	10.673	5.081	996
Toscana	354	810	19.137	9.430	1.375	88	462	9.630	4.742	1.851
Umbria	86	187	4.172	1.995	327	8	45	877	427	148
Marche	92	221	5.066	2.477	387	18	96	1.767	881	331
Lazio	548	1.306	29.846	14.606	2.205	240	1.387	28.464	13.855	4.361
Abruzzo	124	266	5.952	2.844	474	20	108	2.511	1.263	330
Molise	35	74	1.453	695	140	2	10	238	100	32
Campania	1.237	2.764	54.663	25.675	4.717	361	2.161	40.402	18.837	32
Puglia	564	1.342	26.193	12.616	2.031	68	401	7.885	3.885	6.502
Basilicata	44	94	2.117	1.028	141	3	16	354	168	1.197
Calabria	392	775	14.941	7.021	1.432	29	169	3.119	1.528	42
Sicilia	729	1.345	25.823	12.350	2.185	29	169	3.119	1.528	550
Sardegna	261	587	12.645	6.147	787	150	805	14.829	7.205	2.220
						22	129	2.568	1.236	393

Table 17 - Private schools and primary schools, classes, number of pupils and teachers - School years 2007-08

From Istat³⁷ tables, in Lombardy in the 2008, were present 1.621 Private kindergartens. The number can be considered truthful, in order to define the served market in this context.

After the definition of the three macroareas related to the two markets, it is important to analyze the current competitive situation of Caremi for the “piece of furniture that grows with the child” through the use of the 5 competitive forces model by Porter, in order to identify the most relevant variables and discover the most important areas of intervention.

³⁷ http://www.istat.it/lavoro/sistema_istruzione/Tabellescolastico03.xls

5.3 Competitive analysis

Thanks to the analysis of the 5 competitive forces (internal rivalry, potential entrants, substitute products, customers, and suppliers), the three elements that determine the level of competition in a market are identified: the contractual power for the suppliers and customers, the competition of the sector and the enter barriers for the potential entrants and the substitutive products.

	MARKET OF FAMILIES	MARKET OF KINDERGARDENS
Internal Rivalry	<ul style="list-style-type: none"> • Competition: innovative product bu not completely new. Not a unique object, the competition of similar product produced by other companies is very high • Broader competition: the internal rivalry depends of the companies specialized in children’s product. The special nature of the product increase the competition • Differentiation level of companies and products: Caremi is part of the Furniture District of Brianza, that is specialized in the production of furniture and objects of wood and assure a similar high level in terms of quality and service. 	
Potential entrants	<ul style="list-style-type: none"> • Entry barriers: knowledge derived from the large experience, factor not easily replicable; high image level of the companies of the District, perceived and recognized in all the countries as qualified producers. 	<ul style="list-style-type: none"> • Entry barriers: not so elevated, this fact allows the companies that make similar or lower quality products to enter the market. • Different type of competition: in the kindergartens context the high quality level is not so essential, but factors such as functionality, safety and cost are much more important.

Substitute Products

Furniture and drawers: can be considered as objects that satisfy similar needs, related to the restraint of the objects (toys or, in the case of families, clothes).



Picture 38 Types of substitute products

- They are products realized for children, in which the aesthetic factor is the first characteristic in order to be good looking for the users.
- Containers: similar to the Caremi product and developed for the repositioning of toys. They can be defined as child-friendly coloured containers.



Picture 39 Chicco's container object - Source: Chicco, 2010

- The container beds: solution designed for the repositioning of clothes. It partially resolves the lack of space, because it uses the space under the mattress like a big drawer.

	 <p>Picture 40 Container Bed - Source: Internet</p>	
Buyers and Suppliers	<p>Bargaining power through the value chain:</p> <ul style="list-style-type: none"> • The production is internal and the company works with historical suppliers. The partnerships are independent from the new product, the processes are not a critical factors. 	
	<ul style="list-style-type: none"> • Buyers: low bargaining power that strictly depends on the purchasing dimension. 	<ul style="list-style-type: none"> • Buyers: low bargaining power that strictly depends on the purchasing dimension.

Table 18 -5 forces model applied to Caremi

Through the analysis of the competition, you can notice a strong competition in terms of internal rivalry, due to the presence of a lot of products similar to “piece of furniture that grows with the child” of Caremi. This consideration is strictly related to the nature of the product, in fact it is innovative but not of new conception.

Such a characteristic does not guarantee important competitive differentials into the broader competition nor into the substitute products.

With regard to the potential entrants, in the market of families the company can have benefits in terms of brand image related to the belonging to the Furniture District. Such a fact has lower weight into the kindergartens market, because the considerations about price are much more important.

The company for the product realization relies its usual suppliers³⁸: the supplier of wood panels is the Mauro Saviola Group, the drawer guides are provided by Blum, the hinges are realized by Danco, the aluminium doors are provided by Gruppo Pozzi, and the last important supplier is Mobiltre who provides the doors and the drawers.

³⁸ www.caremi.it

5.4 A Synthetic view: attractiveness and compatibility of the market

Thanks to all the previous analysis other two different dimensions are now taken into consideration: the attractiveness of the sector that Caremi addresses with the “piece of furniture that grows with the child” and the compatibility of the company resources with regard to this kind of business. At the end the variables are evaluated together in a matrix.

In order to make the evaluations in terms of attractiveness four macro-variables are considered: market dimension, market growth, market profitability, and broad competition.

5.4.1 Market of families

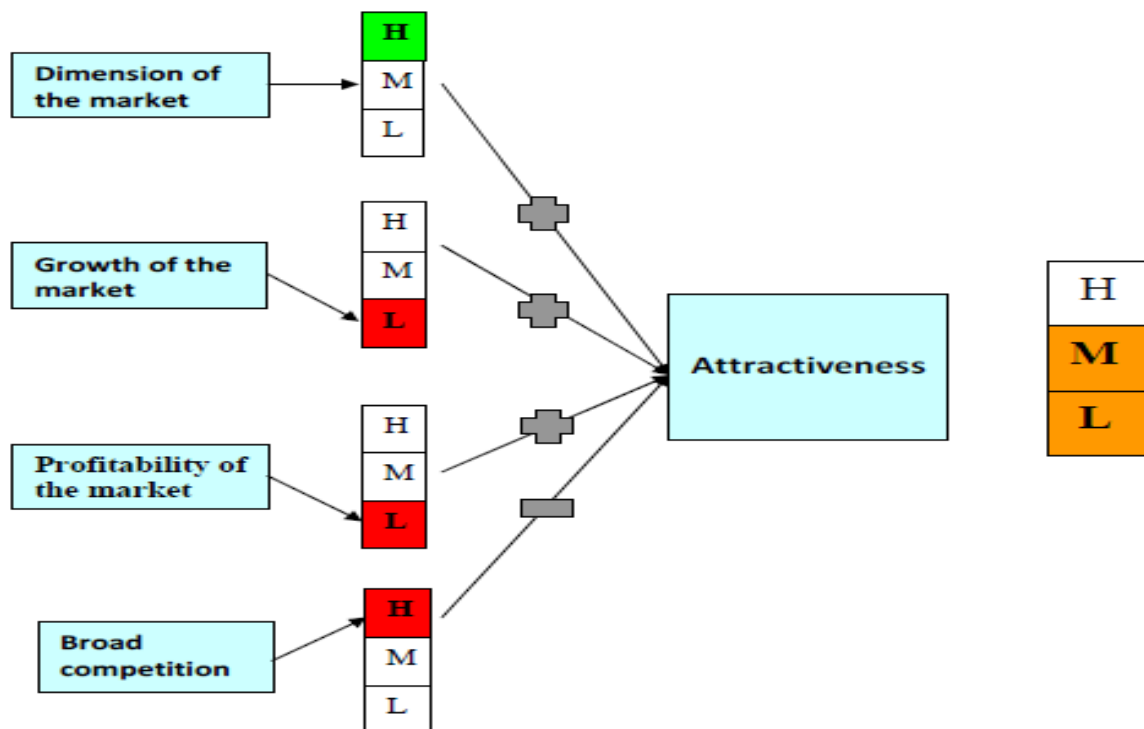
The potential **dimension of the market** seems to be very large, because the product is realized for most families that have at least a child aged lower than 12-14 years. The value estimates the dimension of the market in about 2.500.000 families.

The market do not seem to be very attractive and the drop in consumption of the recent years confirmed this point: between the 2008 and 2009 the sales related to the entire wood-furnish chain has decreased of 18,2%. Assuming an average **growth** rate equal to 4%, in order to get back to the level of 2007 you should wait until 2014, while if the average growth rate will be equal to 3% you should wait until 2016 to obtain the same result.

The **business profitability** is strictly related to the perception that the parents have towards the innovation level of the product. The function of customization and the easiness of use do not justify the high price of the product. In fact, the price will be 180 euro for the standard model and 420 euro for the big one.

With regard to the **broader competition**, it is necessary to keep in mind that the product does not represent an absolute novelty: in the market there are a lot of similar solutions or with different characteristics but that satisfy the same needs. In this case, the high price of the product could also be a possible problem in the future.

Each one of the four variables determines, in a positive or negative way, the level of market attractiveness is altogether medium-low.



Picture 41 Attractiveness in the Family's market – Caremi

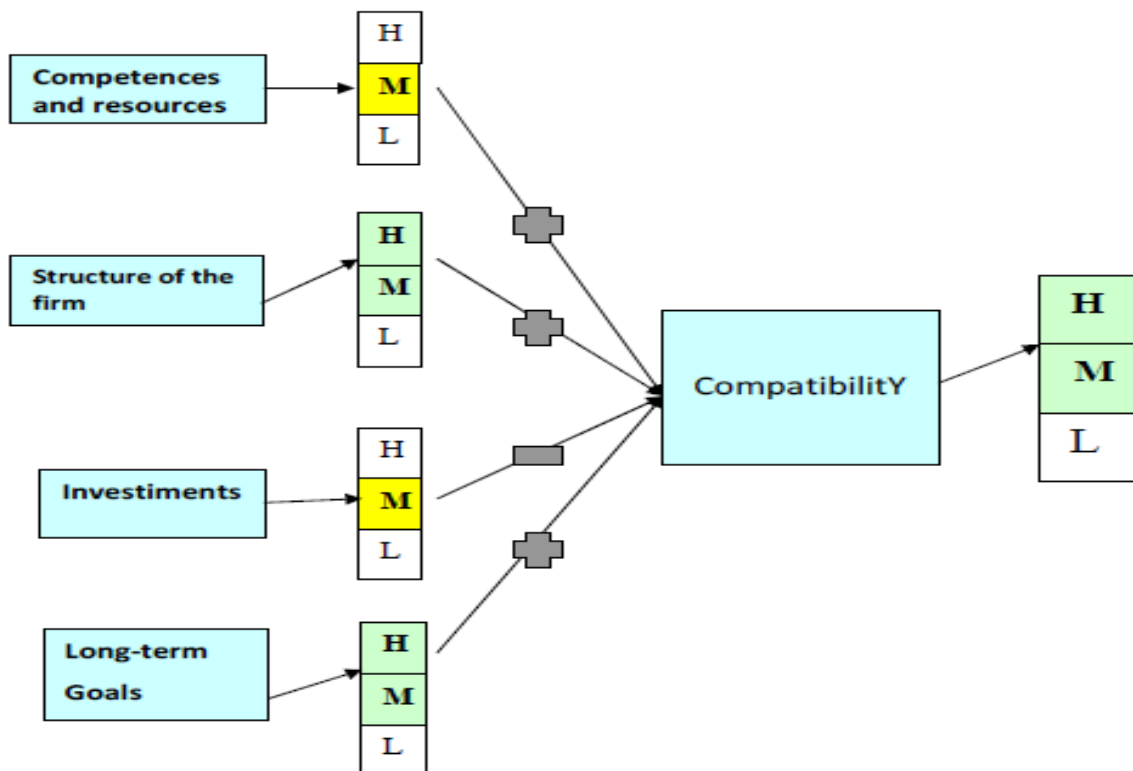
Now the compatibility of the business related to the “piece of furniture that grows with the child” with the company and its as-is internal situation is considered. It means to value the total coherence and thus the effort needed to introduce the new product into the current portfolio. Such a level of coherence is assessed thanks to four variables: resources and competences, company structure, investments, and medium-long term objectives.

The considerations in terms of **resources and competences** are valid for both markets: the company has the necessary resources for the realization of the product, because it has been making wood elements like wardrobes or similar for many years. The production is completely internal and the company controls all the phases without any help from external partner. It is not a new business but it can be defined as an element that can complete and enlarge the actual product portfolio of the company. On the other side, there is a lack of competences for the implementation of the B2C market, which are necessary to implement for example the eCommerce activity. The experiences developed related to B2C are the two single brand shops, while for all the other distribution activities the company has a network of retailers and distributors.

With regard to the **company structure**, some changes in the organization are necessary, including the introduction of a new unit for the coordination of the new sale channels like the Internet. The company is small and is also family run, thus the change can be easier, thanks to the small dimension and to its flexibility.

With regard to the **investments** it is possible to identify different objectives for which the use of different types of resources will be necessary. In fact, the creation of an online sale channel needs some investments in economical, temporal, and personal terms, in order to exploit all the potentiality of the channel. However, the creation of an eCommerce channel justifies the necessary investments because it is also a long term objective of the firm: in fact it is fundamental for the continuation of the business and the image of the firms depends on the effects of its implementation. With respect to the sale channel, deciding to exclusively focus on a quite new channel is a risky and rash choice but, nevertheless, it could reveal as a stimulus for growth. The possibility to promote its own products through the online channel represents an objective of the firm and it is coherent with the innovative level that the company want to achieve, like the creation of a community created to satisfy all the customer requests.

The way the four variables influence the level of compatibility in the market of families with respect to the business related to the “piece of furniture that grows with the child” is then shown graphically.



Picture 42 Compatibility in the Family's market - Caremi

5.4.2 Kindergartens’ market

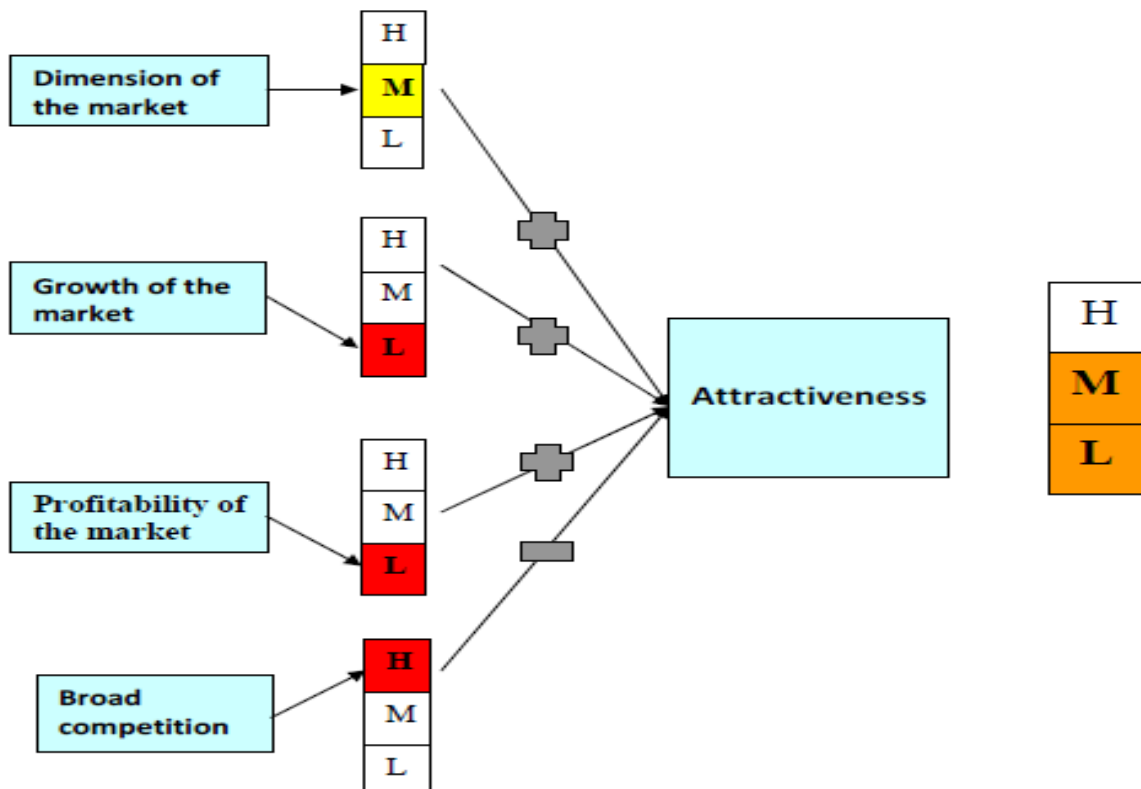
The attractiveness in the market of kindergartens is different compared to the market of families, because the **dimension of the market** is smaller, in fact the number of kindergartens in Italy is about 25000, but the purchase is multiple and not single like in the market of families.

With regard to the **market growth**, the considerations made for the previous market can be adapted also for the context of kindergartens.

The **business profitability** is strictly related to the creation of a strong relationship with a distributor. The quality/price ratio and also the lack of knowledge in the B2C context can be two problems.

With regard to the **broader competition** the same considerations made for the market of families can be shared: in this context, the impact may also be very strong, but it depends on the fact that the competition is widened to all the children’s products that may enter the market of kindergartens.

The graphical representation of the attractiveness of the market of kindergartens is as follows.



Picture 43 Attractiveness of the kindergartens market – Caremi

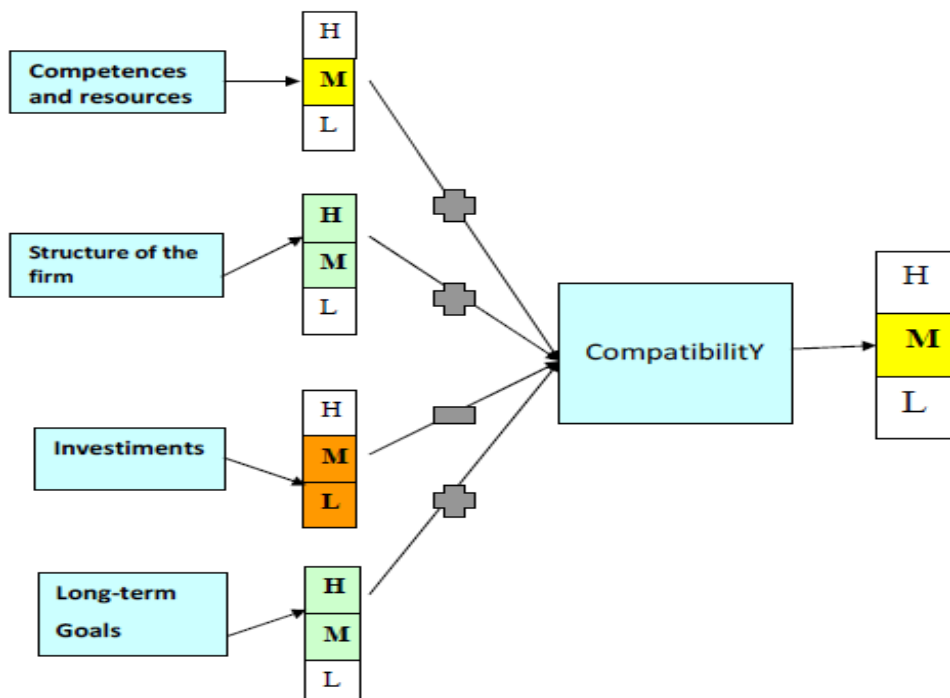
With regard to the compatibility, as mentioned above, the two markets share the same considerations for the **resources and competences**. With regard to the market of kindergartens, another consideration can

also be done about the marketing, because the firm does not have the necessary competences for the direct sale.

The **firm structure** shares the same considerations made for the market of families: in particular the sale in the market of kindergartens will require an adjustment in the organization in order to be able to support the direct sales.

With regard to the relations in the B2B context, the firm will make some **investments** in economic terms: in order to enter in a better way the market it is necessary to support investments in time and human resources in order to fill the gap that actually has in that context. A long term objective is the entry in the B2B market, in order to enlarge its own horizons by exploiting the potentiality of the context of kindergartens. In terms of competition, the company, in particular in this market, must compete with other companies present for years in the market and in order to stand out will have to do great investments, in order to exploit its own competitive differentials in developing direct B2C channels.

The next figure show the effects of the variables taken in consideration for represent the level of compatibility of the kindergartens market.



Picture 44 Compatibility in the kindergartens market – Caremi

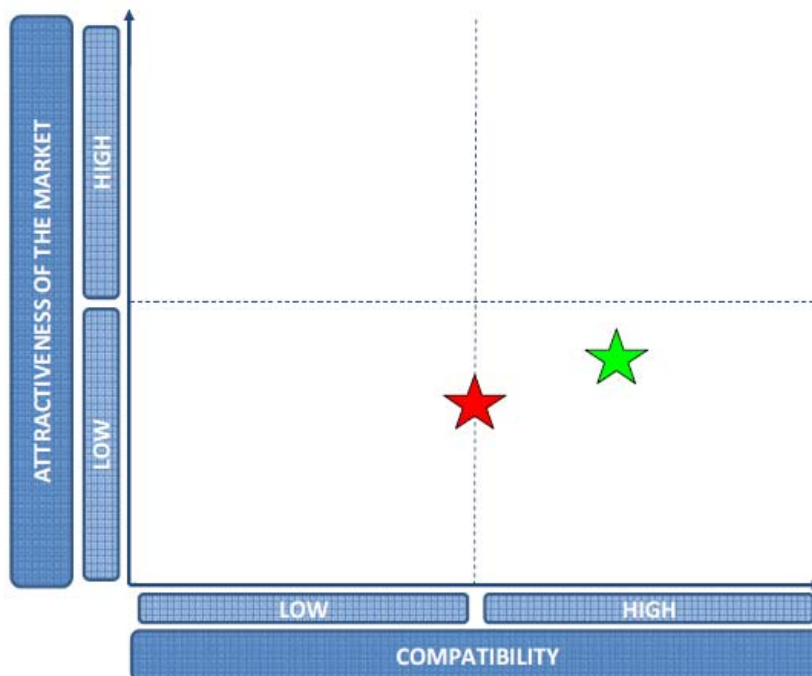
The analysis of the compatibility can be deepened through the evaluation of the strengths and the weaknesses of the “piece of furniture that grows with the child”.

As strength can be considered the modularity and the adaptability of the product. The object made by Caremi has the characteristic of integrating in and adapting to all the environments in which is placed. It can be used both horizontally and vertically. The simplicity of use and movement can be considered as another strength, in particular for the characteristic of having an opening of 360° through a sliding door that facilitates the use. The presence of wheels can also facilitate the movements. The last strength is the customization: the object can be customized through pictures or photographs and can be decorated and coloured directly by the child because it has drawable sides.


A weakness is represented by the fact that the product is not completely new, because it is not a radical innovation but only an incremental innovation. It adds only some characteristics to similar elements that are already present in the market. With regard to the design, the aesthetical characteristics of the product are found to be unsatisfactory at the moment and also not particularly attractive in the perception of the protagonists of the focus group (see par. 5.5.2).


The quality/price ratio is the last weaknesses: the customers often use it as a term of comparison. The economic component is very important in both the two contexts and the presence of other elements with lower price is real.

Thanks to all these elements is now possible to build the attractiveness/compatibility ratio



Picture 45 Attractiveness/compatibility matrix referred to Caremi

The result obtained for the family market  shows that the company in this context is characterized by a medium compatibility and a low attractiveness. The quadrant where the product is identifies all the products that have a high coherence level with the firm’s activity but have the disadvantage to be developed for a very competitive market without or with few opportunities of growth.

The result obtained for the kindergartens market  is worst than the family one, because it is characterized by medium level of compatibility and a low attractiveness level. The products in this context are coherent with the firm’s activities but are developed for a closed and very competitive market that has few opportunities.

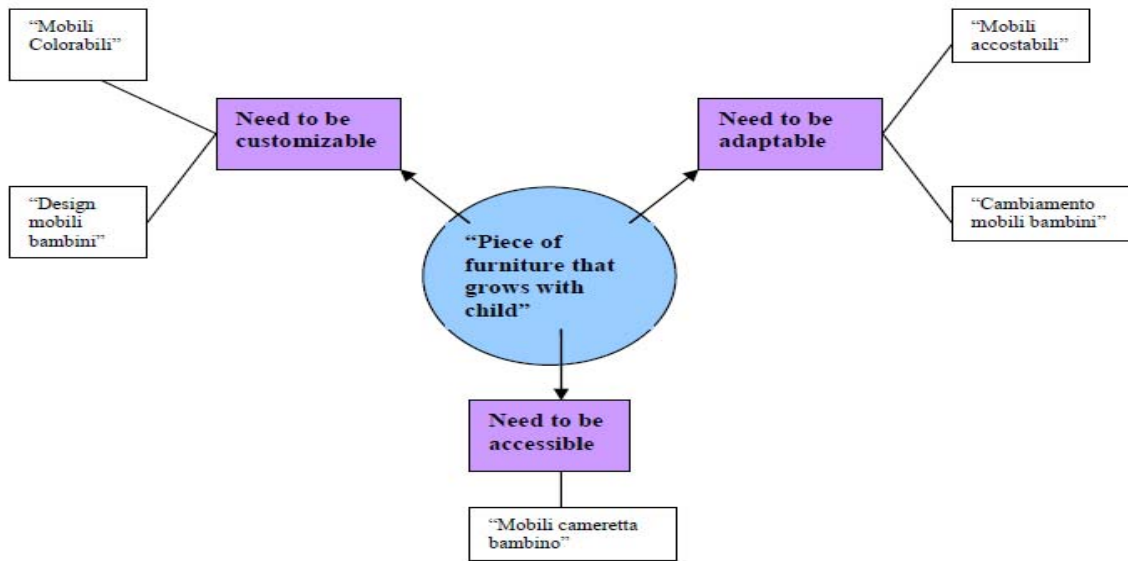
The next necessary step is an effective development of the product and the channels in order to create competitive advantages, especially in the context of kindergartens.

5.5 Micro-analysis of the demand

In order to understand how the “piece of furniture that grows with the child” satisfies a perceived need and estimate acceptance level, heterogeneous sources are developed for the analysis. The level of perception of the need in the market can be understood through the analysis of the blogosphere and the focus group with parents; the focus group is also used for estimating the acceptance level of the product with the pleasantness test done in the Happy Child kindergarten. With regard to the market of kindergartens it is important to mention the interview with Architetto Erba, purchasing manager for Happy Child.

5.5.1 Blogosphere analysis

In order to analyze all the information represented in the blogosphere it is important to use a conceptual tree, made with all the needs that the product aims at satisfying and for each one of them some of the words that better define it.



Picture 46 Coceptual tree used for the blogosphere analysis - Caremi

The first step consists in analyzing from a gross point of view the size of the phenomenon inside all the blogs.

It is important to notice that the research is influenced by the word “mobile”, because in English the meaning of the word is completely different from the meaning that that terms has in Italian. For this reason, a lot of blogs are not useful for the research and the blogosphere analysis assumes different connotations compared to the classic one.

Hence, in order to complete the macro analysis, the use of another search engine called Liquida is necessary, which mostly considers the blogs and posts in Italian, in order to achieve a coherent result with the context of the research. The analysis investigates the macro-needs, with the aim of obtaining the effective weight for each of them into the Liquida search engine. The time horizon used is related to the last 6 months, specifically for the period that goes from April to October 2010.

The chosen word are in order “mobili personalizzabili”, “mobili accessibili” and “mobili adattabili”. The research of the expressions and not of the single words can detect only the most coherent post with the context investigated.

For the three key expressions the presence into the blog analyzed is very low, only few posts. The deduction derived is that, despite the presence of the double meaning of “mobile”, the three needs are not felt in a strong way by the market.

The analysis at a deeper level considers then the main links collected in order to study more in detail the perception of the needs of the “piece of furniture that grows with the child”. In doing so, only the blogs that appear over and over again in the analysis of the needs are taken into account, with a list of the most present “roots”. At this point the level of presence of the needs into the blogs could be evaluated.

KEYWORD	MAIN LINK	CONTENTS OF THE BLOG
“Mobili colorabili”	http://mercatinodepiccoli.com	Buying and selling objects
“Design mobili bambini”	http://www.desainer.it	Design
	http://www.designperbambini.it	Stories and reports
	http://mammaoggi.it	Children and culture
"Utilizzo mobili bambini"	http://www.blogmamma.it	Famiglie, maternità e giocattoli
	http://www.nidodiale.blogspot.com	Children, families and games
	http://blog.fotoregali.com	Design, Art and furniture
"Cambiamento mobili bambini"	http://mammaoggi.it	Children and culture

Table 19 - Main links in which the keywords are present - Caremi

In order to separately analyze the most significant posts, the same order used for the macro-needs analysis is maintained, and than the most significant steps related to Caremi’s object are underlined.

With regard to the necessity of customizing the furniture, the needs to use warmly and lively colours is perceived, because it is possible to modify the aspect of the furniture in every moment, both before and after the purchase.

“Il sito da la possibilità di personalizzare i comodini con i colori che volete. Anzi, anche se non li volete acquistare, vi consiglio di divertirvi a combinare i colori...io mi ci sono divertita molto”.

<http://mercatinodepiccoli.com/2010/06/21/facebox-i-comodini-con-la-faccia/>

The concept of the design is highly perceived by the people that write posts present in blogs. The fundamental characteristics that the furniture must have are strictly correlated to the look, the space and the safety.

“Regola n°1: la scelta del colore. Il colore è fondamentale per conferire alla camera un aspetto gioioso. Tuttavia è bene chiedere un parere ai vostri bambini, che si sentiranno certamente più a loro agio in un ambiente dal colore gradito.

Regola n°2: spazio ai giochi! Sappiamo quanto sia importante il guardaroba, la scrivanie ed il letto (elementi funzionali di una cameretta), ma non dimenticate di lasciare al vostro bambino uno spazio da dedicare esclusivamente ai suoi giochi.

Regola n°3: dopo aver arredato la camera accertatevi che non vi siano spigoli o elementi all’interno della stanza che possono rivelarsi pericolosi”.

<http://www.desainer.it/curiosita/idee-per-arredare-la-camere-dei-bambini.php#ixzz134RFstnP>

The needs related to the use of particular colours for the customization of the bedroom is a characteristic that is shared by a lot of posts and is present in almost all the blogs that talk about children and their objects. For this reason it must be considered as the most important element in the modern design context related to the children’s objects.

“Poi avevamo un vecchio armadio del Doc, grande e di legno come non ne fanno più. Era bianco ma un po’ rovinato. Ho chiamato una mia amica che fa la restauratrice (una parolona) e abbiamo individuato i colori.

Da lì l’idea di colorare anche la stanza ma non troppo: tre fascioni alternati che non prendono neanche mezza parete; poi il Doc ha pitturato il lettino allungabile di Leo di arancio, un tavolino nei due colori e una Ivar per i libri e i giochi dei bambini. Il lettino di Picca è rimasto color legno ed è il mio lettino di quando ero piccola”

<http://www.designperbambini.it/2010/09/a-casa-di-mamma-cattiva/>

The word design is often an indicator of novelty, used to identify innovative elements in order to attract new possible customers through particular characteristics that stimulates the creative part and also the attention of the individual. Hence, there is the necessity to research elements with different looks, far away from the concept of “classic”.

“Mobili neri, borse con i manici a più livelli, seggioloni che si trasformano: care mamme, l’universo pensato per i nostri bambini si sta riempiendo sempre di più di oggetti dove il limite tra utile e curioso è sempre più labile”.

<http://mammaoggi.it/news/attualita/mamme-e-design>

With regard to the concept of “accessible furniture”, the posts point out the parents' necessity to allow their children to be independent when deciding if and when to play with their toys that are into the wardrobes. Hence, in order to easily do these actions, the child should use these elements without particular problems.

“Da quando Dafne è libera nei movimenti, la cameretta è strutturata in modo da soddisfare le sue esigenze di spazio per muoversi, gattonare e camminare e anche per poter prendere autonomamente le cose che le appartengono. Secondo quest'ottica, dunque, abbiamo sistemato dei mobili piccoli, funzionali e alla sua portata, in modo che possa prendere da sola i libri che vuole sfogliare, scegliere i suoi giocattoli (proponendoli a rotazione), scrivere e disegnare con i pastelli”.

<http://www.nidodiale.blogspot.com/search?q=mobili+bambino>

The previous concept should be considered in parallel with the concept of safety, both for the use and for the type of materials used.

“L'unica accortezza è acquistare mobili a prova di bambino, con i materiali adatti, tinte anallergiche, resistenti ai giochi dei più piccolini che si scatenano nell'impeto dei loro primi entusiasmi.”

<http://blog.fotoregali.com/2010/07/camera-a-misura-di-bambino/#ixzz134WYgJll>

The necessity to be adaptable is strictly related to the factor of growth and development. Is not possible to think that a furniture, or another element present in the bedroom of a child aged 2-3 years can be considered aesthetically and functionally valid when the child will have 15 or 16 years. The necessity to have a furniture arranged for the transformation and the change is real.

“..il locale deve essere predisposto in tal senso, se non almeno, avere le potenzialità per una futura trasformazione ...”

“E' bene ed essenziale, che la camera, rispetti appieno, o almeno al possibile, le esigenze presenti e future del suo inquilino”

<http://mammaoggi.it/bambino/come-preparare-la-cameretta>

The conclusion is that the needs related to the purchase of a furniture similar to the Caremi's one have just a little space into the blogosphere and thus into the national market. The needs considered are real only for a minimum part of the blogosphere. Nevertheless, other interesting points are considered, such as the need of researching some elements with lively colours and the need of using suitable materials, in order to avoid possible dangerous situation for the child.

5.5.2 Focus group analysis

In this stage, the answers obtained from the parents during the focus group are analyzed, in order to find out which are the needs that clearly came out during the conversation. After that the level of acceptance is studied, by analyzing the sensations and the considerations obtained after the showing of the prototype. After the study of the variables, they are then put in relation with each other through the use of a matrix with perceived need-acceptance level.

Perceived needs

With regard to the needs previously analyzed through the blogosphere, the parents that participated to the focus group were subjected to precise demands in order to validate or not the importance given before. During the debate no significant details related to the need of the children to directly customize or modify the furniture emerged. Such a need came out only after the product was showed. Then the parents commented on the possibility to personalize the object with colours or pictures. The most underlined need is the necessity to possess a furniture that can contain some elements of the child, like clothes or toys, which must be easily accessible by the children. The necessity of adaptability of these elements was perceived only by few parents. Some aspects that were not taken into consideration at the beginning came out later, like the need of protection in order to avoid dangerous situation for the child. The needs related to the change are strictly connected with the functional aspects, in fact a furniture is changed if it is not large enough and if the needs of the children that grows are no more satisfied.

INVESTIGATED NEEDS	SENTENCES EMERGED FROM FOCUS GROUP
<p>Search for an object that can be adapted to the context and the child’s age</p>	<p>“We adapt the furniture to the child’s age period to period, with the change of the internal divisions” S.</p> <p>“Until the 3rd years, a big drawer was sufficient for the repositioning of all the items of the children; now that they have their own bedrooms they also have a bigger furniture and I think it will be used until they are 10 or 12 years old.” Z.</p>
<p>Having an object for placing all the child’s items where he/she can use or find easily</p>	<p>“They have always had their own furniture, unique for both, not so big because there is not a large space ” M.</p> <p>“My son always had all the products in his own bedroom and into his furniture that is big enough” C.</p> <p>“He has all the objects in a drawer in the bathroom” G.</p> <p>“My children have always had their own space, in their own bedroom and in their own furniture. Before, in the previous house, they had a unique wardrobe with two doors, one for the girl and one for the boy. At the beginning when they</p>

	were young our clothes were also placed in, because of the lack of space. Now, in the new house, we have two different wardrobes” S.
Protection in order to avoid dangerous situations	“I prefer that my son does not play in his bedroom alone, I prefer that he plays in the living room where I can look at him” C.
The change of the children’s wardrobes	“I will change it for functionality but without neglect the aesthetic level” Z.
	“I will have to change them because they are small and I have too much things” S

Table 20 - Needs perception derived from Focus Group

For all the reasons described, the needs of adaptability, accessibility, and customization related to the “piece of furniture that grows with the child” can be considered as on average perceived by the leading actors of the debate.

Acceptance level

After the presentation of the prototype, the parents pointed out some critical elements. All the participants observed in a doubtful way the object and the major considerations are related to the lack of perception of the value added of the furniture. The comments about the aesthetic aspects and in general about the look of the structure design are all negatives. The object does not reveal distinctive features but raises doubts and questions related to the not modern shape and to the structural weight considered too massive. After the demonstration of the functioning, there were some doubts related to the facility of use, because the movement and most of all the opening do not appear suitable.

The unique element perceived as interesting is the possibility of customization: as mentioned before this factor is perceived by parents like an additional value and not as an aspect intended to fit a real need.

FACTORS CONSIDERED	PHRASED EMERGED FROM FOCUS GROUP
Aspect	“I would consider it as a container for clothes, for toys, or maybe for a part of wardrobe” G.
	“It seems a toys container, the wheels facilitates the movement and from the photo seems to be a model that can be customized” M.
	“I don’t understand what it is. It remind me the magician’s game. Maybe I could use it for the dirty clothes” C.
	“It seems heavy, it has something that reminds me the 70s, but maybe I am speaking as an architect and not as a mum” S.
	“Can you put one over the other?” Z.

<p>Perception of the value added of the furniture and considerations about negative or missing aspects</p>	<p>“I can’t see an additional value compared to the other products that are presents in the market. I think it can be used only for the first months of life, because there isn’t an intermediate phase. I think that I should pass from 1 unit to 3-4 units together. At this point, buying at once a furniture big enough is better”</p>
	<p>“I don’t like it, because today, I need one and I would buy only one, but 2 years later? If it isn’t in the market anymore, I will not know what to do” C.</p>
<p>Aesthetic aspects of the structure’s design</p>	<p>“It doesn't seem to me so beautiful and suitable” Z.</p>
	<p>“The structure is too massive, moreover such a product should be a sort of pride to show to guests, this thing absolutely doesn’t have this property” S.</p>
<p>Easiness of fuse and functionalities of the object</p>	<p>“The opening might be better, I should be able to open it with a finger, because with this popery the child can also open and use it alone, and have a direct access to his things” G.</p>
<p>Customization of the object</p>	<p>“I like so much the photography idea, because the child will have something that remembers his childhood. The customization’s idea is good, it is an interesting and relatively new idea. Moreover, it is positive, because I like the old things” G.</p>
	<p>“Yes, also for me the personalization of the object is an interesting thing, the idea that the child can draw pictures or figures on the furniture is interesting, maybe I’ll also buy one for me because I like the customization process and also because my son can have a lot of fun with it” M.</p>
	<p>“Yes, it is a positive idea, but then I would have to teach which furniture he can colour and which ones can not” Mp.</p>
	<p>“It should be much more like Ikea products, with the right trade-off between beauty and weight. For the customization, my sons will start drawing on the entire house and I absolutely don’t like it” S.</p>
	<p>“It seems like coffin” C.</p>
<p>Possible uses</p>	<p>“ It seems suitable for the positioning of the TV, or like a DVD container” C.</p>
	<p>“I’ll buy it after deciding where I can use it, maybe in the bathroom” G.</p>
<p>Pricing and purchasing propensity</p>	<p>“Yes I would buy it, but for 200 euro I’ll think about much more. Maybe with a different look, a more sliding opening, finished with other colours, full of photos, I would buy it” G.</p>
	<p>“Only if it was more a designer object” S.</p>
	<p>“No, I wouldn’t buy it” M.</p>

Table 21- Acceptation level of the Focus Group - Caremi

After the use demonstration of the product, the majority of the participants to the debate showed a doubtful expressions (Z.,S.,M.,Mp.,Gp.), and almost all were quite disappointed. Only a participant (G.) showed, at first sight, an air of surprise, looking at the object with outward positivity. Another component of the debate (C.) showed the worst expression ever. She also shook her head, while was looking the others in search of common approval.

During the debate, the components maintained the initial perceptions until the speech has come to the variable of the price. Here, the possible introductory price was exposed (200 Euro). The totality of the leading actors putted on an air of resignation, they appeared confused and doubtful, and also the only figure that showed an interest (G.) in this phase changed his mind and also showed doubt by withdrawing repeatedly the head.

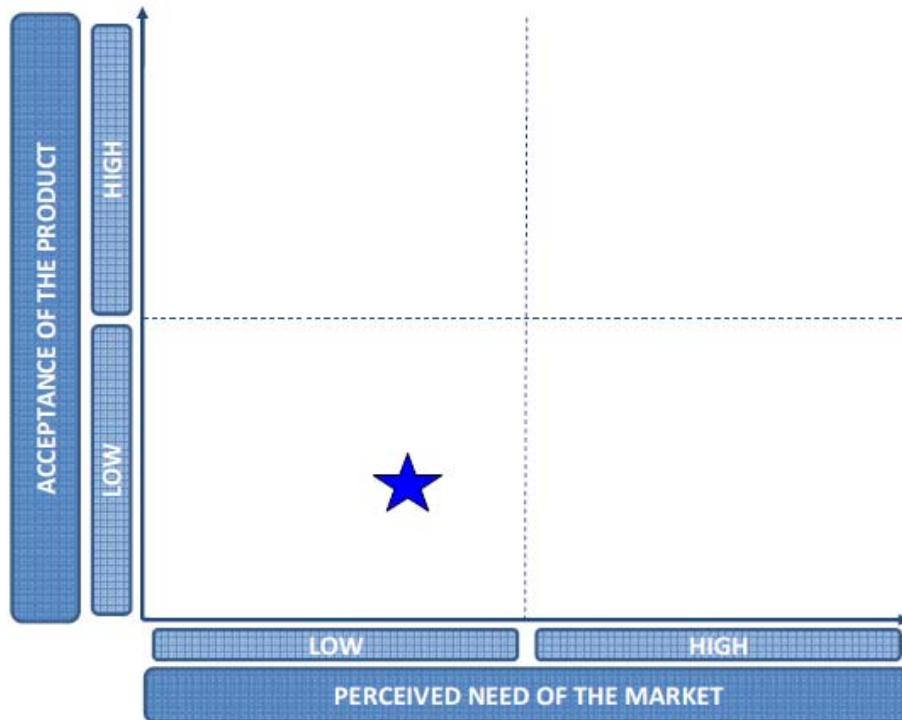


Picture 47 Focus group of Caremi

At the end of the focus group, the only useful element that received positive opinions was the personalization of the product. However, only this factor can not compensate the doubts expressed during the debate for almost all the topics considered. The structure is considered too massive, the design is not suitable, and the price is too high. For these reasons the acceptance level observed through the focus group can be considered low.

5.5.3 The perceived needs/acceptance level matrix

Once studied the two variables, one related to the perceived needs (defined through the blogosphere analysis and the focus group) and one related to the acceptance level (defined by parents during the focus group), a connection is established through a matrix.



Picture 48 The perceived needs/acceptance level in the family’s market - Caremi

With regard to the X-axis, the positioning was established as the mean between the value considered extremely low of the perceived needs obtained through the blogosphere analysis and the medium-high value of the same perceived needs studied through the focus group analysis. With regard to the positioning of the Y-axis, the acceptance level related to the focus group, which is considered as extremely low, has been considered. The final result obtained for the market of families is a low acceptance level combined with a medium-low perceived needs level. This value is caused by the several negative aspects perceived by the parents during the focus group analysis: the needs were not satisfied after the view of the product, from both the aesthetic point of view and the functional point of view of the prototype of the “piece of furniture that grows with the child”.

Ethnographic analysis – Pleasantness test

The pleasantness test was realized by showing the “piece of furniture that grows with the child” to some children in the Happy Child kindergarten. Some of them have approached the furniture of Caremi and, encouraged by teachers, tried to open it, by sliding the flexible panel: a lot of children have had some difficulties, because the opening mechanism was not very handy. At the beginning, they did not observe the internal space because their concentration were on the opening system; when they discovered it, almost at the end of the test, they did not use the space as a space for placing the toys but they entered into it. At this point, almost all the children came to the furniture in order to try that particular “game” but nobody of them noticed the possibility of colouring the figures or the possibility to customize the object with pens or pencils. In the case of Caremi is clear that the interest for the object is due to the novelty instead the real comprehension of the functionalities. The children did not perceive in a complete way the real use and objective of the “piece of furniture that grows with the child”.



Picture 49 Pleasantness test of Caremi

Interview with architect Erba

In this phase the focus is on the analysis of the answers obtained during the interview with Architect Erba, purchasing manager for Happy Child, in order to identify the needs related to the kindergartens. Afterwards the acceptance level is studied, through the analysis of the sensations and the reflections profused.

Expressed needs

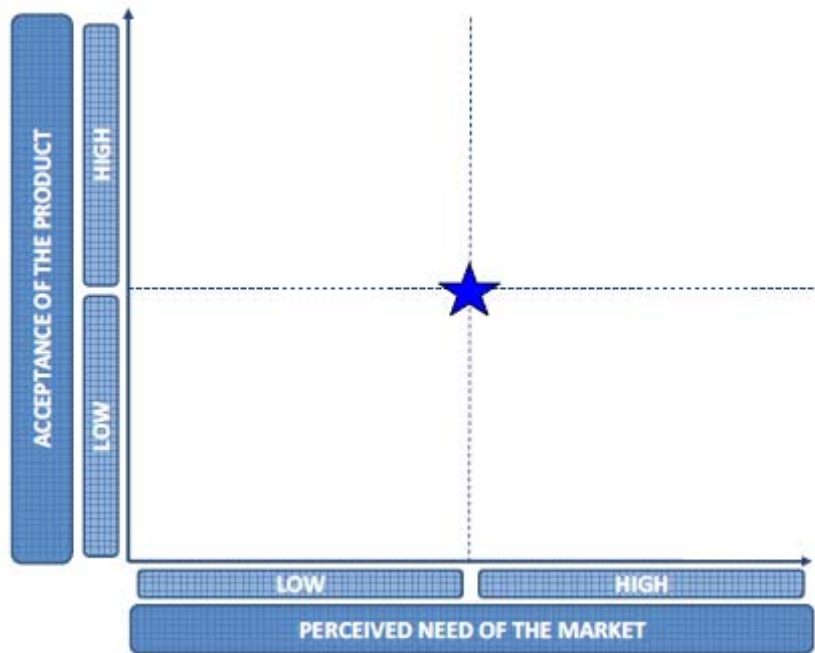
In kindergartens there is the necessity to have a product realized for the containment of the various toys, with which the children are in daily contact in the structure, for example constructions, mini-cars, toy soldiers and similar elements. In the context of families, *“the growth and the different types of clothes creates some problems for mothers, because there is the necessity to adapt the wardrobes according to the child’s age”*. In the first phase, the necessity to have a wardrobe with shelves is real. The wardrobe is horizontal, while during the growth the clothes will be bigger and thus the necessity to have a wardrobe that can be used also in a vertical position shows up. Through the product, which is modular and flexible, the problem would disappear. The added value is the possibility to customize it, through the introduction of pictures or photo into two transparent membranes in order to modify the furniture. The customization need is real and if the Velcro system works, the children could choose what apply and where apply it in according to the phases of their life. *“It’s a thing that could be appreciated by both children and mothers. The need to change the finishes is real”*.

For these reasons the need is to be considered real but marginal for the context.

Acceptance level

In a kindergarten there are some containers for toys and, in taking into account the aesthetic aspect of the environments, the fact of having objects and container elements of different sizes can contribute to embellish the rooms. The object of Caremi can facilitate the order and create a suitable mood for the context that can be easily changed through the use of different finishes. The economic aspect is not very important, because if the element can bring benefits then the price sensitivity substantially decreases.

For these reasons the object can have a high acceptance level in the context of kindergartens. As explained, the value assigned is medium for both the perceived needs and the acceptance level.



Picture 50 The perceived needs/acceptance level in the kindergartens’ market - Caremi

The firm must improve fundamental elements such as the functionality, the easiness of use by the child, and most of all the aesthetic and design level, which is a fundamental feature in order to be able to attract the attention of the customer; this aspect is at the moment particularly poor. The need to have an object with such characteristics is real in the context of the kindergartens but at the moment, like in the context of families, the product of Caremi does not seem to satisfy all the needs required.

Suggestions for improvement

In this section the analysis focus on how the “piece of furniture that grows with child” can be improved in order to make it more appreciated by the market according to the indications that come from the market itself. The sources used are the blogosphere and the focus group.

Needs/criticalities from the blogosphere

- More attractive aspect and colours: the coloured furniture satisfies more the aesthetic requests done by parents and children.
- order is real.
- Safety: it is a broadened concept, because it means safety in terms of functionalities related to the use and safety in terms of type of materials with which products are manufactured.

Wardrobes and furniture placed in the children's bedrooms are in general nice and charming when they are coloured and the fact that they can be fancy does not imply a lower quality level or a lower durability.

Caremi's object has the possibility to be more coloured, thus this fact increases the initial pleasantness level.

The concept of space is strictly related to the size of the bedroom. The necessity to have an object that can maintain and also increase the level of order is fundamental, especially in small environments. In such contexts the "piece of furniture that grows with the child" seems to be coherent with the necessity described by blogs.

The safety aspects are fundamental when you purchase for your child a piece of furniture, which has to be made of suitable materials, if possible with anallergic dyes, resistant to the games of the children that can use it in a wrong manner. At the moment, in this context, the object of Caremi has some weaknesses, because the opening system is not so easy to be used and the metallic stripe on its extremity is not so safe. The weight is also another negative aspect that should be changed or modified.

Needs/criticalities from the focus group

- Possibility to be dismantled in some parts: in order to facilitate the daily actions as the positioning of toys or clothes.
- The structure: the weight and the structural parts must be modified, at the moment the object is too heavy and the structure too massive.
- The design: aspect that is strictly related to the concept of innovation and that currently is the most lacking aspect in Caremi's piece of furniture; in fact the customers are attracted by this feature and only after that by the functional aspect.
- The functioning: the side opening is considered by parents not so fundamental, maybe also too complicated and difficult to be used by children.
- More appealing look and transparency: some members of the debate underlined how the transparency can be useful in order to improve the perception of the object.
- Customization: aspect positively considered by parents, the possibility to insert photos and the possibility to colour it was appreciated.
- Horizontal movement: the use of wheels is considered useful in order to facilitate the movement.

The changed proposed by the parents is related to the possibility of opening the lateral side of the object: in this way, it would be more easy to be used, especially for piling up the clothes, in order to use it like a big shelf.

The difficulty with which the piece of furniture was positioned on the table (during the focus group) aroused a lot of questions and negative considerations. The parents often used the example of the wardrobes made by Ikea: the object of Caremi has an higher quality level but the design must be improved.

With regard to the design, the low development level is considered the biggest problem. Few parents, particularly disappointed by the product, used depreciative terms like: "It seems a coffin" or "It recalls the magician's game".

The 360 degrees opening system was not particularly considered by the parents but created some doubts, in fact it seemed too difficult and strong, thus not suitable for children's strength.

The aspect related to the personalization was appreciated by most parents even if someone had some doubt about it because it would be difficult to explain to the child which piece of furniture can be coloured and which can not.

The horizontal movement due to wheels is another factor that was approved by all the parents.

5.5.4 Stimulus/response model

In order to analyze the purchasing process the model used is the so called "stimulus-response", which is based on 3 variables: product knowledge, sources of influence, opinions and behaviours. This analysis will allow to understand the dynamics that rule the choice of buying or not the product.

	MARKET OF FAMILIES	MARKET OF KINDERGARTENS
Product knowledge	<ul style="list-style-type: none"> Stimulus related to children: adaptability, quality, aesthetic of the furniture, innovation. Product knowledge through different sources: other people, experts and associations, communications received from the firm, website and community. 	
Sources of influence	<ul style="list-style-type: none"> Personal factors Innovation perception Cultural/Information level 	<ul style="list-style-type: none"> Personality of principals/purchasing managers
Opinions and behaviours	<ul style="list-style-type: none"> To affect opinions and behaviours through the communication of the differential elements of the product. 	

Table 22 - The Stimulus/Response model applied to Caremi

With regard to the **product knowledge**, the external stimuli belong to the context where the subject lives and can be very different; in particular they are related to the market of furniture for children and linked to factors such as adaptability, product quality, and aesthetic level of the furniture. Recently, the innovation

factor has increased its importance in the context; in this respect the customer is now an active part in the new idea implementation phase. The information related to the the product can be reached through parents, relatives, friends, experts, associations, or the firm itself (through for example the advertisement or an effective website combined with an active online community). The purchase of the object implies the understanding of the innovation characteristics related to the concept of furniture that grows with the child in order to be always suitable.

With regard to the product by Caremi, there are different kind of factors that can constitute the **sources of influence** and they are different depending on the two context. In the market of families there are personal factors, such as age, occupation, or economic situation, that can influence in a decisive manner the future choice. The product is in a medium-high price range, which needs that the same is true for the perception of the innovative aspects. The different types of personality that the customers have can also affect the purchasing time of the element, slower for the sceptical or faster for the impulsive ones. In the market of kindergartens, there are strictly personal factors that characterize the purchasing manager, while the economic situation of the kindergarten does not seem to heavily affect the choice.

Like for the market of families, the personality can act as an element that speeds up or slows down the purchase: for example a young purchasing manager that is particularly careful about novelties can be much more easily attracted by the offer compared to an old one, devoted to his suppliers and to classic objects.

The **opinions and behaviours** that parents develop are fundamental, hence Caremi shuold create into their customers a positive sensation with respect to the product purchase. The firm should propose an offer that results different compared to other products that are on the market through the promotion and the awareness of the figures described above.

5.5.5 Purchasing process

Here is described the purchasing process of the “Piece of furniture that grows with the child” is divided in 5 steps.

	MARKET OF FAMILIES	MARKET OF KINDERGARTENS
Identification of the problem	<ul style="list-style-type: none"> Latent need: long lasting product which fits well into the growth phases of the child. 	<ul style="list-style-type: none"> Relative need: increase of the perceived service level, with economic and image improvements.
Research of information	<ul style="list-style-type: none"> Internal research: past experiences related to the product. External research: personal resources (for example experiences of friends) and research through different channels (such as spots, Internet, salesmen). 	

<p>Valuation of the alternatives</p>	<ul style="list-style-type: none"> • Comparison: analysis of the most important elements for the final decision (for example: the price, the quality, the performances, and the brand). 	
<p>Decision of the purchase</p>	<ul style="list-style-type: none"> • Where: retailers, single brand shops, possible implementation of the eCommerce platform. 	<ul style="list-style-type: none"> • Where: salesmen that directly contact the structures in order to propose the product through catalogues.
<p>Behaviour post-purchasing</p>	<ul style="list-style-type: none"> • Comparison between the level of satisfaction of the product bought and the own expectations. • Repurchase of the product if the customer is satisfied. 	

Table 23 - The purchasing process of Caremi

The phase of the **identification of the problem** shows different characteristics in the market of families and in the market of kindergartens. In the first case there is a latent need, typically perceived by parents, who decide the purchase of a long lasting product that fits well into the growth phases of the child. In the case of kindergartens, the phase begin with the recognition of a relative need, when there is the necessity to introduce an object able to increase the perceived service level with improvements in economic and image terms.

The next step is the **information research**, which can be analyzed only once for both the contexts. The customer first relies on the internal information research if they have had a similar experience. In this respect Caremi needs to create products with a high quality level joined also with a high service level, in order to maintain through years a positive feedback. With regard to the external information research, the customer uses its personal resources related to the past experiences of the people who are near him but most of all researches information through salesmen, advertisements, websites, and reports. In this respect, the company must invest in terms of economic and temporal resources in order to exploit such tools.

The **evaluation of the alternatives** results basically similar for both the markets. It consist in an analysis made by the client of the features that in his perception are crucial for the final decision. The most important are the price, the quality, the performances, and the brand. The firm must focus on the distinguishing characteristics. A reason for the choice could be the quality of the product combined with the concept to be child-friendly.

The **decision of the purchase** is different for the two markets. In particular, with regard to the sales channel, for the market of families Caremi have to rely on its retailers and on its single brand shops

combined with the implementation of the new online channel. The importance of achieving a simple, clear, and functional virtual platform is the new element and it is considered necessary for the complete marketing of the product. The market of kindergartens will be served through salesmen, who will directly address the schools with the offering of the “piece of furniture that grows with child”. The product should be a vehicle in order to enter into the market with all company's products.

The considerations about the **post-purchase opinions and behaviours** are common for both the contexts. In fact, for both the two typologies of clients a comparison is made between the expectations before the purchase and the satisfaction level after the purchase. For this reason, it is very important that the firm, especially in the first phase, takes a flexible and open attitude in order to improve its offer. The customer's awareness about the properties of the product is very high and the satisfaction-dissatisfaction level may have effects on the possible future repurchases.

5.5.6 The roles inside the purchasing process

ROLES	MARKET OF FAMILIES	MARKET OF KINDERGARTENS
Initiator	<ul style="list-style-type: none"> • Parents (in direct way) • Child (in indirect way) 	<ul style="list-style-type: none"> • Purchasing manager
Influencer	<ul style="list-style-type: none"> • Background actors (relatives) 	<ul style="list-style-type: none"> • Teachers/parents
Decision maker	<ul style="list-style-type: none"> • Parents 	<ul style="list-style-type: none"> • Principal/purchasing manager
Purchaser	<ul style="list-style-type: none"> • Parents 	<ul style="list-style-type: none"> • Purchasing manager
Users	<ul style="list-style-type: none"> • Children 	

Table 24 - The roles inside the purchasing process - Caremi

The child is the most important actor in the process. It is the person that actually uses the object and the marketing efforts are directly addressed to him. He can be considered as the indirect initiator of the process.

The family and the parents are considered as the real **initiators** of the process, because they perceive the child’s need to have an object for the reposition of the items and are likely to purchase it. It is exactly for this reason that the marketing efforts are focused on them.

Other family members such as grandparents or uncles can be considered as **influencers** in the process.

The actors that effectively make the **purchase decision** are the parents, who can thus be considered as decision makers but also as purchasers with all the decisional power especially if the child is not older than 4 or 5 years old.

In case of the repurchase process, the roles are more simple. In fact the parents will not perceive in the same way the need to be supported and the power of the influencers' opinion will be lower. Hence they will act alone and with reduced time.

With regard to the kindergartens, the purchasing manager or the principal can be considered as the real **initiators** of the process, because they effectively perceive the needs of the children to have an utility object and then decide to proceed to the purchase. The marketing efforts are directly focused on draw their attention, because they also are the **decision makers** of the process.

In this context there are several actors that can be considered as **influencers** with regard to the purchasing process. First of all the teacher, because she strictly works with the children and thus she knows which are their needs and asks for the missing objects. *“She can order the missing objects directly through the catalogues of the suppliers”* Architect Erba, purchasing manager for Happy Child).

The parents of the children can also be considered as influencers, because the presence high quality furniture and materials determines the satisfaction level and consequently the possibility for the child to continue to attend the kindergarten.

6 MARKET EVALUATION – FUMAGALLI

6.1. Macro analysis of the market

The target market of the “ergonomic seat” of Fumagalli is constituted by tetraplegic children, aged between 3 months and 12-14 years. Ing. Cazzaniga, during the interview of the 10th of July 2009, stated that the target market is limited to the domestic context because of the completely different type of purchase that does not involve the market of kindergartens.

The first level of the analysis deals with the company macro environment, that is every external factors exerting influence on it. The first method used is PEST analysis.

6.1.1. Macro environment analysis

This analysis is about political, economical, social and technological factors in the setting where Fumagalli operates: they could have some results on the development of the “Ergonomic seat” and on the company behaviour.

FACTORS	MARKET OF FAMILIES	MARKET OF KINDERGARDENS
Political	<ul style="list-style-type: none"> • “Legge quadro” for the assistance, the social integration and the laws of the disabled people • Subsidies for the families with disabled children • Subsidies for the purchase process of the seats 	
Economical	<ul style="list-style-type: none"> • Low diffusion of the economic helps 	
Social	<ul style="list-style-type: none"> • About 81.000 disabled child aged between 6 and 14 years in the 2009 • Attendance of the kindergartens: 17.481 disabled children • Attendance of the elementary schools: 67.755 disabled children • About 81.000 disabled children aged between 6 and 14 years in 2009 	
Technological	<ul style="list-style-type: none"> • The base of the seat can be adapted also for the external environments • The unit of the seat is flexible and comfortable 	

Table 25 – Pest analysis applied to Fumagalli

The **political** factors are based on the integration and the respect of the disabled people: *“Compito della Repubblica quello di garantire il pieno rispetto della dignità umana e dei diritti di libertà e di autonomia*

della persona disabile, promuovendone la piena integrazione nella famiglia, nella scuola, nel lavoro e nella società”³⁹.

With regard to the **economic** factors there is an allowance of 1.020 euro (such a reduction is for families that have an income level lower than 95.000 euro) for the children disabled, which is increased to 1.120 euro for every further child in the family with an age lower than 3 years. For the families with more than 3 children the allowance is increased by 200 euro, for every child starting from the first⁴⁰. The allowances, however, can also be related to the purchases of the aids: in fact there is an allowance, after the tax returns, of 19%⁴¹ of the total costs, and a concessional I.V.A. level of 4%. However, there is a scarce diffusion of the economic aids: among the families with at least one child with grave autonomy problems, only the 52%, 150.000 families out of 290.000, in the 2003, have received aids. Nevertheless this value has increased of 7% compared to the value of 1998. Only the 14% received this helps through public funds, while the 16% received the subsidies through a private fund, and the remaining group in an informal way (relatives and friends⁴²).

With regard to the **social** factors, some ISTAT data are considered. The institute estimates that the disabled Italian children aged between 6 and 14 years who lives in families are 81.000; 41.000 males and 40.000 females. There are also, in this group, different types of disabilities depending on the level of difficulties possessed: the 0,1% is the value that refers to the individuals who have a confinement, as the coercion on bed, on a seat without wheels or at home; 1,4% is the value who defines people with difficulties in functions such as dressing, cleaning, eating etc; 0,2% is related to the groups that have difficulties in movements such as walking, climbing the stairs, etc.; the 0,2% is related to people with senses difficulties.

With regard to the **technological** factors, some aspects can be analyzed. The basis of the seat can be suitable for external environments, internal or for both; also the strongest and the most stable seat are easily manoeuvrable thanks to the low weight of the structure, which is made of light materials. Such bases also easily adaptable depending on different type of grounds or the type of context. Different accessories are also provided: the devices to overcome steps, arms, brakes, running boards, tilt devices, interfaces, dumbbells, and tables. A second new technological factor is the seating shell chassis. On the market there are comfortable and safe seats that allows the child to do different types of activities. The design is studied in order to guarantee the best possible support and at the same time a good aspect.

³⁹ “Legge-quadro for the assistance, the social integration and the laws of disabled people - 5 February 1992, n. 104; Law n. 53, 2000; Decreto legislativo n.151, 2001.

⁴⁰ Agenzia delle Entrate: Guida alle agevolazioni fiscali dei disabili – giugno 2010.

⁴¹ Decreto del Presidente della Repubblica 22 dicembre 1986, n. 917 –12 dicembre 2007.

⁴² ISTAT – La disabilità in Italia 2009.

In conclusion, through the PEST analysis it is possible to make some considerations. The laws are good enough in order to help the families with disabled children. The tax allowances are not so high and also cover the purchase of the seat, provided that its characteristics are present in the Nomenclature Tariffario. It is interesting to notice that only a small part, equal to 14%, of the families relies on the economic public aids, probably due to psychological aspects.

6.1.2. Market qualification

The “6 O” model helps to classify target markets from a macroscopic level. It is based on the analysis of six variables that are related to the contexts expected to analyze.

The **offer** is constituted by an ergonomic seat for disabled children up to 12-14 years. The competitive differentials are related to: the attention given to the aesthetic and comfort aspects, the study of the regulations, which are of different types but easy to be used, and the flexibility guaranteed by different accessories and regulations. There also is another aspect, represented by the assistance guaranteed by the firm, which supplies all the necessary information for the correct product use.

The **occupants** are the parents of the disabled children aged up to 12-14 years, that are living in Italy, and that perceived the need to guarantee to their son an ergonomic seat for different activities, including rehabilitation.

Hence, the **primary objective** is to possess an ergonomic seat with rehabilitative functions. The **secondary objectives** could be defined as: the facilitation of the child insertion in a social dimension, through a more appealing aspect of the seat; the versatility, aspect that allows to the child to do the different actions according to the the situation; the possibility of regulating some parameters of the seat in an easy and quick way.

With regard to the **occasions**, it is necessary to premise that the disability represents an extremely complex and tender aspect. It is very difficult to admit it and even more difficult to admitit for their own children. Performing some steps, for example buying the necessary aids, implies an acceptation which is not so natural. Learning to cohabit with the disability is a process considered extremely long and painful, and in some cases that never comes. Said that, the first purchase happens in the moment in which the parents recognize and accept the disability as a physical problem of their son and decide to relieve the problem with a suitable seat. The future re-purchase will come if the parents recognize positive effects due to the seat and wants to continue in the same way with the same firm. The frequency of the re-purchase is determined by the growth of the child: despite the seat have some regulations, it is easy to foresee that after some years the physical dimensions of the child will reach the maximum support of the seat, and

consequently will be necessary to substitute it with a bigger one. For the purchase process seasonality effects are not assumed.

With regard to the **organization**, it is important to specify that there are multiple roles in the purchasing process of the product of Fumagalli, which appears structured and complex. The parents are generally considered as initiators, decision makers and buyers. Physical therapist, physiatrist, orthopaedic, and authorizer act as influencers; the child is the user.

With regard to the **operations**, the sales channel generally used for the ergonomic seats and in general for all the aids for disabled people is represented by the specialized retailers, due to the nature of the product. Those figures are synonymous of a high level of preparation and reliability. The gathering information phase is wide and it is made by medics and paramedics figures that the parents requested for the support. The payment method happens through cashes or bank drafts, the total or partial expenses is reimbursed in a second moment by the ASL. In the post-purchase phase, the retailers have an important role, because they acts as intermediaries for the diffusion of the information about the correct product use and the delivery, between the firm and the users.

6.2. Market quantification

After making a description in qualitative terms the analysis can pass to the quantification of the market, by deducting the assessment of demand on the market of families.

6.2.1. Demand estimate

This analysis implies the division of the market in three macro-areas.

Potential market

The variables chosen for the definition of the potential market in order to better define the possible buyers of the offer are represented by the demographic characteristics. The group is composed by the children affected by heavy disabilities, both physical and mental disorders included in the age range that goes from the first month of life to the 14 years.

Within the ISTAT data, the number of children residents in Italy, aged between 0 and 14 years is 8.428.708.

AGE	POPULATION
0	569883
1	566368
2	567379
3	563816

4	569655
5	563618
6	558416
7	559967
8	567001
9	557542
10	556223
11	554725
12	556450
13	555147
14	562518

Table 26 – Italian population divided by groups based on age – Source: www.istat.it

The different disabilities named by ISTAT are sub-divided in 4 categories: individual confinement (the coercion on bed, on a seat without wheels or at home), the difficulties in functions (dressing, cleaning, eating), the difficulties in the movements (walking, to climb the stairs, to bend the body forward etc) and difficulties in senses. The disabled are defined as the people that have at least one of the problems mentioned above.

Disabled	Boys and Girls	From 6 to 14 years	(% values)
Individual confinement	Boys and girls	From 6 to 14 years	0,1
Difficulties on the functions	Boys and girls	From 6 to 14 years	1,4
Difficulties on the movements	Boys and girls	From 6 to 14 years	0,2
Difficulties regard senses	Boys and girls	From 6 to 14 years	0,2

Table 27 – People which have disabilities aged between 6 to 14 years, who lives in families divided by type of disabilities – ratios for 100 people, year 2004-05 –Source: www.istat.it

Making the hypothesis that this ratios are real also for the children under 6 years, in order to obtain the number of disabled children aged between 0 an 14 years, the ratio concerning the children that have a movement disability is taken into consideration. This ratio is multiplied by the total number that represents the target children (the 0,2% ratio that includes people with movement disabilities compared to a total of 8.428.708 children in Italy); the result is a potential market of 16.857 children.

Available market

In order to identify the available market you should remove from the total population the percentage people without the sufficient level of income needed to buy the product of Fumagalli.

In this case, due to the nature of the product, the available market is more extended. The presence of possible reimbursements and facilitations guaranteed by the Azienda Sanitaria Locale (ASL), allows to include also a number of families that, thanks to this aspect, would be able to buy the product.

year	2009			
Judgment on the economic resources	excellent	adequate	poor	Absolutely unsatisfying
Territory				
Italy	0,9	52,9	39	6,7

Table 28 - Distribution of Italian population by income (Source ISTAT 2010)

The 92,6% ratio that represents the population with a not absolutely insufficient income level is multiplied by the value of the potential market calculated above. The obtained result is 15.610 children and represents the available market of Fumagalli.

Served market

Due to the dimensions of the firm and its family nature, the locating geographic area of the population is considered as a discriminant variable. You should take into consideration only the North-West Italy area, because it is the area where Fumagalli is present with its business.

GENDER	POPULATION
Male	1.095.050
Female	1.033.074

Table 29 – Italian population aged between 0 and 14 years resident in the North-West of Italy – Source: www.istat.it

With this geographic discrimination, the served market is calculated by multiplying the 0,2% ratio (mentioned above as the ratio that represents the percentage of people with movement disabilities) by 2.128.124 (value that represents the number of children resident in the North-West of Italy). The value obtained is equal to 4.256 children.

YEAR		2009			
Economic assessment of resources		Excellent	Adequate	Poor	Absolutely Insatisfying
Territory					
Italy		0,9	52,9	38,8	6,7
Italy	Nord-West	---	---	---	---
	Piemonte	0,7	55,9	37,7	5,3
	Valle d’Aosta	1,3	64,4	27,9	5,3
	Lombardia	1,1	60,8	32,5	5
	Liguria	0,4	58,2	37,4	3,4

Table 30 – Economic resources of the population resident in the North-West of Italy – Source: www.istat.it

By calculating the mean through all the economic values obtained by the local analysis, it is possible to have an estimate of the served market. Taking into consideration the local income level (of the North-West of Italy equal to 94.7%) and the value that represents the served market (4.256 children obtained before) it is possible to derive, through a multiplication of the two variables, the final value of served market that is equal to **4.030** children.

6.3. Competitive analysis

Thanks to the analysis of the 5 competitive forces (internal rivalry, potential entrants, substitute products, customers, and suppliers), the three elements that determine the level of competition in a market are identified: the bargaining power of suppliers and buyers, the competition of the sector, and the enter barriers for the potential entrants and the substitute products.

Through this type of model, it is possible to understand what are the forces that have a high impact, both positive and negative, on the firm. The model is also used for better define, in a second moment, the attractiveness level of the market in which the firm will operate.

	MARKET OF FAMILIES
Internal rivalry	<ul style="list-style-type: none"> • High competition • Reduced broad competition • Low differentiation (of the Fumagalli’s products but also the others)
Potential entrants	<ul style="list-style-type: none"> • Low attractiveness caused by the high competition and the closest of the distribution channels
Substitute products	Low presence dependent by: <ul style="list-style-type: none"> • Specific technical know-how possessed by Fumagalli • Importance of the Fumagalli brand • Low possibility of differentiation • Restricted distribution channels
Buyers and Suppliers	Low threats through the production chain: <ul style="list-style-type: none"> • Buyers: specialized retailers, critical role in the purchasing process • Suppliers: All the processes are internally managed, there are 3 firms that exclusively supply their products to Fumagalli

Table 31 - 5 forces model applied to Fumagalli

The level of **internal rivalry** is very high because the market could be defined as a niche composed by few companies. The growth rate is null⁴³ and the differentiation degree of the products made by the firm or by competitors is very low, because it is a high specialized offer strictly dependent on the needs of the users.

With regard to the **potential entrants**, the risk is relatively low for different reasons. First of all, the realization of that type of products requests a specific and consolidated know-how, because the product has a high level of quality. The brand develops a relevant role, because a well-know brand is an important psychological factor from the point of view of the possible buyers. Related to this aspect, there is the loyalty level. Generally for these type of products, the trend is to rely on the same brand during the re-purchasing process, provided that the past experience was considered good. Other factors that can discourage possible potential entrants are: the low possibility to differentiate the offer and the narrowness of the distribution channels (fundamentals in order to guarantee an high service level).

There are no **substitute products** for this category, because the need is considered too specific.

The **buyers** of Fumagalli, specialized disabled product retailers (B2B context), have a critical role. They represents a fundamental element in the purchasing process of the “ergonomic seat”, because they perform the explanation of all the information related to the product. Their behaviour directly accounts on the service level, and consequently, also on the final satisfaction of the user.

Through the **suppliers**, Fumagalli shows a high level of vertical integration: all the planning and production processes are internally managed and the firm has only 3 external companies dedicated to the production of their components. It has also a sub-suppliers’ network used only for completing particular processes. The concentration level is medium-low: a high qualitative level is requested, determined by very strict and routinary tests. The most relevant criticalities on the negotiation phases are, in conclusion, related to buyers.

6.4. A Synthetic view: attractiveness and compatibility of the market

Thanks to all the previous analyses other two different dimensions are now taken into consideration: the attractiveness of the sector that Fumagalli addresses with the “ergonomic seat” and the compatibility of the company resources with regard to this kind of business. At the end the variables are evaluated together in a matrix.

In order to make the evaluations in terms of attractiveness four macro-variables are considered: market dimension, market growth, market profitability, and broad competition.

⁴³ Disability tax for the movement difficulties in the target market, is constant for the two relevations done: is 0,2% both in 1999 and in 2004 – Source: www.istat.it

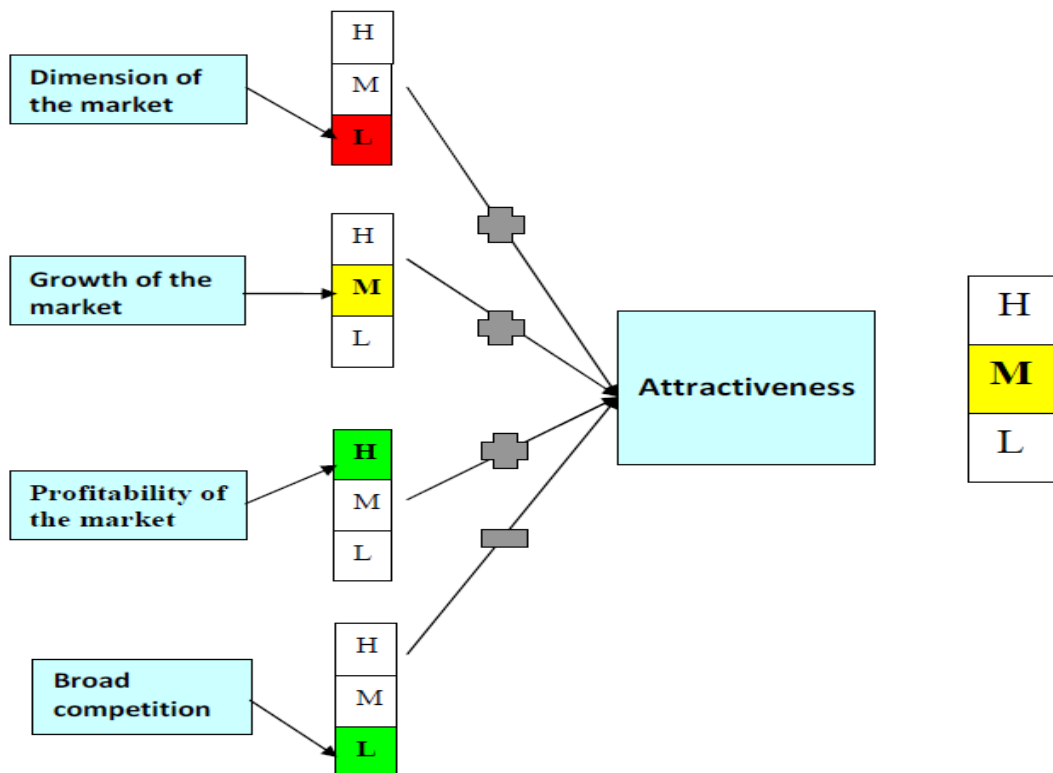
6.4.1. Market of families

With regard to the **dimension of the market** it is useful to say that the market is absolutely a niche, estimated in 16.857 units. It is also difficult to be defined, in fact there are not detailed information because the nature of the products is delicate, from both the ethical and medical point of view.

There are not evident trends that represents the **growth**, but the **profitability** is potentially high, thanks to the reduced price sensitivity of the clients. In order to effectively have this perception is necessary that the client recognizes the value added to the product of Fumagalli.

The **direct competition** is quite low due to the narrow number of actors presents in the market; the clients' brand loyalty trend is another factor that must be taken into consideration.

Each one of the four variables determines, in a positive or negative way, the level of attractiveness of the market that is altogether considered medium.



Picture 51 Attractiveness in the Family's market - Fumagalli

Now the compatibility of the business of the “ergonomic seat” with the company and its as-is internal situation is considered. It means to value the total coherence and thus the effort needed to introduce the new product into the current portfolio. Such a level of coherence is assessed thanks to four variables: resources and competences, company structure, investments, and medium-long term objectives.

With regard to the first variable, as declared by Ing. Cazzaniga, manager of the R&D department, the new seat will replace a product already present in the portfolio of Fumagalli, the Panda seat. For this reason, the base **competences** are considered already present. In order to better complete the offer, some medical and technical characteristics will be developed. With respect to the medical aspects, Fumagalli has a team composed by specialists with some years of experience in the study of the topics related to this sector and thus such a knowledge constitutes the starting point in the development of all the products. The presentations combined with the publications are considered as the best marketing actions, because they are able to spread widely the brand giving to the firm an authoritative and reliable image. The firm possesses all the necessary **resources** in order to develop a successful product: in addition the R&D function, there is a unit constituted by product experts that have specific know-how for all the divisions. It is a multi-professional team, in which there are engineers, architects and surveyors, but there are also rehabilitation therapists and doctors, in order to create technical solutions according to the specific needs of the market. In the development of the aesthetic characteristics there could be some problems, because for the development of the Panda some studies have been made but no-one focused on this aspect. With regard to marketing and distribution, Fumagalli has all the necessary resources to achieve a great competitive differential from them. The experience related to the market of aids and in particular of seats for disabled people developed through years could be another future differential factor. The presence of a specific sales department represents an excellent tool in order to face the introduction of the product in the market.

With respect to the **structure** of the firm, Fumagalli can be placed in the cluster that defines the little-medium and family run companies that constitutes the backbone of the Italian economy. This aspect could be translated in a great flexibility (a proof is the width of the product portfolio), in a great closeness to the market and its needs (with the collaboration of specialized institutes), in a very strong ethic dimension, and in a big attention to the quality of processes. All the structural characteristics of Fumagalli are reflected in the internal structure. There is a R&D function that operates in collaboration with medical specialists; their goal is to obtain a constant level of innovation related to different application fields. The closeness to the market is guaranteed by the sales department for all the divisions, combined with a function dedicated to the warehouse, to the technical assistance and to the maintenance. All these processes are controlled by the “Sistema di Qualità” function.

The **investments** done are addressed to the medical research, which constitutes the basis for the development of innovative products. Also the introduction of the new seat is in this group of activities and has a high level of coherence with the other investments. The fact that the product is not completely new

is considered in order to take into account that the quantity of resources necessary to implement the new product development process is not so high.

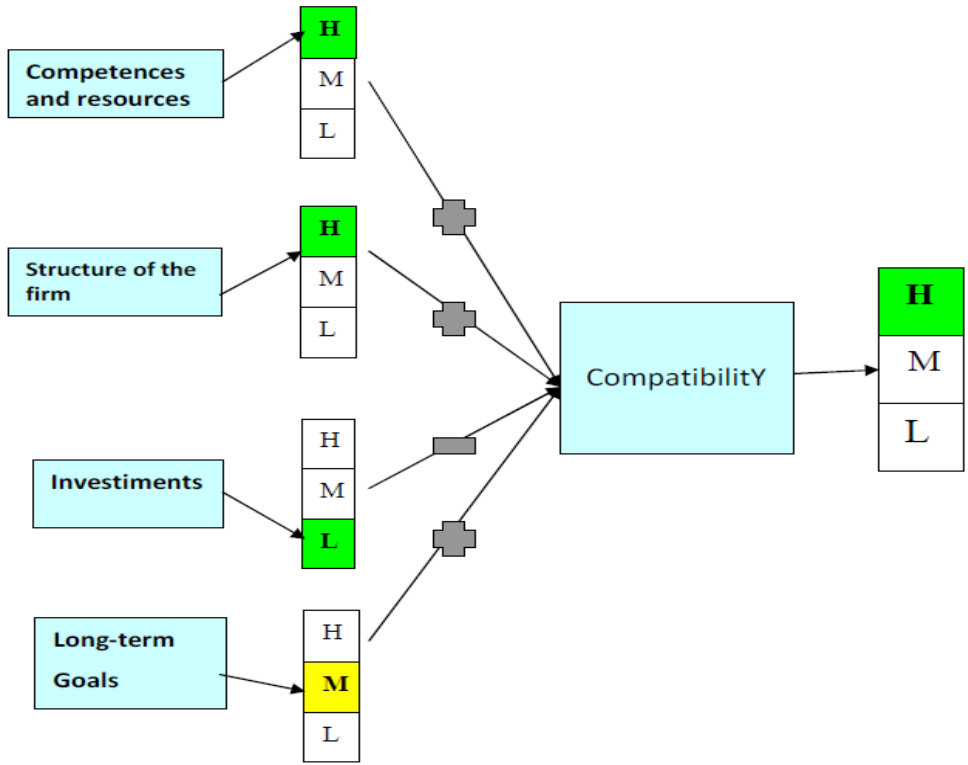
The **long-term objectives** of Fumagalli are related to the continuous development of products also of different natures, but with a correlation in terms of quality and in terms of attention to the needs of the single consumer. The idea of the new seat is strictly coherent with these aspects, by constituting the evolution of a not new product studied for satisfying the needs of the market, in particular for a so critic sector. From the strategical-economical point of view the objective is to the reconquest the market shares lost with the Panda seat.

The level of coherence between the project of the “ergonomic seat” and the reality of the firm, in the light of all the factors considered above, is reflected in a medium-high compatibility level.

The analysis of the compatibility can be deepened through the evaluation of the strengths and the weaknesses of the “ergonomic seat”.

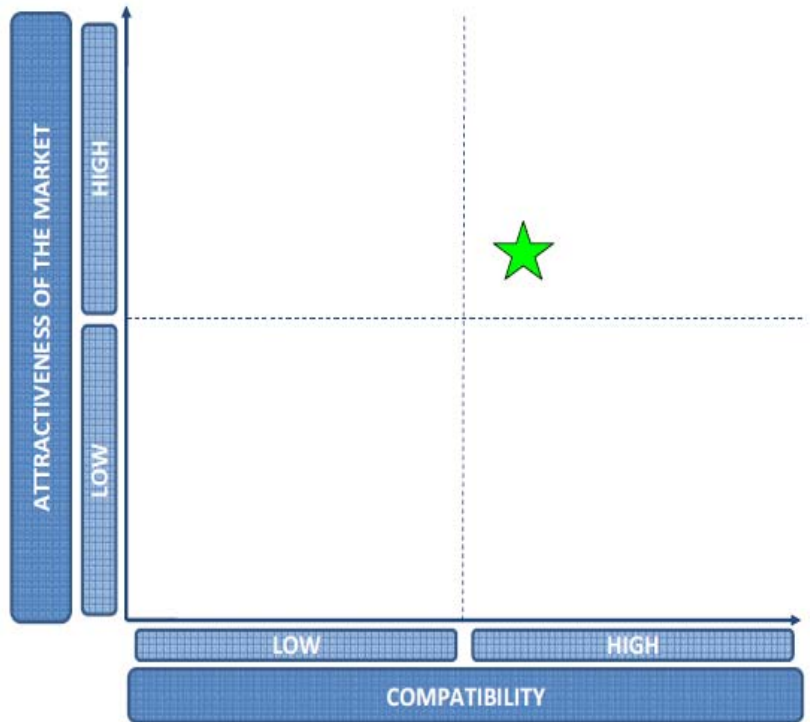
Among the **strengths** the high qualitative level of the production can be considered: Fumagalli works in all their divisions and for all the phases according to the quality system ISO 9001-2000. The certification is, year after year, maintained without any not-conformity note. Also the distribution have a high qualitative level: Fumagalli has a network of retailers highly selected, formed and updated with the goal to guarantee to the client the best possible service in terms of supply, installation and explanation for all the products, including the seat for disabled children. The R&D function is another strength thanks to the focus on scientific aspects tied to all the developed products. The Fumagalli brand, to conclude, is synonymous of quality and reliability: the excellence characteristics combined with the experience have formed a great reputation and a strong brand image over years.

With regard to **weaknesses** the differentiation level must be considered: other firms specialized in the production of aids for disabled people already put in the product portfolio some seats similar to the one of Fumagalli. Another weakness is constituted by the narrowness of the distribution channels (already quoted above): there are only 180 distributors, and the reduced extension of the communication-distribution network can be a limit in the achievement of new potential clients.



Picture 52 Compatibility in the Family's market – Fumagalli

Thanks to all these elements is now possible to build the attractiveness/compatibility matrix.



Picture 53 Attractiveness/compatibility matrix referred to Fumagalli

The business is positioned in the quadrant equivalent to a medium-high attractiveness value combined with a medium-high compatibility value. The position is a consequence of both the great coherence between the new product and the characteristics of the firm and the actual conditions of the market that it addresses. The evolution of the situation is related to the consumers and their answers: if the need is perceived and will develop with the product, then the firm can achieve market shares and improve both the level of attractiveness and the level of compatibility.

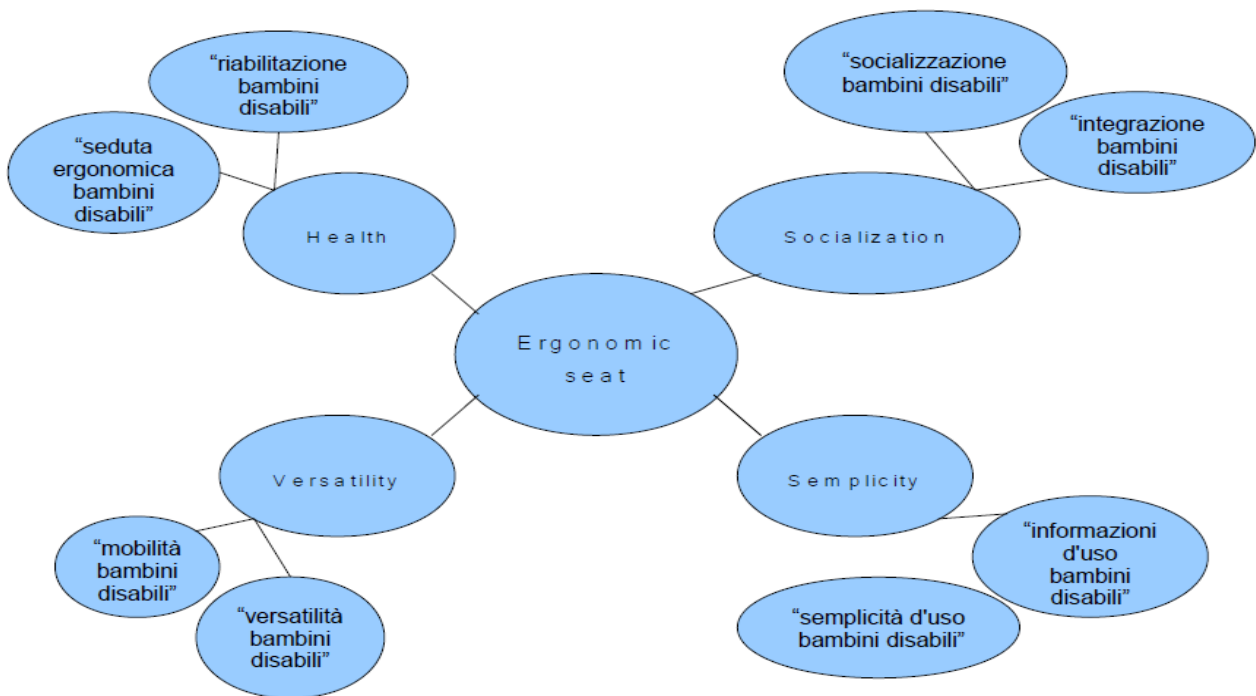
6.5. Micro-analysis of the demand

The level of perception of the need in the market can be understood through the analysis of the blogosphere, by evaluating if the needs that represents the “ergonomic seat” are real and perceived by consumers.

6.5.1. Analysis of the blogosphere

In order to analyze all the information represented in the blogosphere it is important to use a conceptual tree made with all the needs that the product aims at satisfying and for each one of them some of the words that better define it.

The time horizon used is related to the last 6 months, specifically the period that go from 18th of April to 19th of October 2010.



Picture 54 Coceptual tree used for the blogosphere analysis - Fumagalli

According to the considerations related to the recognition and acceptance of the disability, it is clear that, also in the blogosphere, the presence of arguments concerning the disability is very low. For this reason it is not significant and not completely possible to analyse trends about presence of the needs underlined through the conceptual tree. The numbers achieved are extremely low, also using two search engines as BlogPulse and Liquida. The most important links that obtained an important level of attendance of the argument were four.

KEYWORD	MAIN LINK	CONTENTS OF THE BLOG
http://paoloteruzzi.myblog.it	5	Social themes
http://www.salutedomani.com	2	Science and health
http://www.improntalaquila.org	2	Various
http://www.estense.com	2	Various

Table 32 - Main links in which the keywords are present - Fumagalli

<http://paoloteruzzi.myblog.it> is a blog of a private citizen that talks about social arguments and also about the disability. Generally the posts discuss about events and laws tied to that argument. The disability aspect is present but only in general terms and not with themes that involves children.

“Il 7 luglio di fronte alla Camera dei Deputati si è svolta la manifestazione promossa dalle associazioni impegnate nel settore della disabilità per denunciare che i tagli previsti dalla manovra finanziaria del Governo... Un tema ricorrente degli interventi e degli slogan è stato che bisogna colpire gli sprechi, l'evasione fiscale e la corruzione ma non i diritti, soprattutto i diritti che vanno riconosciuti ai più deboli.” - <http://www.dirittisociali.org/inform@ttiva/2010/inform@ttiva-dell%278-luglio-2010.aspx>.

<http://www.salutedomani.com> is a web-site of a journalist interested in science and health aspects. The rehab of children and the implication of the family involved in are some of the themes present in the site.

“I programmi riabilitativi e di supporto, oggi disponibili, sono mirati alla patologia specifica del disabile: molto poco considerata è la sua famiglia.” - Antonio Caperna, <http://www.salutedomani.com>.

<http://www.improntalaquila.org> and <http://www.estense.com> are two information sites, concerning different themes on municipal, provincial, national and international scale. In the first it is described a mini film in which the main actor is a disabled that was befriended with a able-bodied child, in order to make

aware the new friend of its situation. There are also some suggestions concerning the health protection against the summer heat. In the second site, it is described a municipal project (Ferrara) in which the administration bought some new cars for the movement of the elderly and disabled people, in order to facilitate their socialization and integration.

“Si chiama “Disabili” il cortometraggio premiato dalla sezione italiana di Amnesty International nella prima edizione dell’”Amnesty Corto Giffoni Esperienze”, nuova sezione all’interno dell’Amnesty Giffoni Experience.” –

<http://www.improntalaquila.org/2010/08/03/articolo8516/>

“Il Ministero della Salute anche quest’anno ha promosso una serie di iniziative per tutelare la salute dei cittadini dai rischi derivanti dalle alte temperature, soprattutto i più suscettibili, cioè le persone molto anziane, i malati cronici, i neonati ed i bambini piccoli, i disabili, le persone povere e in solitudine.” -

<http://www.improntalaquila.org/2010/06/11/articolo6531/>

“La società Mgg Italia srl, con il progetto ‘Mobilità garantita gratuitamente’, offrirà l’uso dei due veicoli, appositamente attrezzati per persone con ridotte capacità motorie, chiedendo a imprese e società del territorio di concorrere alle spese di utilizzo con contributi volontari o acquistando spazi pubblicitari sui veicoli stessi. ...il trasporto per i cittadini disabili mira perlopiù all’accompagnamento verso i luoghi di lavoro, studio o cura.” –

<http://www.estense.com/un-taglio-sociale-alle-delibere-di-giunta-065625.html>

“La mattinata, dalle ore 10 alle ore 12, sarà completamente dedicata alle persone con diverse abilità... Il luna park poggese abbatte dunque ogni barriera, attraverso un’allegra e stimolante occasione di divertimento e di socializzazione, di aggregazione e integrazione.” -

<http://www.estense.com/diversamente-in-giostra-088331.html>

Through the analysis of the main links it is not possible to notice a substantial presence of the themes related to the needs. Nevertheless it can not be affirmed that the needs are not perceived or known, but it can be noticed that they are not expressed also in more specific contexts.

In order to integrate the quantitative analysis done above, it is also made a qualitative analysis that investigates in detail the blogs related to the most popular disabilities. In this way, it is possible to have a more detailed vision of the needs that arise with power from the blogosphere and about the opinions made by parents of disabled child.

In order to better understand what are the most useful blogs, it is possible to consult the website wikio.it. It is one of the most important and famous site about blogs and its classification of the links according to the votes or comments can be used.

In the blogs' classification, done in November 2010, the most significant blogs related to the analysis of the disabilities, especially in childhood are identified. Three sites in particular, genitoristi.blogspot.com, pitaeruby.blogspot.com and www.ilnostroraggiiodisole.org, discuss about the aspect from the parents point of view. The analysis was obtained through the reading of all comments and posts related to the topic written by parents, in order to understand what are the main alarms and, at the same time, what are the possible solutions in order resolve or reduce the problem.

In order not to divert or distort the analysis, all the sentences are wrote out in their own original language.

NEED	MOST SIGNIFICATIVE SENTENCES	LINK
Recognition of the problem	"E' stato un periodo tremendo."	http://www.ilnostroraggiiodisole.org/2009/05/iniziano-quindi-per-noi-una-serie-di.html
	"Ora, pian piano, insieme a mio marito dovremo dirlo a tutti i nostri parenti, visto che comunque sono già a conoscenza della patologia di M, Se comunque avessi saputo che M. sarebbe stato quasi asintomatico, non ne avrei parlato troppo con i parenti, ma 2 anni fa quasi, chi avrebbe potuto dirlo?"	http://www.ilnostroraggiiodisole.org/2009/05/ieri-finalmente-dopo-10-mesi-da-quando.html
	"Pian piano sto dicendo un po' a tutti dell'ACC di M., anche sul lavoro. Per ora ho iniziato ad aprirmi con i colleghi che sento più vicini."	http://www.ilnostroraggiiodisole.org/2009/06/scrivo-con-diverse-novita.html
	"Spesso mi capita di chiedermi dove siano gli altri bambini/adolescenti/ragazzi come mio figlio – dove abito ce ne sono parecchi. Eppure non li vedo mai. L'ultima volta che mi è capitato di incontrare una famiglia, proprio pochi isolati lontano da casa nostra, è stato in luglio. Non è simpatico sperimentare l'imbarazzo di questi altri	http://genitoritosti.blogspot.com/2010/09/mangiare-fuori-e-dintorni.html

	genitori, forse sono troppo anticonformista ma se vedo altri mamma e papà con figlio/figlia carrozzati il minimo che mi viene è sorridere e fare un cenno di saluto. La risposta è spessissimo una faccia mesta, occhi che fuggono lontano, altrove dai tuoi.”	
Research of the information	“Non ho detto che la decisione di tenere il piccolo è stata favorita anche dall'incontro con il forum che si occupa di ACC e dall'incontro con una famosa ma molto umana neuropsichiatra infantile, consigliata appunto dalle mamme del forum.”	http://www.ilnostroraggiodisole.org/2009/05/non-ho-detto-che-la-decisione-di-tenere.html
	“Chiaccherando con le altre mamme riesco a mettere tutto nella giusta prospettiva.”	http://www.ilnostroraggiodisole.org/2009/05/oggi-pomeriggio-siamo-stati-al-parco.html
	“E’ fondamentale per me comunque il fatto di sapere di non essere soli e di poter parlare, sfogarsi e consigliarsi con persone che vivono la nostra stessa situazione.”	http://www.ilnostroraggiodisole.org/2009/08/non-siamo-soli.html
	“L'importanza di sapere di non essere soli davanti al problema di questa malformazione.”	http://www.ilnostroraggiodisole.org/2009/10/video-sullagenesia-del-corpocalloso.html
	“E’ molto importante, secondo me, condividere la propria esperienza con altri nella stessa situazione e non rimanere isolati. Parlandone insieme si riescono a vedere i problemi nella giusta prospettiva e non ci si sente più soli.”	http://www.ilnostroraggiodisole.org/2009/11/malattie-rare-e-disabilita-genova.html
	“Resta un certa perplessità ed una domanda che mi gira in testa da giorni: ci voleva tanto a dirmelo prima?”	http://www.ilnostroraggiodisole.org/2010/05/linsegnante-di-sostegno-questo.html
	“Per quale motivo, come sempre, questi tipi di diritti vengono rispettati solo se dietro c’è qualcuno che batte i pugni sul tavolo e che è costretto ad alzare la voce?”	http://pitaeruby.blogspot.com/2010/09/e-domani-si-comincia.html

	<p>“Informarsi è fondamentale, non credete a tutto quello che i media passano. Cercate, verificate!!!! Per nostra fortuna viviamo nell’era di internet dove l’informazione, quella vera, ESISTE!!!! “</p>	<p>http://pitaeruby.blogspot.com/2010/02/di-nuovo-una-bufala.html</p>
	<p>“Noi, che nel frattempo cercavamo informazioni su internet.”</p>	<p>http://pitaeruby.blogspot.com/2009/05/riabilitazione-la-nostra-esperienza.html</p>
	<p>“Nel nostro mondo dorato (si fa per dire) ogni giorno GLI ALTRI ne inventano una.... ma una cavolata che dovrebbe annientare i tuoi diritti.”</p>	<p>http://genitoritosti.blogspot.com/2010/10/i-geni-scappati-dalla-lampada.html</p>
	<p>“È importante reagire in questi casi, perchè in nessun ambito come quello della tutela dei diritti delle persone disabili, in Italia, regna l'indifferenza e l'inazione.”</p>	<p>http://genitoritosti.blogspot.com/2010/09/la-forza-dellunirsi-lettera-8.html</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Versatility and movement</p>	<p>“Devo imparare un pochino a lasciargli i suoi spazi, a sperimentare giochi e movimenti. “</p>	<p>http://www.ilnostroraggiadisole.org/2009/06/in-questo-momento-sono-sempre-alle.html</p>
	<p>“Se pensiamo ad un bambino con disabilità grave non riesco ad immaginare un modo per lui di arrivare in classe se non sulle spalle dei genitori perché ad esempio sia nel nido che frequenta il raggio, sia alla materna non ho visto un ascensore o una rampa per sedia a rotelle.”</p>	<p>http://www.ilnostroraggiadisole.org/2010/06/bilancio-di-6-mesi-di-nido.html</p>
	<p>“Altra componente, che ulteriormente complica il tutto, è quando tuo figlio sta sulla carrozzina: chi non sperimenta questa dimensione non sa, non s'immagina i vari problemini logistici che ci si trova ad affrontare.”</p>	<p>http://genitoritosti.blogspot.com/2010/09/mangiare-fuori-e-dintorni.html</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Socialization</p>	<p>“Insieme agli altri bimbi si diventerà di sicuro più che con me e suo papà.”</p>	<p>http://www.ilnostroraggiadisole.org/2009/09/asilo-nido.html</p>

	<p>“In un momento in cui ancora tantissime persone pensano che un bambino disabile rallenti il programma, dia fastidio e vada inserito in una scuola speciale adatta a lui, c'è la necessità assoluta di far sentire forti e chiare le nostre voci di genitori di bambini e ragazzi disabili!”</p>	<p>http://www.ilnostroraggiodisole.org/2010/10/manifestazione-per-una-scuola-di-tutti.html</p>
	<p>“Vero è anche che stare con gli altri bambini lo sta (o dovrei dire lo stava, visto che ormai è più a casa con la febbre che in asilo) svegliando molto: addio ai capricci, al sentirsi “principino” ed a tutti i vizi che più o meno consapevolmente gli abbiamo dato noi genitori.”</p>	<p>http://www.ilnostroraggiodisole.org/2009/11/nido-ed-influenze.html</p>
	<p>“Ecco un'altra bella dimostrazione dell'integrazione dei nostri bambini, ecco un altro esempio di come noi genitori possiamo sempre stare tranquilli nelle nostre case fiduciosi che i diritti sanciti da specifiche LEGGI vengano rispettati. “</p>	<p>http://pitaeruby.blogspot.com/2010/09/ora-pensiamo-alla-scuola.html</p>
	<p>“Quindi si aggiunge anche la componente "psicologica", chiamiamola così, come aggravante al contesto: il bambino magari non è a suo agio, risente della non serenità dei genitori (a volte è davvero irritante l'insistenza con cui gli altri ti fissano). “</p>	<p>http://genitoritosti.blogspot.com/2010/09/mangiare-fuori-e-dintorni.html</p>
	<p>“Abbiamo cercato di includere (ossignur che brutta parola) nostro figlio in tutto: gite, visite ad amici parenti, matrimoni, battesimi, compleanni, escursioni nei parchi, pomeriggi di shopping, la spesa al super, la passeggiata in centro, la piscina, le pizzate con gli amici.”</p>	<p>http://genitoritosti.blogspot.com/2010/09/mangiare-fuori-e-dintorni.html</p>
Easiness of use	<p>“Perchè più di una volta l'ho trovata con i tutori messi male e questo vuol dire farle del male!”</p>	<p>http://pitaeruby.blogspot.com/2010/05/competenze_24.html</p>

Table 33 – Perception of needs raised from the blogosphere - Fumagalli

Through the study of the blogs and of the most representative phrases it is possible to underline the effective presence of psychological problems, from the parents point of view, when they discovered the disability of their son. The acceptance of the disability represents the most complicated phase, and sometimes lasts for many years.

With regard to the most perceived needs, one is the research of specific **information**. These information concerns basically two different aspects: a part derived from medical aspects considering the pathology of the child and possible treatments, while the other derived from legislative aspects related to the laws for

disabled people. In particular concerning the laws aspect, there are in the blogosphere and in the classification made a lot of web-sites developed by people that are in contact with disabled or done directly by disabled people that tries to underline administrative problems and the non-respect of the laws from different points of view. In the sites taken into consideration, it is clear that in addition to the traditional sources, as the doctors for the first type of information or as the institutions for the second type of data, there are the Internet and the people with the same problem that act as information sources. In particular it is considered as important the comparison between different experiences, both for the acceptance of the problem and for the sharing of opinions. In this respect the Internet facilitates the sharing phase and provides competences in order to discuss with the doctors in a better and more aware manner.

The aids **versatility** and the needs of the movement are two aspects not so underlined from blogs, but the possibility to guarantee an high autonomy grade for different activities is considered important. This importance is related to different aspects: the necessity to adapt the child in different structures and environments that have too many obstacles and the goal to guarantee for the child a development also physical that will be as much as possible natural.

Another need is the **socialization** and the foundation of relationships with people of the same age or adults. Some posts describe the efforts in achieving this aspect, especially in the case of kindergartens, with different goals: in order to guarantee to the child a fair level of education, if possible, equal to their friends; another objective can be the facilitation of the creation of opportunities for fun and discussions to help the personal growth. However, the aesthetic component is not considered as a helper, and the discomfort due to the psychological aspect is real.

The need to have an object **easy to use** is not a perceived aspect, probably for the awareness of the parents that have to deal with complicated instruments, with also delicate functionalities. This aspect overshadowed their own needs in favour of the complete tutelage of the son's health.

In conclusion, the needs tied to the socialization, to the versatility and the easiness of use that the "ergonomic seat" would satisfy in an innovative manner are perceived in a medium-high level.

6.5.2. Stimulus/response model

In order to analyze the purchasing process the model used is the so called "stimulus-response", which is based on 3 variables: product knowledge, sources of influence, opinions and behaviours. This analysis will allow to understand the dynamics that rule the choice of buying or not the product.

With regard to the **product knowledge**, external stimuli can be represented by the medical information that illustrates the characteristics of the product. Basically the information are made by the people that

follows the child during his growth as paediatrician, physical therapist and orthotist, or from companies that provides various solutions, as Fumagalli itself. The characteristics of the stimuli could be different: they might be only medical; also operational and medical or only operational. The communications of the firms are less specific from a medical point of view and are much more focused on benefits and advantages of their own product compared to the competitors' ones. A marketing effort should be present in order to increase the awareness of the market with respect to particular needs that can be present in the consumer but without enough power to justify a particular purchase. In this case the aspects tied to the socialization and to the advantages of the use due to the versatility and to the simplicity must be underlined.

Among the **sources of influence** there are the psychological, social and personal characteristics. In the group that represents the possible consumers of the seat of Fumagalli, the characteristics can be very far-away between them. The characteristic that combines all the sources is related to the particular condition of the child and also to the relative context; it is recognized a particular sensitivity to the disability problems, to the medical aspects, to the laws of the disabled people, and to their introduction in the community. The price plays a less important role if compared with the other products. In fact, it is a personal product used to improve the child relationship with the disability, and in some cases can be subsidized by the Sistema Sanitario Nazionale.

The **behaviours and the opinions** are crucial for this kind of product. It is fundamental that Fumagalli passes a message where effectively communicates the accessible goals that can be reached with the product and that is shaped on the user. The word-of-mouth constitutes another fundamental aspect. The information made in this respect are useful for the moment that follows the introduction phase, in order to be able to reach also who can not directly know the offer and its advantages.

6.5.3. Purchasing process

Here the purchasing process of the “ergonomic seat” is described divided in 5 steps.

The phase of the **identification of the problem** is the most complex and the most influenced by the acceptance of the disability. Recognizing the disability of their own son could need a long time and a lot of efforts done by parents. The aspect related to possess an “ergonomic seat” is considered as the first need, and the necessity of the child to be facilitates in the different activities, with a better comfort can be considered as the second.

In the first step during the **research of information**, the parents can rely on external sources. A first category of sources includes the commercial sources such as the advertisement and all the activities made by the firm or by the retailers to improve the communication; of the same type but more personal is the

consultation of the sales staff. The word-of-mouth completes a very important function because it is based on the experiences of the other people. A second category is composed by the non-commercial sources, that includes the mass media with the function of spreading the information about the disabilities in childhood, and all the others relationships more personal, with different actors such as doctors, relatives, friends, parents of other children and teachers. According to the type of source of course also the nature and the quality of the information changes. In the case of successive purchases the internal sources, constituted by the memory of the client are added; from the experience the most important and the most reliable information derives.

In the **valuation of the alternatives** the aspects of quality and brand have a big importance: in this respect, Fumagalli occupies an advantage position. The price probably constitutes a variable with an importance considered as low. Through the combination of these principles with the factors that denoted each one of the alternatives as, for example, the involvement in the communication, the degree of knowledge related to the product or other factors tied to the single situation, you can obtain an evaluation of the performances of the alternatives in order to be able to take the final decision.

Due to the proper specificity of the “ergonomic seat”, the quality of the service of the point of sale results fundamental. Fumagalli has a confined network of retailers carefully formed and prepared: the quality of the addresses, of the installation, and the explanation of the use of the aids represents a very important factor for the consumer that can derive in the purchase. For the timing aspect there are not any particular phenomenon: in the case of the first purchase of a seat for the own child, the parents did the choice in the first months of life, while in the re-purchasing process starts when the child have reached the maximum dimensions for the seat.

The **post-purchase behaviour** depends on the satisfaction level derived from the use of the product and also on the difference between the value perceived and the value expected. This satisfaction level is a fundamental element for the successive purchase.

6.5.4. The roles inside the purchase process

The roles inside the purchase process of an aid for a disabled are several and each one has specific competences and responsibilities. In particular, with regard to the ergonomic seat for disabled people, the situation is be much more complicate, because varies from first purchase to following purchases.

From the point of view of the firm, it is very important to understand on which figures concentrate its marketing effort and in which manner some significant effects, from the commercial point of view, will be obtained.

The figures involved in the purchasing process of the aids for disabled are: the parents, the paediatrician, the physical therapist, the physiotherapist, the CPO, the authorizer, and the child. Their roles are described in detail.

ROLES	MARKET OF FAMILIES
Initiator	<ul style="list-style-type: none"> • Parents • Paediatrician
Influencer	<ul style="list-style-type: none"> • Physiotherapist (medical influence) • Physical therapist (medical influence, but not closest to the family) • Technical orthopaedic (medical influence) • Authorizer
Decision maker	<ul style="list-style-type: none"> • Parents
Purchaser	<ul style="list-style-type: none"> • Parents
Users	<ul style="list-style-type: none"> • Children

Table 34 - The roles inside the purchasing process - Fumagalli

It is first analyzed the case of the first purchase, highlighting at the end of the paragraph the differences with respect to the case of the re-purchase.

The **initiators** of the process are the parents and the paediatrician that individuates the level of disability of the child. At this point, because the paediatrician does not have a high level of medical competences, another role enters in the process: the physiotherapist. It's a paramedic that has to elaborate the rehabilitative program of the child, in order to individuate and the overcome the future possible health need of the disabled. It is his responsibility then, based on the grade of disability individuated, to suggest the adoption of a particular aid and help the child and the parents to use the product in order to verify the efficiency of it. The physiotherapist carries a high degree of **influence** on the parents because they do not have the necessary know-how for this kind of decision. Hence it results, also from a marketing viewpoint, a very important figure. Due to its formation, the information transmission must count on medical elements related in particular to the physical aspects.

“Sonia, la nostra fisioterapista, quella che tutti noi genitori portiamo in palmo di mano, quella che ci fa sentire tutti in una botte di ferro, quella che, almeno x quanto riguarda la fisioterapia, ci fa dormire sonni tranquilli...” - Nina, <http://pitaeruby.blogspot.com/>

The physiotherapist does not choose the seat alone but works in collaboration with the physiatrist, a specialized in Physic and rehabilitative medicine doctor. It has a know-how wider than the physiotherapist

and have the goal to achieve the maximum level of functions and abilities recovery of the child with a comprehensive approach. It is also extended the issues relative to the physical, family and social environments. The responsibility of that figure consists in diagnosing the exactly nature of the disability and prescribing the typology of the seat. The prescription constitutes an integrant part of the prevention, the care and injuries rehab that determines the disability program. The prescription is also combined with a rehabilitative program of the dispositive use, done in collaboration with the physiotherapist. The patient must be informed about the fundamental functional-therapeutical characteristics of the device. It is necessary to specify all the characteristics of the aid through identifying codes presents on the Nomenclatore Tariffario⁴⁴ and must be precisely specified the necessary adaptations in order to customize the dispositive. The physiatrist has also a high degree of influence but considering that it is not a figure close to the parents and their child, he has a not so critical role.

The marketing communication must be constituted by medical information less focused on the physical and therapeutical aspects but more on the psychological and social dimension.

When the typology of the seat with all the necessary characteristics is chosen a new figure shows up in the process: the Technical orthopaedic. It is a sanitary operator that participates to the elaboration of the rehabilitative process and executes, based on the prescription realized by the physiatrist, the adaptation and the finishes of the seat, through the direct measures and models surveying. It has a relative influence on the parents, because he has more technical know-how than medical. Fumagalli on the basis of the information could organize the proper value communication in order to highlighting the technical and operational aspects.

To obtain a disabled aid, it is necessary also the presence of another actor, called authorizator. It is a recent figure created by the ASL in order to help the correct management of the available resources and make a correct assistance for the people that have really need⁴⁵. It is a kind of doctor specialized that has the responsibility to verify and check the indications, the diagnosis and the prescription of the aid. It can also foresee the evaluation of the trade-off between benefits and costs for the users but also for the firms. At this point, the authorization is passed to the patient with the list of the firms that operates within the national health service for the sale of the seat. The decision of the firm that will realize the seat is made by parents. From the marketing point of view it is an underestimated figure.

The parents now are able to **make the purchase** with the help received by the actors described above. The **user** is obviously the child.

For the next purchases, the actor that suffers the most variations are the parents: such a figure at this point can count on their experience and tend to less entrusts to other figures in order to do their own evaluation

⁴⁴ Il Nomenclatore Tariffario is a document periodically dated by the Ministero della Salute that identifies the typology and the modality of prosthesis and aids supplies.

⁴⁵ Art.2 del DM 332/99 e DPCM del 29 /11/01, "Definizione dei livelli essenziali di assistenza"

alone. Naturally the medic opinion represents the landmark. Often the users that reached a positive response by the seat tend to entrust again to the same brand and to the same model. Fumagalli is favourite thanks to its high degree of quality of their own product; to the high service level, and to the high reputation level of its brand. The communication in this phase can include more specific elements both medical and technical. Also the child, according to the age and the pathologies that he has, could be able to exercise an high degree of **influence**. The value communication is, in this case, based on aesthetic aspects related to the game, using parents as a binder.

7 MARKET EVALUATION – LUXSOLAR

7.1 Macro analysis of the market

The study related to the “luminous floor” concerns as target market the children between the birth and 8-9 years old.

The first level of the analysis deals with the macro-environment where the company operates, that means all the factors that influence the reference context.

7.1.1. Macro environment analysis

The PEST analysis deals with the political, economic, social and technological factors that are in the sector where LuxSolar operates and that can have got every kind of effect in the “luminous floor” and more in general in the company’s behaviour.

FACTORS	MARKET OF FAMILIES	MARKET OF KINDERGARTENS
Political	<ul style="list-style-type: none"> • CE marking (directive 88/378/CEE) for games • CEI marking and UNI for electronics games (CEI EN 62115, UNI EN 71) 	
Economical	<p>Games’ sales</p> <ul style="list-style-type: none"> • + 0,2% compared to the year 2009 • + 0,4% compared to January 2010 	
Social	<ul style="list-style-type: none"> • Growing rate of the population: 0,7% between the 2001 and the 2008 • Population in residence : from 57 to 60 millions in the same period • Registered families: 24 millions and 905 thousand • Average numbers of families’ components: 2,4 	
Technological	<ul style="list-style-type: none"> • Use of the LED instead of sodium lamps 	

Table 35 - PEST analysis applied to Luxsolar

The Luxsolar’s product belongs to the category of the educative games. With regard to the political point of view, the safety is ensured by the marking CE used for answering and normalizing the fabrication needs required by law and it also guarantees the quality (directive 88/378/CEE of the Council of the 3 may 1988). This law must be considered generic for all the products used as games, while for the other products denominated electronics games, CEI and UNI work out specific rules for electronic games (CEI EN 62115)

and rules that set requirements and testing methods in order to guarantee the safety of each game (UNI EN 71).

The Italian law is quite rigorous with regard to the games production. In fact rules establish for example that toys must not release toxic substances, must not be inflammable and must be resistant. Toys which own laser devices or LED must not let out dangerous expulsions. Dangerous fluids must not go out from the batteries.

UNI EN 71 rules and CEI EN 62115 rules define in addition some general safety that can be easily verified by adult people in order to control the dangerousness of the toy during both the purchasing and the use.

A summarize of the main principles is the following:

- toys must not have got rough edges or cutting curls;
- parts that can be perforated must be protected;
- open-closed workings must have got automatics dispositive in order to stop them;
- tongs and any kind of moving mechanisms must not be accessible by fingers;
- seams and other parts must be resistant to every kind of tear;
- toys that can be accidentally brought near the mouth must have got parts that can not be ingested by the children
- toys in which children can enter (tents, playhouses) must have got ventilation holes and opening doors with minimum effort.

These rules provide that if the toy is for children under 36 months, then the instructions for the use, the indications for the assembly and maintenance, and the warnings about the age range must be considered as part of the toy and must be packed with it or print on the box. Warnings must be also written in the official language of the nation and must be readable for all the duration of the toy⁴⁶.

With regard to the economic factors, first-of-all the sales of the last months must be taken into consideration. The tendential values reported by Istat⁴⁷ are all positive. In particular, they are growing compared to June 2009 (+0,2%) and compared to the same index in January 2010 (+0,4%).

In order to evaluate correctly the general situation of the sales in the last years, it is necessary to increase the reference time for the study, with the aim of having a complete prospect of the situation of the economical-index for the non-alimentary products in the great distribution.

⁴⁶ CEI data - 2010

⁴⁷ Value index of gross and retail sales - June 2010

For this purpose the chart below is taken into consideration⁴⁸.

Period	INDEXES				TENDENTIAL VALUES							
	Alimentary		Not Alimentary		Total		Alimentary		Not Alimentary		Total	
	Big Retail	Small Retail	Big retail	Small Retail	Big Retail	Small Retail	Big Retail	Small Retail	Big Retail	Small Retail	Big Retail	Small Retail
2007	105,2	100,7	105,0	101,5	105,1	101,3	1,9	0,3	3,9	0,5	2,9	0,4
2008	108,0	100,4	105,6	99,6	106,7	99,8	2,7	-0,3	0,6	-1,9	1,5	-1,5
2009	107,7	97,2	106,0	97,0	106,8	97,1	-0,3	-3,2	0,4	-2,6	0,1	-2,7
2009												
II trim.	108,7	98,0	99,3	92,9	103,5	93,9	1,2	-2,0	0,5	-2,6	0,8	-2,5
III trim.	107,0	96,6	102,3	95,0	104,4	95,4	-0,9	-3,1	-1,4	-3,0	-1,2	-3,0
IV trim.	118,1	106,2	129,8	113,6	124,5	112,1	0,3	-1,8	2,9	-1,3	1,7	-1,4
2010												
I trim.	97,6	86,0	94,7	86,1	96,0	86,0	0,6	-2,1	2,0	-0,7	1,5	-1,0
II trim.	106,8	96,3	99,7	92,5	102,9	93,2	-1,7	-1,7	0,4	-0,4	-0,6	-0,7
2008												
June	106,3	103,3	99,9	94,4	102,8	96,2	0,4	-4,9	-0,6	-4,4	-0,1	-4,4
July	109,8	105,6	106,5	108,9	108,0	108,3	5,4	1,2	2,5	1,0	3,7	1,1
August	107,7	98,2	101,8	84,6	104,5	87,3	2,0	-1,9	-0,9	-4,2	0,5	-3,6
September	106,6	95,3	103,0	100,2	104,7	99,2	1,7	0,2	1,6	0,6	1,7	0,5
October	109,6	100,0	101,9	106,7	105,4	105,4	1,9	-1,7	-2,4	-2,7	-0,4	-2,5
November	112,5	87,0	105,5	96,4	108,7	94,5	0,8	-3,9	-0,5	-4,0	0,2	-4,0
Dicembre	131,1	137,7	171,1	142,1	153,0	141,2	-0,9	-1,6	-4,5	-2,6	-3,2	-2,4
2009												
January	91,6	87,5	95,2	91,0	93,5	90,3	2,0	-7,2	3,8	-0,4	2,9	-1,8
February	94,0	82,1	91,1	80,3	92,4	80,7	-2,2	-5,1	-3,9	-6,6	-3,1	-6,3
March	105,4	93,7	92,0	88,8	98,0	89,7	-4,6	-6,1	-1,9	-4,5	-3,4	-4,9
April	111,2	97,7	99,1	88,7	104,6	90,5	4,2	1,3	1,2	-3,2	2,6	-2,2
May	107,7	95,3	99,0	96,7	102,9	96,4	-1,3	-5,0	0,3	-3,6	-0,5	-3,9
June	107,1	101,1	99,7	93,2	103,0	94,8	0,8	-2,1	-0,2	-1,3	0,2	-1,5
July	108,4	102,8	105,3	105,1	106,7	104,7	-1,3	-2,7	-1,1	-3,5	-1,2	-3,3
August	105,8	95,1	99,5	82,5	102,3	85,0	-1,8	-3,2	-2,3	-2,5	-2,1	-2,6
September	106,7	92,0	102,0	97,5	104,1	96,4	0,1	-3,5	-1,0	-2,7	-0,6	-2,8
October	111,0	97,5	106,4	105,6	108,5	104,0	1,3	-2,5	4,4	-1,0	2,9	-1,3
November	110,3	85,8	104,0	95,0	106,8	93,2	-2,0	-1,4	-1,4	-1,5	-1,7	-1,4
Dicembre	133,1	135,3	178,9	140,1	158,2	139,1	1,5	-1,7	4,6	-1,4	3,4	-1,5
2010												
January	88,8	83,9	94,6	88,7	92,0	87,7	-3,1	-4,1	-0,6	-2,5	-1,6	-2,9
February	93,4	79,0	94,1	79,4	93,8	79,3	-0,6	-3,8	3,3	-1,1	1,5	-1,7
March	110,7	95,0	95,3	90,2	102,3	91,1	5,0	1,4	3,6	1,6	4,4	1,6
April	106,9	96,5	99,5	89,2	102,9	90,6	-3,9	-1,2	0,4	0,6	-1,6	0,1
May	106,8	91,8	98,6	94,2	102,3	93,7	-0,8	-3,7	-0,4	-2,6	-0,6	-2,8
June (a)	106,6	100,6	100,9	94,1	103,5	95,4	-0,5	-0,5	1,2	1,0	0,5	0,6

(a) Temporary data

Picture 55 ISTAT, Value index of fixed and detailed sales, Time series - July 2010

According to the analysis the market seems wide. Tendential values of the last three years (2007, 2008, 2009) for the non-alimentary and great distribution categories are all increased, in the triennium in fact an increase of the 5 % has been recorded. This element is in conflict with the retail market that in the same period has been decreasing by the 5%. Such data can be considered as real if put in relation with the data recorded in the last months for the toy's category, where the decrease of the retail sales is in opposition with an increase of the great distribution.

⁴⁸ Istat – Value index of fixed and in detail Sales ,Time series -July 2010

With respect to the **social point of view** it is important to take into consideration the increasing of the population. The average rate of the increase between the 2001 and the 2008 is about the 0,7% with an increase of the Italian population from about 57 to 60 million people in the same period.

Also the number of families is an important element: anagraphic families are about 24 millions and 905 thousand; the average number of the components for each family is 2,4; the same of the 2008.

With respect to the **technological point of view** of the toy's production the most important innovation is the use of LED in substitution of the sodium lamps. The LED technology is better in a lot of aspects. The most important is the energy saving: with the LED technology you have got a saving of the 50%-80%. The qualitative point of view is also important: the light of the sodium lamp is yellow and does not correspond to the peak of the eye's sensibility: colours are not faithfully reproduced and for this reason you need more light in order to allow a perfect vision. Instead LED send out white cold light that allows to reach a better illumination with a smaller use of energy. The index of colour yield that shows the faithfulness of the colours' reproduction is 20 for the sodium lamp and 80 for the LED lamps. Studies about the white light are based on the fact that according to the brightness we use all the parts of our eyes. With respect to the duration, the life of a LED lamp is estimated in 50000-100000 hours that means about 10-20 years with a 112 yours per-day use, against the 4000-5000 hours, that means about 11-14 months of the sodium lamps⁴⁹. The comparison is strictly supporting the new technology, in particular if you think that the maintenance costs estimated are a tenth of the ones for the normal lamp. LED have got a higher price, about 4 or 5 times the sodium lamp price. Considering in opposition the previous variables the result is a saving of about the 50% to 80%.

7.1.2. Market qualification

The qualitative analysis of the market continue through the "6 O" model, that take into consideration six variables straightly connected to the context that have to be analyzed. The study of this model is divided by taking into consideration the two reference markets.

⁴⁹ www.leditaly.com -2010

	MARKET OF FAMILIES	MARKET OF KINDERGARTENS
Offering	<ul style="list-style-type: none"> Product: “luminous floor” 	
Occupants	<ul style="list-style-type: none"> Parents 	<ul style="list-style-type: none"> Purchasing manager for the kindergartens
Objectives	<ul style="list-style-type: none"> Satisfy the recreational and learning needs of children 	
		<ul style="list-style-type: none"> Improvement of the look of the organization Safety
Occasions	<ul style="list-style-type: none"> Different in relation to the age range of the children 	<ul style="list-style-type: none"> Beginning of the activity of the organization Renewal of the furniture
Organization⁵⁰	<ul style="list-style-type: none"> Children: users 	
	<ul style="list-style-type: none"> Parents: promoters, decision-makers, buyers. Secondary figures: grandparents, uncles and aunts, who have got their own importance in the decision making 	<ul style="list-style-type: none"> Purchasing manager: promoter, decision-maker and buyer. Others figures such as teachers and parents: influencers.
Operations	<ul style="list-style-type: none"> Sales channel: distributors Information: magazines and web-sites Specialized shops 	<ul style="list-style-type: none"> Catalogues Specialized magazines

Table 36 – The model of “6 O” applied to Luxsolar

The unchanged **offering** in both the two markets is represented by “luminous floor”, whose aim is to stimulate the learning and the education of children with the use of playing dynamics.

With regard to the **occupants**, there are some differences according to the market. In the market of families there are the parents who compose the demand of the “luminous floor”; more frequently mothers are the main figures when talking about the purchase of children’s objects, in particular during the first period of their life. In more than one case also relatives are involved: grandparents, uncles, and aunts can represent buyers in particular when they purchase the product as gift for the children. In kindergartens figures that do the same things are the purchasing managers that are in charge to purchase all the equipments; instead principals are in charged of evaluating the investment and verifying the coherence

⁵⁰ The characteristics are fully described in the purchasing process analysis.

between them and their business. In both of the context the decisions are made without the help of the children.

Both in the market of families and in the market of kindergartens, the main **objective** is related to the children: that means to offer them instruments that can stimulate learning without making them tired but otherwise making them more involved through the play dynamic. In kindergartens this aspect can be seen also as group dynamic, in order to stimulate, under the teachers' influence, the interaction between children both in the learning stage and in the amusement time. In kindergartens other two objectives are to be taken into consideration. The first, which is economic, is related to the improvement of the school with the aim of influencing parents' opinion. The second one is about the safety: in the product must be present all the requirements in order to be used in public buildings.

The main differences must be researched inside the purchasing **occasions**. In the market of families in fact the purchase of a toy is connected with the age of the children and for this reason is helpful to split the purchasing possibilities according to the growth. In kindergartens instead, the need develop itself into two main moments: when the organization begins its activity and in the case of furniture renewal during the year. The useful life of the product is different inside the two markets: in the market of families, the low level of use means the possibility that the product can be purchase only one time. In kindergartens instead it is recorded a decrease of the useful life of the product due to the fact that a lot of children use them. For this reason we can suppose a cyclicity of purchasing due to the periodical use.

With respect to the **organization**, in the market of families parents represents the initiators, the decisors, and purchasers, while the children is the end-user. There also are some background figures such as grandparents, uncles and aunts, brothers and sisters. In the market of kindergartens the purchasing manager is the initiator, the decisor, and the buyer while the parents and teachers can be considered as influencers. Like in the other market the users are the children.

With regard to the **operations**, the main sales channel in the context of families is represented by the retailers on which the company rely; moreover which the offer is shown on specific magazines and on the company website in order to let people know all the characteristics of the product. An opportunity for the future could be the direct approach of Luxsolar with the end-customer: in this case the company should have specialized shops in the whole territory or a well informed staff. In the market of kindergartens the sales channels are different, because magazines and catalogues are used. Through these methods the companies can choose according to their needs which solutions are the best for them and simply order all that they need. The company has to create a catalogue where all the main characteristics of the product are explained.

7.2 Market quantification

In this section the market of the families and the one of kindergartens are analyzed from a quantitative point of view. The first type of analysis consists in the estimate of the demand.

7.2.1 Demand estimate

The analysis implies the division of the market into three levels: potential, available and served market.

Market of families

Potential market

The potential market for the “luminous floor” is numerically definable through the calculation of the number of Italian families that have got at least a children between 0 and 9 years old, which is the main target of our product.

With the help of the ISTAT data analysis, calculated from the census of 2001 the total number of families in Italy is about 22 millions.

An indirect method is used in order to achieve the total estimate: the percentage of families without children was, in the 2001, the 1,9 % of the whole population. The number of children between 0 and 9 years old is 5.600.000 (calculated from the chart below), that is almost the 10% of the whole population.

AGE CLASSES	N° of Children		Distribution (%)	
	2008	2009	2008	2009
“0” (Born in the year)	558.624	569.883	6,7	6,8
1 – 3 Years	1.689.042	1.697.563	20,2	20,1
0 – 3 Years	2.247.666	2.267.446	26,9	26,9
4 – 9 Years	3.338.195	3.376.199	39,9	40,1
10 – 14 Years	2.781.182	2.785.063	33,2	33,0
Total 0 – 14 Years	8.367.043	8.428.708	100,0	100,0

Table 37 – Distribution by age group of Italian child

The number of children between 0 and 9 years old is 5.600.000:

$$8.428.708 - 2.785.063 = 5.643.645$$

In order to calculate the number of families, you have to take in consideration the ISTAT data for the average number of children per family that, in the year 2009, was 1,41.

$$5.600.000 / 1,41 = 3.970.000 \text{ families}$$

Multiplying all the data we obtain that the number of families that live in Italy and have got at least one child between 0 and 9 years old is 3.970.000.

Available market

In order to identify the available market you need to take away the percentage of the population that does not have a certain level of income and that can not justify the possibility of purchasing the product.

year	2009			
Judgment on the economic resources	excellent	adequate	poor	Absolutely unsatisfying
Territory				
Italy	0,9	52,9	39	6,7

Table 38 – Distribution of the Italian population by income (Source: ISTAT 2010)

From the previous chart that split the whole population according to the economic condition, we can take into account all the values related to the families with the best economic resources, which can be considered able to achieve the Luxsolar offer and we multiply them by the previous value.

$$3.970.000 * 0,538 = 2.136.700$$

The value of 2.1736.700 represents the number of families that live in the territory, have got at least a child between 0 and 9 years old, and are able to purchase the product.

Served market

Families with children purchase different toys. It is helpful to pay attention to all the categories of toys, in order to verify which is the category that is more closed to the Luxsolar’s product and select the related market. According to the classification of Assogiocattoli, the category which is nearer to the “luminous floor” is the one of the electronic toys.

The chart below represents all the toys (age group between 0 and 14 years old) spread in macro categories, with the percentages related to the whole number of purchases.

CATEGORIES	2008	2009	+/- (%)
Pre-Scholar Toy	16,2%	17,3%	9,9%
Arts & Crafts	5,5%	5,5%	3,0%
Constructions	6,4%	7,1%	14,8%
Table games and puzzles	12,9%	12,4%	-1,6%
Dolls	16,1%	15,6%	0,1%
Veicles	10,6%	10,4%	1,4%
Peluches	4,0%	4,0%	2,4%
Action Figures and accessories	8,4%	10,0%	21,9%
Sport and Outdoor games	11,7%	10,6%	-7,1%
Electronic games for kids	3,5%	2,9%	-15,8%
Other games	4,7%	4,2%	-6,9%
TOTAL	100,0%	100,0%	

Table 39 – Percentages of the number of purchases by categories of toy (Sources: Assogiocattoli, June 2010)

According to the previous chart, the category that is nearest to the Luxsolar's product is the one of electronic games (2,9% of toys of the category sold in the 2009).

The value related to the macro categories does not represent the target of Luxsolar (0-9 years old) but an wider range (0-14 years old). In order to make the value more closer to the evaluation you should consider the number of children in Italy divided into age group. You can notice that the number of children between 0 and 9 years old (about 5.600.000) is more or less double of the number of children between 0 and 14 years old (about 2.800.000). This proportion (number of children between 0 and 9 years old in Italy = 2/3 number of children between 0 and 14 years old) can be considered for the evaluation of the served market operating on the reference target.

Using these data you can thus define the served market:

$$(2.136.700 * 0,029) * 2/3 = 41.300 \text{ families}$$

The value of 41.300 is referring to the number of families on the whole territory that have at least a children between 0 and 9 years old and are economically able to achieve the product of the category of electronic games for children.

Market of kindergartens

Potential market

Considering the context of kindergartens it is enough to have the whole number of kindergartens, that means the schools attended by children between 3 and 6 years old in Italy in order to define the potential market.

Territory	Italy	
Scholastic order	childhood	
Management of the school	total	
Year of closure of the school term	2007	2008
Type of data		
Number of schools	24848	24727
Number of classrooms	73161	73050
Registered male and female	1652689	1655386
Registered female	795066	797433

Table 40 - School attendance of children aged between 3 to 6 years.

The total of kindergartens on our territory in the 2008 was 24.727: this value represents the potential market of Luxsolar.

Available market

In order to easily create efficient supply relationships, it is better if the company in particular during the first period of product launching focuses its marketing effort in the Northern Italy.

Territory	Nord-West	
Scholastic order	childhood	
Management of the school	total	
Year of closure of the school term	2007	2008
Type of data		
Number of schools	5402	5369
Number of classrooms	17087	17131

Table 41 – Number of kindergartens in North-West of the Italy (Search: ISTAT 2008)

Territory	Nord-East	
Scholastic order	childhood	
Management of the school	total	
Year of closure of the school term	2007	2008
Type of data		
Number of schools	4373	4369
Number of classrooms	12987	13084

Table 42 - Number of kindergartens in North-East of the Italy (Search: ISTAT 2008)

The total of kindergartens in the Northern Italy in 2008 is equal to **9.775**: this value represents the available market of Luxsolar.

Served market

In order to define the served market, you should take into consideration the totality of private kindergartens in Italy. These schools are less sensible to the prices variations and can pay more attention to the qualitative aspects of the “luminous floor” than general kindergartens.

Territory	Nord-West	
Scholastic order	childhood	
Management of the school	total	
Year of closure of the school term	2007	2008
Type of data		
Number of schools	2354	2331
Number of classrooms	7519	7510

Table 43 - Number of the private kindergartens in North-West of the Italy (Search: ISTAT 2008)

Territory	Nord-East	
Scholastic order	childhood	
Management of the school	total	
Year of closure of the school term	2007	2008
Type of data		
Number of schools	1985	1979
Number of classrooms	6141	6168

Table 44 - Number of private kindergartens in North-East of the Italy (Search: ISTAT 2008)

The total number of private kindergartens in Northern Italy in the 2008 was 2.331 for the North-west and 1.979 for the North-east, for a total value of 4.310 buildings.

7.3 Competitive analysis

Thanks to the analysis of the 5 competitive forces (internal competition, potential entrants, substitute products, customers, and suppliers), the three elements that determine the level of competition in a market are identified: the contractual power for the supplier and customer, the competition of the sector, and the enter barriers for the potential entrants and the substitute products.

	MARKET OF FAMILIES	MARKET OF KINDERGARTENS
Internal Rivalry	<ul style="list-style-type: none"> • Competition: innovative but not unique, the product is in the context of games used to improved learning • Broader competition: the internal rivalry depends on the companies specialized in the creation of toys for children 	
Potential entrants	<ul style="list-style-type: none"> • Low entry barriers 	
Substitute Products	<ul style="list-style-type: none"> • Performance/price ratio unfavourable • A lot of companies have been producing toys since a lot of years 	
Buyers and Suppliers	Bargaining power through the chain	
	<ul style="list-style-type: none"> • Suppliers: mainly external for both materials, stencils, and competences related to the touching technologies • Buyers: families with a reduced bargaining power 	<ul style="list-style-type: none"> • Buyers: families with a reduced bargaining power

Table 45 - 5 forces model applied to Luxsolar

With regard to the **internal rivalry** in Italy the two multinationals Mattel and Hasbro are in competition with a local leader strong also on the distribution level: Giochi preziosi (the second European company with the most important turnover after Lego). Other important societies are: Clementoni (puzzle and toys), Globo (that produces more than 1.500 types of toys), Mac Due (technological toys), Bburago (metal cars), plastwood (supermag products), Trudi (soft toys and wooden toys).

Moreover, it is important to consider the bad condition related to the **potential entrants**: the sector of educative games is a sector with few enter barriers, due to very poor investments and to the low technical and specific know-how.

In order to have a better comprehension of the product typologies among the electronic games category that can be **substitute products** of the “luminous floor”, some of them are the following described. The first example of toys that have been improved during the time and that aim at satisfying all the needs of amusement and learning that a children has during all the childhood is represented by the talking and luminous tables. For example “Sapientino”, a brand created by Clementoni, allows children to approach since the first months of life to the toy, through very simple actions such as combining sounds and colours

or simply making the table brighten up. When the child becomes older the needs change and for this reason the product also changes. For children between 12 and 14 years old the products are more complex in order to achieve their attention.



Picture 56 AllenaMente Logic (Clementoni)

Instead Giochi Preziosi decided to focus the attention on other aspects such as the practicalness and the facility, in fact for example in Superconsole with a simple touch of the finger the images interact with sounds and words, according to the activity chosen, teaching a lot of topics in a very amusing way. This toy is based on cartoons, which attract children.



Picture 57 Superconsole Gormiti (Giochi Preziosi)

Even big multinationals create these kind of toys, companies such as Disney, Mattel, Hasbro and others. The huge number of companies that work in this sector makes the context of substitutive products related to learning toys very competitive. It is also important to underline that the product proposed by Luxsolar, which is based on the LED technology and on the functioning by touching, will have a bigger prize.

With regard to **suppliers**, LuxSolar contacts foreign suppliers in order to buy raw materials that uses every day. The company does not think to produce the product internally but need the help of other actors for the specific design and the moulds. Moreover, there are also other aspects related to the criticality of the processes: the functioning through touch for the tile and all the other external parts previous mentioned is

a know-how that the company does not have and that is not easily available on the market because it is possessed by very few companies. Suppliers for this reason have got a very important bargaining power that you can not undervalue. With regard to the **buyers** there is not any particular element that needs attention, apart from the fact that in market of kindergartens they have a bigger bargaining power, due to the fact that is a B2B market characterized by multiple supplies.

7.4 A Synthetic view: attractiveness and compatibility of the market

Thanks to all the previous analyses other two different dimensions are now took into consideration: the attractiveness of the sector and the compatibility of the industrial resources with reference to the business of the “luminous floor”. At the end the variables are evaluated together in a matrix.

In order to make the evaluations in terms of attractiveness four micro-variables are considered: dimension of the market, growth of the market, profitability of the market and the broader competition.

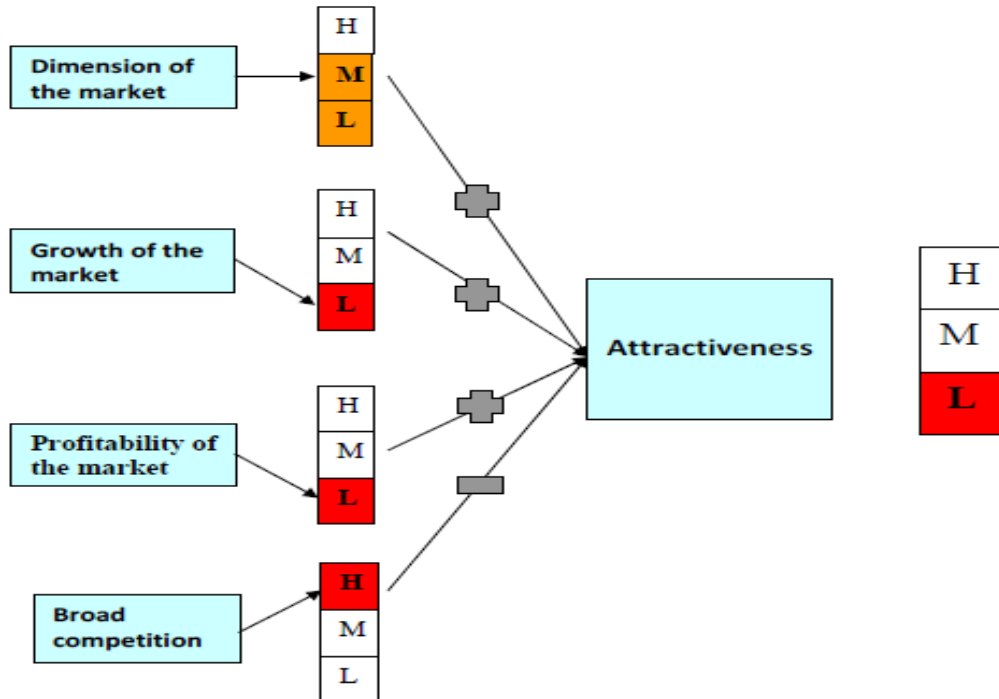
7.4.1 Market of families

The **dimension of the market** seems wide: the product is for all Italian children (potentially 3.970.000 families). It is important to also consider the price of the product, which is very high. The realization of the prototype has in fact reached the price of 800€: the effects of the economies of scale could reduce it to 500€ but it remains a very expensive product. Due to these valuations it seems even more important the perception of the product and its performance.

The **market growth** shows instead more than one critical point. In fact, while since 2001 in the toys’ market has been recorded an increasing rate almost constant (for example in the 2008, inside the Iper & supermarket channel, the trend was around the 5%), at the beginning of the 2009 the market growth rate was negative, due to the important financial and industrial crisis. On the other hand there was an increase in the second half of the year (+6% compared to the 2008) especially in the Christmas time (+7,2% compared to the 2008). With regard to the internal dynamics of the sector it is necessary to specify that the group of electronic games for learning shows signs of crisis due to the growth of videogames. The sector in which the “luminous floor” has been considered, which is electronic games for children, shows in fact a decrease in the 2009 of the 15, 8% compared to the year before, as shown in Table 5.

With regard to the **profitability of the business** it is important to take into consideration that it is connected with the perception that parents have about the level of innovation of the product. Moreover the Luxsolar's approach to a total foreign market could represent an element of criticality

With regard to the **broader competition** a lot of solutions that satisfy the same needs can be found. Each one of the four variables determines, in a positive or negative way, the level of attractiveness of the market, which is extremely low.



Picture 58 Attractiveness in the Family's market – Luxsolar

The compatibility of the business related to the “luminous floor” with the company and its as-is internal situation is now considered. It means to value the total coherence and thus the effort needed to introduce the new product inside the current portfolio. This level of coherence is valued thanks to four variables: resources and competences, company structure, investments and medium-long term objectives.

The company have got only a few part of the **resources and competences** necessary for the product: in fact LuxSolar mainly produce LEDs for the outdoor illumination and lighting elements. The product is an application of the technology and the company has got only the resources and the competences about the LED technology. Moreover LuxSolar does not have the necessary commercial competences, in order to arrange a distribution network for the B2B context; the same considerations are true when thinking about the possibility of a direct retail in the future.

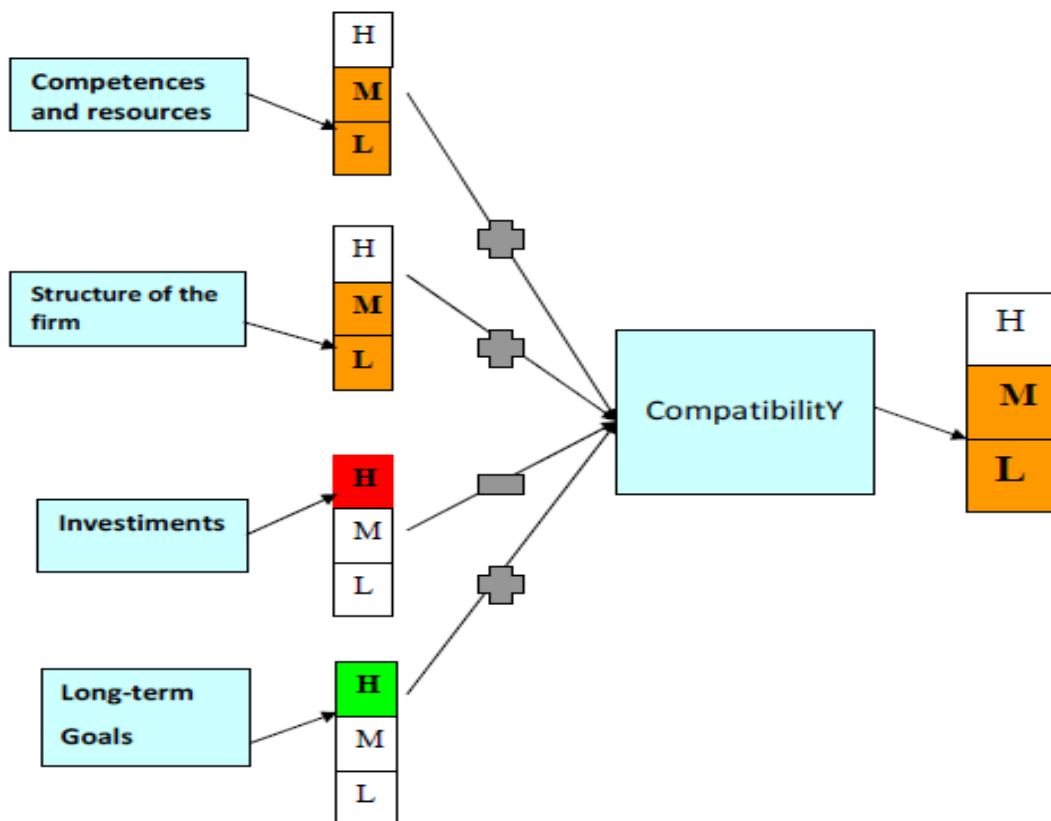
From an **organization** point of view the company needs some changes, because the entering in the two new markets implies the necessity of a new unit for the coordination of all the new distribution channels. This necessity means an important effort for the adaptation to the new situation.

The biggest **investments** in economic, time, and staff terms are to be make in order to fill all the gaps of the company in particular for the B2B market. That means that the company will need the help of suitable

salesmen in order to allow the company to compete with all the other realities and increase its competitive differential, by showing all the characteristics of the product and promoting it in the meetings with possible buyers.

With regard to the **medium-long term goals** it is important to underline the improvement of the LED technology and of all its application: it is a very new area of interest and for this reason still unexploited.

The way the four variables influence the level of compatibility in the market of families is now shown graphically.



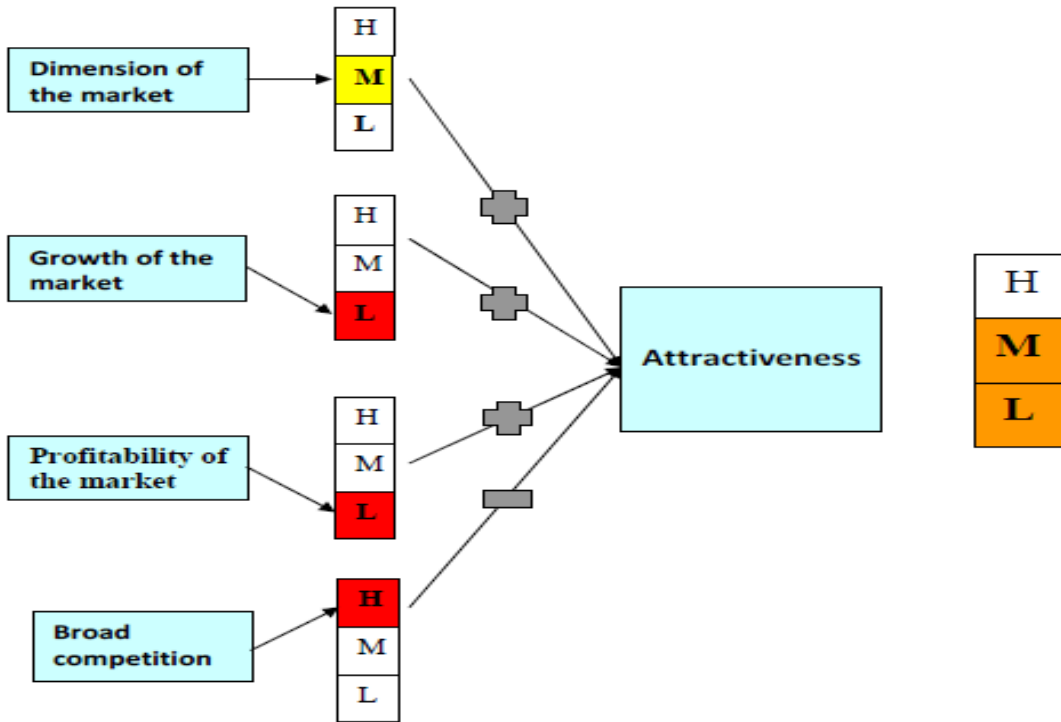
Picture 59 Compatibility in the Family's market - Luxsolar

7.4.2 Market of kindergartens

Compared to the other market the **dimension** of the one of kindergartens seems smaller (about 25.000 structures in the whole territory), although there are some positive aspects related to the price, that could not be considered high, and the possibility of a multiple purchase.

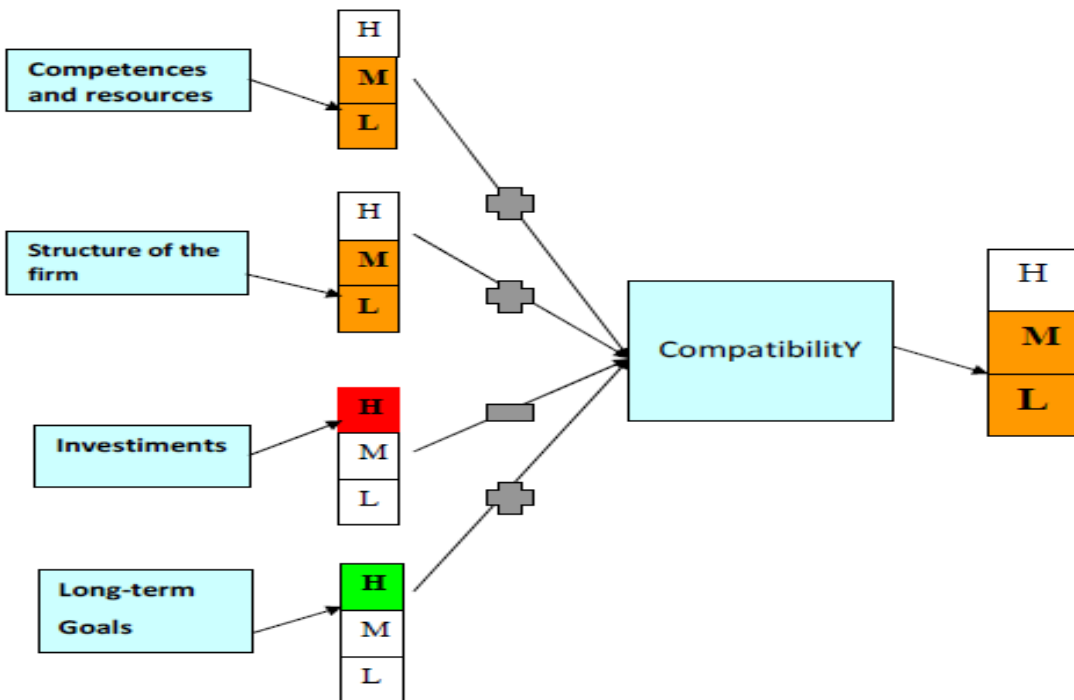
With regard to the **growth of the market** the same considerations made for the other market can be valid. The **business profitability** is not on a high level in the short run because it is related to the instauration of a strong and long-term partnership.

The **broader competition** comprehend all the products for children that can constitute a competitive differential for the kindergarten; in this case the possibility of choice is very wide.



Picture 60 Attractiveness of the kindergartens market - Luxsolat

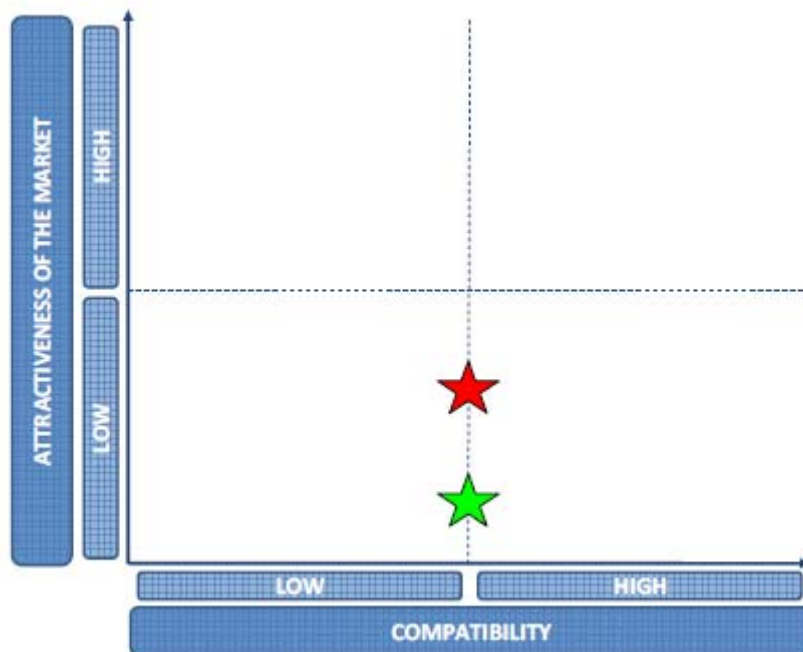
In terms of compatibility all the considerations done for the families' market can be represent even in the kindergartens' one.





Picture 61 Compatibility in the kindergartens market - Luxsolar

The analysis of the compatibility can be deepened through the evaluation of the strengths and the weaknesses of the “luminous floor”. A strength that is important to mention is the know-how that the company owns about the LED technology. Another important strength is the use and move simplicity of the product. An additional element that is peculiar of the context related to kindergartens that is the possible use of the “luminous floor” for learning and educational support. A weakness that is important to underline is represented by the dimensions of the product: these are considerable and the product needs a lot of space in order to be used. The price also represents a critical element, especially for families.

In the light of all the elements emerged is now possible to build the attractiveness/compatibility matrix.



Picture 62 Attractiveness/compatibility matrix referred to Luxsolar

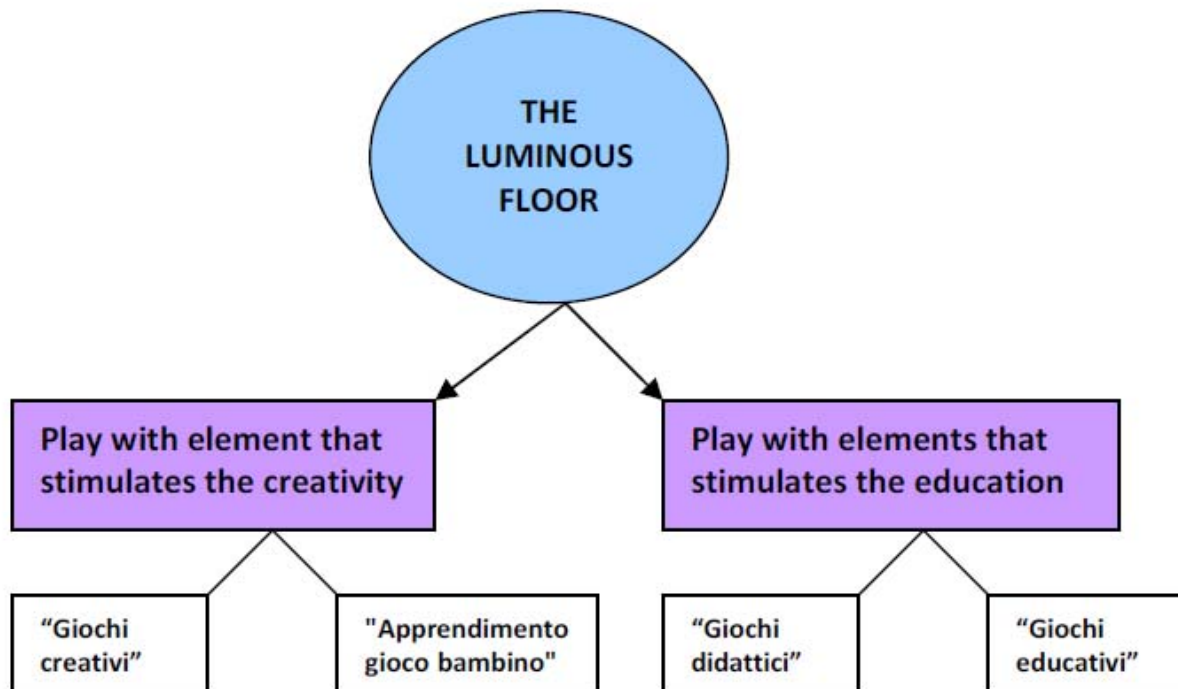
The result obtained for the market of families  shows that the company in this context is characterised by a very low compatibility and attractiveness. The position shows a product that has a few coherence with the activities of the company and that has the disadvantage of being produced for a very competitive market, with a lot of substitute products with lower prices. Instead the results obtained for the market of kindergartens  is a little better because it is characterized by the same compatibility but a higher attractiveness level. In this case the variable considered as critic that will have a very important role is the marketing of the product.

7.5 Micro-analysis of the demand

In order to understand how the “luminous floor” satisfy a perceived need and to evaluate the acceptance level, heterogeneous sources are developed for the analysis. The level of perception of the need in the market can be understood through the analysis of the blogosphere and the focus group with parents; the focus group is also used to estimate the acceptance level of the product with the pleasantness test done in the Happy Child kindergarten. For the acceptance level of the market of kindergartens it is important to mention the interview with Architetto Erba, purchasing manager of Happy Child.

7.5.1 Analysis of the Blogosphere

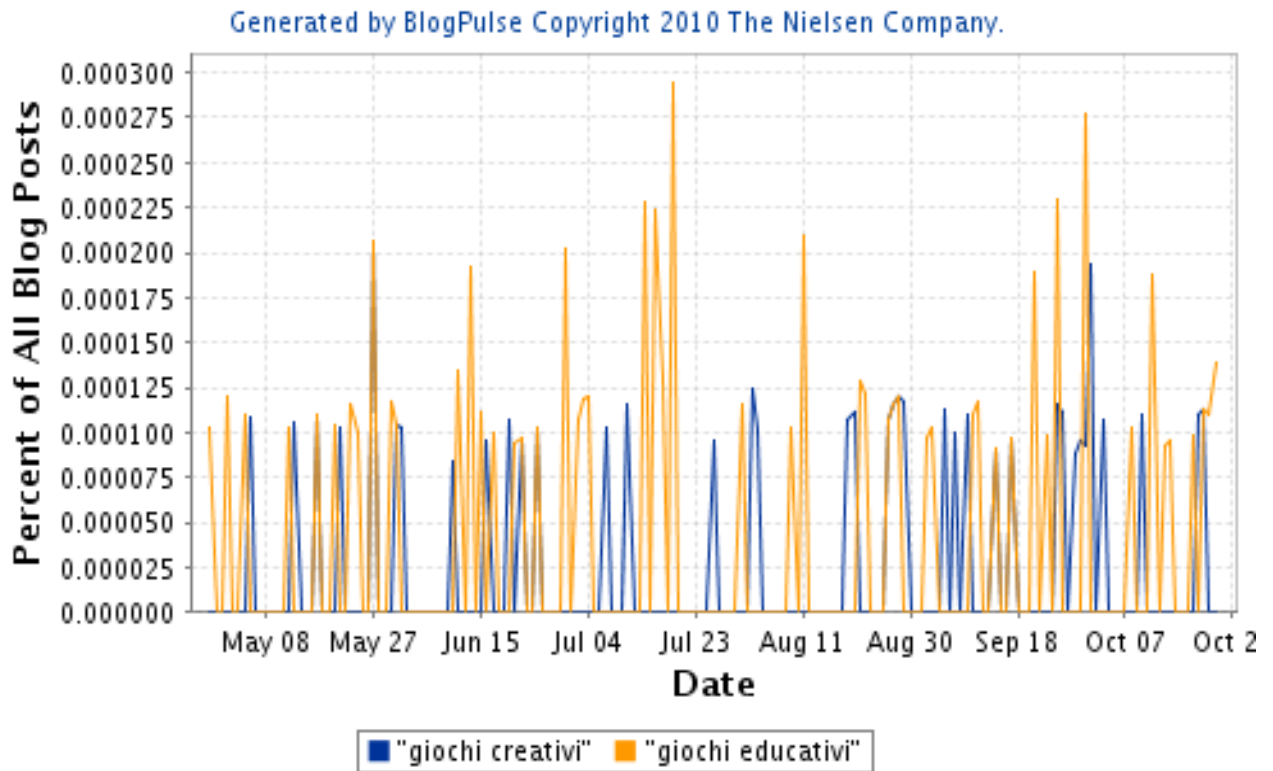
In order to analyze all the information represented in the blogosphere is important to use a conceptual tree, made with all the needs that the product aim to satisfy and for each one of them some of the keywords that better define it.



Picture 63 Conceptual tree used for the blogosphere analysis – Luxsolar

The first step consists in analyzing from a macroscopic point of view the size of the phenomenon inside all the blogs in the websites.

By using BlogPulse, an online software that makes researches inside blogs, first of all is evaluated the trend of the last six months, from April to October 2010, for each need.



Picture 64 Trend analysis of the last 6 months - Luxsolar

As you can see from this first analysis in the last six months there are no particular phenomenon of increase or decrease but a constant trend. It is possible to affirm that there is a very low percentage of posts that talk about the subject. The highest values are made by the echo of a news on more than one website: in any case these are very little periods with a very low weight.

In order to complete the analysis two search engines are used. Such engines are BLogPulse and Liquida. Macro needs are very deeply analyzed, by indentifying words or little sentences that can show their presence in order to obtain the specific weight of each one inside the blogs. Such words are “Giochi creativi” and “Giochi educativi”.

The expression “Giochi creativi” is contained in 127 posts while the other one only in 148.

In expanding the analysis to a deeper level, the main links are pointed out, that is the blogs where the concept of both the macro needs is present, in order to understand in which way the topic is faced and the ideas of the customers. In this respect only the blogs that appear over and over again in the analysis of the macro needs are taken into account in doing a list of the most present links. At this point the level of presence of the needs into the blogs could be evaluated

KEYWORD	MAIN LINKS	CONTENTS OF THE BLOG
"Giochi creativi"	http://www.bebelog.it	Clothing, Accessories, Growth
	http://paneamorecreativita.it	Creative activities for child
	http://www.homemademamma.com	Activities and objects of the child
"Apprendimento gioco bambini"	http://www.bebelog.it	Clothing, Accessories, Growth
	http://paneamorecreativita.it	Creative activities for child
"Giochi educativi"	http://www.bebelog.it	Clothing, Accessories, Growth
	http://blog.mammenellarete.it	Pregnancy, Child and health
"Giochi didattici"	http://www.bebelog.it	Clothing, Accessories, Growth

Table 46 - Main links in which the keywords are present - Luxsolar

For each one of them the most important and significant posts are presented here, in order to understand in detail all the aspects that can be considered important with reference to the "luminous floor".

The need of searching toys and activities that can stimulate children's creativity is inside the blog a very important element. In Bebeblog, website that belongs to the blogo.it channel and that is about more than 45 different subjects, the percentage of posts that contain the keyword "creative games" or the concept of learning with a game is very low (less than 1%) even if it is important to underline the extremely high number of posts that handle it (36).

"I giochi creativi ovvero semplici, colorati, non rumorosi, possibilmente in materiali naturali come il legno.

Le classiche costruzioni, i giochi di ruolo, la cassetta degli attrezzi consentono al bambino una maggiore possibilità di manipolarli e dare spazio a nuove idee da realizzare".

<http://www.bebelog.it/post/4315/giochi-creativi-e-in-materiali-naturali-una-scelta-sempre-piu-frequente>

The need of learning through a toy inside the blog is quite popular in some of the conversations even if the percentage that represents the totality of the posts is again very little (less than 1%).

"Il gioco, infatti, non è soltanto divertimento per i bambini, ma è molto di più: è un modo per conoscere il mondo, per sviluppare le proprie capacità come il tatto, il senso sociale, il gusto estetico e, nei bambini più grandi, anche per facilitare l'apprendimento scolastico"

<http://www.bebelog.it/post/186/giocattoli-come-sceglarli-in-base-all-eta>

“Avrete certo notato che non ho incluso i giochi elettronici, che appartengono alle ultime generazioni. Sono rimasta diciamo sul classico”

<http://www.bebelog.it/post/2516/i-10-regali-di-natale-piu-belli>

“Da piccola volevo la pianola, mi piaceva l’idea di imparare a suonare il piano.

Al Natale del mio 7 anno d’età sorpresa: i miei mi hanno regalato la pianola della Bontempi!!”

<http://www.bebelog.it/post/2516/i-10-regali-di-natale-piu-belli>

Commento di Celeste

“Ogni gioco ha uno scopo preciso nella crescita del bambino, tutto è stato creato per aiutarlo nell’apprendimento, ovviamente continuando a giocare, la serie si chiama Pannelli, ma non facciamoci ingannare da un nome così banale.”

<http://www.bebelog.it/post/459/i-pannelli-giochi-educativi-in-stoffa-e-feltro>

In paneamorecreatività, the aspect related to the creative games is present in a more substantial way, exceeding the percentage of 1%. The explanation must be found in the fact that the aim of blog is to describe activities and games related to the development of children’s creativity. Other posts connected to the learning aspect are not present.

“Io adoro i giochi creativi, giochi che si possono fare in compagnia, che si trasformano e possono diventare belli nel tempo.

Ad esempio quando il mio piccolo farà le elementari mi piacerebbe comprargli un kit per fare le orme dei dinosauri o giochi di società. Nella mia casa non gli farò mancare pennarelli, colori a dita, fogli, cartoncini colorati..stoffa, legno.”

<http://paneamorecreativita.it/blog/2008/12/giochi-per-natale/>

In the last blog, homemademamma, people speak only about maternity and the concept of creativity is very important.

“La creatività è innata ma va stimolata giorno dopo giorno, va curata e annaffiata come una piantina, le erbacce la attaccano sotto forma di simboli noti e schemi tradizionali ma le sovrastrutture e i pregiudizi vanno estirpati ogni giorno altrimenti la creatività viene repressa.”

<http://www.homemademamma.com/2010/04/09/cose-la-creativita/>

The learning connected to playing is present inside the website in some posts but the percentage is to be considered as not significant.

“Mi piace molto il vostro gioco “Qual’è la mia cartolina”. Con Topastro diventerei matta, ancora il suo modo di esprimersi è davvero povero e non credo indovinerei mai la cartolina scelta da lui! Però è un’idea...
potremmo provare, magari impara a usare meglio le parole.”

<http://www.homemademamma.com/2010/08/02/giochi-creativi-giocare-con-le-cartoline/>

With regard to the research of posts related to educational games, two are the blogs that contains a lot of information. Bebeblog is presents in a strong way for this need too and mammanellarete is a website that present a blog area divided in categories related to mothers and thus to children. The need of objects that has an educational support is not deeply felt while the concept of “educational games” is not considered.

“Giochi educativi: ne trovate a bizzeffe e per tutte le tasche. Un consiglio: prendeteli semplici, non troppo articolati o rumorosi. I bambini infatti amano giocare più con gli oggetti di uso quotidiano che con prodotti che dovrebbero super stimolare la loro intelligenza”

<http://www.bebelog.it/post/2557/regali-per-bambini-di-1-anno>

“I cosiddetti giochi educativi sono sicuramente tra i più regalati. Purtroppo sono spesso rumorosi e troppo completi, nel senso che non lasciano spazio alla fantasia e alla manualità del piccolo”

<http://www.bebelog.it/post/4315/giochi-creativi-e-in-materiali-naturali-una-scelta-sempre-piu-frequente>

“Attualmente sono giunta a queste conclusioni: se si tratta di salute, ovviamente, non bado a spese. La maggior parte dei giochi educativi e giocattoli in circolazione sono davvero inutili.”

<http://www.bebelog.it/post/3789/quanto-costano-i-nostri-bambini-il-commento-della-federconsumatori>

“I giochi educativi vanno bene, ma dovrei stare lì con lei ogni volta e dopo un po’, conoscendola, si stancherebbe.”

<http://www.bebelog.it/post/2521/computer-per-bambini-come-sceglierlo>

“Dispone anche di una parete interattiva che comprende giochi educativi con luci, suoni e forme che intratterranno anche i bambini più turbolenti”

<http://www.bebelog.it/post/2307/little-playzone-il-box-interattivo-con-luci-e-suoni>

“In realtà, spesso i piccoli si disinteressano ai giocattoli già pronti e strutturati e preferiscono gli oggetti che sono presenti nella loro quotidianità o che vedono usare a noi genitori. Così, se forniamo loro pezzi di stoffa, vecchie borse, occhiali, contenitori, nel loro tentativo di imitarci scopriranno i vari materiali, le grandezze, le forme, gli spazi.”

<http://www.bebelog.it/post/130/giocattoli-e-giochi-educativi-se-sono-troppi-frenano-la-crescita-e-limmaginazione-i-consigli-di-silvia-vegetti-finzi>

With regard to mammanellearete.it, the percentage of posts that contain the word “educational games” is not significant, and so are the conversations; the concept of “didactic games” is not present.

The low percentages of the keyword researched also testifies a very low perception of the macro needs considered. Even the deep analysis of each one of the blogs confirms this data, although it is important to notice that inside the blogs that deal with children’s activities the concept of stimulating the creativity is more actual. The toys taken into consideration are far away and completely different from the electronic toy, because they are simple and often home made.

7.5.2 Focus group analysis

In this stage, the responses gathered from parents during the focus group are analyzed, in order to find out which are the needs that came out during the conversation. After that the acceptance level is studied, by analyzing the feelings and the considerations obtained after the showing of the prototype. After the circumscription of the variables, they are related with each other through the use of a matrix perceive need-acceptance level.

Perceived needs

The parents that participated at the focus group were submitted to some questions in order to explore all the aspects analyzed. The most important result is that parents want their children to play with very simple elements, in order to stimulate and increase the creativity and learning. In fact it emerged that all the children play with daily objects and with a lot of fantasy. It is not particularly felt the need related to education through game. The didactical aspect was taken into consideration only after the vision of the “luminous floor”. Other important elements that emerged from the focus group are the need of orienting the children to very simple games especially in their first years of life. It is strong the will of supporting children in the choice of the game, when possible.

INVESTIGATED NEEDS	SENTENCES EMERGED FROM FOCUS GROUP
<p>Playing with simple toys</p>	<p>“My children play a lot with books, they tell each other stories made by themselves such as “I do the chef and you do the mommy” S.</p>
	<p>“My son gets bored after five minutes. For example now he is playing with a piece of fabric and a piece of broom which is the sword, we gave him even a bandana. He plays with Gormiti, making up a lot of stories” C.</p>
	<p>“My daughter would stay an entire life playing with two dolls, while my son likes more physical game like cars or football” M.</p>
	<p>“Cars, cars, only cars and they often play alone with the ball in the garden” Z.</p>
	<p>“He play with very simple games like the bicycle or the ball. He uses educational but very simple games such as Lego or puzzle” R..</p>
<p>Playing with classic elements instead of videogames</p>	<p>“We don’t use toys that make noise or that works with piles maybe because they are not used to, they play with pots and covers. We don’t use electronic games except the farm that makes all the animals’ sounds” S.</p>
	<p>“No to the electronic games because it is a decision of mine” R.</p>
<p>Following the instruction of the children</p>	<p>“We usually support his fantasy, thus he changes a lot of games. For example now he is cutting all the newspapers” G.</p>
	<p>“My children do the selection, only when they see my mother that plays puzzles they help her” M.</p>
	<p>“It depends on what they want, they don’t look at spots on the TV” S.</p>

Table 47 - Needs perception derived from Focus group - Luxsolar

For all the reasons described the need of playing with electronic-luminous games that stimulate the creativity and the learning is considered extremely low.

Acceptance level

After asking to all the participants the questions that want to investigate the perception of needs, some pictures about the “luminous bright” were showed. The reactions were doubtful and after that the dimensions and the weight of the product were verified they expressed their doubts about the use in the domestic context.

The common idea is related to the thought that the product would result interesting only for a very short time especially in the first years of life. According to the thoughts of the parents, the product would be more used in the context of kindergartens; in this respect the positive aspect that the product would represent a better way for the teaching is highlighted. The parents also proposed some different uses for the product after being asked by the moderator.

FACTORS CONSIDERED	SENTENCES EMERGED FROM FOCUS GROUP
<p>Using possibility</p>	<p>“It is a very cumbersome product. In my living room I would have it always around” M.</p>
	<p>“Is it possible to use it on the wall? Or only in an horizontal way?” C.</p>
	<p>“The use at the moment is only in a horizontal way” F.</p>
	<p>“It’s a pity, because that could be a good idea, both for playing and for leaving it after the use” Z.</p>
	<p>“In my case even on the wall would be a problem because I have got no space” M.</p>
<p>Places of use</p>	<p>“I would leave it in my living room, because now it is my children’s area because is near the kitchen and I can see him” G.</p>
	<p>“I would be happy if this kind of product was in the kindergarten because in the domestic context my son would lose interest in it” All</p>
	<p>“I don’t think my son would play with this thing. In the kindergarten with the help of an adult or with other childrens would be better” C.</p>
	<p>“This thing is huge, and it should be a reason of praise with friends, thus at the moment I say no” S.</p>
<p>Object functioning</p>	<p>“I think that touching and seeing all these lights is a great thing for children.</p>
	<p>“Only touching for coloring the part of the game and hearing some sounds like it is now it’s not a good thing for me” S.</p>
<p>Utility of the product</p>	<p>“It could be an tool for learning foreign languages, for example I touch it and it speaks to me in different languages; I think it is more an educational game than a toy” C.</p>

Pricing and purchasing propensity	“Personally at the moment I think that I could by it” G.
	“150 Euros?, we can talk about it” Gp.
	“With other uses for this price I would buy it but at the moment I would not accept it even in the kindergarten” S.
	“It depends on the softwares that I can instal, if they are easy to install or not” C.
	“I would buy it, I think that a price of 150 Euros is not so high” Z.
	“No I would not buy it, but only because it would be used for only 10 minutes by my children C.
	“With these characteristics I don’t think that I would buy it” Mp.
	“I would not buy it because it is very cumbersome, I haven’t got enough space. If I had It I would buy something else” M.
Other uses	“With more flexibility it could be even a carpet, different from all the rest” Z.
	“I would see it in old’s people home, like a coordination exercise or rehabilitative aim.” C.
	“I think that its place could be a shopping center, on the floor in order to attract people’s attention” Mp.
	“If it was thinner and more flexible it could be a designer element” Z.
	“It could be a table, used like a worktop” G.

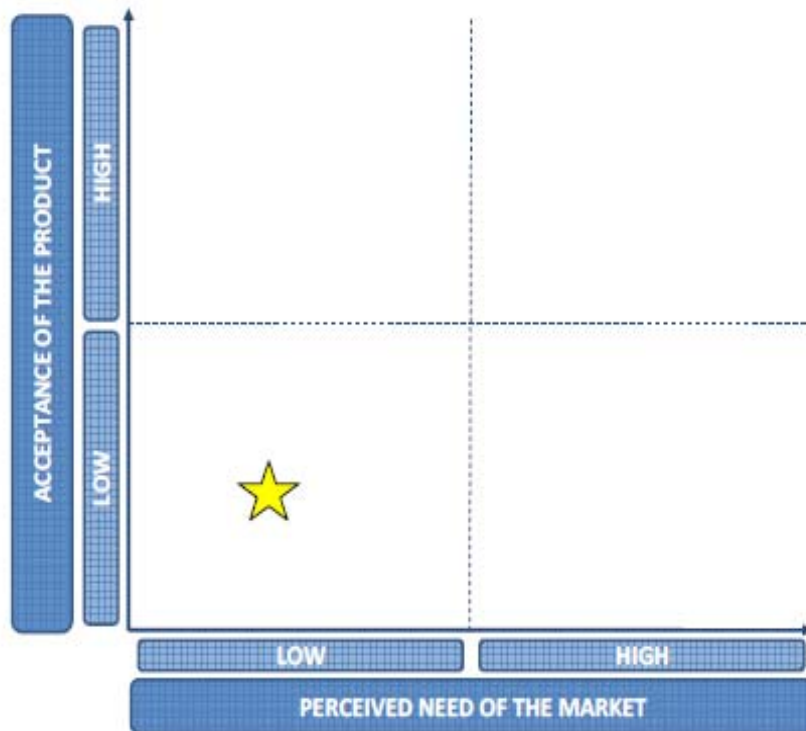
Table 48 - Acceptation level of the focus group - Luxsolar

In order to describe all the behavioural aspects taken into consideration by parents after the showing of the product it is important to underline the absence of a prototype but only the presence of some sketches of the “luminous floor”; in particular Mp looked at them for a long time with a very confused expression. G. e M. were very doubtful while Z. and S. didn’t look at them but simply passed the sketches to the other people. On the contrary, C. looked at the product with an expression of disapproval.

Although it was limited to the judgement of the sketches, the test of pleasantness highlighted a low product acceptance level. The parents also noticed that it would have a very difficult use in their houses but hypothesized other uses inside kindergartens, for educational and learning aims.

7.5.3 The perceived needs/acceptance level matrix

Once circumscribing the two variables, they are put in relation with a matrix.



Picture 65 The perceived needs/acceptance level in the family’s market - Luxsolar

The market of families is at the moment not suitable for the product. The aspects that lead to this conclusion are mainly related to the short longevity forecasted for a child, the product encumbrance, and the price. The electronic game with creativity and learning functions is not perceived as indispensable by parents and it is not considered able to improve the growth in the domestic context.

Hence, the company should improve its distribution and communication channels in order to attract the parents that want to buy an electronic toy and that are particularly sensitive to all the innovative aspects of the toys with learning functions.

Interview with Architect Erba

In this phase the focus is on the analysis of the answers obtained during the interview with Architect Erba, purchasing manager for Happy Child, in order to identify the needs coming out during the debate. Afterwards the acceptance level derived is studied, by analyzing the feelings and the reflections made.

Expressed needs

In kindergartens there is the necessity to have objects that are very resistant, due to the fact that they are used for all day by a lot of children. The product should not be considered as dangerous and must maintain this characteristic even when used in a wrong way. The product would not be left in the room but in a corner and used only in special occasions, thus it have to be flexible and not heavy.

From the interview with Arch. Erba a topic related to the moment of the children's afternoon nap has emerged: it is often useful to have something in order to make them relaxed. The "luminous floor" in this sense could have an opposite effect: *"When children are laying it would not be useful because they would be attracted by the light and would not sleep; it could have a relaxing function before the nap if a music was also reproduced from it and then stopped"*.

Hence, LuxSolar's concept does not satisfy the a real need of the context and by now it is not considered as a missing piece but as *"something which can involve and amuse the children and that is suitable to be used in groups, with the help of an adult or parents"*.

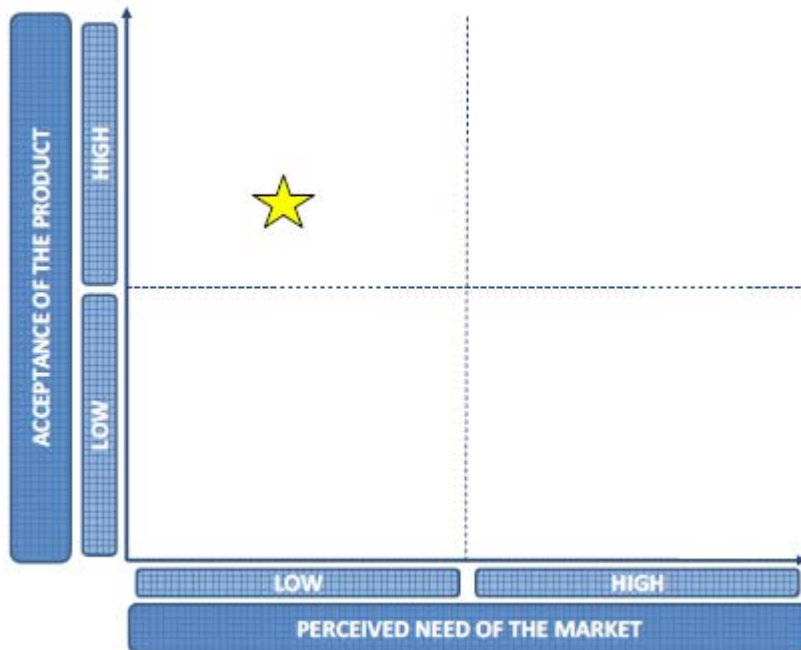
Acceptance level

In the context of kindergartens the economical factor has got a lower relevance than in context of families: in fact in this kind of school the product would be bought individually in order to arrange new didactic activities for children and thus to justify the cost compared to a common luminous toy .

Moreover, the dimensions represent a less important problem while in the domestic context the product (which measures 60 x 60 cm, 10 cm high and 7 kg weigh) could represent an obstacle both in terms of space and in terms of moving difficulties and safety.

The novelty of the product combined with the possible educational and learning activities that can be done with it make it very attractive; on the other hand, the doubts related to the safety and the longevity make the level of acceptance medium-high.

Once circumscribed the two variables, which respectively concern the needs and the acceptance level (defined by the interview with the purchasing manager of Happy Child), they are put together using the same matrix used for the market of families.



Picture 66 The perceived needs/acceptance level in the kindergartens’ market - Luxsolar

According to the matrix you can understand that the most suitable market for the product is the market of kindergartens. This conclusion is confirmed by the feelings expressed by the parents during the focus group and is related to the concept of the product use in groups led by the experience of teachers that together with children can arrange educational and amusing activities.

Hence, the company should improve its distribution channel in order to address the market of kindergartens through salesmen and distributors.

Suggestions for improvement

In this section the analysis how the “luminous floor” can be improved in order to make it more appreciated by the market according to the instructions that come from the market itself. In this respect the sources used are the blogosphere and the focus group.

Needs/criticalities from the blogosphere

- Simplicity: in order to stimulate children and let people immediately know about the amusement of the product and also the didactical possibility the toy should be as simple as possible.
- Colour: children like and are attracted by colours. For this reason the toy by Luxsolar, can be considered as suitable to satisfy this need through the potentialities of the LED technology and its colours.
- Not particularly noisy: the necessity is due to the fact that a noisy product can scare the children and decrease the pleasantness of the toy. The attraction should not come from the noise but the sound should be something that stimulates children. The game has the possibility to insert through the USB plugs low acoustic effects.

Needs/criticalities from the focus group

- Space: the game is now very cumbersome, especially for a domestic context where places and spaces are very reduced. During the debate emerged the possibility to use it on the wall. The parents said that in such a position all the problems due to the space could be reduced. The vertical positioning should be the best possibility in terms of space for the product after the use.
- Different surfaces: another aspect underlined by the parents is to design an object that can allow the children to touch different surfaces. In this way the children could learn easier the diversities and interact with the different characteristics of each part. Creation of tactile routes could be a variable and also an element of interest in order to test sensations and differences.
- Flexibility: the structural stiffness of the game does not lead to positive considerations. The totality of the protagonists in the debate underlined how the flexibility is a very important element in the domestic context especially for children. A flexible product is considered more safe.
- Interaction tools: the product is considered as limited. Words like interaction and dynamicity were often used during the discussion and resulted particularly missing in the product. The parents suggested some possible applications: it could be useful for children in order to learn foreign languages, meaning that to the touch is linked a sentence or a word or even a palette to stimulate creativity.

7.5.4 Stimulus/response model

In order to analyze the purchasing process the “stimulus-response” model was used. Such a model is based on 3 variables: product knowledge; sources of influence, opinions and behaviours. Such an analysis will allow the understanding of the dynamics that rule the purchasing decision.

	MARKET OF FAMILIES	MARKET OF KINDERGARTENS
Product knowledge	<ul style="list-style-type: none"> Stimuli that come from the market of electrical games Recreational and educational activities combined in one product Sources of information: communication sources and word-of-mouth of the parents 	<ul style="list-style-type: none"> Didactical applications of the product Information sources: company, parents, other kindergartens.
Sources of influence	<ul style="list-style-type: none"> Cultural and information level Income level Personal factors (personality, way of life) 	<ul style="list-style-type: none"> Education level Personal inclinations and personality
Opinions and behaviours	<ul style="list-style-type: none"> To influence the opinions and the behaviours by showing the technical and use characteristics of the product 	

Table 49 - The Stimulus/response model applied to Luxsolar

With regard to the **product knowledge**, the external stimuli can be very different and belong to the context where the subject lives. In particular they belong to the market of toys and in particular to the market of electronic toys for children. However, there are some differences between the market of families and the market of kindergartens. In the first one the playing aspect is not the only characteristic wanted by the market. Toys that can stimulate creativity and learning and that are suitable for didactic aims are elements particularly wanted and appreciated. The most common information sources that influence such a market are spots and promotions, but the word-of-mouth between parents or people that have children of the same age has also a great importance. In the market of kindergartens instead the didactic aspects are very important: the suppliers, the parents, or even the competitors are the main influencers. The aim of the organization that buy the product is to increase the level of the service with potential strategic effects. In the case of parents very attentive to the didactical aspect of toys, the **sources of influence** depend not only on the price but in mostly on the cultural and personal aspects; people with a high education can perceive as familiar the very innovative and technical elements that characterize the product and consequence understand its value. The economic level also represents an important influence source while occupation and age do not influence the choice. With regard to personality and lifestyle the considerations

are the same: a creative person will be more stimulated by the offer. In kindergartens instead, the main actors that can be influenced is the purchasing manager; in particular his education and his experience could make the comprehension of the product value easier. Even in this case the age do not play a fundamental role that can influence the decision, but the personality can speed up or slow down the purchasing process.

The considerations about the **opinions and behaviours** are the same for both the markets and are very important for the success of the product. In this respect the company should focus on a long-term marketing effort in order to influence the opinions of the potential customers by communicating the innovative and differential characteristics of the product and clearly showing the functions and the uses. In the market of families the actions are based on the comprehension of the efficacy and the innovation of the product, while in the market of kindergartens they are also based on the possible economic and imagine advantages related.

7.5.5 Purchasing process

Here the purchasing process of the “luminous floor” is described by dividing it in 5 steps.

	MARKET OF FAMILIES	MARKET OF KINDERGARTENS
Identification of the problem	<ul style="list-style-type: none"> Latent need: electronic games that can stimulate learning and creativity 	<ul style="list-style-type: none"> Relative need: products that can improve the service level offered by the kindergartens
Research of information:	<ul style="list-style-type: none"> Internal research: past experiences related to the product External research: personal resources (for example experiences of friends) and search through communication channel such as spots, Internet, salesmen, consumers 	
Valuation of the alternatives	<ul style="list-style-type: none"> Primary standard: price Secondary standard: quality and performance 	<ul style="list-style-type: none"> Economical evaluation
Decision of the purchase	<ul style="list-style-type: none"> Where: distributors’ network, specialized shops 	<ul style="list-style-type: none"> Where: distributors’ network, salesmen
Post-purchase behaviour	<ul style="list-style-type: none"> Comparison of the level of satisfaction related to the product bought and the own expectations Repurchase of the product 	

Table 50 - The purchasing process of Luxsolar

With regard to the first step, which is **the identification of the problem**, it is necessary to distinguish between two markets. In the market of families the latent need perceived by the parents is to give to their

children an electronic game that combines the recreational aspects with the educational ones in order to improve the education of the children and in some particular case solve some little difficulties in the learning. In the market of kindergartens instead the relative need occurs when there is the necessity to introduce a product that can improve the service level of the organization.

The next phase, which is the **information research**, can be analyzed in the same way for both the contexts. A first step can be the internal research of the information: potentials customers search in their mind if they had a past experience with similar products. There is then an external research through the use of salesmen, spots, websites, and experiences of other people. In this phase it is fundamental to invest economic resources in order to improve the knowledge of the “luminous floor”, in order to make the competitive differentials stand out.

In the phase related to the **evaluation of the alternatives**, in the market of families the price has a fundamental role: the wide possibility of substitute products and the economic crisis make the economic variable very important. Aspects such as product quality and performance are also considered important but not on the same level. In kindergartens instead the evaluation is only economic, although it is important to take into consideration the higher expenditure level that such schools can face. The quality and performance are also evaluated through rational criteria.

The **decision of purchasing** in the market of families will probably be influenced by the decision of LuxSolar of relying on a network of distributors. In this respect the creation of new commercial relationships with toys distributors and specialized shops will be fundamental. Consequently, the creation of distribution channels is also important for the temporal aspect of the purchase because an easy availability of the product can help the decision. In the market of kindergartens the purchase will also probably happen through a channel of salesmen: hence the company will have to rely on qualified people that can show off the product.

The **post-purchase behaviour** shows some differences between the two markets. In fact, although in both of them the comprehensive satisfaction depends on the satisfaction of the expectations and has effects on a possible repurchase, the evaluations that determine it are different. In the market of families in fact the satisfaction depends on the experience of the children: parents can see directly if the children likes the game and learn from it. In the other market instead the satisfaction the reactions of the children, the parents, and the other actors that deal with the structure too. If the product is considered as an important element that satisfies the customers and attract new consumer the level of satisfaction can be high. In this case there is the possibility of a new purchase and a positive word-of-mouth.

7.5.6 The roles inside the purchasing process

ROLES	MARKET OF FAMILIES	MARKET OF KINDERGARTENS
Initiator	<ul style="list-style-type: none"> Parents 	<ul style="list-style-type: none"> Purchasing manager
Influencer	<ul style="list-style-type: none"> Family members and relatives 	<ul style="list-style-type: none"> Teachers
Decision maker	<ul style="list-style-type: none"> Parents 	<ul style="list-style-type: none"> Principal/purchasing manager
Purchaser	<ul style="list-style-type: none"> Parents 	<ul style="list-style-type: none"> Purchasing manager
Users	<ul style="list-style-type: none"> Children 	

Table 51 - The roles inside the purchasing process - Luxsolar

For both the market children are the effective **users** of the product, but during the purchasing process several other actors can be involved.

In the market of families parents are the main protagonists: they are in fact the **initiators**, the decision makers, and the buyers. In the first years of life, the children is not completely able to recognize the level of satisfaction related to an object and does not understand if and how there are differences between one object and other, thus the input comes from their parents. The relatives such as grandparents, uncles, and aunts can be considered as **influencers** of the process, for example through thoughts, opinions, or perceptions related to the object.

As said the roles of **decision maker** and **buyer** are played by the parents, who decided if and when make the purchase. For this reason the marketing efforts should be orientated toward parents.

In some cases grandparents and relatives may also represent the role of **buyers**, for example if they buy the product as a gift.

In kindergartens instead the real **initiator** of the process is the purchasing manager, who is the person that perceive the need and decide to start the purchasing process. This figure also coincide with the decision maker (or in alternative the principal if the organization is big) and with the final buyer.

In this context there are different figures that can be **influencer** with respect to the purchasing process.

However, the most important is the teacher, because is the person that works with children and knows in detail their needs.

8 MARKET EVALUATION – SOLIANI

8.1 Macro analysis of the market

The study has been effectuated considered as target market for the “Shell bed” made by Soliani children till 14 years old. In detail a parallel analysis between the market of families and the market of kindergartens has been done.

The first level of the analysis deal with the macro environment where the company operates, this means all these factors that can influence the referring context.

8.1.1 Macro-environment analysis

In the PEST analysis political, economical, social and technical factors that are involved in the context where the company operates are took into consideration in order to see if they can have any kind of reflex in the development of the product and more in general in the behavior of the company.

FACTORS	MARKET OF FAMILIES	MARKET OF KINDERGARDENS
Political	<ul style="list-style-type: none"> Noise pollution: normative 2002/49/CE of the European Parliament and European Council 	<ul style="list-style-type: none"> Law 26/10/1995, n. 447 – “Legge quadro sull’inquinamento acustico”
	<ul style="list-style-type: none"> Elettromagnetic pollution: law nr.36 of the 22 February 2001 – “Legge quadro sulla protezione dalle esposizioni a campi elettrici, magnetici ed elettromagnetici” 	
Economical	<ul style="list-style-type: none"> Consumptions: -1,7% families’ outlay for Italian families 2009 vs. 2008 Product/services quote for health’s outlay: -0,4% (2009 vs. 2008) Propensity to save money: +0,4% (II trimester 2009 vs. II trimester 2008) 	<ul style="list-style-type: none"> Quote of profitability for non-financial companies: -1,8% (II trimester 2009 vs. II trimester 2008) Quote of profitability: -0,6% (I trimester 2009 vs. I trimester 2008) Investment rate for non-financial companies: -2% (II trimester 2009 vs. II trimester 2008)
Socials	<ul style="list-style-type: none"> Non-homogeneous geographic distribution Non-high birthrate in north regions and in Campania Attendance of school facilities 	
Tecnological	<ul style="list-style-type: none"> Noise pollution: screening solutions that can reduce the acoustic level by 25-30 Electromagnetic pollution: screening using metallic materials 	

Table 52 - PEST analysis applied to Soliani

About the politics factors, concerning the noise pollution in the 2002 was introduced a European normative that want to fight noise using a sharing approach in order to avoid, anticipate and reduce novice effects of the exposition to the environment noise, without set the highest level and terminations.

In Italy emission's limits of acoustic waves in fixed environment, like for example residential zones are 55 db during the day and 45 db by night.

Instead for the electromagnetic pollution, member states of the European Union must protect and educate the population. Everything constitutes some indications and sometimes even the National organizations do not follow them. In Italy for the moment limits of exposure ,attention values and aims have got lower amount than in the other European nations. For kindergartens, emission's limits of 55 db per day and 45 db by night established by the law regarding the "legge sull'inquadrimento acustico" about the uptown areas, falls down when talking about particular areas like hospitals, kindergartens, park, etc: 50 dB by day and 40 dB by night. Exposure's limits, attention's values and aims are the same for both the residential buildings and for scholastic buildings.

Regarding the economic factors it is possible to underlined a drop of the consumptions: from 2008 to 2009 the average consumption for Italian families is decrease by the 1,7% registering a higher contraction between families with medium-high level of consumptions. In particular, inside the analyzed categories the quote of consume for products or services with health benefits registers a drop from the 4,0% of the monthly consume to the 3,6%. The propensity of save money, means the relationship between the gross saving and their gross incoming, in the second trimester of the 2009 was 15,2%, with an increase of the 0,4% by the 2008 but with a decrease of 0,4% if compared to the first trimester of the 2009; with reference to the context of the kindergartens is possible to note that the profitability quote of the non-financial societies registered a decrease of the 1,8% in correspondence of the trimester of the 2008.

With reference to the first trimester of the 2009, the quote of profitability is lower than the 0,6 %. The investment rate in the non-financial societies was in the second trimester 23,3% two points less reflex to the same trimester of the 2008.

Social factors influence in the same time both the markets. About the geographic distribution more than one third of the Italian population is focused in three regions: Lombardia (16,2%), Campania (9,7%) e Lazio (9,4%). In the 12 cities with population number higher than 250 thousands of inhabitants⁵¹, this means the ones monitored by the European commission about the noise pollution, live more than 9 millions inhabitants, the 15,1%of the whole. The index of birth rate of the 2008 is higher in north-regions than in the south one with an exception of the region Campania with an increase of 10,5%. The number of families, in the year 2009 was 24 millions and 905 thousand; the average number of components for each family is 2,4

⁵¹ Roma, Milano, Napoli, Torino, Palermo, Genova, Bologna, Firenze, Bari, Catania, Venezia, Verona.

which is the same as 2008. Regarding the frequency of school buildings children and teenager to 14 years old are registered in a regular course of study and who also attended kindergartens and nurseries is 30% this means 1.974.302 children.

Even technologic factors influence in the same way the contexts. Isolating solutions available in order to fight the noise pollution consists in positioning an elastic material inside other materials like cement in order to reduce the pollution by the 25-30 db. In defense of the electromagnetic pollution, instead, different solutions are available. From gasket cables to entire screened rooms; material chosen are in general metal, necessary to ensure electric conductivity and so screening, combined with filling and covering materials. Are available also specific treatments of nickel, zinc and silver.

From the PEST analysis is also showed that a more complex context can be considered as favorable but that presents unknown aspects. In particular, the recent economic crisis provoke a contraction of the consumptions of all the Italian families even if these are made for health. Families tend to save more money and invest less. This situation hit also companies, that reduced their profits and investments. From the normative point of view some opportunity born: Italian law is quite severe about the noise and electromagnetic pollution, exceeding also the indications from the European union. The solutions for these problems are a lot and with different prices.

8.1.2 Market qualification

Once studied the environment where Soliani operates, it is possible to pass to a qualitative analysis of the market, with the use of the “6 O” model. Will be analyzed in the same time the market of families and the market of kindergartens. This division is necessary in order to describe the differences between the two markets.

	MARKET OF FAMILIES	MARKET OF KINDERGARTENS
Offer	<ul style="list-style-type: none"> • “Shell bed” with little dimension, which protect the children during the sleep from noise pollution and electromagnetic pollution 	
Occupants	<ul style="list-style-type: none"> • Parents 	<ul style="list-style-type: none"> • Purchasing manager
Objectives	<ul style="list-style-type: none"> • Protection of the children from noise and electromagnetic pollution 	
		<ul style="list-style-type: none"> • Imagine of the organization • Security

Occasions	<ul style="list-style-type: none"> • Development of the need: the moment when the pollution is seen as a problem 	<ul style="list-style-type: none"> • Personal decision of the director/purchasing manager • Emerged /latent need of parents
Organization⁵²	<ul style="list-style-type: none"> • Parents: promoter, decision maker and buyer • Controller: pediatrician, friends, relatives company 	<ul style="list-style-type: none"> • Purchasing manager: promoter, decision maker and buyer • Controller: parents and teachers
Operations	<ul style="list-style-type: none"> • Place: dedicated shops, website 	<ul style="list-style-type: none"> • Place: purchase from the company directly or with the use of representatives
	<ul style="list-style-type: none"> • Timetable: collection of the information related to the product 	

Table 53 - The model of “6 O” applied to Soliani

The **offer**, common for both the markets, consists in a product with little dimensions that allow parents to protect their children from noise and electromagnetic pollution during the sleep.

All the **occupants** can be shared in two markets. For the families, there are parents: they express the request after the need of protection recognition and in order to satisfy it, they address themselves to the market for screening solutions. In kindergartens instead there are purchasing managers that want to give their customers a better service.

Both in the families’ market and in the other one the most important aim is to protect children from the bad effects of the exposure to the electromagnetic waves. In the kindergartens’ context there are two more aims: the first is related to the security due to the fact that the “Shell bed” must both ensure the protection of the children during the rest and on the other hand must not present characteristics that can constitute a danger. The second one has economic characteristics and it is the improvement of the image of the organization.

Regarding the **occasions**, the improvement of need in the families’ context is verified when parents feel the problem of the pollution like a phenomenon that interests all the family, and realizes the importance to protect the children. The frequency of purchase is connected to the recognition of the product as an object which can protect children’s health: In this case it is possible that the parents decide to buy the “Shell bed” even looking at the fact that, till to 12-14 years old, the children are still rapidly growing. In the market of

⁵² The characteristics are better defined in the purchase process part.

kindergartens, the purchasing process can be activated in the moment when the school director find out between parents a emerged need of protect their children from the pollutions; or even could be the result of a personal decision with the aim of guarantee more than one service.

There are several conditions: for example the director must evaluate if the need of parents can justifies this kind of investment, if the kindergarten can face this purchase both on the logistic point of view and on the economic one and if this one is coherent to the business and to the consequences that may verifies.

Referring to the characteristics of the furniture, the purchase can be done in huge quantity, with a variable cyclic related to the use of the product and with a periodicity during the school year, this means from the beginning of September.

On the **organizational** level, in the market of families are parents who starts, decides and do the purchasing process while other figures like the pediatrician, friends, and the company have only a secondary function. In the market of kindergartens instead the purchasing manager has the same role of parents during the purchasing process while the role of influencers is done by parents and teachers. In both the two markets the children is of course the users of the product.

Related to the channel of purchase the “Shell bed” can be bought by parents in the first time with the use of dedicated shops; for the long period Soliani is evaluating the idea of an improvement of the sales system on the web adapting the website or creating a new one. Referring to the timetable there is a pre-purchasing step when all the information are collected with the use of advertisements. For kindergartens’ the purchase can be done directly from the company or through distributers.

These qualitative considerations can be completed with quantitative considerations in order to analyze the market and its dimension.

8.2 Market quantification

Understanding which are the dimensions of a market implies a deeper analysis, analyzing time by time the weight of some significant analyzed variables, like for example the demographical, economical and behavioural ones. Even in this case it is necessary to make a distinguish between the market of families and the market of kindergartens.

8.2.1 Demand estimate

The analysis implies the division of the market into three levels: potential, available and served market.

Market of families

Potential market

In this part there are the families that buy the product. Variables that must be taken in consideration are the demographic ones. The “shell bed” of Soliani addresses to parents whose children are between 0 and

13 years old.

The total number of families in Italy is about 22 millions units. The 81% (the 17.820.000) has at least one child. Knowing that the percentage of the population between 0 and 14 years old is constantly near to the 14% since years, it is possible to derive the number of families that live in Italy with at least one child.

Territory	Italy					
	Year	2006	2007	2008	2009	2010
Type of the indicator						
Percentage of the population between 0-14 years (al 1° January)		14,1	14,1	14	14	14
Percentage of population between 15-64 years (al 1° January)		66,2	66	65,9	65,8	65,7
Percentage of population over 65 years (al 1° January)		19,7	19,9	20	20,1	20,2
Average age(al 1° January)		43	43	43	43	43

Table 54 – The age of the population in percentage value divided by age groups - source: www.istat.it

$$22.000.000 * (1-0,19) * 0,14 = 2.500.000$$

Multiplying the data you get the number of families in Italy with at least a child aged between 0 and 14: about 2.500.000.

Available market

To identify the available market you should remove from the total population the percentage of that part without a sufficient level of income needed to buy the product.

We have to decrease the previous obtained number:

year	2009			
	excellent	adequate	poor	Absolutely unsatisfying
Judgment on the economic resources				
Territory				
Italy	0,9	52,9	39	6,7

Table 55 - Distribution of the Italian population by income (Source: ISTAT 2010)

Considering that the “shell bed” is a product done in order to embrace the most of the population as possible but at the same time that is not considered indispensable, it will take into consideration both the population with great economic resources and the one with suitable economic resources.

Multiplying the 53,8% of the population that own a suitable income for the potential market previously calculated the result obtained is the available market, equal to **1.345.000** units.

$$2.500.000 * 0,538 = 1.345.000$$

This is the number of families in Italy with a child aged between 0 and 14 that are able to buy the product.

Served market

In this case the definition is related to all the people that show a certain sensitivity to noise and electromagnetic pollutions.

In order to evaluate the level of interest, all the data collected by the European Commission can be analyzed: the 74% of the Italian population thinks that noise has got an huge effect on the health, while the 81% is worried about the effects of the electromagnetic waves.

Considering the possibility of protection from both the two phenomenon, it is considered an average of the two factors, that is the 77,5%, that multiplied with the value of the potential market gives the number of the served market, which is 1.042.375 families.

Market of kindergartens

In the same time the market constituted by kindergartens is analyzed, this means all the public and private organizations that could buy the product for the children.

Potential market

It is composed by all the kindergartens in Italy.

Territory	Italy	
Scholastic order	childhood	
Management of the school	total	
Year of closure of the school term	2007	2008
Type of data		
Number of schools	24848	24727
Number of classrooms	73161	73050
Registered male and female	1652689	1655386
Registered female	795066	797433

Table 56 - School attendance of children aged between 3 to 6 years.

The Soliani's potential market is **24.727** units.

Available market

The part of the potential market that can be considered as available market is constituted by all the kindergartens that are particularly subjected to the pollution. This category is represented by all the organizations positioned in the Italian cities with more than 250.000 thousands inhabitants, dimension considered critic by the NOISE European agency for environment that supply monitoring and information regarding the noise pollution.

At the 31st December of 2009 for ISTAT the Italian population that live in a city with more than 250.000 inhabitants was the 15% of the whole population. If it is considered a distribution of the population into

age range equally in all the nation it is possible to say that the number of schools that are in these cities are the 15 % of the total, equal to 3.709 kindergartens.

Served market

Due to its nature (it is a niche market), the served market of Soliani for kindergartens is constituted by all the available market, about 3.709 structures, level that could be entirely reached by the marketing effort.

After the definition of the three macroareas related to the two markets, it is important to analyze the current competitive situation of Soliani for the “shell bed” through the use of the 5 competitive forces model by Porter, in order to identify the most relevant variables and discover the most important areas of intervention.

8.3 Competitive analysis

Thanks to the analysis of the 5 competitive forces (internal rivalry, potential entrants, substitute products, customers, and suppliers), the three elements that determine the level of competition in a market are identified: the contractual power for the suppliers and customers, the competition of the sector and the enter barriers for the potential entrants and the substitutive products.

	MARKET OF FAMILIES	MARKET OF KINDERGARDENS
Internal Rivalry	<ul style="list-style-type: none"> The direct competences are reduced Broad competition: other companies specialized in product for children 	<ul style="list-style-type: none"> Broad competition: product supplied by the habitual suppliers but not substitutes Dimensions of the market: wide, stable, with a high concentration level
Potential entrants	<ul style="list-style-type: none"> Low entry barriers 	<ul style="list-style-type: none"> Advantage for the firm that have developed economies of scale and experiences curves



Substitute Products	<div style="text-align: center;">  </div> <ul style="list-style-type: none"> • Isolation of some parts of the home <p>Picture 67 Curtain shield Elettrosmog Tex - Fonte: www.elettrosmogtex.com</p>	
	<div style="text-align: center;">  </div> <ul style="list-style-type: none"> • Isolation of the bedroom <p>Picture 68 Application of shielding plates Sati italia - Fonte: ww.sati.it</p>	
Buyers and Suppliers	<p>Bargaining power through the value chain:</p> <ul style="list-style-type: none"> • Suppliers: Common raw material, purchased from external suppliers • Relationship with Parà for the supply of the tissue for the covering structure 	
	<ul style="list-style-type: none"> • Buyers: families with low negotiation power 	<ul style="list-style-type: none"> • Buyers: kindergartens with a high negotiation power which is potentially very relevant

Table 57 - 5 forces model applied to Soliani

For the **internal rivalry**, in the market of families, the “shell bed” at the moment has not direct competitors. In a broader level, the competition is higher. The firm must compete with all the specialized operators that realizes products for children. In the market of kindergartens, the competition is extended to all the products requested by the structures; in this case, also the products that not satisfy directly the need but that contribute to increase the balance sheet weight must be considered. The market is pretty much stable, both at the firm’s level and about products portfolio.

For the **potential entrants** it is important to specify that the market of families has low entry barriers: the economies of scale, the experience curves and strong initial investments are not fundamental. Soliani does not have a loyalty market and the actual distribution channel will not be suitable. For the market of kindergartens, the situation is different, because there is a different type of competition: in this case, the economies of scale and the experience curves could give a certain advantage for the firms that have developed these aspects. The quality must be combined with a competitive price.

In the market there is not a **substitute product** for the object of Soliani. For the protection from the noise and the electromagnetic pollutions, a possible solution might be the isolation of the entire room. It is a fully isolating solution (but also much more expensive), that is realized thanks to the installation of plates or tissues in the walls. An intermediate solution consists in the isolation of some parts of the room such as curtains and trimmings placed around the cables. The protection is restricted but the price is more competitive than the cost for the isolation of the entire room.

Referring to the bargaining power of the **suppliers** through the chain, some common considerations for the two markets can be done. For the realization of the product, Soliani uses simple and common materials; it purchases from external suppliers the necessary raw materials. From this point of view there are not any particular criticality. In the future a collaboration with Parà will be possible, born inside the Babylandia project, for the supply of the covering tissue of the “shell bed”.

With regard to the **buyers**, it is possible to think that in the market of the kindergartens they can have a potentially higher bargaining power, because the structures that will decide to use the product of Soliani might purchase different pieces .

The analysis of the competitive situation does not underline particular critical elements, however it is necessary to specify some aspects. While considering the innovative nature of the product that might guarantee both an important space in the broad competition (thanks to its benefits on the health) and with respect to the substitute products (thanks to the advantage of the quality/price ratio), there still are some doubts related to both the total lack of distribution channels and the non-familiarity with the market of the children for both the two contexts.

8.4 A Synthetic view: attractiveness and compatibility of the market

In order to make the evaluations in terms of attractiveness four macro-variables are considered: market dimension, market growth, market profitability, and broad competition.

8.4.1 Market of families

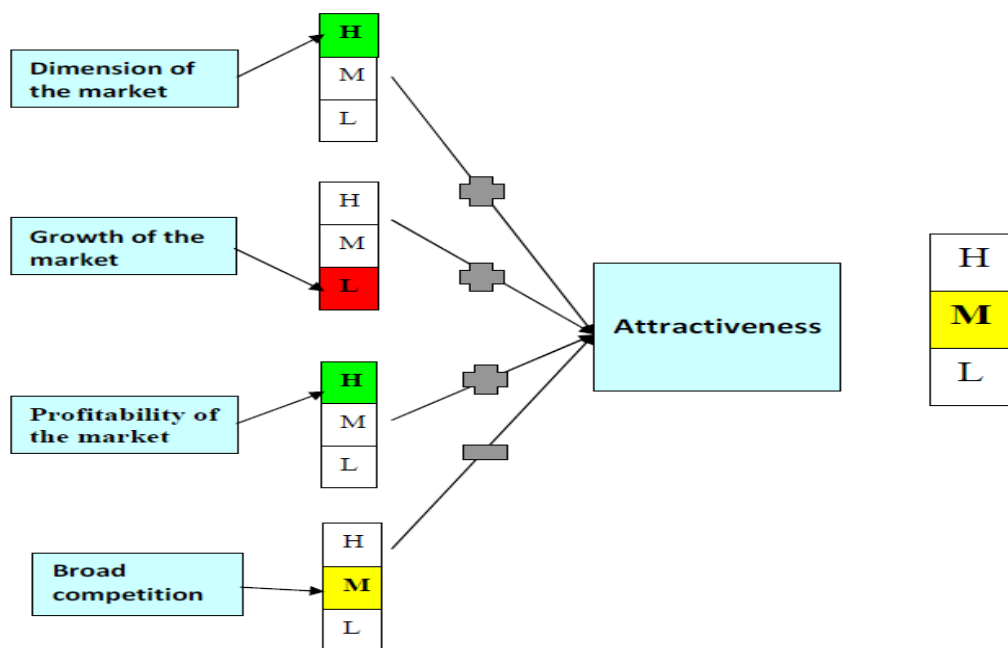
The potential dimension of the market seems to be potentially wide, depending on both the dimension of the potential market, equal to the majority of the Italian children (about 2.500.000 families) and to the competitive price of the product. At the same time, it is always necessary to keep in mind the unknown factor related to the perception of the needs by parents.

The **market growth** is, for hypothesis, negative. In the context of the families, there is a drop in consumptions of 1,7% from 2008 to 2009.

The **profitability** may be good, thanks to the degree of innovation of the product and a much more high availability of parents to protect the health of their own sons, also for more money.

For the **direct competition**, it is necessary to consider the other solutions, characterized by a lower quality/price ratio. For the broader competition, in the market of families, there are all the products that aim at maintaining and protecting the health of the child. In this case the differentiation degree of the product proposed by Soliani has a central role.

Each one of the four variables determines, in a positive or negative way, the level of attractiveness of the market that is altogether low.



Picture 69 Attractiveness in the Family's market - Soliani

Now the compatibility of the business related to the “shell bed” with the company and its as-is internal situation is considered. It means to value the total coherence and thus the effort needed to introduce the new product into the current portfolio. Such a level of coherence is assessed thanks to four variables: resources and competences, company structure, investments, and medium-long term objectives.

At the moment, Soliani includes in its product portfolio shielding solutions based on different technologies, functionalities and shapes, but that will reach the same protection need to the sound and electromagnetic waves. Quality and flexibility are the distinctive characteristics of the business, necessary also for the production of the “shell bed”. With the entry in a new market, other factors not considered yet are also important: the usability, the aesthetic pleasantness, the comfort and the handiness. It is necessary that both the structure and the tissue will be thought with the goal to develop these characteristics. The first part is internally and completely realized by the firm, moving to itself economic and human resources that might be assigned to other projects. The fabric is supplied by Parà: all the costs related to both communication and coordination must be taken into consideration, for these aspects it is necessary a collaboration with another firm. Soliani has the necessary **resources and competences** in order to realize the product, but they are not sufficient, they must be developed and completed.

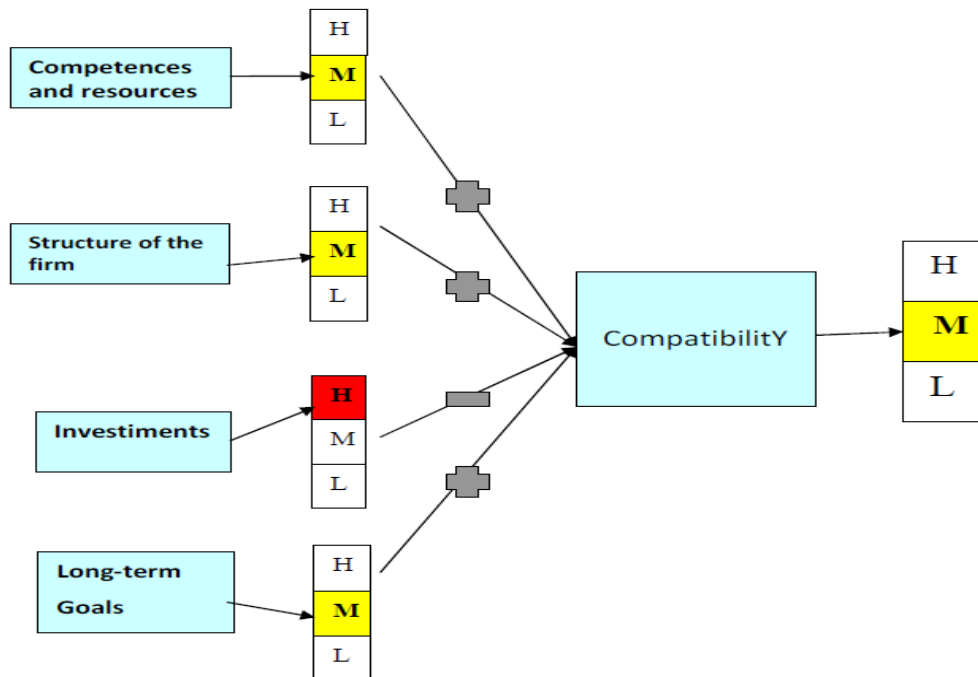
From the **firm structure** point of view, Soliani is small and also is a family run firm, for these reasons the change can be facilitated, also thanks to its reduced dimension and to its flexibility.

The organizational structure is similar to a matrix where in y-axis there are the three products division and on the x-axis the functions of the firm. This structure helps in the same time two dimensions: for the first guaranteeing an high specialization level and for the second guaranteeing the collaboration between different units. These characteristics altogether facilitates the introduction of the “shell bed”. The major incompatibility is related to the distribution phase: a function that deals with this process does not exist at the moment, because the firm actually can count on repetitive and durable collaborations with other companies.

The firm is not facing at the moment particular **investments**, but continues in its proper activity of research and development. This activity could have a drop with the introduction of the new product, because some shiftings are necessary. The level of coherence with the investments previously decided is relative. Although, the necessary efforts for the technical part are moderate, while for the part of the development of marketing aspects, the activities are almost all new and therefore requires a large economic commitment.

The **long-term goal** of Soliani is to continue the technology development that represents the core business of the firm. This fact will permit both to assure a high quality and personalization level and will assist to find some different application fields for the same technology. Such goal already happens with the collaboration of medics, militaries, aeronautics projects. Thanks to the flexibility, it is possible to find opportunities in order to expand the business of the company.

It is now possible to show graphically the way the four variables influence the level of compatibility in the market of families for the business of the “shell bed”.



Picture 70 Compatibility in the Family’s market - Soliani

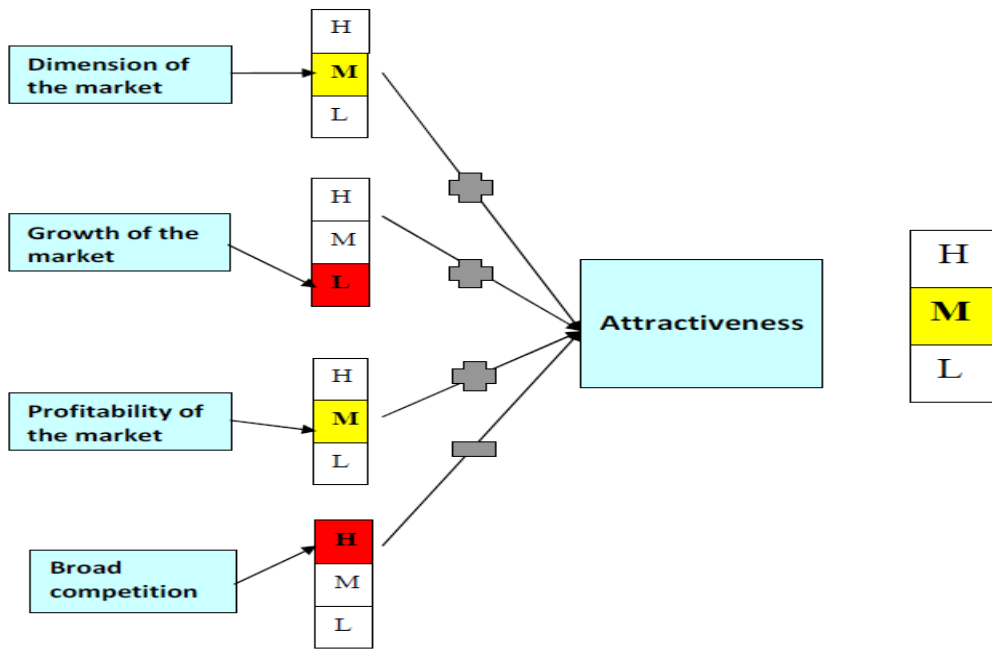
8.4.2 Kindergartens’ market

The **market** of kindergartens is reduced compared to the families' one; it is about 24.727 units, even if the single supply is bigger in the order of a few dozen units.

As in the market of families, also in the market of kindergartens the hypothesis for the **growth of the market** is negative: with respect to the firms, including kindergartens, in the same periods of time (2009 vs. 2008) a drop of the investments of the 2% has been recorded. These factors have a negative impact on the market growth.

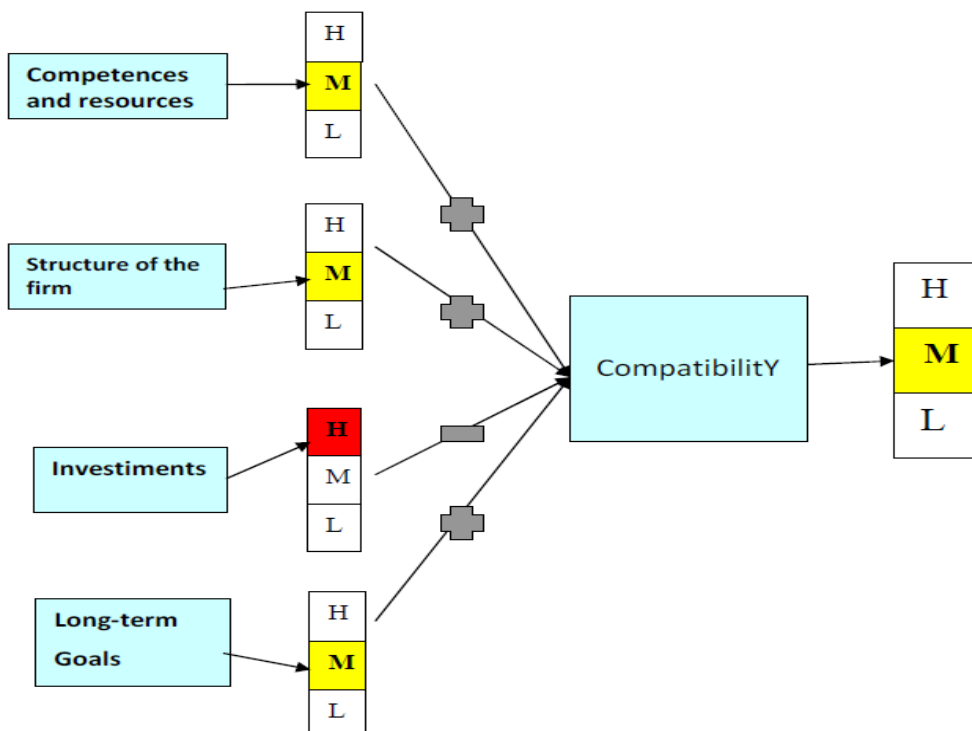
In the kindergartens, assimilable for logic to companies, the **profitability** must be considered, in the short period, as lower compared to the previous market, because the counterparty possesses a not negligible bargaining power. In the long term run the possibility to obtain durable commercial agreements might have a positive effect.

For the direct **competition**, the market of kindergartens shares the same consideration done for the market of families: all the others insulating products are considered. Referring to the broad competition, all the products for children that might be a competitive differential for the kindergarten are included. The representation of the attractiveness of the market of kindergartens is as follows.



Picture 71 Attractiveness of the kindergartens market - Soliani

In terms of compatibility all the considerations done for the families’ market can be represent even in the kindergartens’ one.



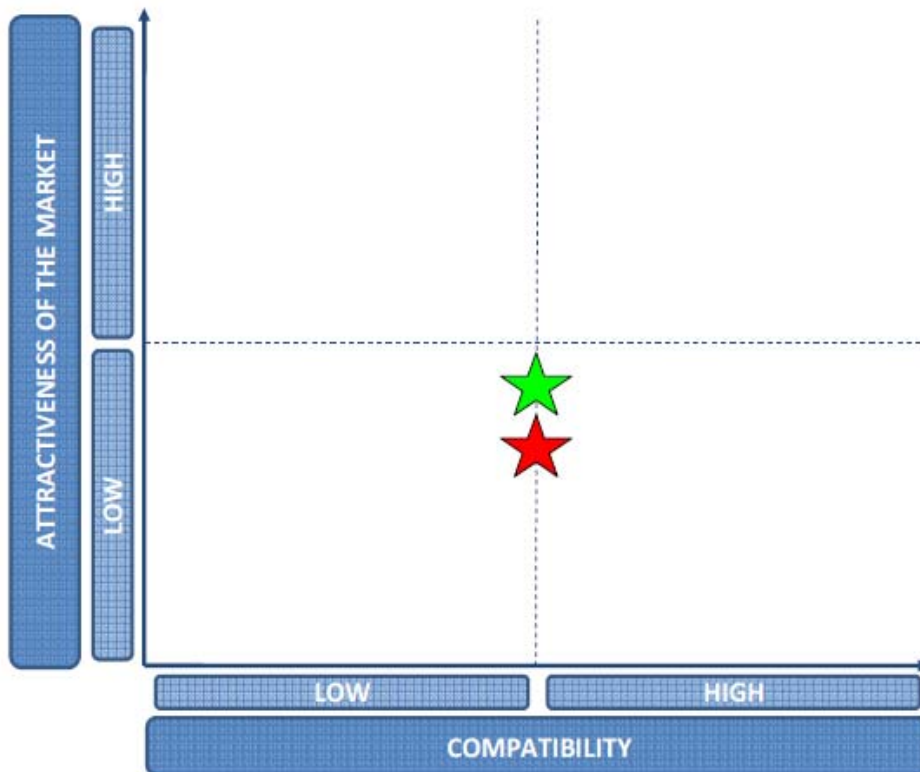
Picture 72 Compatibility in the kindergartens market – Soliani

The analysis of the compatibility can be deepened through the evaluation of the strengths and the weaknesses points of the “shell bed”.

Among **strengths** it can be considered the possess of an important know-how, the knowledge about the electromagnetic field are continuously integrated, developed and updated thanks to external contributes of single scholars or important laboratories that can help the firm in order to guarantee to the “shell bed” an high technical level. Partially tied to that concept, there is the high qualitative level: an extreme attention to the production processes and to the product is provided in order to obtain a very high quality level. The experience represents another important strength, because it is not limited to the products made for the big order, which can be partially standardize, but derives also from a big quantity of supplies with very small dimensions but extremely customized. A last strength may be represented by the flexibility proper of Soliani. The firm follows the client from the beginning, sharing the know-how in order to obtain a solution that is aligned with the needs. This factor represents the most competitive differential of the firm: to supply not only the physical product but also all the technical information, derived from the knowledge and from the experience.

If the experience in the sector of the shielding solutions represents a strength, from the other part, the inexperience for the creation of product for child as the “shell bed” is a dangerous **weakness**. The lack of suitable distribution and communication channels is considered as another weakness of the firm: the company communicates only in a B2B market through old relationship. The rarely and occasional experiences in a B2C context, with privates and final consumer, happened with electro-sensitive people, through the use of the word-of-mouth. The relation with a distributor that operates on a wide-scale in the product market results as a necessity and a novelty. Another possible point of weakness is represented by the importance that the suppliers have in the business of the “shell bed”. For example, the fabric that will be directly in contact with the user has a crucial importance because it influences the relationship of the child with the object. The partnership with Parà, future supplier of the fabric, is to be considered as a key factor in the strategic choices of the firm.

Thanks to all these elements is now possible to bring the attractiveness/compatibility ratio.



Picture 8.4.2 Attractiveness/compatibility matrix referred to Soliani

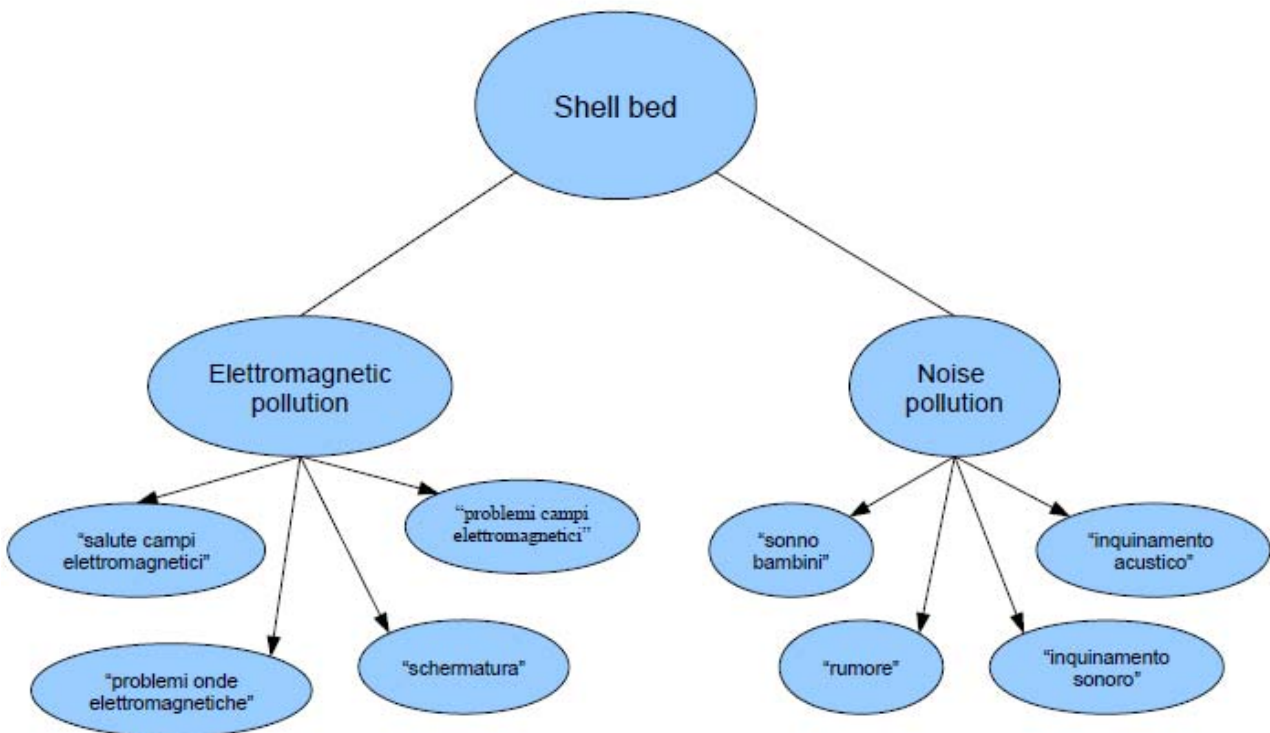
Both the market are in the first quadrant, with a medium-low level for the compatibility and again a medium-low level of attractiveness. In particular the x-axis value is the same, because the compatibility considers only the internal characteristics of the firm; while the value of the y-axis is for the market of families higher than the kindergartens' one. The compatibility value is determined by the novelty of the market in which Soliani will enter, and consequently to a high level of the necessary investments. With regard to the attractiveness, the major problems are related to the doubtful of the need recognition by a market that does not have important signals of positive growing. Both the positions can be improved: first of all with the creation of a marketing function that is able to act from the beginning of the development process of the product, with the needs analysis, and at the end, with the communication and distribution phases. Only in this way, it could be created a product that presents more attractive characteristics for parents, or in opposition could be searched a market sector that presents more attractive characteristics from the point of view of Soliani.

8.5 Micro-analysis of the demand

In order to understand how the “shell bed” satisfies a perceived need and estimate acceptance level, heterogeneous sources are developed for the analysis. The level of perception of the need in the market can be understood through the analysis of the blogosphere and the focus group with parents; the focus group is also used for estimating the acceptance level of the product with the pleasantness test done in the Happy Child kindergarten. With regard to the market of kindergartens it is important to mention the interview with Architetto Erba, purchasing manager for Happy Child.

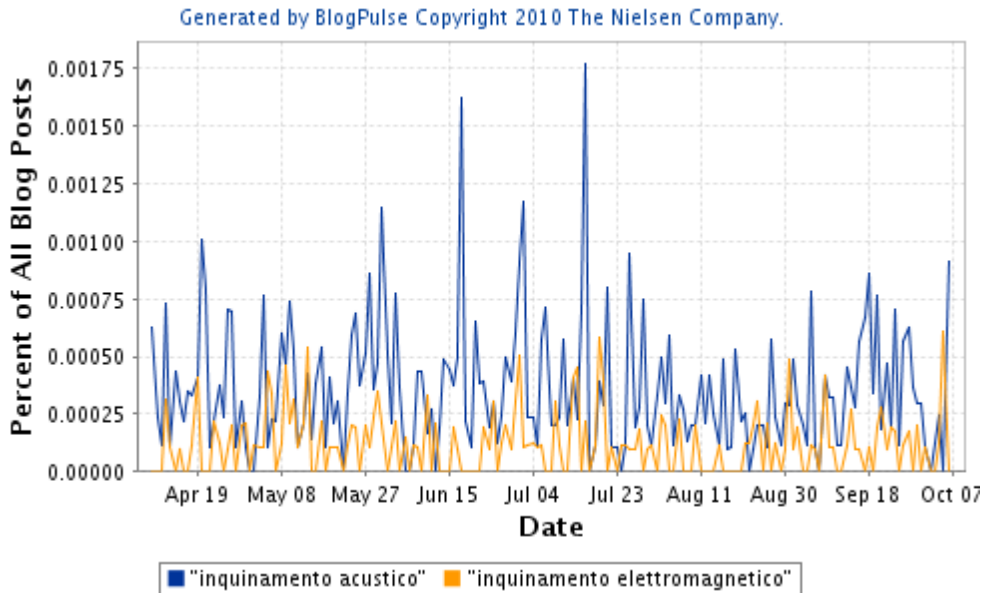
8.5.1 Blogosphere analysis

In order to analyze all the information represented in the blogosphere it is important to use a conceptual tree, made with all the needs that the product aims at satisfying and for each one of them some of the words that better define it



Picture 73 Coceptual tree used for the blogosphere analysis - Soliani

The first phase of the analysis has the objective to analyze from a macro point of view the entity of the phenomenon in the blogs presents in Internet. Through a search engine, in this case BlogPulse, it is evaluated the trend presence of the expressions “inquinamento acustico” and “inquinamento elettromagnetico” in the last six months, from April to October 2010.



Picture 74 Trend of presence - Soliani

As can be noticed from that first part of the analysis, in the last six months there are not any particular phenomenon of increase or decrease but a constant course. For sure, it is possible to say that the blogs that faced up the arguments are few, with the incidence of the “inquinamento acustico” anyway higher than the “inquinamento elettromagnetico”.

After the trend analysis of the two aspects taken separately, it is evaluated the contemporaneous presence, in order to understand if a relationship between them exists. In order to make this operation is made a combined research of the expression “inquinamento acustico” and “inquinamento elettromagnetico”. The result indicates that in the last six months these concepts are been nominated in the same blog for only five times, constituting a very low percentage.

WEB SITE	NATURE OF THE SITE
terrapurablog.blogspot.com	Is a blog of a no-profit association that promote the green building
www.menoenergiaelettrica.com	Blog in which are explained technical solutions for the protection to pollutions
dirittocondominiale.wordpress.com	Blog in which are discuss laws regards buildings
www.ternimagazine.it	A local, National and international site, that provide general information
www.soavi.it	Blog managed by a firm that works in the production of electricity

Table 58 – Joined research of “inquinamento acustico” and “inquinamento elettromagnetico” -Soliani

The macro analysis is completed through a research for each one of the two types of pollution, with the goal to understand what is the effective weight of them in the blogosphere. With the search engine Blogpulse is also used Liquida, in order to obtain a result sufficiently wide and real. For the noise pollution there are 309 posts. It is a very low percentage of attendance, because it is calculated on a very high number of blogs. In the case of the electromagnetic pollution, the result obtained is, if possible, lower than the previous, with 109 posts. It can be concluded that in a macro level the two needs are absolutely not perceived by the market, especially in the case of the electromagnetic pollution, and there are not any growth trends.

Spreading the analysis to a micro level, at this point it is studied which are the most relevant sites, in which the analysis could be deeper. The analysis is done in order to understand in which manner the topics are perceived and which are the comments of the consumers. The time horizon used is related to the last 3 months, specifically for the period that goes from the 9th of April to the 8th of October in 2010.

The principal sites individuated are four for the acoustic pollution and five for the electromagnetic pollution.

KEY WORD	MAIN LINK
“inquinamento acustico”	bastamoto.wordpress.com
	www.lopinionista.it
	www.sassuolo2000.it
	www.greenews.info
“inquinamento elettromagnetico”	polab.it
	www.lopinionista.it
	www.vignaclarablog.it
	www.bnotizie.net
	www.9online.it

Table 59 –Main links in which the key words are present - Soliani

“Inquinamento acustico” and “inquinamento elettromagnetico”

Terrapurablog.blogspot.com is a new site centred on themes regards pollutions.

Two posts talks about the acoustic pollution, while one, explains one of the biggest problem created by the electromagnet waves. There is a description of the less famous types of pollution, that could be present in some buildings.

“Siamo abituati a collegare la parola inquinamento ai fumi delle auto... magari l'inquinamento fosse solo fuori, saremo molto fortunati (concedetemi il termine). Invece no. L'inquinamento indoor è una contaminazione che riguarda l'interno di edifici, quali case e luoghi di lavoro.” -
<http://terrapurablog.blogspot.com/2010/09/inquinamento-indoor.html>.

For the noise pollution some insulating solutions based on the properties of wood are also proposed.

“Per pannelli in fibra di legno vengono talvolta utilizzati gli scarti della lavorazione del legno. Le fibre vengono sminuzzate e pressate, senza utilizzare collanti ma con l’ausilio della lignina. I pannelli ottenuti sono traspiranti e antistatici, presentano un basso valore di conducibilità termica (termoisolanti) e isolano dall’inquinamento acustico.”
 - http://terrapurablog.blogspot.com/2010/09/il-legno-per-le-nostre-case_07.html.

www.menoenergiaelettrica.com deals generally about pollution and environmentally sustainable solutions. The common typologies of pollutions are considered, in particular the air pollution. The acoustic and the electromagnetic pollutions are presents, but in a lower manner. The focus is on the people's health.

In dirittocondominiale.wordpress.com the acoustic problem is strongly present and it is decribed as the most trouble for people who lives in buildings. The level of attendance is anyway, very low; summed the two aspects' attendance level, the result is equal to about the 2%.

www.ternimagazine.it includes articles about health and environments, but the themes related to the acoustic and the electromagnetic pollution have a null relevance, overhang by the most known type of pollutions.

www.soavi.it neglects completely themes about the electromagnetic pollution, probably in order to not damage its own products, that can be considered a source of pollution. The level of attendance of the acoustic pollution is null.

Noise pollution

bastamoto.wordpress.com is a blog that declares the problems related to the noise produced by motorcycles.

“Perché non sopporto i motociclisti?

E' molto semplice. Essenzialmente per 2 motivi:

Per il rumore assordante, irritante e assolutamente gratuito provocato dai loro mezzi

Perché non sanno neanche che esiste un codice della strada e sono molto pericolosi” - Bastamoto,

<http://bastamoto.wordpress.com/2009/09/14/perche-non-sopporto-i-motociclisti/>.

As it can be noted through the motivations of the blogs, the problem of the noise is certainly considered high: this importance is confirmed by the presence in about the half of the total of posts (about 44%). The noise is not always combined with the noise pollution, it compares only in the 18% of posts, underlining how the knowledge and the relevance of this phenomena is low.

“Un problema tanto grave quanto sottovalutato: l'inquinamento acustico. E' un tema delicato che un po' per ignoranza, un po' per mancanza di sensibilità, un po' perché rappresenta un tasto dolente, viene

costantemente trascurato (coscientemente o inconscientemente)” - Bastamoto,
<http://bastamoto.wordpress.com/2010/08/11/parliamo-un-po-di-inquinamento-acustico/>.

No posts on the problems tied to the children’s sleep.

www.lopinionista.it is an online Abruzzian information newspaper that deals with actual themes, manifestations, arts and culture, environment and sports. The width has as a result the relative importance of noise's themes and acoustic pollution: so, for both the two key words, the level of presence is lower than 1% respect the total of posts. This value underlines a low perception of the aspects also for the media. The presence of themes about the noise pollution and the children’s sleep are null.

www.sassuolo2000.it, is another online local information newspaper and it confirms the information mentioned above: the percentage of attendance for “rumore” and “inquinamento acustico” are lower than 1%.

It is interesting to note that there are in “the main blogs” two local newspapers and no National ones: this aspect is a direct consequence of the development of associations which are sensible to that problems, but in a local dimension.

“Sono stati effettuati controlli sui rumori nelle ore diurne e verifiche di notte, associate ai servizi antipirateria e di sicurezza stradale, con tre denunce penali per violazione della legge sul rispetto della normativa acustica nei confronti di altrettanti locali del litorale di Pescara, sia nord che sud, che si sono visti anche comminare la sanzione pari a 3mila euro” - Donatella Di Biase,
<http://www.lopinionista.it/notizie/2010/08/pescara-polizia-municipale-controlli-inquinamento-acustico/>.

“Il progetto europeo IMOSMID “Modello integrato di gestione sostenibile della mobilità nei distretti industriali” mira ad individuare e definire un modello innovativo di governo locale degli spostamenti, ispirato a criteri di mobilità sostenibile. L’idea è quella di cercare di soddisfare la crescente domanda di servizi supplementari di Trasporto Pubblico Locale (TPL) e di ridurre l’uso di veicoli privati” -
<http://www.sassuolo2000.it/2010/09/21/reggio-vivere-sostenibile-la-mobilita-nei-distretti-industriali/>.

www.greenews.info is an online magazine that provides some information and data about the environment and the behavioural tenability of both the companies and people. It is a specialized web-site, but, also here, the noise pollution and the noise are generally not considered as main needs (the presence level is only equal to 1% respect the total of posts).

“La prima cosa che noti, quando metti in moto la Smart Fortwo Electric Drive, è che quasi non si avverte la differenza rispetto a quando era spenta: un silenzio, anche quando parte spedita per le vie della capitale in versione estiva – insolitamente vuote e accoglienti – appena rotto da un rumore minimo, “giusto il necessario perché le altre macchine si accorgano di te”” - Ilaria Donatio,
<http://www.greenews.info/progetti/per-essere-smart-in-citta/>.

Also in this case the key words “sonno bambini” and “inquinamento sonoro” are neglected.

Concluding, it can be affirmed that also in the most relevant sites, the themes related to both the acoustic pollution and the noise do not constitute very important problems (level of presence lower than 1%). It can also be affirmed that the perception level of that phenomena is not high.

Electromagnetic pollution

polab.it is a blog of the firm that has the same name; it works in the environmental and electromagnetic field with projects, measures, and monitoring in the industries and services sectors. It is present also a community, with some articles, events, technical information and explanations related to laws.

“«Negli ultimi mesi un bambino si è ammalato di leucemia e tre insegnanti hanno scoperto di avere un tumore» rivela, allarmata, Paola Bucarelli, portavoce del gruppo di genitori (i figli oggi frequentano le due classi quarte) che ormai da anni si batte per far smantellare l’elettrodotto. «Ovviamente i medici — prosegue — non possono confermare che questi problemi di salute siano conseguenza della presenza dell’elettrodotto, ma non lo escludono neanche. E intanto ci sono quattro aule inutilizzabili e sbarrate: significa che il pericolo c’è, eccome se c’è»” - Francesca Bianchi,
<http://polab.it/srl/2010/10/tralicci-un-bimbo-e-tre-maestre-si-ammalano/>.

In conclusion, the blogosphere reflects the considerations made about the low perception level of the problems related to the electromagnetic and the noise pollution: the presence levels almost null points out that the problems are not perceived and are not considered as priorities by the people.

8.5.2. Focus group analysis

The focus group made with the collaboration of some parents of children that attend the Happy Child kindergarten in Castiraga Vidardo has a double objective: on one hand to understand the needs effectively perceived and the latent needs while on the other hand, once the product has been shown, to evaluate whether the “shell bed” can satisfy those needs.

Perceived needs

During the focus group no particular problems or needs related to the noise or electromagnetic pollution emerged. In fact in the first case the parents recognized the importance of an undisturbed sleep but at the same time they also added that their children currently have a deep and regular sleep. Such a situation is helped by the position of their houses, which are in peaceful places. In the case of the electromagnetic pollution the lack of a strong protection need is caused by the corresponding lack of information that notices and describes the phenomenon. Only one mother, C, thinks that the problem is important and consequently takes a drastic solution that is to avoid wireless devices. All the other parents take little expedients given according to the common sense, but they do not seem to give them much importance. There also is an impotence sensation in the case of the electromagnetic fields come from outside the house and they can not remedy.

INVESTIGATED NEED	SENTENCES EMERGED FROM THE FOCUS GROUP
Protection from noise pollution	“My son has a good sleep; after the 7-8 years old Diego sleeps if he is in a dark place even alone.” - C.
	“ Now my children sleep all night long but when they were younger they had some difficulties in sleeping with continuity; they always sleep well and without particular problems.” - M.
	“Giada has always slept a lot.” - R.
	“Now my children sleep alone and have a very deep sleep.” - S.
	“We live in peaceful places, there are little sounds but nothing particular that need a remedy.” - F, S.
	“If the child do not sleep during the night then the following day is definitely harder.” - C.
	“If my daughter goes to bed late and wakes up easily, she remains nervous and intractable all day long, has a tantrum, and during the dinner put her head on my shoulder because she wants to sleep.” - R, S.

Protection from electromagnetic pollution	“(The electromagnetic pollution theme) is not new to me but I do not know exactly what it can cause.” - M.
	“Yes, but only as on an advice level, for example to position the bedroom furniture far from the plugs, but the studies do not give clear and sure results.” - R.
	“Yes, but anyway the law is strict, right?” - Mp.
	“We do not have the cordless telephone in our son's bedroom and anyway he is always kept at a some distance.” - Gp.
	“Personally, I am against wireless devices, I want everything with wire, hence I prefer telephones and connections with wire.” - C.
	“I do not have any cordless phone but actually I have never thought about that problem.” - M.
	“Yes, I am worried even if I do not know precisely what kind of consequences there could be.” - C.
	“I should quantify the power and intensity of the electromagnetic waves; clearly I will think about the problem if I were near a repeater but I think that the power of waves caused by devices such as the cordless phone or the mobile phone is not so strong to have serious effects on health.” - Mp.
“If the neighbour install a powerful antenna used to receive particular waves I can not do anything.” - Gm.	

Table 60 - Needs perception derived from Focus group - Soliani

With regard to the noise pollution and the sleep of their children, the parents showed a very calm and satisfied behaviour; when the conversation passed to the electromagnetic noise theme the members showed some preoccupation, testified by the change in the voice and in the expressions, and a little anxiety with regard to a completely unknown phenomenon. Once they were reassured by the moderator about the lack of studies that certify the danger, they kept anyway a less tranquil behaviour, in reducing the number of interventions.

The perception level of the need to be protected by the noise pollution that emerges from the focus group is quite low because in this respect the parents do not have any particular problem, although they give a high importance to the sleep of their children. With regard to the electromagnetic pollution the protection need noticed is also low, because the participants admitted to almost not know the phenomenon even if some expedients are already taken.

Acceptance level

The responses that came out after the contact with the product by the parents are in general negative. The look is one of the main reason: in fact the “shell bed” is considered as a kennel, a cage, or a trap with dark colours that are definitely not suitable for a child; it also gives to them feelings of constrictions and of excessive heat. However, someone, like M and Mp, sees some possibilities of embellishment and thus of improvement, in order to make it look more like a toy. C is the only mother that feel in a considerable way the problem of electromagnetic pollution and she is the only one that clearly admit to appreciate the shape, probably because she realizes the functionality. However, all the parents agree that the product can be highly appreciated by their children. Another problem that emerged is related to the lack of air turnover, to the washing difficulty, and thus to the low hygiene level; however G and S already propose a possible solution through the installation of an airing system. Moreover Z also notices a problem of space because she has more than one child. When asked about the possibility of buying the product and the price that they would accept the parents showed three reactions: R would not buy it for any reason, S would buy it only after suitable changes and with a reasonable price, while C, G, and M would spend any amount if the product was really necessary.

ELEMENTS CONSIDERED	SENTENCES EMERGED FROM THE FOCUS GROUP
Look	“It is a kennel!” - All parents.
	“Personally I like the shape.” - C.
	“It generates a heat feeling, maybe for the structure; it seems to be hot, that it emanates heat; the panels usde also make me say that, moreover the children could also feel a sensation of protection.” - S.
	“My feeling is exactly the opposite, because I feel like there is not enough air in it, it is dark, definitely not positive.” - R.
	“It could also look like a Faraday cage.” - Mp.
	“I think it could look like a carriage, if it was embellished and changed.” - M.
	“It seems that inside there is a high temperature especially now that the weather is very hot.” - G.
	“It currently looks more like a trap.” - Gp.
	“Through the right improvements, it could become more inviting, like a train or anyway a toy.” - Mp.
Children's reaction	“The problem is not represented by the children because they may consider it as a novelty or a toy but for us it is difficult to think about them sleeping in

	<p>there.” - S, C, G.</p> <p>“Although I need to sleep in a large space maybe the child could play with it.” - M.</p> <p>“I also think that the child would consider it as a toy.” - Mp.</p> <p>“Yes, probably the problems come more from us than from the children.” S.</p> <p>“Probably if they were used to sleep in it since they were young they would do it without any problem. Have you ever thought about a model for the pram? Because maybe it could be more suitable.” - C.</p>
Children's hygiene and health	<p>“Nowadays the concept of opening and air the house is very promoted, hence the product seems in contrast to that advice.” - M.</p> <p>“All the bacteria could remain inside” - C.</p> <p>“Moreover I also think that it is not hygienic, how can you wash it? Does the dust remain inside for a long time? I do not think it is a good idea to dismantle it every time you want to wash it. - R.</p> <p>“There could be an air turnover inside it; maybe with that change my perception could also change.” - G.</p> <p>“Maybe there could be a machine for the air turnover.” - S.</p> <p>“And if the child sweats?!” - R.</p>
Children's safety	<p>“It could have the advantage that the children do not fall down from bed” - C.</p>
Problems of space	<p>“If you have two children you should have two products and thus you would have a problem of space.” - Z.</p>
Purchase propensity	<p>“I would not accept it even if it was for free.” - R.</p> <p>“No, I do not, but maybe if it had some transparent parts in order to see the child inside I could change my mind.” - S.</p> <p>“Maybe with a different height I could buy it even if I think you could have a problem in showing your love for the child because If you want to kiss him you have to make him go out the shell.” - C.</p> <p>“I would buy only if it was one of the few solutions remained; you should understand whether the problem exists or not and, if so, it would have</p>

	<p>effects during both day and night.” - G.</p> <p>“I would like to know and have a medical opinion about the possible effects that the lack of air turnover could have. If necessary, I would think about something that protect the child all day long, because only two hours in the afternoon are not enough. However there must be evidences of the damages caused (by the electromagnetic waves), because then I would completely change my mind.” - M.</p>
Pricing	<p>“Supposing an extreme emergency situation, if I needed to buy it I would spend 100€; currently, I would not spend a euro.” - G.</p>
	<p>“With another shape and the children's interest I would spend 50€, at maximum 70€, considering that I do not know the materials used.” - S.</p>
	<p>“If it was necessary and the problem caused by the electromagnetic waves was demonstrated I would spend any amount.” - C.</p>
	<p>“Of course if it is for my child's health I would spend any amount.” - M.</p>
Use in the kindergarten	<p>“There would be different costs, because the family would have to incur the whole cost, while the kindergarten could amortize and defer the cost during some years.” - C.</p>
	<p>“If it was necessary I would think about a product that could protect him 24/7 because two hours in the afternoon are not enough.” - M.</p>
	<p>“However, if you consider that the child is protected for ten hours at home and for two hours at the kindergarten, then the situation is different.” - C.</p>
	<p>“The kindergarten would need several studies in this respect, because every child should have its own “shell bed”; if you had to disinfect the product every time a different child uses it then you could have a problem.” - Z.</p>
	<p>“If the situation was so serious then you should stop and think about your whole lifestyle, because if it was a necessary thing then I would be worried in general and I would shield everything.” - Gp.</p>
	<p>“Actually at that point I would think about shielding the whole house.” - M.</p>
	<p>“At that point the overall perspective would change and the children should be protected everywhere.” - S.</p>

Table 61- Acceptance level of the focus group - Soliani

When the “shell bed” was shown the parents demonstrated curiosity by looking at it with attention and C, G, and R also stood up and touched it. However, after that initial phase most parents did not seem to appreciate the object because they felt a lack of air, in primis G and M, and in some cases they completely rejected it, like R and Gp, who defined it as a trap. On the other side C and Mp seemed to like the idea, although they were puzzled by the look.

When asked about the possibility of purchasing the product, most parents showed uncertainty, like S, R, C, and G, by betraying a basic negative opinion. R clearly expressed a negative opinion, coherently with the first impression. However, in case of necessity the parents that were uncertain added that they would definitely spend any amount, in particular G, C, and M. With regard to the use in the kindergarten all participants did not seem to be much convinced, because they would rather prefer a complete shielding if necessary.

The acceptance level of the “shell bed” that emerged from the focus group is thus to be considered as low. In fact, although the children could like the product, the parents did not appreciate its look, which generated bad feelings, and the lack of air turnover and thus hygiene. However, such evaluations would be pushed into the background and at the same time the purchase propensity would increase if the presence and the effects on health of the electromagnetic pollution were demonstrated. The use of this solution in the kindergarten context for the snap only would not be enough and they would prefer a total protection.

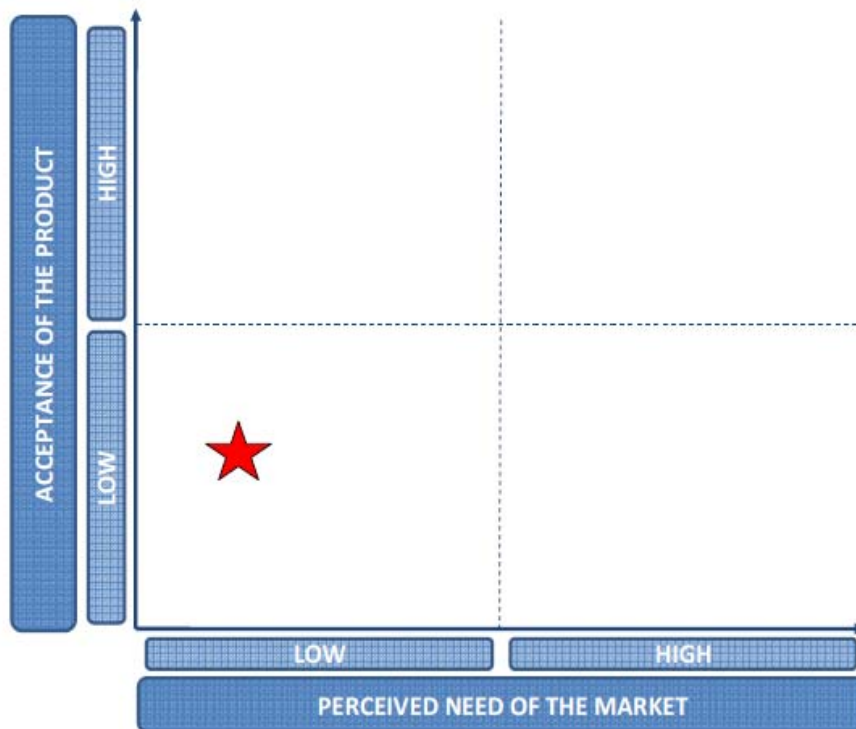


Picture 75 Focus group Soliani

8.5.3. Perceived needs/product acceptance matrix

Market of families

Once noticed the need perception level of the protection from noise and electromagnetic pollution, through the analysis of the blogosphere and of the focus group, and the product acceptance level, through the focus group analysis only, the two aspects can be matched, in order to understand the success possibilities of Soliani product.



Picture 76 The perceived needs/acceptance level in the family’s market - Soliani

The position of the “shell bed” with respect to the market of families has on the x-axis a very low value, because on the blogs the problems related to noise and electromagnetic pollution do not cause a great stir and the parents that participated to the focus group confirmed the little importance of the need. The y-axis value is also low because the parents did not seem to appreciate the product and showed some perplexities.

Ethnographic analysis – Pleasantness test

In order to understand if and how much the “shell bed” can be appreciated not only by the parents but by the children too, who are the real end-users, you can consider the results of the pleasantness test. Some children that are enrolled to the Happy Child kindergarten in Castiraga Vidardo tested the product and then their reactions were noticed and analyzed.

When the children saw the “shell bed” they got closer because they were curious about the shape; after an initial phase of study someone started to get into it. Since then, the children have been playing with it and immediately seemed to really appreciate the “kennel” shape. Probably thanks to the colours of the covering fabric, which were different brown tones, the product looked like a small house or anyway a shelter and generated welcome, protection, and secrecy feelings that were widely appreciated. Inside the shell the children sat down in small groups talking, playing with the stickers on the internal covering, or simply looking at the other children. You should notice that the product was appreciated by both male and female children of different ages, but not for the function it was meant, which is sleeping, but as a toy.



Picture 77 Pleasantness test of Shell bed

Suggestions for improvement

In this part the analysis focuses on how the “shell bed” can be improved in order to make it more appreciable by the market according to the indications that come from the market itself. In this respect the sources considered are the blogosphere and the focus group.

Needs/criticalities emerged from the blogosphere

- Day and night protection for everybody: if the problem of the noise and electromagnetic pollution really exists then all family members should be protected during all day and night.
- Lack of reliable information: there are no reliable studies that demonstrate the real dangerousness of the noise and electromagnetic pollution for the health of people and in particular of children.

The results of the analysis of the blogosphere shows that the needs related to the protection from noise and electromagnetic pollution are little perceived and they are limited to particular cases. In such cases the protection needed should be effective not just during the night but during the day too and not just for children but for adults too. Moreover, especially with regard to the electromagnetic pollution, there is the necessity to have reliable information about the presence and the effects on health that allows the parents to be aware of the phenomenon and fight it in a suitable way.

Needs/criticalities emerged from the blogosphere

- Reliable information: the parents that took part to the focus group also reported the lack of reliable information.
- Better look: the first impression given by the look in general was quite negative, because of the colours and the shape.
- Child control: the shell shape has the disadvantage of blocking the view of the parents or of the teachers on the child, with potential danger.
- Air turnover: this is another problem related to the shape, because the air inside the shell would tend to stagnate and to become heavy and full of germs.
- Washing: the detachment system of the fabric through Velcro was not very appreciated.
- Dimensions: the little volume could be a problem in the contact between the parents and the child but with a bigger opening the protection from noise and electromagnetic pollution could be less effective.

The opinions recorded during the focus group indicate a product that can not be accepted at the current prototype status but at the same time that can be improved with changes that could increase the purchase propensity of parents. However, all those improvement possibilities must necessarily come along with the

recognition of a real need: in this case the parents could spend very high amounts. In this respect the supply of information related to the product that aims at increasing the consumer awareness of noise and electromagnetic pollution can play a very important role.

Other potential improvements are related to the design and the look: by improving the “shell bed” the company could obtain a higher appreciation level at the first impact with the product and thus a different consideration. In this respect the actions that could help are the use of more bright colours and the addition of decorations that embellish it and make it more homely and similar to a toy, such as a carriage or a train.

With regard to the functionality several solutions were proposed. In order to avoid the lack of visual inside the shell some transparent parts could be added to the structure: in this way the control of the child could be easier. The problems related to the air turnover and the hygiene could be solved through the installation of a system of fans or channels and through the study of a washing and disinfection method that is more convenient and effective than the detachment of the entire covering fabric. However, such solutions should not weaken the beauty of the product but make it look like a toy to the child's eyes. The necessity of bigger dimensions was also noticed in order to make the contact with the child more simple, although such a characteristic has to be combined with possible limitations caused from the space availability and the protection effectiveness.

Market of kindergartens

Interview with Architect Erba

With regard to the market of kindergartens, the possible considerations are related to the judgement expressed by Architect Erba, purchasing manager for Happy Child, a chain of kindergartens, during the interview made.

Perceived needs

The need for protection from noise and electromagnetic pollution is not currently a need perceived by the kindergartens or expressed by the mothers of the child that are enrolled. In this regard the protection for only two hours of sleep during the afternoon would not be justifiable, but rather it would be for the night sleep and thus for the market of families. Moreover, with regard to the protection from noise pollution, such a product could be useful only if the kindergarten does not have a sleep room delimited by walls, for example in case of open space or intermediate floors.

Acceptance level

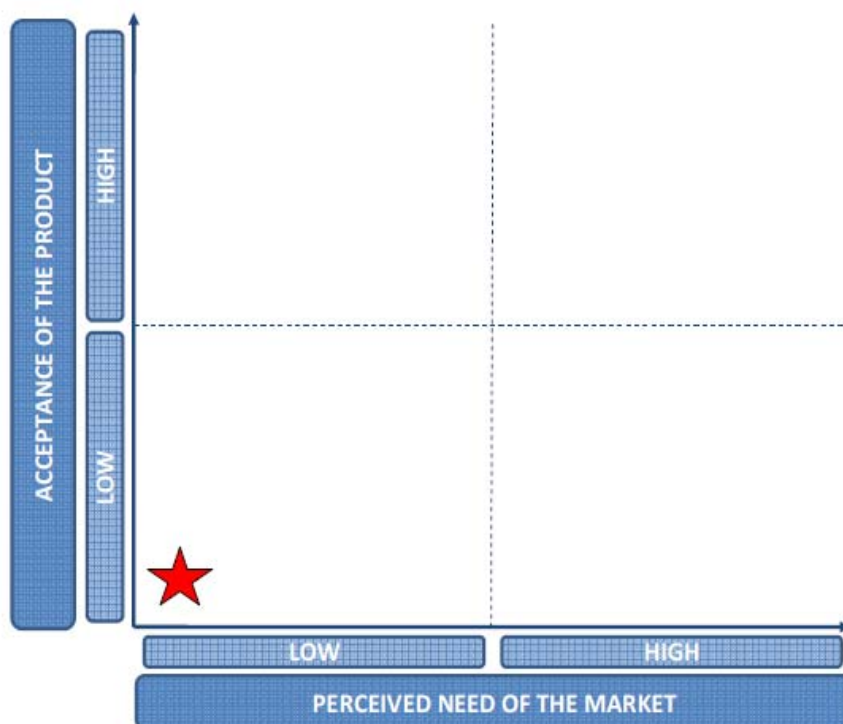
The product could not be suitable for the introduction into the kindergartens for different reasons. The main reason is represented by the economic aspect: the price of the “shell bed” is at least twice the price of

a single normal bed; moreover, the supply volume of a kindergarten, even if it is small, contributes to make the problem bigger. Then there is a problem of space because the sleep room can have fixed beds but in most cases there are movable beds that are piled up in order to make room for other activities: it would be impossible to pile up the “shell beds” because of the shape. The last problem emerged is related to the product perception. In fact it is possible that the parents could consider the presence of the “shell bed” inside a kindergarten not as a value added but as a danger signal of a possible presence of electromagnetic pollution. In this respect the awareness effort of the kindergarten towards the customers is fundamental.

“The “shell bed” could communicate a subliminal message that can be perceived as a concern and create additional alarmisms inside the families, which would have to face a problem that nobody has never mentioned”. - Architect Erba

The final judgement drawn currently shows an almost total lack of market in the sector of kindergartens.

In order to better evaluate the success possibilities for the market of kindergartens the need perception and the product acceptance levels are considered at the same time through a matrix built according the interview with Architect Erba.



Picture 78 Perceived needs/product acceptance matrix for the market of kindergartens - Soliani

The extremely bad position of the business is caused by the complete lack of need and, with regard to the acceptance level, by problems and constraints related to the price, the logistics, and the product perception.

8.5.4. Stimulus/response model

After the valuation of the need perception and of the possible reactions of the market with regard to the product supplied the analysis focuses on the purchasing process, which is made by highlighting the influence sources, the way through which the product is known, and the opinions that determine the purchase or not.

	MARKET OF FAMILIES	MARKET OF KINDERGARTENS
Product knowledge	<ul style="list-style-type: none"> Product knowledge and information about the phenomenons related to noise and electromagnetic pollution 	<ul style="list-style-type: none"> External economic stimuli
Influence sources	<ul style="list-style-type: none"> Personal factors Cultural factors Personality 	<ul style="list-style-type: none"> Emotional characteristics and personality of the principals/purchasing managers Purchasing manager's background
Opinions and behaviours	<ul style="list-style-type: none"> Medium-long run marketing effort in order to strenghten the perception of the product efficacy 	<ul style="list-style-type: none"> Medium-long run marketing effort in order to strenghten the perception of the advantages for the kindergarten

Table 62 - The Stimulus/response model applied to Soliani

The **product knowledge** is extremely important because it is at the bottom of the external stimuli that can determine the purchasing of the “shell bed”; they are mainly represented by the information about the presence and the dangerous effects on health caused by the noise and electromagnetic pollution. Such stimuli come from the environment in which the parents are and can have several natures and origins, such as relatives, other parents, friends, experts, associations, or companies. In fact Soliani could make a communication, information, and awareness effort about the topic in order to propose its product as a possible solution through the distributors and maybe a special website. The external stimuli that lie at the bottom of the purchasing process in the case of kindergartens are different. In fact in addition to the fundamental information about the noise and electromagnetic pollution there is some economic information, related to the different context. There are several sources: companies that propose themselves as suppliers, like Soliani, the parents that are potential customers, the parents that are already customers of the kindergarten, or other similar schools that have already adopted such a solution.

With regard to the market of families among the **influence sources** there are several factors. The cultural and social factors can be very different; of course, the people with a higher education could probably be more used to technical terms, while the people more health- and environment- conscious could be the first

ones to understand the potentialities of the offering. The same considerations can be made for the personal factors: age, occupation, and economic situation can not influence in a decisive way the choice if the need is felt, while the personality and the lifestyle can only speed up or slow down the purchase. In the market of kindergartens, the personal factors can be very different among people with the same role; some of them, such as personality, age, or experience can influence in a similar way the choice in terms of risk attitude. The personal education, which is also variable, includes in the choices a strategic valuation, which is thus based on economic data and tries to forecast the market reaction.

The **opinions and behaviours** that the parents develop are fundamental in order to determine the success of Soliani: in fact the company through medium-long run marketing effort has to be able to develop into the market a good brand knowledge and to make the consumers think about Soliani as a company that makes effective and safe product, which is a fundamental characteristic for children. The opinions and behaviours can also be influenced in the case of kindergartens but with significant information that changes according to the change of the need. In fact it also is a medium-long term marketing effort but that focus not only on the positive effects on child's health but rather on the advantages for the kindergarten. In this market it is even more difficult to change the habits developed in several years of experience: in fact the object of the decisions goes from your own child to the company you work for, which are two different level of importance.

8.5.5. Purchasing process

Once the consumer internal factors that are developed with the purchasing process have been explored, the analysis moves its focus on the phases from a temporal point of view, with a distinction between the market of families and the market of kindergartens.

	MARKET OF FAMILIES	MARKET OF KINDERGARTENS
Problem recognition	<ul style="list-style-type: none"> Latent need: protection from noise and electromagnetic pollution 	
Information gathering	<ul style="list-style-type: none"> To be more present on different channels in order to supply the potential customers with specific contents and complete information 	
Evaluation of alternatives	<ul style="list-style-type: none"> Price less important Performance variables more important 	<ul style="list-style-type: none"> Economic valuation

Purchasing decision	<ul style="list-style-type: none"> Specialized distributor (Chicco) 	<ul style="list-style-type: none"> Place: salesmen that directly contact the kindergartens and propose the product through catalogues
Post-sale behaviour	<ul style="list-style-type: none"> Strong influence of product performance on parents' judgement 	<ul style="list-style-type: none"> Enrolments influenced by parents' judgement and children's experience

Table 63 - The purchasing process of Soliani

The first phase, which consists in the **problem recognition**, depends in both markets on the presence of the latent need of protection from the noise and electromagnetic pollution: as said above the main problem is that such a need is not enough widespread.

The **information gathering** phase presents similar characteristics in the two markets. In fact the “luminous floor” is a product with several technical and innovative aspects and so it is necessary to complete the information given by external sources such as the doctor, the publications, the magazines specialized on health, or the consumer associations with the information more detailed about the product. Hence, Soliani should be present in different communication channels in order to reach different consumer categories every time with suitable messages.

With regard to the phase of **valuation of alternatives**, in the case of the market of families the price has a less important role, because the most important variables for the judgement of a product for children's health are quality, performances, and advantages. On the contrary, in the case of the kindergartens the valuation is exclusively based on economic considerations: the objective is to evaluate in the most rational way possible the performances of the “shell bed” and choose the alternative with the best economic impact on the company.

During the phase of the **purchasing decision** it is necessary to consider the differences in the distribution. In the market of families the product is sold through big chain stores specialized in children's product, such as Chicco, in order to rely on a wide diffusion and a strong brand; hence, the decision and the making of the purchase could be very near in time. On the other hand, in the market of kindergartens the product is sold through specialized distributors and directly delivered to the customer. From a time point of view the purchasing activities are concentrated in september, before the school year, and in july, when the following year is prepared.

The **post-sale behaviour** can be strongly influenced by the performances of the product. First of all, there may be immediate effects if the child manages to get used to sleep in the “shell bed” and effectively has some advantages related to a less disturbed sleep; in this case the judgement of the parents will definitely

be positive. On the contrary, if there is not any advantage the effects of the dissatisfaction developed in the short run will contrast with the long term effects on health; this is a valuable element in Soliani's offering that can stimulate a continuous use of the product. In the market of kindergartens children's and parents' judgement is also fundamental: the children, as end-users, can directly test the product and thus accept it or not; on the other hand, the parents can decide to not enrol their child to the kindergarten because he refused the product or because they do not want their child to use that product.

8.5.6. The roles in the purchasing process

The purchasing process has different actors that have different roles with a different importance in terms of marketing. In this paragraph such roles are analyzed, their evolution in case of first and successive purchases is described, and the influence that Soliani could have on them is also studied.

ROLES	MARKET OF FAMILIES	MARKET OF KINDERGARTENS
Initiator	<ul style="list-style-type: none"> • Parents (in a direct way) • Child (in an indirect way) 	<ul style="list-style-type: none"> • Purchasing manager
Influencer	<ul style="list-style-type: none"> • Background actors (family members, relatives, doctors, pediatrician, specialists, associations, or society) 	<ul style="list-style-type: none"> • Parents • Staff • Suppliers • Specialized magazines
Decider	<ul style="list-style-type: none"> • Parents 	<ul style="list-style-type: none"> • Purchasing manager/principal
Buyer	<ul style="list-style-type: none"> • Parents 	<ul style="list-style-type: none"> • Purchasing manager
User	<ul style="list-style-type: none"> • Child 	

Table 64 - The roles inside the purchasing process – Soliani

The roles are not always defined and stable but some roles can be played by a single person and viceversa.

In the case of first purchase of the “shell bed” as **initiators** can be considered the parents, because the child can not recognize the need and communicate it to them, even if he is the **user**. The **influencers** are different and can influence in a direct or indirect way: relatives, friends, other parents, doctors, pediatricians, specialists, members of associations, or the society. All these actors can positively or negatively influence the product purchase through their words or through their own purchase. However, the **buyers** are the parents.

In case of successive purchases the parents can rely on their experience in addition to the sources consulted before: the result is a lower influence by the actors external to the family and a high importance to the behaviour and the reactions of the child with regard to the “shell bed”.

In addressing the market of kindergartens, Soliani establishes B2B relationships, thus characterized by more definite and stable roles compared to the ones related to the market of families. The **decider** for example is always the purchasing manager, who has to evaluate the offering and decide whether to accept it or not. Such a manager can be considered as an important **influencer**, because it is the most important actor of this field in the organization. A similar influence but with a different nature and strength can also be carried by the parents, the staff of other schools, the suppliers, including Soliani, or the specialized magazines. The **initiator** and the **buyer** are also represented by the purchasing manager. Of course the **user** is the child.

In case of successive purchase also in the market of kindergartens the experience is a fundamental factor of influence: if the purchasing manager or the principal recognizes the advantages guaranteed by the “shell bed” it will be more easy to take the decision of a new supply and restart the purchasing process with the same actors.

CHAPTER 9: GO TO MARKET PLAN

Introduction

In this chapter the analysis will focus on the operational procedures through which the companies involved in Babylandia project will communicate and distribute their values to the market. A Go To Market plan will be proposed, starting from the study of the internal and external company situation made in the last chapters and analyzing which could be considered as the best alternatives. It is the comprehension in detail of the distribution channels to be used in order to make the customer know and reach the products; at this level both the already known and the new channels for the companies will be considered, in order to highlight the most suitable combinations.

A part of the proposal is focused on the customer, aiming at identifying and interpreting the new product purchasing nature: in particular at this point it is important to know the procedures through which first the information transmission and then the purchase happens.

9.1. Caremi

In this section the marketing phase of the “piece of furniture that grows with the child” is analyzed, for both the two markets considered (families and kindergartens). Different dimensions are studied: coherence level of the product with the channels currently used by the company; extension of distribution channels; potential synergies with other companies, whether internal or external to Babylandia project. A communication plan is then made.

9.1.1. Marketing of the “piece of furniture that grows with the child”

Market of families

Coherence level with the distribution channels currently used

In regard to the current distribution channel, Caremi makes use of a network of distributors, around three hundreds in Italy, which deal with the retail of bedrooms and small bedrooms for children, the specialization sector of the company. Caremi supplies the retailers with its catalogues, where you can easily find all the solutions made. Only for some particular spaces or shops, the company has designed bedroom compositions to be shown in order to represent in a better way the product quality level.

Another distribution channel is composed by single brand stores. Caremi currently owns two points of sale, one in Rome and one in Bergamo. In those shops the company proposes only its products, which are completely internally made, such as small bedrooms for children, master bedrooms, completion elements,

and beds. The new product fits in with the catalogue as a supplement to small bedroom furniture and it has a very high coherence level with the distribution channels currently used by the company.

New distribution channels

Especially in the introduction phase, the furniture made by Caremi needs to be marketed through consolidated retailing channels, where the company can make use of its own experience placing side by side the new product with the other elements that are already made.

In the short term, for example, the company should promote the new product mainly inside its own shops. In that context the furniture can be showed off in the best way, by means of explanations directly given by the retailers, with exhaustive illustrations and demonstrations of the different methods of use. In this way the customer that goes into Caremi shops can understand more easily the innovation carried by the product. In Caremi single brand stores, the company can offer directly its products to the customers, without intermediaries. The result of this solution is a retail price definitely more low if compared to the price that the same product may have in the other shops, which have to increase the price by the 50% in a profit and loss logic. The outcome is a too high price with consequences that directly impact on the customer satisfaction and on his propensity to purchase. For these reasons, as noticed by the top management, Caremi wants to focus on its own stores, inserting the “piece of furniture that grows with the child” into the small bedrooms section, as a sort of extended offering. The opening of a new store in Bologna is a confirmation of this strategy.

After that, the company should widen the range of channels, adding other ones on completion, in order to improve the offering and the communication. Considering that the “piece of furniture that grows with the child”, even if it addresses mainly children needs, is actually purchased by the parents, Caremi should cooperate with companies specialized in childhood products distribution, modifying and widening the current distribution network.

The biggest Italian retail chain that deals with products for children is Chicco. The company currently has a product line called Baby Room, composed by elements with important design features, made on completion of small bedrooms.

However, the retail chain that best fits with the marketing of the product proposed by Caremi is Prenatal. In fact it offers a complete product range for pregnant women and children and includes a bedroom catalogue. Through the proposed solutions there are some similar to Caremi offering, such as the modular elements of the small bedroom “Mix & Match”.



Picture 79 "Mix & Match" small bedroom - Prenatal

Prenatal offers a portfolio of complete solutions, which includes all the elements related to small bedroom furniture. Moreover, it shares the most important concept of Caremi offering: in fact the small bedroom “Fun” is defined as a “small bedroom decorated with soft stars that grows with the child”. For Caremi it could be thus interesting to insert the furniture into a more structured offering, proposing solutions for small bedrooms that also include the other product categories made by the company, as for example the small beds.

Hence, the “piece of furniture that grows with the child” could try to get into Prenatal catalogue “Le camerette” (“The small bedrooms”) in the double form of completion element and of complete and structured solution through the other Caremi product lines.

Cameretta Fun Azzurra

Cameretta decorata con tenere stelle che cresce con il bambino.

SAUTHON



Picture 80 "Fun" small bedroom – Prenatal

Coming back to distribution, in addition to big chains like Prenatal in Italy there are several small retailers, which are equally suitable for the marketing of Caremi's product, because they have catalogues of products for children. In order to complete the research and highlight a portion of the retailers that the company could consider there is a list of the suitable shops.

Focusing on the most important cities in the Northern Italy, especially those near the company, where it is likely to propose its product more easily, you find the following points of sale:

NAME OF THE STORE	PROVINCE
La Casa del Neonato	Bergamo
Centro Baby	Brescia
Prima Infanzia	Brescia
Pianeta Bimbo	Brescia
Hola Bebè	Lecco
Bimbilandia	Milano,Varese
Mamma Baby	Milano,Lodi
Centro Baby Cunati	Milano, Varese
Nido	Varese
Bambino Mio	Padova
Il Papero	Treviso
L'albero Incantato	Vicenza
Casa del Bambino	Verona
Baby Style	Alessandria
Centro Infanzia e Giochi	Cuneo
Paradiso dei Bmabini	Novara
Bebè	Torino
Bamby	Torino
Pulcino d'Oro	Torino
Universo Bimbo	Torino,Bolzano,Padova,Verona,Vicenza
La Cicogna	Trento
Superbebè	Genova
La Culla	Savona

Table 65 - Possible retailers of the “piece of furniture that grows with the child”

The stores considered are retailers of other famous brands of children's products, such as Brevi, Chicco, Foppapedretti, Baby Più, and Inglesina; some of them belong to chain such as Bebè Royal. The companies found have a department and a catalogue related to elements and furniture for small bedrooms. In this context Caremi can easily insert its proposal by showing its product, focusing on the concept of “growth with the child”, and also giving brochures and flyers that can explain both the concept and the functioning, in order to be advantaged in terms of offering completeness and knowledge.

In the long run, the company could address the market with the Internet too. However, it is necessary to make two clarifications. First of all the implementation of an eCommerce platform implies the renewal of the current company website. Secondly, that operation carries high costs, which could not be optimized without an Internet site that is not able to maximize the traffic. Hence, it would be better to focus the efforts on the renewal of the company website and to make use of aggregator websites for the eCommerce, such as eBay. In this way it would be possible to exploit the catchment area of platforms already opened and to prearrange the company website for a future possibility of including the eCommerce.

Synergies with other companies

In order to add to the product another differentiation element and to work side by side with a famous brand, Caremi could start a collaboration with Parà, born within Babylandia project. In fact, Caremi could use Parà products for the finishes, such as, for example, the internal fabric that covers the back and begin a supply relationship.

Other relationships could furthermore be developed with companies that supply materials for the external covering. In fact, for the second prototype created, the company thought about some finishes with different patterns and surfaces (for example through materials such as eco-leather, normal colored finishes, or more particular finishes similar to wood or crocodile leather) with a lower sheet of foam rubber in order to make the covering flexible, soft, and safe.

Market of kindergartens

Coherence level with the distribution channels currently used

The coherence level for the market of kindergartens is lower than the one for market of families. In fact, kindergartens would not go to retailers nor to Caremi single brand stores. Hence, it is necessary to develop other distribution channels.

New distribution channels

When dealing with kindergarten context it is necessary to keep in mind some important aspects. Such structures probably exploit long lasting supply relationships with other actors: hence, for Caremi dealing with that kind of relationships and changing them could be difficult. Furthermore, in considering of the nature of the context, the products with lower price and basic characteristics are probably favoured, because the choices has to respect economic constraints. Moreover, as it emerged from the interview with Caremi's top management, the concept of "growth" related to the furniture is less important, because the

age of the children in the kindergarten remains the same every year, comprised between 0 and 6 years of age depending on the type of school.

Hence, the marketing of the “piece of furniture that grows with the child” in this context should be done through a network of salesmen. By going directly to the structures, they could show the product and explain the distinctive characteristics and the functioning. Such an approach is more suitable for the communication of the value added, which is an essential condition for the product acceptance and purchase.

9.1.2. Communication plan

For the communication of the offering related to the “piece of furniture that grows with the child” the company needs to use tools that can have concrete results in both the contexts in the same way: in fact the company should design a single communication plan in order to address parallelly the two markets. For the achievement of this objective all the available communication means should be exploited in a complementary way. In this way the company can contact the consumer in diverse moments and places, using every time the most suitable leverage.

The tools currently most used by costumers in order to gather information about products such as furniture are generic catalogues, company catalogues, and advertisements in specialized magazines.⁵³

The advertising through newspapers and magazines is fundamental especially during the early phase in order to increase the level of attention, by informing the potential customers about the innovative aspects related to the product. Caremi needs to cooperate with companies specialized in communication and advertising such as Box2, Panadvertising, Primadv, Kettydo, Expansion, and DDB in order to maximize the results given by the offering description through catalogues, flyers, and brochures.

Moreover, in order to increase the knowledge level of the brand and in particular of the product, the company could participate to fairs and events that allow it to have a direct contact with the potential customers. The most important fair dedicated to parents and children in Italy is Bimbinfiera⁵⁴, which takes place in Milan, Rome, and Bari. Through that contact the company could receive useful feedbacks in order to understand possible hidden needs.

⁵³ Il giornale della nuova comunicazione – October, November 2010

⁵⁴ In 2009 the 130 espositors could deal with 33.850 people during the 2 day event.

With regard to Internet-related methods, the most common one is to look for a possible product into online catalogues, exploiting the characteristics of speed and easiness given by the research engines. Caremi needs to improve its website, in order to make it more complete and appealing. The idea of the company is to split the website according to the current activities and customers. In particular Caremi thought to make four macro areas: “Area Caremi”, with the company introduction, “Area Contract”, where the most important works already done are shown (for example the partnership with BeB abitare for the furnishing of cruise liners), “Area Negozi”, in order to highlight the importance of the three single brand stores, and “Area Bedroom”, where all the company products are exhibited. According to this logic, one of those areas should be related to the “piece of furniture that grows with the child”, in order to make the potential customer find all the information needed. There could also be explaining videos about the product functioning or assembly. In order to improve the part related to personalization, the website could have a configurator, in order to increase the interactivity and give to the customer the possibility to see and change the furniture characteristics according to his own tastes.

However, the preliminar activity of renewing the website should go with parallel activities of SEO (Search Engine Optimization) and SEM (Search Engine Marketing): in fact, one of the most important problem for little known brands is related to the management of Internet traffic and the increasing of the visits to the website. A clear and appealing website is fundamental for a good product promotion and the use of an additional blog can improve the communication level between the company and the customer. The possible blog contents can be related to new trends and innovations of both the company and the furniture market; there can also be subjects related to the concept of design and style, in addition to a part dedicated to experts, in order to develop a conversation with the consumers and exchange ideas and information.

9.2. Fumagalli

In this section there is the analysis of the “ergonomic chair” marketing, by highlighting for the family market different dimensions: the coherence level of the new product with the distribution channels currently used by the company; the possibility of introducing new channels; possible synergies with other companies. After that a communication plan is proposed.

9.2.1. Marketing of the “ergonomic seat”

Coherence level with the distribution channels currently used

Fumagalli distribution channel is composed by the 180 retailers present in Italy. They are selected and trained retailers that sell also other brands and that constitute the unique link between the company and the market. The product knowledge is also guaranteed by the company website and the presence in specialized centres for disabled people.

The new ergonomic chair for disabled children designed by Fumagalli is an element totally coherent with the current product portfolio and the distribution channels currently used, even if it presents innovative characteristics. In fact it is basically an evolution of “Panda” product line and consequently it aims at satisfying similar needs, as said by Mr. Cazzaniga, a Fumagalli engineer, during the telephonic interview of 2nd September 2010.

Hence, the retail channels to be used for the new product are those already used by the company, that is the network of 180 retailers that deal with Fumagalli brand, which are called RiSeF (Fumagalli products Selected Retailers). The added service guaranteed by those actors is fundamental thanks to four distinctive characteristics:

- Specialization

RiSeF retailers have a staff specialized in the application of aids for motor disabilities that attended the Fumagalli continuous formation program; thus they are product specialists and represent an very reliable contact between the company and the market.

- Competence

RiSeF staff knows the technical and functional characteristics of Fumagalli products and so it can suggest to the customer the best use possible, adapting the rehabilitative solution to end-user needs and evolution.

- Post-sale service

The post-sale service, consisting in technical assistance and maintenance, is directly controlled by Fumagalli, in order to guarantee the optimal use of the aids. Hence, the spare parts supplied are always original and the sale staff is continuously retrained.

- Professionalism

The supply of a specialistic aid can not be casual and so Fumagalli, company that has always been characterized by rigor and fairness, pays high attention to the final phase of the new product development process: the way the product is proposed and supplied to the company. Investing on retailers in training means adding the values of competence and high professionalism to the rehabilitation properties of the aid.

Considering the good experience level, it is not necessary a big training effort but rather an explanation of the innovative nature of the new chair and of the advantages given by it.

The tensions that could develop inside the distribution channels are not new to Fumagalli. They are the same problems that there are for the other chairs for disabled children that are marketed, in particular similar to those of “Panda” line; in fact, as said before, the objective of the new chair is to replace that line, supplying a product that can satisfy in a better way market needs.

New distribution channels

Considering the extreme specificity of Fumagalli business and the high coherence with the current distribution channels, the introduction of the new ergonomic chair does not need the adoption of new distribution channels.

Synergies with other companies

Fumagalli could establish an interesting supply relationship with Parà. In fact, the fabrics produced by Parà are well suitable for the covering of Fumagalli ergonomic chair. Both the fabrics already present in the catalogue and the new fabric developed by Parà can be used for the covering of the central parts of the back an of the chair (while the external edges must be covered with a more elastic material, in order to guarantee the extendibility of the chair according to the growth phase of the child).

9.2.2. Communication plan

With regard to the gathering of information and the purchasing procedures, even if it is an innovative product, there are no big differences with the seats for disabled children already marketed by Fumagalli. The parents, who are the decisors and the buyers, after having consulted the actors that take part to the purchasing process, go to the distributor with the prescriptions received. Considering the extremely specialized nature of the purchase, the information sources are mainly represented by the medical and paramedical staff that decides the right product, such as physiatrist, physiotherapist, and, less, orthopedic technician. The information given by the company website are about the general characteristics of the company and of the product while that information given by the retailer concerns the technical and functional characteristics of the product and the best use possible according to the particular user needs.

9.3. Luxsolar

In this section there is the analysis of the marketing phase of the “luminous floor”, divided according to the two markets taken into account (market of families and market of kindergartens). For each of them different dimensions will be analyzed: coherence level of the new product with the distribution channels currently used; extension of the channels according to the introduction of the new offering; potential synergies with other companies, whether internal or external to Babylandia project. Finally, some alternative applications will be proposed.

9.3.1. Marketing of the “luminous floor”

Market of families

Coherence level with the distribution channels currently used

LuxSolar currently works in a market sector that is completely different from the one of the “luminous floor”. This consideration is to be kept in mind because it introduces criticalities that can not be neglected with regard to the new product/technology marketing.

In order to increase the product knowledge and to market its products LuxSolar does not have a staff of salesmen that visits the companies that are potential customers but only relies on the company website and on some magazines specialized in the aeronautical sector. During last years LuxSolar has been developing a collaborative relationship with foreign companies that use LED solutions aiming at the promotion of its own product outside Italy.

Hence, the coherence level is quite low, because the channels currently used are not sufficient and not suitable for the marketing of the “luminous floor”.

New distribution channels

During the meeting with LuxSolar's top management of 4th November 2010 it emerged an opinion concordant with the results of the analysis for the choice of the best distribution channels. Considering that LuxSolar is a small company that has always dealt with a market composed by other companies, the independent development of distribution channels that address directly the end-consumers, which are the families, would be too expensive both from time and investment viewpoint, with the risk of the birth of similar products. Hence, the most suitable solution is to contact retailers specialized in products for children, in particular toys: the most important ones are Chicco (brand of Artsana group), Toys Center and Giocheria (brands of Giochi Preziosi group). They all sell very different kinds of products, including electronic toys with educational and learning objectives, and have points of sale in all Italian regions.

Chicco currently has 162 stores where there are very different products for children and pregnant women: baby's bottles, hygienic accessories, high chairs, pushchairs, clothes, and of course toys. In particular with regard to the last ones, in the catalogue there is already a rug, called "Tappeto degli Animali Cantanti", with several manual and sound-based activities that favour the tactile sensitivity and the manual coordination of the baby and that lead him to the discover of music; the game modalities are two: one with animal cries and one with nursery rhymes.



Picture 81 Tappeto degli animali cantanti Chicco - Source: www.chicco.com

One of Chicco toys that deal with sound is also “Orchestra Cantante”, an activity centre for elder children, from 12 months old, which is useful to discover orchestra elements through three game options: “Strumenti” (Instruments), “Canzoni” (Songs), and “Orchestra”. The baby can interact with the toys by speaking, by playing, or by singing.



Picture 82 Orchestra cantante Chicco - Source: www.chicco.com

As you can understand from Chicco catalogue analysis, there are toys with educational and interactional features but they are based on sound only. The “luminous floor” could widen the range of choice with a product based on visual responses, thanks to the innovative LED application, and that is also suitable for elder children through different softwares. In this way LuxSolar would not occupy the same positioning of the current offering, thus developing tensions inside the channel, but it would increase the opportunities for parents through a complementary product. However, it is absolutely necessary a better design in order to be appreciated by the children, who are the real end-user. That being stated, you can understand how the economic aspect represents a big uncertainty for the success of the “luminous floor”: the prices of the possible substitute products for what concerns Chicco are quite low, especially compared to the final price expected by LuxSolar, which is around 400-500€. Considering the crisis and the resulting consumption decrease, the economic variable would probably be a very big drawback for the diffusion of the “luminous floor”. Hence, an effective value communication is fundamental, in order to give to the consumer a reason for a price that is much higher than other products' ones.

Toys Center is the biggest chain store for family. In fact in addition to toys the product portfolio includes books, videogames, outdoor articles, and everything is related to infancy and child care, from small beds to

baby food. Through 109 points of sale it is present in all Italian regions but it is centered around Central-Northern Italy. In the Christmas 2010 catalogue there are several electronic toys that can have both a recreational and educational function: they are products related to Clementoni brand, which is the most important brand in this product category.



Picture 83 Sapientino Smart TV Clementoni - Source: store.toyscenter.it

In this case the products have different possibilities of tactile interaction and responses that are both visual and auditive. It works through the inserting of cartridges that contain softwares with different educational aims such as learning the alphabet, the numbers, the shapes, and the colours, training contemporaneously memory and logic sense. The target market is made of the children that go from 3 years old to 7-8 years old. At the same time through Computer Kid brand Clementoni also markets products that represents some sort of computer anticipation, at least for the shape, with LCD screen and educational features. Also in this case the product line is addressed to children starting from 3 years old but there are some codes that are suitable for elder children starting from 7-8 years old⁵⁵.

⁵⁵ In this case the price is between 40€ and 200€.



Picture 84 Computer Kid Clementoni toys - Source: store.toyscenter.it

However, such toys imply a kind of posture and interaction that matches with a significant child growth phase, certainly they are not suitable for everybody. In addition to Clementoni products there are some toys that are similar to LuxSolar “luminous floor”, at least for what concerns the shape and the use: they are the musical rugs made by GIG, which is a brand of Giochi Preziosi group.



Picture 85 Giocattoli GIG - Source: store.toyscenter.it

Exclusively addressed to little girls starting from 3-5 years old, they are based on the reproduction of songs related to TV series or cartoons aiming at developing movement and coordination⁵⁶. Hence in this case there is interaction through both hearing and sight like in the case of LuxSolar's product.

Also through the consultation of Toys Center catalogue is clear that the "luminous floor" can carve out its own space provided that it improves from the aesthetic viewpoint: in fact all the toys in the catalogue have appealing design and decorations, very often based on character very famous among children. Once this gap is filled in, the product could be more appreciated by children. With regard to the price, LuxSolar is above the range detected, which goes from 40€ to 200€. In fact, supposing to sell the product at 400-500€, as stated by the top management, that would be a price higher than both the educational toys, including

⁵⁶ Price: around 50€..

the rugs for dancing, and the toys similar to laptops. Given this situation, LuxSolar must make the consumer understand the product flexibility, considering that is suitable for different ages thanks to the softwares: by doing so you would have an educational toy with a very long life and amortize the cost.

The analysis of the possible introduction of the “luminous floor” into the catalogues of the main toy chain stores confirms product strengths but it also highlights the fundamental weaknesses. Surely, cooperating with famous chain stores has important advantages related to the brand knowledge, the already consolidated confidence relationship with the consumer, the widespread market penetration, and the reduction of fixed costs incidence on final price. However, there are also some weaknesses that should be managed in the right way. First of all, the relationships with the above said actors constitute an important variable for the product marketing success, because the product needs a prominent position in the catalogue in addition to an effective explanation of the innovative characteristics. In order to do so, LuxSolar should have a manager that deals with those aspects, which are totally new to the company. Secondly, the “luminous floor” design must be improved in order to be fully appreciated by the children, who care a lot about the shape and the colours of toys. The third weakness is represented by the communication channels, which are currently almost nonexistent for what concerns the market described. It would be useful to modify the company website in order to make it more accessible and appealing. The product knowledge could also be improved through the participation of the company to the International Lighting Fair EuroLuce 2011, which is a regular appointment for LuxSolar. However, the most important weakness is the price. As observed before, the educational toys that address the same age range that is addressed by the “luminous floor”, which goes from the first years to 8 years, have a much lower price, even almost 1/10 in most cases. If you consider furthermore the particular economic situation coming from the crisis and attested by the consumption decrease you can understand how that weakness could be crucial. The only solution is to communicate in the best way the advantages and the innovations carried by LuxSolar product, in order to have an effective value communication.

Market of kindergartens

Coherence level with the distribution channels currently used

Like in the case of the market of families, in the case of the market of kindergartens the distribution channels needed for the “luminous floor” marketing are profoundly different from those already used by the company. Hence, the coherence level is the same one: quite low

New distribution channels

As noticed during the interview with Architect Erba, purchasing manager for Happy Child, in the kindergarten context it often happens that every structure or chain has a stable and enduring relationship with its suppliers. Because of this trend the entry of the company into such a market is likely to be more difficult and onerous compared to that one for market of families.

It is thus necessary for LuxSolar to have a network of salesmen that, by going directly to the kindergartens, can show the product main characteristics and functioning, highlighting the value added and the possible applications in a didactic context. In fact the “luminous floor” is suitable for a team use, with several children and with the support of the teachers: hence, it would be useful to show to the purchasing manager the product potential uses and activities.

9.3.2. Alternative applications

In the meeting with the top management in the light of the analyses made, in particular of the focus group, it was noticed that the “luminous floor” may have some difficulties in being appreciated by the consumers, especially because of the missing need recognition and the high price. In fact, a big part of the final price is made by the external box, which has to be very resistant in order to sustain weight of a child. Such difficulties has made the company design solutions that can be more appreciated by the market and that can guarantee that the developed know-how, which is considered very interesting, can be used. LuxSolar understood that it is not suitable the horizontal use of the product, which needs the support of the full child weight, in order to exploit in the best way its possibilities, but rather the vertical use.

According to the market chosen for Babyladia project, different solutions for the kindergarten application were hypothesized: as a wall toy, as a signal or protection element, and as product able to create moods. In the first case the function would be similar to the one originally thought, which is the interaction of the child with the toy through visual-luminous and sound responses, with the advantage of developing a box that do not have to support anymore the pression caused by the weight of a child but just the pression caused by the push of an hand; the result would be a lower final price.



Picture 86 Led Touch Wall - Source: www.spacecraft.co.uk

Through this configuration in addition to the recreational-educational function the company could also develop some softwares for physical exercise or for movement more generally speaking. For example, in rehabilitation centers, in this case for both adults and children, the lighting of some parts of the surface could indicate some particular movements to make, in a more intuitive and less boring way. The contact with those areas for a particular number of times or with a particular length could then let the user pass to the next exercise.

Thanks to the possibility of creating whatever software, the product could also be used as a signal element, for example by showing to the children the way to follow during a particular activity or movement, or as a protection element, by preventing the children from reaching potentially dangerous positions. For example, in case of fire alarm, it would be easier, especially for children, to follow light indications in order to reach the escape route and the meeting points; or in case of movement activities that include the execution of a particular path with different stations the control by the teachers would definitely be more easy. This ability to communicate messages could also be used for the creation of atmospheres functional for different moments of the day: for example during the sleep phase a soft lighting that becomes less and less intense could help the children to fall asleep.

In addition to those ideas, there are other possible applications of the know-how developed with the “luminous floor” that can be applied to other sectors, for example in the luxury hospitality, where the price is not the most important variable. In fact thanks to the contribution of an artisan LuxSolar is developing the concept of a similar product that can be applied to the floor, the walls, and the ceiling and that has in addition on the surface a thin marble sheet, 2 or 3 mm thick, positioned on the LEDs and a crystal or glass sheet that guarantees the resistance of the product. In fact, it was demonstrated that the marble cutted in thin sheets has some transparency properties the would allow the LED light to pass through. Such a product would have a double function: on one side the communication of messages and on the other side the mood creation. It could be applied for example inside big airports or international stations, like in the Frankfurt airport (Figure 9.3.2-9), where it is necessary to orient in a clear, quick, and intuitive way a big amount of people that speack different languages and maybe do not know the procedures well.



Picture 87 Aeroporto internazionale di francoforte - Source: www.interairport.blogspot.com

A product with such characteristics could also be useful for exclusive hotels or restaurants, in places like halls, where it is necessary to give some indications about the facilities, or like bathrooms and spa, where the creation of a relaxed atmosphere is very important.



Picture 88 Reception della SPA dell'hotel Four Seasons di Doha - Source: www.fourseasons.com

However, in these cases it is fundamental to make a partnership with an important design studio. In fact, for a small company like LuxSolar it would be very difficult to propose its product to big luxury hotel chains like Ritz-Carlton, Four Seasons, or Hilton, because the company do not have the necessary credentials. On the other side, by cooperating with a partner that has a good experience in the luxury hospitality sector, LuxSolar could make its product suitable for that market and exploiting several international opportunities. Moreover, the “Made in Italy” concept related to design and marble use could play a very important role.

Once such a technology is developed, the product line could also include codes with characteristics that could be applied in different situations, maybe without the marble sheet in order to allow a lower price and by including some surfaces that give to the product a look that is suitable for every context. For example, one context could be constituted by places like bars and clubs, in order to have light and design effects that the traditional solutions could not make.



Picture 89 Club Surya, Londra - Source: www.club4climate.com

Such light effects could also be amplified through the contact with water, creating light shows within fountains placed in touristic places.



Picture 90 Fontana di Buckingham, Chicago - Source: www.americaontheroad.it

Moreover, the characteristics of the light made by several LEDs together could be applied in all those contexts where it is necessary a uniform and constant lighting but that do not annoys: museums, art galleries, workplaces such as factories and offices, shops and supermarkets, theatres, cinemas, convention rooms, or places related to education, health, and public administration.



Picture 91 Art gallery of Ontario - Source: dealcetera.com



Picture 92 Examples of industrial LED lighting - Source: www.ledlightsorient.com

9.4. Soliani

In this section the marketing phase of the “shell bed” will be analyzed, for both the two markets studied (families and kindergartens). For each of them different dimensions will be considered: the coherence level of the product with the distribution channels currently used; the possibility of adding new channels for the introduction of the new product; potential synergies with other companies, which could be both internal and external to Babylandia project. After that a communication plan is proposed.

9.4.1. Marketing of the “shell bed”

Market of families

Coherence level with the distribution channels currently used

As noticed in the chapters before, Soliani do not use any particular channel for the communication and selling of its shielding solutions but only relies on a direct and enduring relationship, in some case even 30 years long, with big companies. The cases of B2C market have been very rare and consisted in private customers with particular needs that knew the company thanks to the website, some articles on specialized magazines, or the word-of-mouth.

The “shell bed” is such an innovative product that has peculiar characteristics that are extraneous to the current Soliani product portfolio. In fact, although the technology used is very widespread inside the company offering, the target market and consequently the ways through which address it are new. It is a product that addresses a very large part of consumers, in a standardized way, and without particular needs to be satisfied. Hence, it is fundamental to arrange a wide distribution channel, with a deep market penetration, that reassures the parents when buying a product for their children's health and that can start possible fidelization mechanisms.

For this reasons, the coherence level with the current distribution channel can be considered low.

New distribution channels

According to the considerations made, the company should cooperate with big chain stores specialized in children products, such as Chicco, Prenatal, and Bebe Royal, in order to reach the widest market possible and, at the same time, to exploit as a result the distributor's brand power so that the product can be accepted and appreciated.

Chicco is probably the most famous brand among those named, because it has a network of 162 stores in Italy. In the catalogue there are several products related to child health and sleep, such as pillows, small beds, lamps, thermometer, humidifier, and creams. However, none of the small beds gives a protection

from noise and electromagnetic pollution, thus they can not be considered as direct substitute products with respect to the “shell bed”.

Prenatal and Bebe Royal, respectively 200 and 62 points of sale in Italy, are in the same situation, because they recognize the importance of sleep for children and they dedicate to it a big part of the product catalogue, but they do not consider at all the problem of the pollutions named. However, there are bed accessories, cradles, prams, mattresses, creams, small beds, and toys that help the child to fall asleep.

The analysis of the product portfolios of the main players in the childhood market confirms the extremely innovative nature of the “shell bed”, which is a part of the very little product category that deals with noise and electromagnetic pollution and is the only product that applies those particular technologies to a product for children and in particular for the sleep. In order to get into the catalogues of the distributors described in the right way, Soliani should hire a manager that deals with the relationships with those intermediaries, which is a completely new activity to the company. It is necessary that the distributors are aware of the competitive advantages of the product and that the salesmen are properly trained, in order to communicate effectively to the consumer the innovative characteristics of the “shell bed”, giving their contribution to market awareness with respect to noise and electromagnetic pollution.

Synergies with other companies

Soliani should develop a partnership with a company specialized in the production of designer beds. In fact, it could have some difficulties in selling the “shell bed” alone, because the parents may not be able to match it with the beds already owned. Hence, Soliani should build a partnership that is not limited to the supply of the bed but that includes phases of joint development of the two products, so that the “shell” can improve its look and comfort while the bed can be easily matched with it without compromising the efficacy of the protection from noise and electromagnetic pollution. In fact, the feasibility of such idea was confirmed by a bed expert specifically interviewed.

Another relationship, in this case a supply, could be developed with Parà, whose fabrics could be used for the covering of the “shell bed”, in contributing to improve the look. The fabrics that can be considered for this aim are those belonging to the medium range of Parà product portfolio, in order to guarantee the price competitiveness of the “shell bed”.

Market of kindergartens

Coherence level with the distribution channels currently used

The market of kindergartens also represents an absolute novelty for Soliani, even if, in being a B2B relationship, it is nearer to company habits than market family. However, the kindergartens are small firms, which can not be compared at all to the big organizations that currently constitute the Soliani client portfolio; furthermore, they rely on specialized distributors, who are extraneous actors with respect to Soliani business, and they present supply needs that are very different from those currently satisfied by Soliani: standard technical characteristics but look that can be customized according to the style of the particular kindergarten, lower time and costs. Hence, the coherence level can be considered as low in this case too.

New distribution channels

The kindergartens rely on specialized distributors that deal with toys and school furniture supply. However, in this case the distribution can not be limited to a single actor that reach several market sectors but Soliani should make a portfolio of retailers that keep in touch with a number of kindergartens that is big enough to justify the investment. The relationship with the distributor is also different with respect to the market of families: it is not a brand sharing anymore but the experience of the particular kindergarten with the particular actor is considered as an assurance of the supply values, in the “shell bed”'s case quality and safety. Because of the increasing competition inside the distribution channel, extended to all those expenditures that are in kindergarten's balance sheet, it is very important that a cooperation relationship is built between Soliani and every single distributor, in order to give to the new product a prominent position on the catalogue, based on the innovative level and on the potential acceptance by the kindergarten's director. For this market, there could also be some tensions with other companies inside the distribution channels, which get worse because that kind of supplies are enduring and concern all kindergarten's furniture. Hence, Soliani should guarantee product flexibility and variety, in order to not be considered as a threat but on the contrary as an integration of the other suppliers' offering that can be matched in a suitable way.

Synergies with other companies

With regards to the market of kindergartens, a partnership with a designer bed producer, such as Caremi, could represent an important strategic value. In this respect, Soliani should consider the multiple nature of the supplies for this kind of structures and the simplicity of the furniture chosen. In fact, while in the market families the design and the material elegance represent a fundamental value, in the market of kindergartens the valuations made are mainly about the economic aspect: hence, for this market it could be suitable a basic product line, which however keeps the quality and functionality features that characterize the offering.

The same considerations made for market of families are valid for the collaboration with Parà.

9.4.2. Communication plan

The parents get to know the “shell bed” through different channels, such as word-of-mouth, specialized magazines, company website, or directly at the point of sale. The word-of-mouth, as noticed by the company itself in several occasions, is an important means of promotion for the products already marketed and it can be even more important in the case of the “shell bed”, because the parents often confront each other for suggestions or opinions.

With regard to the specialized magazines, the story of some customers particularly satisfied of Soliani products increased the brand knowledge through some articles. Soliani should develop this channel too, by attending to fairs and meetings, in order to increase the presence on these magazines and reach in an effective way who is especially sensitive to the problem. In this case the communication should be based on scientific and medical data that could at the same time be understood by most people and on the description of successful experiences. Among the most suitable magazines there are the scientific ones (such as Focus, Newton, Geo, or National Geographic), the health ones (such as Starbene, Viver sani e belli, Ok, or Corriere Salute), and the ones for mothers (such as Donna e mamma, Bimbi sani e belli, Io e il mio bambino, or Insieme).

The website is an idea that Soliani is considering for the long run as an added distribution channel. In the short run it can have a good promotional function: in fact through banners and links on specialized websites for mothers and sensitive people it is possible to increase the traffic and reach the target market. However, the point of sale is the main channel for both the communication and the purchasing. In fact, considering the technological product nature and the health implication, it is necessary that the purchase is anticipated by a very important service level and explanation phase on the point of sale, in order to communicate the real product value and to give the information for the right use. In fact in most cases the consumer knows about the problems related to noise and electromagnetic pollution only in front of the product; if the need is latent it could once and for all reveals itself or, if it is not present, it can start the awareness phase. In fact, the purchasing is not likely to be impulsive; more probably, it needs time and an information and awareness level that justifies the expenditure.

Kindergarten market

With regard to the market of kindergartens, the information gathering phase is made by the purchasing manager through the distributor, the specialized magazines, and the Soliani website. The product knowledge starts mainly from the distributor's catalogue, which explains the “shell bed”'s characteristics; if there is a sufficient level of interest the manager can gather more detailed information through the website. The presence on specialized magazines could at the same time be an alternative channel for the increase of the product knowledge.

CHAPTER 10: BABYLANDIA PROJECT CONCLUSIONS

10.1. Market evaluation

The results of the research made indicate that the products still present some problems and uncertainties that could discourage the investments of the companies, although they have a quite high quality and innovation level. In fact, they are products that exploit the important know-how developed, the production artisanality, the considerable flexibility, and the entrepreneurial mark that characterize the small and medium enterprises. Such an entrepreneurial mark has led to a product design that is based on personal intuition without really estimating the market demand, according also to the required investments. In fact the consumer needs has been taken into account only in a subsequent phase, by accordingly adapting or developing the offering.

Moreover, it is necessary to premise that the existing economic-financial crisis plays a fundamental role in the valuations made: in fact, in Italy and in several other countries there is a consumption decline and a consequent investment decrease from the companies' point of view, including the kindergartens. In a scenario of this kind the price sensitivity has increased and such a trend has negative effects especially in case of low need perception, as noticed for most of Babylandia products, and of low value understanding, which is fundamental for handmade products that can not be price competitive. On the other side, the parents, who are the real buyers, give a great importance to the products used by their children, especially from the safety point of view, and such a behaviour sometimes can constitute a reason to lower the price sensitivity, mostly in a family context where the need is really perceived. Moreover, the target market, which is the sector of products for children, does not offer interesting business opportunities, because the birth rate is quite constant, although the potential demand is quite high, composed by some millions of families. The competition is also stable, because the parents, especially in the case of the Fumagalli ergonomic seat, needs a trust relationship with the brand and thus tend to become loyal; in this way the market entry by unknown brands like LuxSolar or Soliani is more difficult.

Hence, the study of the businesses involved in the Babylandia project has two different levels: first from a macro point of view, by analyzing the market and the situation of every single company compared to the product designed, and then from a micro point of view, by exploring the characteristics and the responses to external stimuli of the single consumers. From the macro analysis you can understand that the markets, with regard to the families, are potentially very large for the Caremi piece of furniture, the LuxSolar floor, and the Soliani "shell bed" and count from two to four millions of families; however, such a consideration

must be seen in the light of the premised consumption decrease. If you also consider the constraints related to the impossibility of serving the whole market because of the characteristics of the consumers and of the companies, you can understand that the businesses can not be considered as particularly interesting. With regard to the demand, although the end-users are the children and thus the products should be designed according to their needs, the real decisors and buyers are the parents: hence the offer must necessarily take into account the opinions of the parents too, in particular of the mothers; such a characteristic makes the approach to the market even more complicated.

Another reason that lower the attractiveness of such sectors concerns the competition and the competitive differential of the innovation. In fact, although the products developed has a quite high innovation level based on new or almost new concepts, they aim at satisfying needs that are already considered by other companies and that are not an absolute novelty. In particular, the Caremi piece of furniture will cope with the competition carried by similar products designed to satisfy the same needs of adaptability, accessibility, and personalization; the “bright floor” and the “shell bed” could face the same problem to a lesser degree or at a broadened competition level, because there are already interactive floors or solutions against the noise and electromagnetic pollution. Hence, the product positioning and the value communication will be fundamental, considering also the high price.

On the other side you should notice that LuxSolar and Soliani have to complete to a great extent their competences, especially with regard to the distribution channels, because they increase the product innovation level by applying their know-hows to a totally extraneous sector. Such an integration also inevitably means high changes and investments on the organizational side, in order to adapt the company to a new business. Moreover, in addition to the opportunities you should consider all the problems that could arise from the collaboration with other firms that are related to critical supply relationships and partnerships. On the contrary, Caremi presents a product that is not extremely innovative and that is coherent with the company assets and thus do not need great investments or structural changes.

The conclusions so far drawn are related to the “piece of furniture that grows with the child” by Caremi, to the “bright floor” by LuxSolar, and to the “shell bed” by Soliani, because they presents some common characteristics with regard to both the market and the internal situation, even if some nuances. The “ergonomic seat” by Fumagalli is in a different situation, mostly because it is addressed to a niche market, composed by a few thousand children, and it has completely different mechanism. In fact, the price sensitivity is lower, because of the absolute necessity of such products and the possibility to have state contributions. The purchasing organization is extremely structured and includes actors such as physiatrist and physiotherapist that have a great influence on the parents, who hardly accept the problems of their child and even more hardly share their feelings with the world. Such peculiarities, in addition to the strong tendency to be loyal to a particular brand, makes the market addressed by Fumagalli very difficult to be deeply analyzed and thus the formulation of an effective marketing plan is equally difficult. However, like Caremi Fumagalli already has a good knowledge of the target market given by a long experience and so it does not need great organizational changes or investments in order to adapt its assets. Moreover, unlike Caremi, the distribution channels are fully coherent and sufficient with regard to the ergonomic seat. Although the differentiation level of the market segment is low, Fumagalli is also in a better position from the competition point of view, because the number of competitors is low and the particular nature of the object reduces to almost zero the number of substitute products.

MARKET OF FAMILIES	Piece of furniture that grows with the child	Ergonomic seat	Luminous floor	Shell bed
Market attractiveness	Medium-low	Medium	Low	Medium
Market dimension	Potentially very large	Niche market	Potentially large even if high price should be considered	Potentially large
Market growth	Very low	No clear trends	Negative also because of success of videogames	Negative
Business profitability	Critical because of high price	Potentially high thanks to reduced price sensitivity	Critical because of high price and sector inexperience	Good thanks to high innovation level and health care possibility
Broadened competition	Intense and caused by several products with higher quality/price ratio	Limited to the direct competition caused by a few actors	Intense and caused by solutions that satisfies the same needs	Intense but faceable thanks to high quality/price ratio and differentiation

Table 66 -Comparison of the market attractiveness between the companies - Market of families

With regard to the market of kindergartens, the considerations made are the same, but with a much smaller potential market, of about 25000 units, and with a consequent served market that counts a few thousand units. In this context there are two main peculiarities compared to the market of families, related to price and distribution. In fact, the quality/price ratio is a much more important characteristic for the kindergartens than for the families, because the kindergartens can be considered as companies and so they have to take into account in a more strict way the economic aspects; moreover, they have bigger supply dimensions and results in terms of brand image and thus of profits. With regard to the offering acquisition, the kindergartens usually rely for a long time on the same distributor, which gives thus an overall image to the structure. From this point of view, the entry in the market of kindergartens is quite complicated, because it is difficult to effectively enter the distributor's catalogues and to train the distributor itself in order to communicate the innovative aspects of the product to the purchasing manager of the kindergarten. In this regard it is necessary to build a strong and enduring relationship with several kindergartens in order to justify the investments and maybe, in considering the high price sensitivity, do it through a simpler product line or product model that is thus cheaper.

MARKET OF KINDERGARTENS	Piece of furniture that grows with the child	Ergonomic seat	Luminous floor	Shell bed
Market attractiveness	Medium-low	N/A	Medium-low	Medium-low
Market dimension	Smaller but bigger single supply	N/A	Smaller but more amortizable price and bigger single supply	Smaller but bigger single supply
Market growth	Very low	N/A	Negative	Negative
Business profitability	Critical because of the market inexperience and quality/price ratio	N/A	Critical because strongly linked to the supply relationship	Medium because of the important bargaining power of kindergartens
Broadened competition	Intense and caused by several products with effects on the service level	N/A	Intense and large, caused by very different products	Intense and caused by very different products with effects on the service level

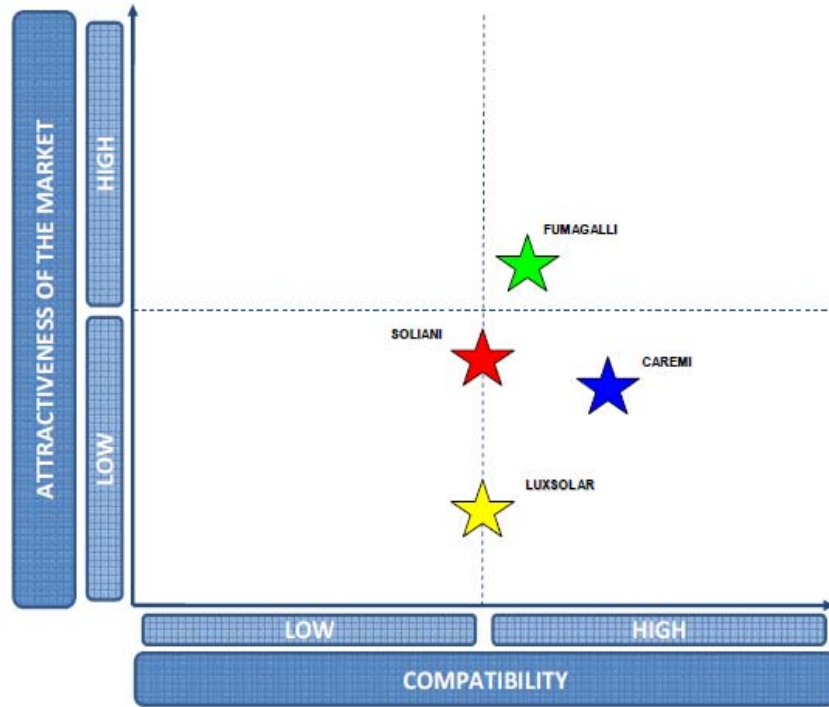
Table 67 - Comparison of the market attractiveness between companies - Market of kindergartens

The considerations made about the coherence of the businesses with the companies are summarized and compared in the following table.

	Piece of furniture that grows with the child	Ergonomic seat	Luminous floor	Shell bed
Market compatibility	Medium-high	Medium-high	Medium	Medium
Resources and competences	Already owned for the production but to be improved for the distribution	Suitable because the product is an evolution of another line	Missing with regard to the external box of the product and the distribution	Resources to be completed according to the needs of the new market
Company structure	Easily changeable and flexible	Coherent with the product	Changes needed for the new market	To be adapted with regard to the distribution
Investments	Necessary in the long run in order to improve the distribution channels	Low and coherent with those normally made	Medium and necessary in order to improve the management of B2B relationships	High because of the full development of marketing aspects
Medium-long run objectives	Innovation in distribution too: coherent	Quality, innovation and attention to consumer: full coherence	Coherent with development of LED technology and different applications	Coherent in terms of quality and application in different fields

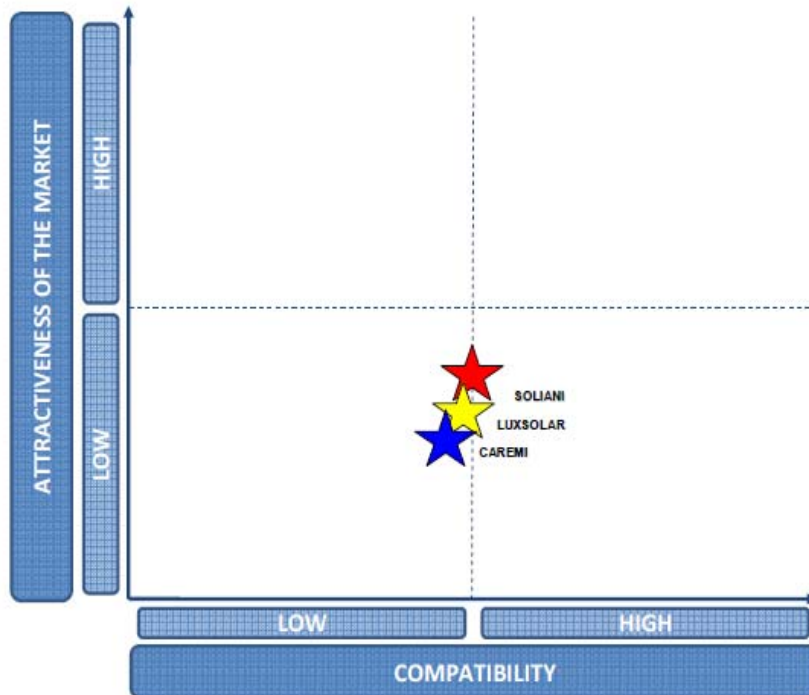
Table 68 - Comparison of the market compatibility between companies

By comparing the businesses analyzed, in the light of the considerations made, you can draw an overall judgement about the market of family and the offerings that address this market. The map obtained shows market segments with a medium-low attractiveness and a medium-high compatibility: they are segments to be possibly occupied with marginal spaces, that is to say with self-financing businesses that do not take away resources from more profitable segments. The situation is slightly different for each of the company taken into account: Fumagalli could focus in a more effective way on its product because it is coherent with its assets and it addresses a quite profitable market, while LuxSolar should address a sector that offers more opportunities.



Picture 93 Attractiveness/compatibility matrix - market of families

The market of kindergartens has similar situations for all the three companies analyzed, characterized by a medium-low attractiveness and a medium compatibility. As said, such a position indicates not particularly interesting market segments, where the company should remain only in the case it is possible to do so without large investments.



Picture 94 Attractiveness/ compatibility matrix - market of kindergartens

In the light of the analyses made you can understand that the products belonging to Babylandia project presents some weaknesses that could be a problem in the competition with other companies. In particular the main weaknesses are the price, which is surely higher than the average and hard to justify without a full comprehension of the value offered, and the design, which is a fundamental aspect especially in the products for children; the problem of the design is also related to dimensions, which has to be small especially in the domestic context, and to resistance, very important in the kindergarten context. Then there are all those problems related to the distribution channel, mostly in the cases of LuxSolar and Soliani, caused by the total inexperience in the sector studied; such an inexperience also has effects in the low brand knowledge and thus in the difficulty to gain the customer loyalty, particularly in the product introduction phase. Moreover, these two companies have to complete in a substantial way their competences and thus recognize a high bargaining power to the possible suppliers or partners. On the other side, the other two companies that has remained faithful to their sectors have to cope with a intense competition caused by the low innovation level and thus the low differentiation level of the offering, increased in the case of Fumagalli by the restricted distribution channels.

Among the strengths to be exploited there certainly are the high quality level, which is guaranteed by the handmade nature of all the companies and can justify the high price, and the importance of the know-how on which the products are based, a result of years of experience in the relative sectors especially in the cases of the most technological products, such as the “luminous floor” and the “shell bed”. There are then all the peculiar characteristics of the products, which can be used to differentiate them from the competitors' offerings and to answer to market needs that are only partially satisfied: for the Caremi piece of furniture they are the adaptability to different spaces and ages, the accessibility, and the personalization possibility; for the Fumagalli seat they are the high quality level of distribution too, the exhaustive study of the medical aspects that are at the bottom of the product development, and the brand image, which is related to professionalism and attention to ethical values; the “luminous floor” by LuxSolar can rely on the use immediacy and simplicity and, especially in the market of kindergartens, on the possibility to have both recreational and didactic activities; for the “shell bed” Soliani can exploit its flexibility and experience, in order to cooperate with the costumer, share with him the know-how, and thus improve the offering with all the information that is particularly important for the right comprehension of the product.

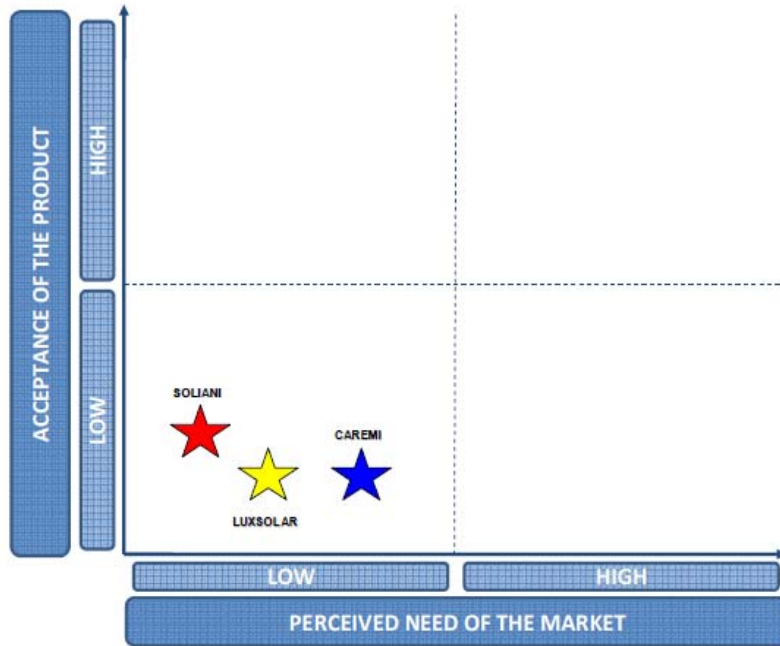
	Strenghts	Weaknesses
Piece of furniture that grows with the child	<ul style="list-style-type: none"> ✓ Adaptability ✓ Semplicity ✓ Personalization 	<ul style="list-style-type: none"> ✓ Similar product existing ✓ Design ✓ Quality/price ratio
Ergonomic seat	<ul style="list-style-type: none"> ✓ High quality level of production and distribution ✓ Research & Development ✓ Brand 	<ul style="list-style-type: none"> ✓ Low offering differentiation ✓ Narrowness of distribution channels
Luminous floor	<ul style="list-style-type: none"> ✓ Know-how ✓ Smplicity ✓ Didactic objectives (market of kindergartens) 	<ul style="list-style-type: none"> ✓ Inexperience in the sector ✓ Lack of distribution and communication channels ✓ Big dimensions ✓ Price ✓ Resistance (market of kindergartens) ✓ Unknown brand
Shell bed	<ul style="list-style-type: none"> ✓ Know-how ✓ High quality level ✓ Information supply 	<ul style="list-style-type: none"> ✓ Inexperience in the sector ✓ Lack of distribution and communication channels ✓ Bargaining power of suppliers ✓ Unknown brand

Table 69 - Strenghts and weaknesses of the companies respect the new products

With regard to the micro analysis of the demand, which aims at noticing the opinions and the reactions of the single consumer, two main conclusions can be drawn: the needs that Babylandia products try to satisfy are in general little perceived and the offering is not accepted, probably because the value is not understood. Such considerations are a direct consequence of the data recorded through the analysis of the blogosphere and the focus group. In fact, in the blogs the keywords that indentifies the needs that can be satisfied by the offerings have very low presence rates and, even if you analyze more deeply the main links, you can understand that they are not important concepts in the customer's mind and that anyway would not justify a purchase that has a price so high. The focus group, which is the second tool used to explore the need perception level, confirms what noticed in the blogosphere, even if in the case of Caremi piece of furniture the responses obtained shows a slightly better situation, characterized by a medium need perception.

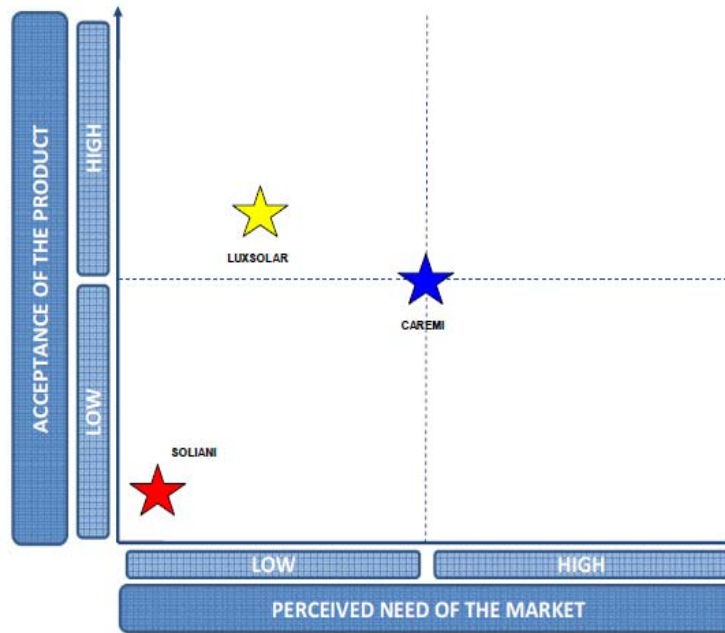
With regard to the product acceptance, explored in a second phase of the focus group, the responses are quite negative: in fact when the parents saw the products, they had a negative first impression and, even after the explanation of the products, they did not seem to appreciate the offering. In particular, the main doubts are related to the desing, which is considered as little suitable to children and very important for

parents too; with regard to the single products, the Caremi piece of furniture is considered too heavy and hardly usable by children because of the opening mechanism, the “luminous floor” as too cumbersome and with a too short life cycle, while with regard to the “shell bed” there are some problems of hygiene and convenience. Once the prices were discovered, the parents showed disconcertment and thus a high price sensitivity, maybe joined with a missing need perception and value comprehension.



Picture 95 Perceived needs/Product acceptance matrix - Market of families

With regard to the market of kindergartens, explored through the interview with Architect Erba, purchasing manager for Happy Child, the products of LuxSolar and Soliani are characterized also in this case by a missing need perception, while the Caremi piece of furniture could satisfy the need of containing the toys, even if in this context the “growth with the children” concept that is at the bottom of the product becomes meaningful. With regard to the product acceptance the situation is slightly better, especially in the cases of the piece of furniture and of the floor: in fact the acceptance level is medium, because the problems existing in the market of families related to the life cycle, the dimensions, and the price would less impress the kindergartens, where the product can be used for several years, by several children, and in bigger rooms. With regard to the “shell bed” the low acceptance level is mostly caused by the perception of danger that the parents would feel when coming into a kindergarten that has such a product, because it creates de facto a concern and not a service added.



Picture 96 Perceived needs/Product acceptance matrix - market of kindergartens

However, in addition to the several problems described there is room for improvement that would make the products more acceptable, which are related to a better design, use simplicity, and safety. The price remains an important variable and so it is necessary to decrease it and to increase the quality/price ratio.

	Piece of furniture that grows with the child	Ergonomic seat	Luminous floor	Shell bed
Needs/ problems noticed in the blogosphere	<ul style="list-style-type: none"> ✓ Better look ✓ Space ✓ Safety 	N/A	<ul style="list-style-type: none"> ✓ Semplicity ✓ Colour ✓ Low noise 	<ul style="list-style-type: none"> ✓ Day and night protection for everybody ✓ Lack of sure information
Needs/ problems noticed in the focus group	<ul style="list-style-type: none"> ✓ Unassembling possibility ✓ Structure ✓ Design ✓ Functioning ✓ Better look - Personalization ✓ Horizontal movement 	N/A	<ul style="list-style-type: none"> ✓ Space ✓ Different surfaces ✓ Flexibility ✓ Interaction possibility 	<ul style="list-style-type: none"> ✓ Lack of sure information ✓ Better look ✓ Control of the child ✓ Air turnover ✓ Washing ✓ Dimensions

Table 70 - Needs/Problems noticed in the blogosphere and in the focus group

In this case the Fumagalli seat has also some peculiarities, because the sharing of opinions related to the disability is obstructed by some ethical problems and so it is not easily studiable; however the presence of some needs that can be satisfied by the product can be found in the blogosphere through the analysis of the main links: such needs are related to the supply of reliable but at the same time understandable information, the child socialization, and the versatility of the aids to be used.

10.2. Go to market plan

With regard to the marketing of Babylandia products, there are two different situation: Caremi and Fumagalli can count on a good coherence of the currently used channels with the new business, while LuxSolar and Soliani necessarily have to start a distribution system from scratch. If Fumagalli does not need to complete those channels, by keeping on relying on the current 180 selected retailers, Caremi in the long run and LuxSolar and Soliani from now should start a collaboration with chain stores specialized in products for children. The advantages would be various: a wider and deeper distribution, a trust relationship with the consumers through an already known brand, and a reduction of the fixed costs, which is possible thanks to the large volumes managed by the distributors. Moreover, in the long run Caremi could try to market the “piece of furniture that grows with the child” through an eCommerce platform, in order to avoid all those costs caused by the presence of intermediaries: in this respect in the first period it would be useful to make use of aggregator websites such as eBay, in order to exploit the traffic attracted and prepare the company to the opening of a company eCommerce site.

In order to better cope with the disadvantages related to the presence of competitors inside the same channel and to enter in a better way the product catalogues it is necessary that the offering proposed is more complete and appreciable in all its aspects thanks to synergies with other companies. In this respect Parà could be a very important actor, because it could supply some fabrics with different characteristics: for the Caremi piece of furniture a rigid and resistant fabric, for the Fumagalli seat a soft and comfortable fabric, and for the Soliani “shell bed” a covering with nice colours and a high transpiration level. Moreover Caremi could supply a designer bed in order to complete Soliani offering, maybe with a basic and thus cheaper line for the market of kindergartens. Moreover, in order to exploit in the best way the collaboration between the companies of Babylandia project they could create a brand that involves all the products in the name of the values that constitute the project; in this way they could increase the brand knowledge, improve their own bargaining power compared to the big chain stores described, or modify the whole offer by opening single brand points of sale.

MARKET OF FAMILIES	Piece of furniture that grows with the child	Ergonomic seat	Luminous floor	Shell bed
Current channels	<ul style="list-style-type: none"> ✓ Distributors ✓ Single brand points of sale 	✓ RiSeF retailers	✓ Personal contacts with the customers (companies)	✓ Personal and enduring contacts with the customers
Coherence level with the current channels	✓ High	✓ High	✓ Low	✓ Low
New channels	<ul style="list-style-type: none"> ✓ Specialized chain stores ✓ Small retailers ✓ eCommerce 	✓ None	✓ Specialized chain stores	✓ Specialized chain stores
Synergies	✓ Parà	✓ Parà	✓ For alternative applications only	<ul style="list-style-type: none"> ✓ Parà ✓ Caremi

Table 71 - Distribution channels for the market of families

With regard to the market of kindergartens, in the light of the particular conditions, some salesmen or specialized distributors are needed, in order to address every structure in the most effective way. In fact in this way it would be easier to build those enduring relationships on which the kindergartens rely on and that would allow to justify the investment from a temporal viewpoint too. In this respect it is also necessary that the client portfolio is quite wide, especially in the case of products supplied in limited quantities such as the Caremi piece of furniture and the LuxSolar floor, unlike the Soliani bed that must be guaranteed in a singular way to each child enrolled.

MARKET OF KINDERGARTENS	Piece of furniture that grows with the child	Ergonomic seat	Luminous floor	Shell bed
Current channels	<ul style="list-style-type: none"> ✓ Distributors ✓ Single brand points of sale 	N/A	✓ Personal contacts with the customers (companies)	✓ Personal and enduring contacts with the customers
Coherence level with the current channels	✓ Low	N/A	✓ Low	✓ Low
New channels	✓ Salesmen	N/A	✓ Salesmen	✓ Specialized distributors
Synergies	✓ Parà	N/A	✓ For alternative applications only	<ul style="list-style-type: none"> ✓ Parà ✓ Caremi (with a basic line)

Table 72 - Distribution channel for the market of kindergartens

The communication should balance in the right way the traditional means, such as catalogues, magazines, and fairs, with the new opportunities guaranteed by the Internet: the company website should be an alternative information source, because the point of sale or the distributor, in the case of kindergartens, remains the main source. In particular with regard to Caremi, it would be useful the development of an company website that also has appealing contents such as videos that explain the possible uses or the assembly of the piece of furniture, a configurator that shows the product designed by the customer, or a blog to make the dialogue between the company and the consumer easier. With regard to Fumagalli, the very tricky and structured purchasing process needs a particular attention to the value communication addressed to actors that can influence the parents in the choice such as physiatrist and physiotherapist, through the supply of medical information pack.

	Piece of furniture that grows with the child	Ergonomic seat	Luminous floor	Shell bed
Market of families	<ul style="list-style-type: none"> ✓ Generic catalogues ✓ Company catalogues ✓ Specialized magazines ✓ Fairs and events ✓ Company website and blog 	<ul style="list-style-type: none"> ✓ Medical information to medic and paramedic influencers ✓ Distributors ✓ Company website 	N/A	<ul style="list-style-type: none"> ✓ Word-of-mouth ✓ Specialized magazines ✓ Company website ✓ Point of sale
Market of kindergartens	<ul style="list-style-type: none"> ✓ Generic catalogues ✓ Company catalogues ✓ Specialized magazines ✓ Fairs and events ✓ Company website and blog 	N/A	N/A	<ul style="list-style-type: none"> ✓ Distributors ✓ Specialized magazines ✓ Company website

Table 73 - Communication plan

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