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Bimby Case:

Time to Market Innovation on *Premium* Products

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Bimby Case – Time to market innovation on *premium* products

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ABSTRACT

Title: Bimby Case – Time to market innovation on *premium* products

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Thermomix, or Bimby in Portugal, is the kitchen robot's market leader that became a generic brand, confounding itself as a product category. With the unstoppable changes on the technology market which constantly demand novelties, Thermomix is studied as an example of a brand that doesn't want to fall behind. Aware its' products stand in a particular situation, the German firm's goal is finding the optimal time to market innovation on their *premium* product.

To answer such quest, primary and secondary research methods contribute to a time interval proposal for product innovation and other complementing findings. Leading to such proposal, concepts such as innovation, *premium* products, the importance of market research and defined positioning gain special prominence.

Major findings indicate consumers give strong importance to innovation and most expect *premium* brands to launch product updates every year. When it comes specifically to Bimby, expectations are less ambitious and further away from life changing innovation once consumers prefer incremental to radical changes. It was also noticed that recognition of products as *premium* or non-*premium* doesn't affect more impulsive consumers on the speed to purchase. As the major conclusion, the most realistic time interval advises firms to launch *premium* products from two to five years.

Key words: innovation, technology, high involvement products, *premium* products, purchasing behavior, launching new products, purchasing power.

RESUMO

Título: O Caso Bimby – Momento para lançar inovação em produtos *premium*

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Thermomix, ou Bimby em Portugal, é o robot de cozinha líder de mercado que se tornou numa marca genérica, confundindo-se com a categoria de produto. Com as exigências provenientes das incessantes mudanças no mercado da tecnologia, a Thermomix é estudada enquanto marca que não quer ficar para trás. Consciente de que o seu produto se encontra numa situação particular, a empresa Alemã procura saber qual o tempo óptimo para comercializar inovação nos seus produtos *premium*.

Para responder a tal demanda, métodos de investigação primários e secundários contribuíram para a proposta de um intervalo de tempo óptimo para inovações de produto, bem como conclusões adicionais. Conduzindo às respostas desejadas, conceitos como inovação, produtos *premium*, a importância da pesquisa de mercado e da definição de posicionamento ganham especial protagonismo.

Os principais resultados indicam que os consumidores atribuem grande importância à inovação e esperam que marcas *premium* lancem updates de produto anualmente. Em relação à Bimby especificamente, tais expectativas são menos frequentes e mais longe de alterações profundas à rotina, uma vez que os consumidores preferem alterações incrementais a radicais. Notou-se também que o reconhecimento de produtos como *premium* ou não-*premium* não afecta consumidores mais impulsivos no que toca à velocidade de aquisição. A maior conclusão indica que o intervalo de tempo mais realista para lançar produtos *premium* é entre dois e cinco anos.

Palavras-chave: inovação, tecnologia, produtos de grande envolvimento, produtos *premium*, comportamento de compra, lançamento de novos produtos, poder de compra.

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"The arrogance of success is thinking what you did yesterday will be sufficient for tomorrow"

William Pollard (n.d.)

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1. INTRODUCTION

Vorwerk's most well-known brand – Thermomix – is a success case in Portugal, where it arrived in 2000 as Bimby. Even in 2012, when the economic crisis was on its' peak, Bimby's sales showed no sign of slowing down. On the contrary, 35.000 machines were sold (Padinha, 2013). This trend still hasn't changed, once 2016 sales were of 1.286 billion € (KG, 2017).

In 2014, Thermomix released its 5th generation. What happened to clients that purchased the older machine? Did they update for the newest model and spent an extra 1.195€ (more than twice the minimum wage in Portugal (Economias, 2017))? What about future launches? What is the optimal time interval for Vorwerk to launch a new model so it doesn't have something like “one more client, one less client”?

On this line, this dissertation tries to answer what is the optimal time to market innovation on *premium* products.

To assist on its answer, Key Research Questions (KRQ) will deepen the research and infer:

- KRQ 1: What is the weight of innovation given by consumers, in terms of purchasing criteria?
- KRQ 2: Is the criteria presented above heavier regarding *premium* products?
- KRQ 3: With what frequency do consumers expect *premium* brands to launch new products?
- KRQ 4: With what frequency would Portuguese consumers be interested in buying Bimby's latest version?
- KRQ 5: To what extent does an innovation need to go to be worth it?

The method carried out includes qualitative and quantitative data, following an exploratory approach. This will provide reliable data, directly linked to the topic. The Literature Review opens the dissertation with the basic concepts and past studies (on top journals and trustworthy sources) carried out on similar matters. This secondary data source serves as a starting point for all further research. Afterwards, an online survey will allow a market research specific to the topic under analysis. The primary data source will address the public's eye on the matter. The case study is also supported by face-to-face interviews with Bimby contacts, who helped gather important inside information.

Through this research, Vorwerk can assess the expectations of consumers and the most rewarding time to release product upgrades. Also, brands with equally high involvement products can use this study as an example applicable to their own reality.

Academically, it will be interesting to know this success story and the secrets behind such achievement on a difficult market at first sight. Furthermore, the present dissertation focuses on a hot topic: the concept of innovation on a non-stopping technological world.

2. LITERATURE REVIEW

Great importance has been given to the concept of Innovation, many times seen as a savior for enterprises and a source of competitive advantage (Siguaw, et al., 2006). Therefore, the concept is presented in greater detail, along with an approach on *premium* products and the purchasing behavior of technological and innovative high involvement products.

2.1 THE POWERFUL INNOVATION

The concept of innovation is presented as “the degree to which customers believe that the product possesses newness and uniqueness” (Watchravesringkan, et al., 2010). Other authors add that it is not just about products, but also services, processes and any social construction – it’s “an idea, practice or object that is perceived as new” (Flint, 2006). Carr (1999) (cited in (Siguaw, et al., 2006)) adds innovation may even come from new channels. Even if often recognized as critical to firms’ success and customer loyalty (Reichheld, 1996), many are yet to recognize its important role (Flint, 2006).

Hurley and Holt share Watchravesringkan, et al. and Flint’s view and add the firms’ culture dimension in orienting innovation (Hult & Hurley M., 1998). These authors further approach the concept of innovativeness as “the ability of the organization to adopt or implement new ideas, processes or products successfully”. In fact, said concept was addressed earlier by Schumpeter, in 1911, claiming innovativeness was connected with profit increases brought to companies by entrepreneurs in the form of new technologies, methodologies, and organizational or market developments (Siguaw, et al., 2006). Tushman – cited by the previous authors – doesn’t recognize long-term business success as being caused by a specific innovation, but by an overall innovation orientation that leads to long-term survival. However, most studies link innovation to positive performance outcomes (Fu & Elliott, 2013) even if some say otherwise (Peters and Waterman, 1982 cited in (Siguaw, et al., 2006)).

Garcia and Cantone 2002 (cited by (Calantone, et al., 2010)) define Innovation as a process that goes from the product development to “production, commercialization of an invention, product diffusion and adoption by customers”. A possible way of product innovation is to sell gradually upgradeable products, giving the feeling the first investment isn’t lost (Krishnan & Ramachandran, 2011).

i. Disrupting the market vs slowly preparing consumers

The fact that a brand offers different products often generates excitement in consumers and motivates adoption (Fu & Elliott, 2013), but innovation may come in different levels. Through the literature one may come across the differentiation between evolutionary and revolutionary, or radical versus incremental innovation, which are in fact two extremes of a continuum scale. Radical changes are those which create “market redefinition” and internal disruption, while Incremental innovation comes naturally and following some progression with minor and less risky changes (Calantone, et al., 2010). The same article shows that incremental innovation alone is almost undetectable, but an organization can introduce cumulative incremental innovation and have a larger impact.

Disagreement between the impact of the two types leads to different beliefs among authors. Some claim incremental innovation will only lead to short-term competitive advantage (Baker & Sikula, 2002), others defend radical and truly new products will bring sustainability (Langerak & Hultink, 2006), while incremental along with radical innovation will lead to higher performance (Calantone, et al., 2010). The defended by most authors is that innovation implies social and political resistance, besides changes on “competences, processes, structures, and network partners”, especially for radical technological changes (Kock, et al., 2011)

ii. Innovation: Facilitators and Drivers

Disruption often happens when market needs meet technology developments (Irene Spitsberg, 2015), that have been rising in the form of “state of the art electronic devices” (Ravikanth, et al., 2016). It’s mostly during critical times and through societal change that innovation rises as a response to turbulence. As Cunha et al. (2013) put it, “necessity is the mother of invention and resource scarcity may be a trigger of innovation in adverse contexts”, forcing action with less-than-optimal means. Innovators may lack material resources, time and affluent buyers, but it’s often under this critical scenario that real innovation rises (Cunha, et al., 2013). In opposition, Calantone et al. (2010) claim that it’s not the market turbulence that originates a higher innovation and performance rate, but the technological one, which has a direct positive impact on innovation. These authors defend that it’s all about seizing the opportunities brought by technological advances in order to get higher returns, with innovation as key to success. Siguaw et al. (2006) mentions the costs innovation brings,

which result in stable firms' accommodation and those under some kind of turbulence having the need to allocate funds to develop something new that solves their problems.

A study that approached the precedents of product innovation looked at the effect of “market and technological turbulence; customer and competitor orientation; and organizational structure” (Calantone, et al., 2010). Results have shown a link between market and technology turbulence with innovation. A great deal of studies on the same article also suggested that both competitor (a view in which enterprises wish to stand alongside with competition) and customer orientation (where the most radical innovations usually come from) lead to new product innovation.

As for the type of organizational structure, there are two sides defending the best conditions for innovation creation. After analyzing 64 articles on the subject, the previously presented study concludes that innovative projects imply team direction and standardization. As for new product development, goals need to be clear and top management supportive (Calantone, et al., 2010). Miller and Friesen (1982), Meyers, Sivakumar and Nakata (1999) (cited on the same article), defend that centralization will boost innovation. On the other side, different authors see highly centralized, formal and bureaucratic structures as an obstacle to innovation (Covin and Slevin, 1989; Hage and Dewar, 1973, cited on (Calantone, et al., 2010)) and newness is said to require a degree of nonconformity (Johne and Snelson, 1998; Nakata and Sivakumar, 1996), high individualism and personal drive (Nakata and Sivakumar, 1996). Also, employee autonomy, free expression, interfunctional cooperation, decentralization, informality with non-rigid guidelines on job assignments and boundaries are claimed to provide an innovation-friendly environment, based on employee empowerment and diversified tasks (Siguaw, et al., 2006).

These authors identify a learning environment as an innovation and financial performance booster. Regarding internal talent, the article claims organizations that look for breakthroughs and use aggressive and competitive strategies are innovation pushers, often using time as an outcome measure. Resources need to be set in motion towards novelty, which of course requires investment and therefore depends on the weight given to it (Siguaw, et al., 2006).

Product innovation is more and more connected to high-tech and consumers search for interactive and instant experiences that technology can give them (Park, et al., 2013). In fact it is said to encourage “new-to-the-market” products (Calantone, et al., 2010). However, the

authors complete that the more technological innovation, the quicker products became obsolete once consumer preferences and market itself change.

iii. Innovation as a source of competitive advantage

With the fast changes observed every day, entrepreneurs are the surviving species which know how to flexibly adapt through innovation (Heinonen & Ruotsalainen, 2012). This is the kind of society Drucker (cited by the previous authors) claims we need, with “normal, steady, and continuous” innovation to answer value, attitude, situation changes, or even when consumers look for a wider variety (Flint, 2006). Competitive advantage will depend on the match with consumer preferences and a certain distance from competitors’ offer (Caldieraro, et al., 2015).

Innovation is often used “to maintain or capture markets, to outdistance competitors, and to assure long-term growth and survival, especially in highly complex and turbulent environments” (Siguaw, et al., 2006). It leads to higher “sales revenue, creating resale opportunities and sustaining leadership positions” (Fu & Elliott, 2013). But companies should be careful about the amount of horses on which they bet, once it gets difficult to focus on several innovations that may get lost and distant from the core business, leading to return losses (Siguaw, et al., 2006).

Also leading to competitive advantage, Siguaw et al. stand by innovation orientation and its “knowledge development and strategic intent that directs functional competencies such as human resources, marketing, and operations”. Cantalone et al (2010) refer to the differentiated resources and capabilities highlighted by Day, Penrose and Peteraf, which are claimed to be “the enduring sources of competitive advantage”. In this line, the article defends that for firms who overlook all these items and create “superior, unique, and novel products” it’s only fair they reach the desired competitive advantage.

Although this chapter focuses on innovation and its role on competitive advantage, it doesn’t mean it’s all one needs to sustain advantage. Organizations need to ensure a certain homogeneity culture that pushes practices that continuously aim at it (Siguaw, et al., 2006).

iv. Through the Product Lifecycle

From the moment a product is introduced in the market until it’s eventually discontinued, it passes through distinct phases that together form the *product lifecycle*. This concept

“describes the process by which a durable product diffuses through the market over time” (Healey & Moe, 2016) and gains extra relevance for products such as technological ones due to their shorter lives (Seifert, et al., 2016). Both previous sources, along with most authors, agree on Bass’ division into four stages: introduction, growth, maturity and decline/end of life.

The process starts with **introduction**: a slow diffusion into the market by the first few consumers who recognize the products’ utility (Peres, et al., 2010). The following phase is “a less stressful period” characterized by several **growth** opportunities (Mahapatraa, et al., 2012). These authors carry on explaining the **maturity** stage, as a witness for standardization whilst differentiating from competitors. As the name itself indicates, the **decline** is the products’ end of life, where the market saturates (Peres, et al., 2010).

Peres, et al. mention two new concepts to complement the cycle: take-off and saddle. **Take-off** stands between the introduction and early growth and is the initial increase in sales, with an average penetration time of six years – although this timing is said to be shorter in each technological innovation, meaning generations are adopting innovation faster and faster. Take-off time results from different sensitivity towards price, consumer heterogeneity and risk avoidance – which is much higher in the beginning of the cycle. It is only afterwards that consumer interaction plays its’ heavy role. **Saddle** is the beginning of the growth stage, influenced by technology and macroeconomic changes. Besides these alterations proposed to the famous “bell-shaped curve” (**Figure 1**), the authors add most companies introduce some kind of technological substitution on declining products so they gain new live.

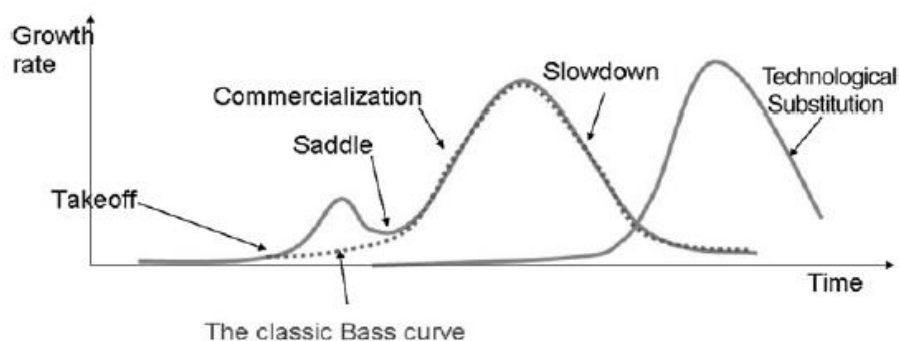


Figure 1: Product Lifecycle by Peres et al. 2010

These new lives given by product upgrades allow improving functionalities and reducing costs, in opposition to the launch of completely new ones (Tolonen, et al., 2015). The timing between the launch of these upgrades is given by the concept of *product rollover*, which also

controls inventory and pricing of both old and new upgrades during the shift (Seifert, et al., 2016). The authors further distinguish between solo-rollover (the upgraded model is the only one offered in the market, which reduces cannibalization danger and old version's inventory need) and dual-rollover (both old and new versions are available).

Other researchers use a different terminology for the product lifecycle, dividing it into Beginning of Life (including product development and supply), Middle of Life (that regards the use and product maintenance) and End of life (where the product is destroyed/recycled) (Taisch, et al., 2011). This view involves "people, processes/practices and technology to all aspects of a product's life" (Hadaya & Marchildon, 2011).

Innovations are diffused across consumers along different phases of the lifecycle (McCoy, et al., 2010). In that way, product and consumer lifecycles run in parallel, once the latter may choose to "wait and see" what happens to newly launched products (Peres, et al., 2010).

2.2 PURCHASING BEHAVIOR & PRODUCT LAUNCHING

i. Through the Consumer Lifecycle

On the consumer perspective, the distinction lies on the purchase speed of new products, which comes from different relations with risk, social influence and level of information (Rogers, 1983). Other authors don't agree on the effect of personal communication and elect consumer heterogeneity as a driver for product adoption, once "the social system is heterogeneous in innovativeness, price sensitivity and needs" (Peres, et al., 2010). Nevertheless, most authors agree on the classification presented on **Figure 2**, that differentiates innovators (2,5% of new consumers - ONC) from early adopters (13,5% ONC), early majority (34% ONC), late majority (34% ONC) and laggards (16% ONC) (Healey & Moe, 2016).

Innovators are independent, unbound by group norms, more self-confident, active information seekers (Blackburn, 2011) and the first to recognize added value on a new product and adopt it, regardless the risk (Bernstein & Singh, 2008). Authors continue describing them as adventurous and highly technology oriented. If the innovations are classified as radical, the first to adopt it are "techies" who are so keen on innovation that may even help solving problems that may arise (McDonald, et al., 2003). The previous article collects results from other studies and concludes that 74% present innovators as having a

higher degree of education, 63% as belonging to a higher social status, 68% as having a higher income level, and 73% define this group as more socially active. Rogers (1983) also refers to the relational aspect of innovators, defining them as having “cosmopolite social relationships” with other innovators, even if physically distant. The purchasing power of this group is also highlighted in order to face the risks of such innovative products’ failure. This group initiates the adoption process, even if they aren’t the heaviest influencers of all. On the contrary, Timmor and Katz-Navon (2008) claim innovators to be opinion leaders, besides showing high involvement.

Early adopters are also risk takers, even if not as much as innovators (Peres, et al., 2010). They adventure themselves on purchasing early in the product lifecycle by counting on their own instinct, but desire pragmatic innovations that answer needs (Bernstein & Singh, 2008). Blackburn elects the group as the opinion leader (instead of innovators) once they take into account group norms and are included on certain social groups. Rogers further adds that early adopters are taken as an example once they are not so drastic on innovation adoption and their choices are respected. They end up by playing the uncertainty reduction role and giving insights to future consumers. However, Healey and Moe cite a theory that claims early adopters start by using the new product less than later adopters and only later increase usage.

Early majority follows, as the group that adopts a product just before the average consumer does, taking their time until full adoption (Rogers, 1983). They are bound by social influence and connect early adopters to the late majority – continues Rogers. This waiting period allows them to make decisions upon “proven track records” and truly increase their productivity (Bernstein & Singh, 2008).

The **late majority** is conquered next, adopting products right after the average user does (Rogers, 1983). The author appoints economic necessity and social pressure as common criteria, which don’t exclude their careful posture until adopting novelties surely accepted by system norms – even after recognizing the innovation’s advantage. This is a pessimistic and very little technology inclined group that needs to see other consumers’ example before adopting (Bernstein & Singh, 2008).

Laggards close the consumer lifecycle as the last to adopt a product. Bernstein and Singh describe this sceptic group as the hardest to capture, once they are actually uncomfortable with innovation. Rogers states this “change suspicious” group purchases based on tradition, which often means they adopt innovations when there are newer products already available.

Furthermore, this author states that laggards have almost no opinion leadership, interact on the most local level and have scarce resources that force them to assure the innovation won't fail. Peres et al. add an alternative feature to the concept definition, stating consumers can be laggards for one product and innovators for another due to "leapfrogging" from an older product right to its newest substitute. The article presents the MP3 player example, claiming some users may have switched directly from Walkman's to it, and skipped the use of CD's. This takes a certain degree of "innovative orientation" out of some early users. The critic on the inconsistency of consumer definition across products is also stated by Bernstein and Singh. Healey and Moe complete that consumers behave differently according to the time at which they arrive at the market – this is, if they are established or have just arrived.

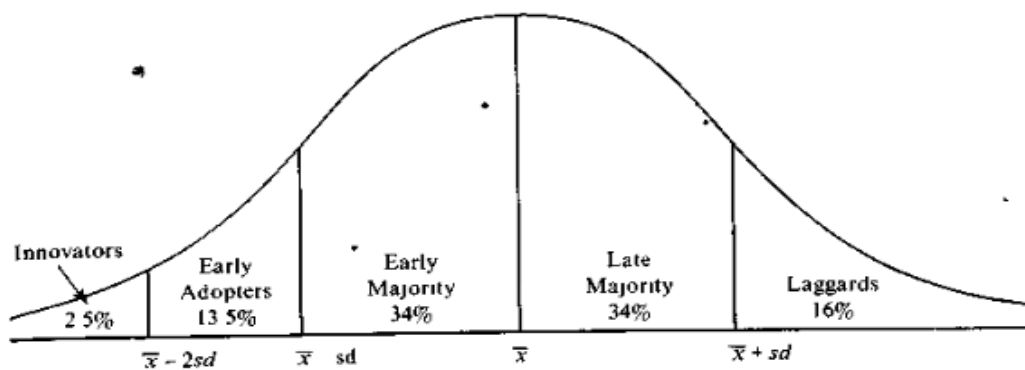


Figure 2: Consumer Lifecycle of adoption, by Rogers 1983

The consumer lifecycle shows a normal distribution curve due to the diffusion effect, the increased knowledge on the product and the rising social influence towards the purchase (Rogers, 1983). Peres et al. call these influences internal and distinguish them from the external that result from brand efforts – such as advertising and other communication initiatives. Previous users increase the adoption of new products by saving research time/cost and providing useful insights that reduce risk – hence the role of social interaction (Peres, et al., 2010). Furthermore, the majority position is often seen as the correct one, that carries lower risks and increases adoption (Timmor & Katz-Navon, 2008). Of course this depends on consumers' need for assimilation or distinction, which is unrelated to opinion leadership and risk taking – the previous authors complete. Other sources claim the existence of cases where the curve is not normal, with a much higher number of innovators and little laggards (McDonald, et al., 2003). However the article concludes normal curves are the most common scenario.

Another alternative thesis splits the consumer lifecycle into **innovators** (who purchase the product for its recognized useful features) and **imitators** (that are influenced by word of mouth) (Healey & Moe, 2016). In this context, product take-off is the moment it starts being adopted by imitators.

ii. Consumer Profile: who are the current buyers?

Consumers seek more and more features to satisfy their growingly sophisticated demands, once they are getting better informed and their knowledge grows (Rangaswamy, 2015). Taylor-made formats and “having, using and interacting with distinct goods” are desired as a way to express individuality (Hunt, et al., 2013), thus adding value to mass customization. Stimulation brought by excitement, variety and novelty (Schwartz, cited in Fu & Elliott, 2013), can come from the consumption of new products (Fu & Elliott, 2013).

Sproles and Kendall (cited on Ravikanth et al. 2016) developed 8 consumer decision-making styles’ definition regarding electronic products. The authors claim consumers demand quality, are brand, fashion and price conscious and recreational, while having difficulty in choosing when presented with excessive options, acting impulsively. Furthermore, they are heavily influenced by their peers and social communication on whether to adopt new products (Fu & Elliott, 2013). People also seem to have difficulty in assessing a financial investment and making decisions (Estelami, 2014). But technology is indeed valued and placed in the “center of consumers’ value perception” with the experiential dimension as central (Park, et al., 2013). Actually, technology products are now lifestyle products and experiential value is unfolded on a scale including “aesthetics, playfulness, service excellence and customer ROI”, on the mentioned article.

When choosing what to buy, consumers select products that give them the highest value for their money (Lee & Zhao, 2014). Product value will decrease if they recognize risks attached (Rangaswamy, 2015), which is why brand name will likely tackle such danger, guaranteeing “product quality, utility and technology” (Ravikanth, et al., 2016).

iii. Purchasing behavior: What is expected from technologic products

The purchase intention is the desire to acquire a certain product, based on personal motivations that guide the choice towards a specific brand (Yeh, 2015). Rangaswamy (2015) presents completing theories that add consumers are not only guided by personal motivations, but by internal factors – cultural, social, personal and psychological –, product attributes,

demographic, social, cultural, price and quality factors. Another author presents buying behavior as “a study of how individuals make decisions to spend their available resources (time, money and effort) on consumption related items” (Ravikanth, et al., 2016)

There is a great importance given to brand, once it reflects quality and value measures – consumers naturally prefer well-known brands that carry fewer risks (Yeh, 2015). Another thesis highlights the importance of perceived innovation and product knowledge as influences for new product purchase (Fu & Elliott, 2013). Existing product knowledge will save consumers time, when facing such a wide offer of products that complicates choice. Fu & Elliott carry on saying this doesn't stop the fact that the more innovation, the higher the effect on the will to purchase. Consumers also seem to believe that the more features, the greater value – not even price will have a significant effect (Lee & Zhao, 2014). Another perspective attributes technological innovation a positive and negative outcome for new product performance: it does increase customer value, but implies changes that are negative for success (Kock, et al., 2011). Once both forces null each other, the authors claim there's no effect of innovation on commercial success.

According to Easingwood et. al (2006), being the first matters – specially on “technology intensive markets”. Pioneers are said to conquer most market and take the most advantage of permanently changing technology. In fact, when a new technology is introduced, the whole market potential rises, giving the consumer the choice to upgrade (Peres, et al., 2010). If products are efficient, aesthetic and carry economical value, people are more likely to repurchase (Park, et al., 2013). Experience in technological products is also key. The previous article states this is what entices word of mouth and repurchase intentions, especially for products as the ones described above. High involvement felt towards a specific brand is positively linked with purchasing decisions of that brand (Rangaswamy, 2015).

Following the intention to purchase, the following step regards the willingness to pay, which is closer to the product adoption moment (Rangaswamy, 2015).

iv. Timing: the moment to purchase innovation

With shorter product lifecycles (Fu & Elliott, 2013), consumers observe constant improvements on products. Unceasing product substitution over time may originate regret on consumers when they finally purchase (Melnikov, 2012). It may even happen that they constantly postpone such moment (Ülkü, et al., 2012). However, preferences seem to be

different over time – on the short run consumers choose feasibility and high functionality; while desirability is left for the long run and price has no meaning (Lee & Zhao, 2014). These authors further claim “price information increases preference for high-functionality products for the near future and induces preference consistency over time”.

Melnikov compares decisions of what and when to buy as equally important. Modular upgrades’ study has concluded that usually consumers prefer more immediate benefits so they feel savings in the moment (Ülkü, et al., 2012). So, for modular products that are intended to provide upgrades in the short run, “the initial price should be relatively lower and the price for the upgrade relatively higher”.

2.3 PREMIUM PRODUCTS: A FAIR EXTRA EFFORT

In this section a specific kind of product is introduced. It may be called *premium* (emphasizing superior features) or *high involvement* product (regarding the effort made during the purchasing moment). From now on, the concept used will be of *premium product* and it includes both dimensions.

A *premium* product is a superior quality product, that often implies that consumers pay a rather higher price for it (Caldieraro, et al., 2015). *Premium* products require investment, which several classical authors claim to be tied to saving decisions (Garegnani, 1978). In order to be worth incurring in such investment, one should investigate the effect of consumers’ perceptions, product attributes and perception of competitors’ products (Caldieraro, et al., 2015).

Consumers’ high involvement comes from an “understanding and recognition of the special product” even if there’s no specific characteristic being considered (Rangaswamy, 2015). A *premium* brand indeed provides higher value for consumers, who recognize a heavy link between brand and product quality, confident that “high-quality products are likely to be associated with high quality brands and vice versa” (Caldieraro, et al., 2015). Therefore the previous author claims the leader company may release a new product with the same brand’s name, taking advantage of own popularity. Besides brand power, ethics has been found to weight more on product involvement than product category itself (Rangaswamy, 2015).

New high involvement products may be a result of an upward line extension, used to obtain competitive advantage (Caldieraro, et al., 2015). This is said to be the only way organizations reach competitive advantage through line extensions, once if they are done downwards, cannibalization will cause a decrease in firms' profitability (Desai, 2001). *Premium* products are not risk free. Consumers may relate a new brand's *premium* and superior features to other brands that offer the same attributes, recognizing the competitor also as superior (Caldieraro, et al., 2015). This may endanger the leaders' advantage in upgrading. Also, some consumers may not be able to pay a *premium* price for the distinct goods they value (Hunt, et al., 2013).

2.4 PRODUCT SURVIVAL: INNOVATION ON *PREMIUM* PRODUCTS

Given the previous framework, it is time to ask what does in fact predict success for new products, once a typical invention has 9% probability of exiting the market each year that goes by (Astebro & Michela, 2005). The key paper that provided such percentage studied 37 variables of new product duration and found that survival is determined by market size, acceptability (including "need, societal benefits, compatibility, learning, visibility, appearance, comparative functionality and durability"), higher profits, technical factors (such as feasibility, performance, R&D and technology). As for fix demand and product line potential (with preference for a rather extensive one so the decrease in a certain product's demand doesn't affect the investment on the others), the effect is still unclear. In sum, the article defends products are more likely to survive if they are "technically and functionally sound (...), compete in industries with higher price (...), and face less intense competition".

The experiential valence of economy and society added by Sirkka Heinonen and Juho Ruotsalainen (2012) along with the success factors presented above all point to the success of brands such as Bimby. People are immersed into technology and technology is part of the routine, promising to simplify life and give a taste of luxury (Cetron & Davies, 2008). Inferior products have higher chances of being discontinued (Astebro & Michela, 2005) once "single workers and two-income couples" are constantly looking for better solutions and can afford them (Cetron & Davies, 2008). Even economy crisis seem to have small impact on innovation adoption once "consumers are willing to put aside their economic worries and spend on the latest and greatest innovative goods" (Fu & Elliott, 2013).

3. CASE STUDY

3.1 THE THERMOMIX WORLD

Thermomix is a company worth studying, with a very particular way of doing business. The brand deepened on the next pages is a success case in Portugal, however still with great growth potential. Inside information was collected through an interview to Isabel D'orey – head of the marketing department for 10 years and current Project Manager of the cooking workshops –, news articles on several reliable sources and internal documents.

i. Vorwerk: The mother company

Vorwerk & Co. was born in 1883, in Wuppertal Germany, as a carpet company that inaugurated the concept of selling “door to door”. Nowadays it has a 3.777 billion € business volume and reached 3.058 billion € in sales in 2016.

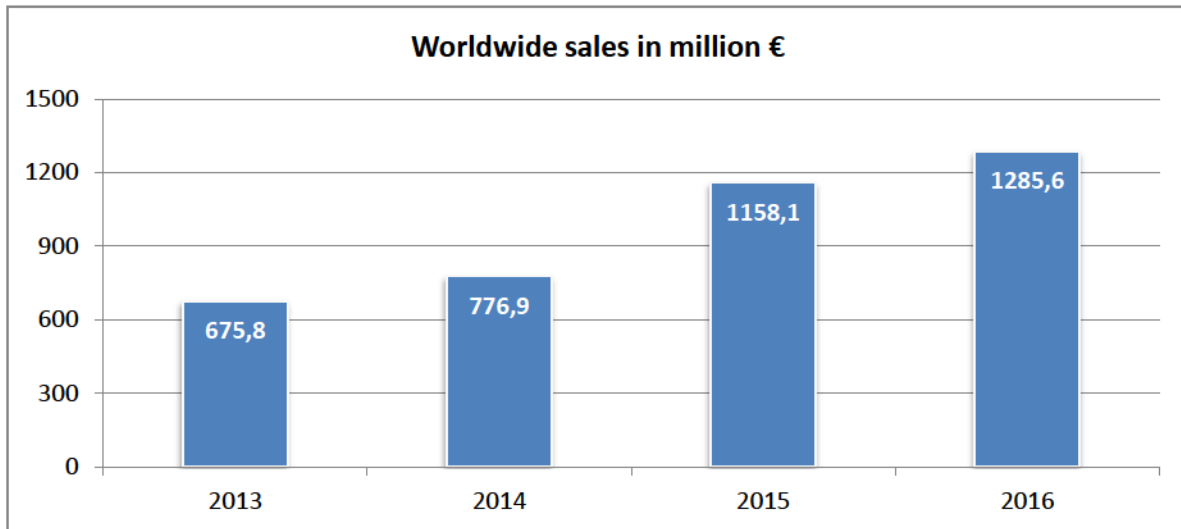
The family owned company is present in 79 countries, with over 649.000 thousand workers around the globe and operations still run mostly through direct sales. Their vision states a focus on “superior products and services that elevate the quality of life everywhere you call home”, with the aim of simplifying daily domestic life with continuous innovation.

Their eight brand portfolio includes Kobold (responsible for the vacuum business), JAFRA Cosmetics (which produces beauty products), Lux Asia Pacific (provides vacuum cleaners and water and air filters to the Asian Pacific region), Twercs (tool products), Vorwerk Direct Selling Ventures (an investment company), Hectas (support services), akf group (which includes akf bank, leasing and service lease), Vorwerk flooring (carpets, carpet tiles and elastic, organic solutions) and Thermomix (the kitchen robot brand, which is the heaviest in terms of sales, accounting for 42% of Vorwerk’s operations).

ii. Thermomix: Bimby for us

For Portuguese or Italian people, the name Thermomix might not ring a bell, but Bimby (from the Italian *bambino*, or little) will most likely bring a sophisticated technological kitchen device to mind. The first machine was launched in distant 1971, in France (**Figure 3**) and today, it operates in 14 countries with a subsidiary system, besides several other locations where it works through a representative model. Worldwide, sales have been continuously growing, and Germany stands in first place with a total sales revenue of 385 million €. The Portuguese market counted with a 6% increase, with revenues totalizing 42 million € in 2016.

For 2017 the preview was a decrease in operating earnings and a moderate positive revenue increase (Ley & Wiegandt, 2017).



Graph 1: Worldwide Thermomix sales (Ley & Wiegandt, 2017)

For those who don't know it, Bimby is a kitchen robot that serves as a twelve-in-one tool. Thermomix Portugal deserves special attention, once it is pioneer at several levels – such as in digital matters, awards and recognitions, human resources strength and social uses. The New York Times researched the Portuguese phenomenon of the multitask robot that costs more than twice the minimum wage but still sells more than the latest tablet and has more fans than the most famous Portuguese rock band (Brito, 2014). The multitask machine arrived in 2000 to Portugal and was alone for 13 years. Their time to market was essential for the confusion as product category – meaning that for consumers a kitchen robot is a Bimby, whichever brand it is. Even during the economic crisis felt in the country, sales broke records. When in 2012, the goal was to sell 29.000 thousand machines, Vorwerk sold 35.000 thousand. On the following year it reached near 5.100 sales on a single month for the first time, which meant a 12% increase regarding the same month in 2012 (Silva, 2013). The trend carried on with the launch of the most recent update (TM5), when all countries ran out of stock. However, the current market penetration of 9,73% on the Portuguese market proves there's still a wide growth opportunity, even if with the typical softer curve of a maturing product.

iii. Who are the consumers

There is a vast majority of the feminine gender (83% of consumers), mostly between 25 and 44 years old (59,2%). Geographically, Bimby's clients are mostly located on "big Lisbon"

area, followed by “big O’porto”. Bimby got more transversal (not only geographically) nowadays, due to periodic payments method. The new generation is more interested in products’ aggregated services and digital world (there are over 2.000 daily visits to the brand’s facebook page). TM5’s digital component reached a wider male public that see the product as a gadget. Besides, one of the most popular recipes collection is called “Men in the Kitchen” (Dinheiro Vivo, 2016). The simplicity and fast access to content is also valued by clients and explored by Thermomix.

As for the brand’s target, sources claim there’s no focus on a specific profile, gender nor social status, given the robot serves all kind of consumers and sells a saving dimension.

Consumers are often the brand’s promotion tool, through positive word-of-mouth. Therefore there’s an effort of turning detractors into promoters, or at least indifferent consumers. Some consumers remain suspicious and claim “I love cooking, so I hate the machine” – but these are said to be easily converted and afterwards, quickly buy the kitchen robot.

iv. A Careful Business Process

When approached, the potential client has previously heard about the machine and been referenced by someone. He/she is already somehow interested in Bimby and allowed the contact sharing with the sales person. The agent schedules a home demonstration and fills in a quick form to infer what kind of consumer is before him/her, right at arrival and with a few simple questions. The selling arguments will depend on it, once a Bimby can be sold for time saving, health issues or even because there’s a baby to feed. The demonstration allows a direct contact with the machine, where the client experiments and learns how to use it to its full potential, while cooking a meal together with the demonstrator. Entering people’s homes is said to be the most difficult part, but once there, it is rather easy to sell a Bimby. A good demonstration usually leads to a good reference or a new demonstrator, even if the person doesn’t buy immediately.

If the customer wants to buy the robot, he signs a contract and waits a few days. This waiting time is intended to increase excitement, but it can’t be so long that creates frustration instead. The demonstrator calls again to schedule the delivery moment and offers a gift if the host has a friend over on that day. This is a tension free moment, once the sale is already done, and an optimal time for bonding between client, demonstrator and potential new buyer that assists all the excitement. The demonstrator presents the services’ world and leaves her/his contact for

any assistance needed. The Portuguese process differs from what happens in Germany, for example, where delivery is made by carrier.

Recently the customer cycle got more complete with the offer of cooking workshops with a chef that uses Bimby. Even though it's forbidden to sell, it reaches a target that wasn't interested or didn't want a demonstration for some reason. This public will likely buy directly from the store or schedule a demonstration after all.

The company insists about its' responsibility on a mindset change regarding direct sales, shifting from an annoying method to a customized and with great after sales support way of doing business that allows a full utilization of the product's potential (D'orey, 2017).

To these dimensions, a backstage effort adds the services component and the production process – on which the machine goes through the hands of 12 employees that certify quality and good functioning.

v. Kitchen robot's industry

As previously mentioned, Bimby was alone on the Portuguese market from 2000 until 2013. A lot of the industry's features exhibit Vorwerk trades, especially once competition adopted an imitator posture on aspects such as design of the proper machine and new content's format (**Appendix 1**).

In this line, the several players sell money and time saving, health and the facilitation of the cooking task, doable by anyone. Offerings differ mostly on price, customer service and quality. Transversally, consumers expect technology from all players.

vi. Rising competition

Ever since 2013, Portugal has seen several brands entering the market (**Table 1**). All cheaper than the latest version of Bimby, whose step forward towards technology and innovation in 2014 seemed to arrive as an answer to keep competitive advantage.

Robot's Name	Company it belongs to	Price
Yammi 1	Continente (Sonae MC)	349€
Yammi 2	Continente (Sonae MC)	399€
Chef Express	Pingo Doce (JM)	399€
Cuisine Companion	Moulinex	699€
Ladymaxx Gourmet	Aldi	239,90€
Cookii	Flama	249€
Cooksy	Idea Casa	800€
My Cook	Taurus	475,59€
Petit Gourmet	Sanyo	199€
Bimby TM5	Vorwerk	1.195€

Table 1: Kitchen Robots price comparison, by Dinheiro Vivo, 2016

The supermarket brands – Yammi and Chef Express – look for a democratization of kitchen robots (Silva, 2013) for lower prices and offer accessories and characteristics such as more cup capacity (Dinheiro Vivo, 2016). However, the competition rise actually increased Bimby's sales when the several players entered the market. Isabel Padinha (2017) claims there was no extra effort made, consumers simply got to know the robot's concept better and wanted to compare with Bimby, ending up preferring it – of course with the exception of a market slice with lower incomes that prefer cheaper brands. The “exponential growth” happened mostly when Yammi was launched – the machine Bimby most monitors.

Total sales for Yammi 1 were of 45.000 thousand machines from 2013 until the last day of 2016. Regarding Yammi 2, it felt short on its' objective and ended up selling 14.000 thousand machines – which means around 2.800 sales a month. When comparing to Bimby, the leader sells about 45.000 thousand robots a year and a bad month means selling around 3.000 thousand robots.

vii. Bimby 360°: Marketing Mix

It is worth presenting Bimby's Marketing Mix – starting with product, then price, promotion, and ending with place – in order to fully understand the brand.

As previously mentioned, the **product** is a kitchen robot that aggregates twelve functions in one device, selling simplicity and the idea that all you need is within this robot. There are no extra accessories, nor there will ever be. TM5 gave a huge technological step. It allows to

create week menus and the respective supermarket lists with the option of sending them to the smartphone, to search recipes according to the ingredients one has available, to create thematic lists, all guiding the consumer step by step throughout the meal preparation. But once the client dominates the machine, he/she can use it as desired. This model tries to tie innovation to tradition, by facilitating the cooking process.

More than the robot itself, Bimby's offer is a lot about the complementary services – a department that tests recipes three times and assures they pass ten quality criteria before being published; monthly magazines; recipes books and online platforms; tech support office available 24/7; cooking workshops; etc.



Figure 3: Bimby's Evolution, by Diário de Notícias 2013

A Bimby TM5 – the only one available in the market, following a solo-rolover strategy where an upgrade substitutes the previous version, **costs** 1.195€. There is a “no discounts” policy for the final consumer and the only chance they had of paying a lower amount was through the launching campaign or the recent retrieval campaign where consumers could deliver their TM31 and pay less for the TM5. Every two years the executive staff has a discount, and sales force have some benefits if they meet certain objectives.

Promotion and **Place** walk hand in hand, once there is no budget for advertising and most communication tools are applied on sales channels. (Potential) clients get to know the product through home demonstrations made by certified vendors and the company believes if the sales force has the right mechanisms and help, Vorwerk doesn't need to communicate to the final client. The brand calls them “warm sales” by reference or direct request – people are expecting the salesperson's call – and the whole moment is more intimate than a supermarket sale. Those reluctant in letting strange people into their home may interact with the machine on Cook-it workshops and buy the machine afterwards (once sales are a forbidden topic during such workshops).

There are ten physical stores, mostly to provide technical support to clients and sales force, and currently also sell Bimbys – still advising the buyer to have a demonstration to fully understand the machine’s potential and to make sure everything runs smoothly. Each sale is a bridge to another thanks to the incentive for clients to have a friend over on the delivery moment. Word-of-mouth and references play a huge part and Thermomix counts on client satisfaction to perform the promotion role.

viii. Focus on Human Resources

From place and promotion, derives the focus on sales force and remaining HR, which are the company’s investment target. The more than 1.500 certified direct sales agents work towards monthly objectives and are motivated through several prizes according to individual sales. A great seller can deliver around 20 machines a month (Diário de Notícias, 2013). Further recognition is obtained on trimestral meetings and annual events, where there are more prizes to be attributed. All human resources start as sales force, which they believe empowers decisions and increases credibility.

What started as a mostly part-time occupation is now adopted as a full-time job for a majority of sellers – which are mostly female, even though there’s an increase in male vendors. Female gender is also heavily present on executive positions. Portuguese Thermomix women have achieved great notoriety worldwide, from Mexico to New York and Germany. Furthermore, several countries have adopted Portuguese design and media production teams, proof that Portugal and Bimby’s workforce are on the map.

ix. SWOT: Where Bimby stands

A SWOT analysis will sum up and stand out major internal strengths and weaknesses; and external opportunities and threats:

Strengths:

- Worldwide, it’s estimated that a Bimby is sold every 30 seconds, and TM5 sold more than 1 million machines when it was launched. (Dinheiro Vivo, 2016);
- Market leader thanks to 13 years as the only player in Portugal;
- Product, staff, sales force, and services quality;
- Awarded as superbrand;
- Sales by reference;

- Bimby is confounded as the name for the product category, synonym for “kitchen robot”, whatever brand it is.

Weaknesses:

- Lack of budget for external communication, especially now the brand faces competition such as Sonae MC;
- Distance from Vorwerk’s decision center in matters such as innovation on the machine.

Opportunities:

- Crisis made people search for ways to save and Bimby offers one: “Bimby pays itself” (D’orey, 2017);
- Constant changes bring new opportunities and areas to make Bimby present – leading to an “omnichannel”;
- Ever evolving market with more technology and new consumer generations.

Threats:

- Demand inconsistency;
- Growing number of competitors;
- “Leader arrogance” and need of constant reminder of the obligation to innovate.

4. THE CHALLENGE: TIME TO MARKET INNOVATION AND AIMED POSITIONING

Bimby’s catch phrase is “the best for your family” and the positioning is mostly about quality – brand and product wise. Thermomix Portugal prides itself for their correct posture regarding imitator competitors, claiming the company has never spoken about them – good or bad, regardless their aggressiveness. It seems the brand knows what it wants to communicate but has made no study to evaluate if such message has reached consumers.

Furthermore, another problematic stands on the table. One sees the company understands the power of innovation and the role of technology on competitive advantage, especially on a “busy” industry such as this one turned out to be. The Portuguese subsidiary states the “mother house” keeps innovation a secret until it’s absolutely necessary to reveal it. The 10 year period gone by with no novelties is related to the lack of competition, but the current

market evolution doesn't allow such stillness and simultaneous leadership maintenance. On Bimby's side, the guess on the optimal time to launch a new product would be in two years (five years after launching of TM5, totalizing to seven) – meaning they would be thinking about the new launch at this moment, which they assure it's not the case. This new robot would probably carry a smaller update than the one from TM31 to TM5, but would be a new and smart machine worth updating to and that remains ahead of what competition may offer.

Isabel D'orey imagines the future robot will integrate all Wi-Fi technology and not come as an accessory, with new ways to access recipes and features to facilitate everyday chores – for example, creating supermarket lists with the menus chosen, send them to the supermarket, with home delivery. Besides the device itself, Bimby underlines the importance of services, with possible innovation coming from the concept and the way consumers interact with the machine. Anyhow, it will not be on features such as cup capacity – stated as unpractical and quality diminishing –, like some competitors offer, nor on other products under Bimby's name.

Given the expectations on Bimby's side, what are the consumers'? They crave novelty but it is not expectable that they buy such machine every year. If not so, what is the optimal time to market innovation on the *premium* product that Bimby is? This formulates one more challenge besides Bimby's lack of insight over their consumers' view on brand's positioning. It was facing both gaps that the company proceeded to a market research that would infer consumers' view, expectations and such optimal time to market innovation.

5. MARKET RESEARCH

5.1 Methods

In order to get reliable and unbiased information, the method used both qualitative and quantitative information from direct and indirect, primary and secondary sources, towards an exploratory approach (Gillham, 2000). This allows finding the answer to the exact problem in hands, which further narrows down after existing research, towards the specific topic.

The first moment consisted of an article research for theoretical basis that would provide an overall notion of what several authors defend, and where are the bridges to reach consumers. Therefore the secondary data source on the Literature Review is the starting point for all precedent research. This required finding the role of innovation, the concept of *premium* products, the specifics to market technology and consumer purchasing behavior regarding such products.

The basis built lead to a primary data source collection through an interview (**Appendix 2**) at Bimby's Portuguese offices to the researcher's sources and an online survey (**Appendix 3**) that allowed a market research specific to the topic under analysis – both methods with the aim to provide direct *intel* on the specific topic. The interview collected information on the company's history, Bimby's Portuguese reality, strategy, current issues and expectations regarding the future, and other questions originated from the conversation flow. The entire interview was recorded and afterwards a visit to the facilities was conducted.

The interview questions shared some points with the survey distributed to consumers as a way to compare the expectations and points of view on both parties. The survey was available on Qualtrics and used continuous and categorical scales, mostly using closed answers. As for the structure, it started by inquiring if respondents were technology oriented, their purchasing habits regarding this kind of products, introducing the concept of *premium* products and their stand on innovation. The following section approached Bimby's notoriety compared to competition, consumers' expectations regarding timings and features of these machines. A demographic section closed the survey, sent via email, Whatsapp and Facebook to Portuguese respondents, to reach a wider population at a faster pace. The optimal time to market innovation on *premium* products doesn't look at specific gender, occupation nor any other filter, once it is a question applicable to all. The questionnaire was available for 11 days and counted with 242 answers, however 34 of them were left in progress leading to a total of 208 valid responses.

Information collected on the survey was later treated through IBM's statistics program SPSS to answer all key research questions, and ultimately, the problem statement. The methods to analyze variables varied depending on the type of variable, using descriptive measures to sum data and inferential techniques to reach correlations (Gillham, 2000). The deductive model allowed testing hypothesis with quantitative data, with resource to surveys (Creswell, 2014).

Respondents' Socio-demographics

The total of 208 valid questionnaires shows a distribution of 66,3% female and 33,2% male respondents (besides 0,5% that rather not answer), with ages mostly below 25 (47,6%), and between 25 and 39 years old inclusively (32,2%). 8,7% belong to the class from 40 to 55 years old exclusively; 10,6% from 55 to 65 years old inclusively and 1% of respondents are older than 66 years old. Regarding the maximum level of education, 50% of respondents have an undergraduate degree, 37% have a masters', 11% have the secondary level, 1% have basic education, and 1% a doctorate degree. Respondents' occupation is rather balanced between students and workers (42,3% and 51,4% respectively), followed by a minority of unemployed (2,4%) and retired people (3,8%). Family annual income is mostly between 20.000 € and 50.000 € (34,1%) and 10.000 € and 20.000 € (24%). The class that earns less than 10.000 € has an 18,8% expression and the ones that earn from 50.000 € to 75.000 € and more than 75.000€ are 12,5% and 10,6% of population, respectively. We stand before a mostly single population (69,7%), followed by 26% of married respondents; 3,4% divorced and 1% widowed. Only 12% live alone; 40,4% share the household with one or two people; 30,8% with three or four and 16,8% live with five or more people (**Appendix 4**).

5.2 Measures & Results

Three stages were taken into account: first, an overview on respondent's profile; secondly, an approach on the key research questions with variables designed for each one; and lastly, the analysis of indicators that answer the problem statement. The researcher uses descriptive statistics, Qui-Square, Spearman and Pearson Correlation tests depending on the variables under investigation (Fields, 2009).

Respondents' profile

The population reflects the current technology oriented public, with 94,7% claiming to buy technological products, but only 37,5% consider themselves *premium* product consumers. The

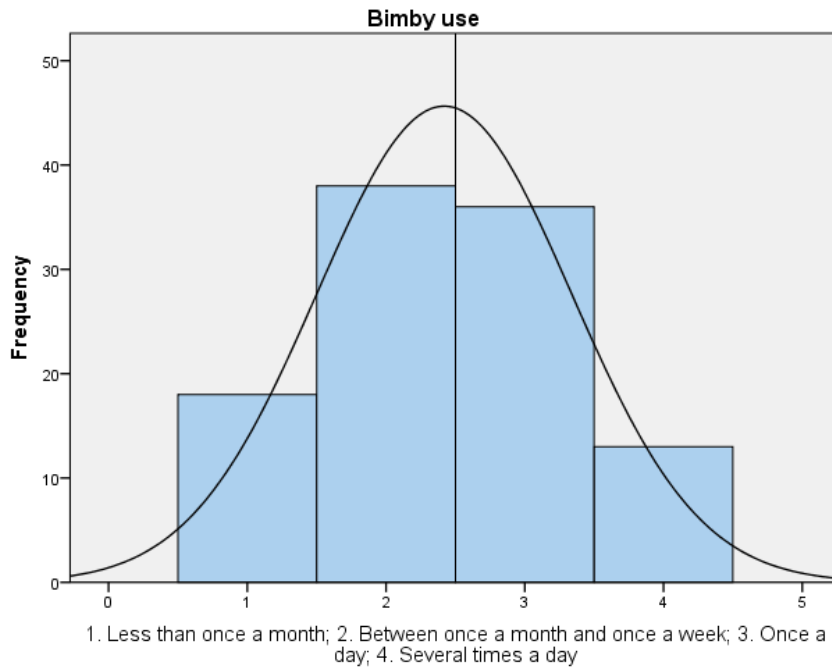
products people mostly chose the *premium* version are cellphones (35,1%), computers (21,2%) and domestic devices (11,5%). (**Appendix 4**)

When asked about kitchen robots, the most famous is Bimby, followed by Yammi and Chef Express. The two least known brands are Cooksey and Ladymaxx Gourmet. Skipping from knowing to having, 51,4% of respondents have a kitchen robot – within which 45,2% have a Bimby; 3,8% have a Yammi; 1,4% have a Chef Express and 0,5% have a My Cook. The present sample had no clients for the other robots (**Table 2**). The three most valued aspects of these machines are quality (51%), user friendliness (28,8%) and technology/innovation (11,5%).

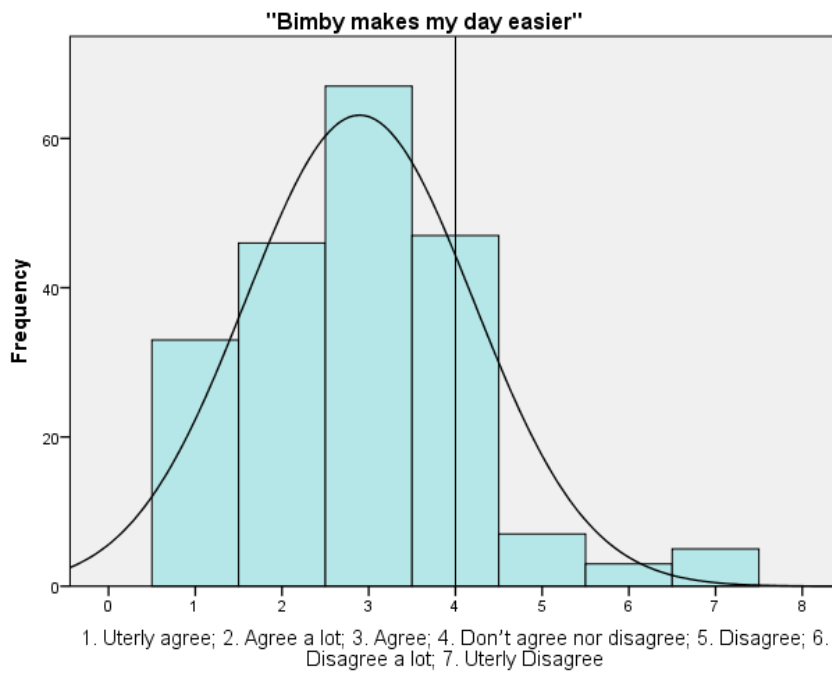
	Know the Kitchen Robot	Have the Kitchen Robot
Bimby	98,6%	45,2%
Yammi	73,6%	3,8%
Chef Express	14,9%	1,4%
My Cook	13,9%	0,5%
Petit Gourmet	10,1%	-
Cookii	6,7%	-
Cuisine Companion	3,4%	-
Cooksy	1,9%	-
Ladymaxx Gourmet	1,9%	-

Table 2: Brand comparison regarding notoriety and ownership

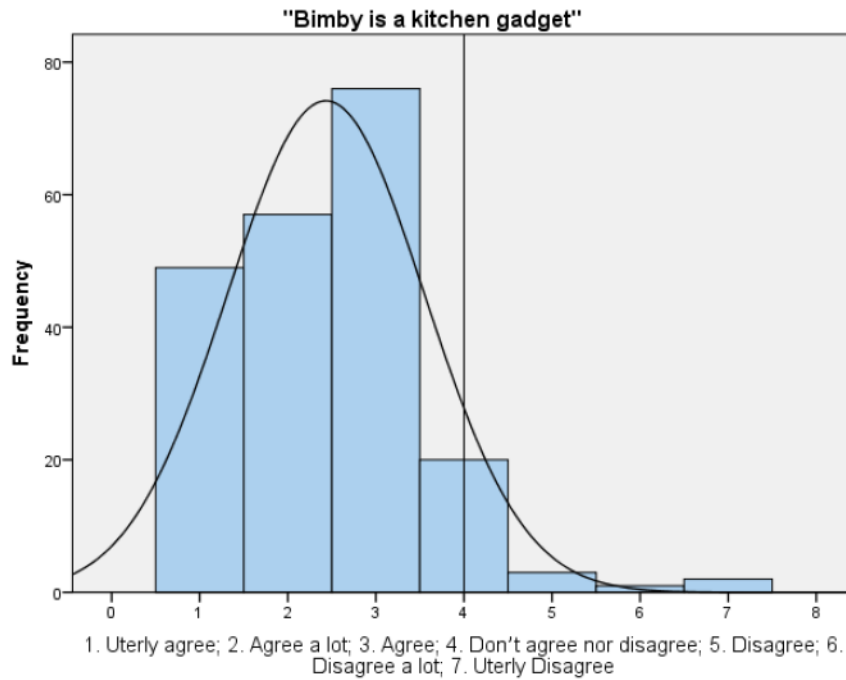
Referring specifically to Bimby, most consumers seem to be rather heavy users – 36% use it from once a month to once a week, 34% once a day and 12,4% more than once a day; only 17,1% claim to use it less than once a month (**Graph 2**). This product is considered *premium* by 85,6% of the population, meeting company and researcher’s expectations. Furthermore, there is a positive reaction to the statement “Bimby makes my day easier”, with 32% agreeing, 22% agreeing a lot and 15,9% utterly agreeing. On the negative side of the spectrum, 2,4% utterly disagree, 1,4% disagree a lot, 3,4% disagree and 22,6% have a neutral position (**Graph 3**). Following a similar trend, also for the sentence “Bimby is a kitchen gadget”, the strongest side of the spectrum is the positive one (**Graph 4**). 26% would like to have a Bimby and, from those who do, the most common model is TM31 – owned by 67%, while 8% own TM21 and 25% the TM5 (**Figure 4**). This means 75% of clients have an, at least, 13 year-old machine.



Graph 2: Bimby use frequency



Graph 3: Degree of agreement with the statement "Bimby makes my day easier"



Graph 4: Degree of agreement with the statement "Bimby is a kitchen gadget"

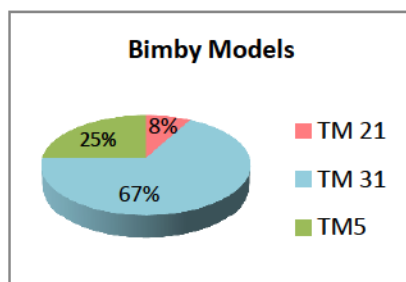


Figure 4: Consumers distribution per model

5.3 Findings for the KRQs

To assess **KRQ 1: What is the weight of innovation given by consumers, in terms of purchasing criteria?**, the variables under analysis were:

- "I am a technology oriented person" + "When choosing a technological product I usually prefer the latest generations"; [*Using Pearson correlation*]
- "When purchasing technological products, by which steps do you go through?" – observing the option "comparing technical aspects"; [*Using Descriptive Frequencies*]
- "What do you most value on a kitchen robot?" – observing the option "technology/innovation"; [*Using Descriptive Frequencies*]

- “In what time interval do you expect a brand to innovate with new packaging?” + “In what time interval do you expect a brand to innovate with new formulas/ingredients?” + “In what time interval do you expect a brand to innovate by launching product upgrades?”. [Using Descriptive Frequencies]

There’s a moderately positive Pearson correlation between technology oriented people and those that chose the latest generation products ($\alpha < 0,001$; $R = 0,548$). Attention given to technical aspects (where features such as memory, technology and innovation are included) in the purchasing process is the second most important item, with 87% respondents claiming to include such step. 50% of the inquired population sets innovation/technology as the third most important feature of a kitchen robot, giving it a fair importance. (**Appendix 5**)

Comparing consumers’ expectations on new packaging, formulas/ingredients and product updates, the scale of 1 to 6 offered the options: every semester (1), every year (2), every two years (3), every 5 years (4) more than every 5 years (5) and no expectation of innovation on the specific area (6). The one where people expect innovation less frequently is on packaging ($\tilde{x} = 3$; $M_o = 2$), followed by formulas/recipes and product updates ($\tilde{x} = 2$; $M_o = 2$), expected every year (**Table 3**).

Through KRQ1, one concludes innovation is a significant purchasing criterion once comparing technical aspects (such as technology/innovation) is a step undertaken by a vast majority of respondents. It’s ranked as the 3rd major feature consumers take into account when purchasing technological products and, on average, people expect brands to innovate on packaging, recipes/ingredients and product upgrades every two years to yearly.

To assess **KRQ 2: Is the criteria presented above heavier regarding premium products?**, the variables under analysis were:

- “The more *premium* is the product, more innovation I’ll demand” + “The more *premium* is the product, more quality I’ll demand” + “The more *premium* is the product, more features I’ll demand” + “The more *premium* is the product, the more time I’ll need to make a decision”; [Using Descriptive Frequencies]
- “In what time interval do you expect a *premium* products’ brand to innovate with new packaging?” + “In what time interval do you expect a *premium* products’ brand to innovate with new formulas/ingredients” + “In what time interval do you expect a

premium products’ brand to innovate by launching product upgrades?” [Using Descriptive Frequencies]

When it comes to *premium* products, most respondents were located on the positive side of the spectrum of agreement with the more *premium* the product, the more innovation, quality, features were expected and time was required to make a decision. Quality is the characteristic most demanded for these products, where 58,8% claim to utterly agree with the highest demand for the attribute the more *premium* the product. Time people take to decide is the one with less expression in the purchasing demand for *premium* products (**Appendix 6**).

Comparing consumers’ expectations on new packaging, formulas/recipes and product updates for *premium* products, the same scale from KRQ1 was used. The one where people expect innovation less frequently is again on packaging ($\tilde{x}=3$; $M_o=2$), followed by formulas/recipes ($\tilde{x}=2$; $M_o=2$) and product updates ($\tilde{x}=2$; $M_o=2$), expected every year (**Table 3**).

To assess **KRQ 3: With what frequency do consumers expect *premium* brands to launch new products?**, the variables under analysis were:

- In what time interval do you expect a *premium* products’ brand to innovate by launching product upgrades?” + “In what time interval do you expect a *premium* products’ brand to innovate with new packaging? + In what time interval do you expect a *premium* products’ brand to innovate with new formulas/ingredients [Using Descriptive Frequencies]

Deepening on the expected time for *premium* product updates compared to packaging and recipes/ingredient innovations, the first case is the one with the lowest percentage of respondents that don’t expect innovation at all and with the lowest standard deviation (**Table 3**) – if one could consider a mean dispersion measure. Therefore, there’s a higher agreement amongst respondents, which most expect *premium* brands to launch product updates every year ($\tilde{x}=2$; $M_o=2$). When observing the cumulative percentage, 74% of the enquired population has even more demanding expectations – *premium* brands should launch product updates **at least** every year (28,8% expect innovation every semester and 45,2% every year). New packaging or formulas/recipes only reach this value later on the scale spectrum (**Appendix 7**).

	<i>Premium products</i>		<i>Non-premium products</i>	
Innovation Category:	Expected innovation	Don't expect innovation	Expected innovation	Don't expect innovation
Packaging	$\bar{x}=3,12; \tilde{x}=3;$ $M_o=2; \sigma=1,7$	20,7%	$\bar{x}=3,43; \tilde{x}=3;$ $M_o=2 \sigma=1,7$	25,5%
Recipes/ingredients	$\bar{x}=2,64; \tilde{x}=2;$ $M_o=2; \sigma=1,6$	13,9%	$\bar{x}=2,83; \tilde{x}=2;$ $M_o=2; \sigma=1,6$	14,9%
Product Upgrades	$\bar{x}=2,28; \tilde{x}=2;$ $M_o=2; \sigma=1,4$	8,7%	$\bar{x}=2,4; \tilde{x}=2;$ $M_o=2; \sigma=1,5$	11,1%

Table 3: *Premium vs Non-Premium innovation expectations*

When comparing KRQ1 and KRQ2, expectations on time to innovate on all three categories explored are the same – regardless if it's for *premium* or *non-premium* products. With the extra effort brought by *premium* products, one could foresee a less frequent update desire, but after observing the population to answer KRQ3, the opposite was stated. Most respondents expect *premium* product updates to happen every year.

To assess **KRQ 4: With what frequency would Portuguese consumers be interested in buying Bimby's latest version?**, the variables under analysis [*Using Descriptive Frequencies*] were:

- In case you have one of the older versions (TM21 or TM31), would you like to have the most recent version (TM5)?
- In case you already have a Bimby, would you like to buy a new version?
- In case you already have a Bimby and you're not willing to buy a new version at the moment, in how long would you be interested?
- In case you don't own a Bimby, when would you be willing to buy one?

From the 106 respondents that own one of the robot's oldest versions 38,7% wish to have a TM5, while the remaining majority doesn't. This tendency is even more visible for the 123 that already have a machine (whichever version) where 14,6% wish to buy a new upcoming version and 85,4% don't (**Appendix 8**).

Regarding time estimates, the average of the 122 respondents who already have a Bimby and are not willing to buy a new version now, foresee that desire in two to five years.

Furthermore, 19,7% claim to be interested in such update in more than six years and 24,6% to never have such interest. As for the 154 respondents that don't own any Bimby version, the average would be willing to buy one in two to five years. Observing the cumulative percentage, only 15,5% would want to purchase up until one year, acting in agreement with expected innovation on general product updates. A curve close to a normal distribution is more commonly observed, but in this case there are more respondents who are willing to acquire a machine in less than six months than between seven months to one year. (Table 4)

Comparing the respondents that already have a Bimby with those who don't, the latest group has more clients with the desire to acquire a machine in a shorter time period – except for 37,7% that don't have the intention to ever purchase (probably part of the detractors). This group is well distributed across all classes and starts being surpassed by the already Bimby clients when expectations regarding the desire to purchase stand between two to five years.

Time interval respondents are willing to buy:	Already have a Bimby version	Don't have any Bimby version
Less than 6 months	1,6%	9%
Between 7 months and 1 year	2,5%	6,5%
Between 1 and 2 years	13,9%	16,9%
Between 2 and 5 years	37,7%	19,5%
In more than 6 years	19,7%	10,4%
Never	24,6%	37,7%
Total	100%	100%

Table 4: Expectations of respondents who have a Bimby vs. those who don't

KRQ4 shows that even though average people claim to wish *premium* product updates yearly (and Bimby is considered *premium* by the vast majority), neither most current nor non-current clients reflect such urgency in buying the most recent machine. It is interesting to notice different reactions when respondents are asked about the time expected for innovation on *premium* products before and after the researcher refers to Bimby – people expect Vorwerk to launch new robots less frequently. Moreover, 9% of respondents that don't own a Bimby yet are willing to purchase one in less than six months (more than the 6% willing to buy in seven months to one year). These are probably the already interested consumers, prospecting the market.

To assess **KRQ 5: To what extent does an innovation need to go to be worth it?**, the variables under analysis were:

- A restructuring innovation, meaning, that brings significant change (questions 16, 17 and 18 on **Appendix 3**)

For most respondents an innovation that brings significant change maintains routine, adding an advantage (option elected by 54,3% of respondents). The second most chosen states such innovations should change a specific aspect (31,3%). Only 1,4% of the population believes it should completely change one's routine. As for the market, these innovative products are expected by a vast majority (73,6%) to add something, and not leave the market unaltered (0,5%) – although 26% defend it should revolutionize it. Regarding the public it aims at, a restructuring innovation should be for those with the need it tries to answer – as 45,2% believe –, or for everyone – option defended by 38% of respondents. The least popular mentioned it shouldn't be aimed at anyone in particular (4,8% of enquired public) (**Appendix 9**).

KRQ5 results indicate respondents tend to distance themselves from extremes and don't desire innovative products to revolutionize their lives, either regarding their routines nor the market. They believe the public of such innovation is targeted at those with a certain need or for all. From the Literature Review derives the statement that consumers prefer incremental to radical innovation.

6. CONCLUSION

With Key Research Questions' intention fulfilled, conclusions may be withdrawn from the **Problem Statement: Optimal time to market innovation on Premium Products**, where the variables under analysis were:

- “On average, how long do you take until you decide to buy a technological product?”
+ “On average, how long do you take until you decide to buy a *premium* product?”
[Using Descriptive Frequencies];
- “In what time interval do you expect a *premium* products' brand to innovate by launching product upgrades?” + “In which product categories are you most inclined to

purchase *premium* products?” – observing the option “domestic devices” [Using Cross Tabs];

- “The more *premium* the product, the more innovation I’ll demand” + “In what time interval do you expect a *premium* products’ brand to innovate by launching product upgrades?” [Using Spearman Correlation Coefficient];

Respondents are slightly faster choosing non-*premium* technological products than *premium* ones. For both kinds of products, the majority takes from one week to a month to choose. From the 24 valid cases of respondents that are inclined to buy *premium* domestic devices, 87% expect *premium* brands to launch product upgrades at least every two years – 20,8% expect innovations every semester, 41,7% every year and 20,8% every two years. Only 4,2% don’t expect innovation at this level.

Through a positive Spearman correlation value, one knows “the more *premium* the product, more innovation is demanded” and higher is the “time interval expected for a *premium* products’ brand to innovate in product upgrades”, once the correlation is significant ($\alpha < 0,05$; $R = 0,142$) (**Appendix 10**).

On the Problem Statement one observes consumers are slightly faster choosing non-*premium* technological products comparing with *premium* ones, even though the difference is small. Amongst those inclined in buying *premium* domestic products, the expectation is that *premium* brands should launch updates every two years. Furthermore, those that claim to demand more innovation the more *premium* the product, also demand it at a slower pace (even though with a small effect size). After the exhaustive study, the time interval that is most realistic, advises firms to launch *premium* products from two to five years – even if such estimative is not error free.

Additional results

When answering the KRQ’s and Problem Statement, researchers came across other interesting results. For instance, those that claim to take one day to decide on purchasing non-*premium* technological products, take the same time when it comes to *premium* ones. This may reflect that the difference in both products doesn’t affect more impulsive consumers – or those already set towards the specific product.

As a result of two Pearson Correlation tests, two additional conclusions are possible. First, respondents with a TM21 or TM31 that would like to have a TM5, would also be willing to

buy an upcoming version other than the TM5 ($\alpha < 0,001$; $R = 0,449$). Meaning it's not about the TM5, but the most recent machine available – the innovation. Secondly, the longer those that already have a machine are willing to purchase a new one is correlated to the longer those that don't have a machine ($\alpha < 0,001$; $R = 0,695$).

A cross tabs analysis was undertaken to infer what demographic characteristics were most connected with the desire to purchase a new model. Results show that among those that already have a machine, the ones keen on purchasing a new one are mostly: female respondents (61% vs. 39% male respondents); the younger crowd (83% until 39 year olds); higher degree of education (89% with an bachelor and/or master degree – even though the two respondents with a doctorate don't desire a new machine); the ones with a busier routine (94,4% are students and workers vs unemployed and retired people); with an annual family income between 10.000€ and 50.000€ (61% of respondents); single (66,7%); with a household composed by 2 to 5 people (66,7%). Regarding time intervals, the respondents that already have a machine desire to acquire a new one in two to five years, regardless the demographic variables under analysis (**Appendix 11**).

7. LIMITATIONS & SUGGESTIONS FOR FUTURE RESEARCH

During the research process, some limitations were encountered and may have led to biases. Due to time restraints and to prevent respondents' saturation, the variables chosen to assess the optimal time to market innovation do not reflect the entire range of possible influences. The same happens for the fields on which a brand may innovate versus those under analysis. Also regarding the survey, special priority should be given to quantitative variables which carry much stronger testing possibilities – which was not the case.

Another limitation was met due to the lack of information from Vorwerk Portugal, once it is not on the stock market and the little data available is related to the whole business or to the headquarters, located in Germany. One may find the optimal time to market innovation in Portugal, but this may not be the same for all countries where Thermomix is present. This leaves the brand with the decision to market an upcoming product at different times for different countries. Also, there were no studies on the Portuguese market nor industry, clients or competitors, which obliged a research “from scratch”, with no solid starting point nor assumptions.

There's a common limitation originated from the biased posture people adopt when answering masters' surveys – the intention to help may induce respondents to deviate their answers from what would actually happen in reality.

Future studies could inquire a more heterogeneous group when it comes to age, education and occupation and add residence area as a variable (to test if the needs differ from big cities to smaller ones). This forthcoming research could also offer more variables (preferring likert scales) to compare with innovation in order to assess more factors on which it might depend.

The present study took place three years after TM5's launch. It would be interesting to re-test consumers right before and after Bimby decides to market a new model and assess the public's expectations.

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9. TEACHING NOTE

The present case analyses Thermomix, the kitchen robot that became a generic brand and ended up naming its product category in Portugal. Bimby faces important decisions as a *premium* product seller: when to market innovation so current consumers feel the urge to purchase for its' advances and new clients are attracted.

I. Teaching Objectives

With a pedagogic intent for undergraduate and master classes, the case sheds light on strategic decisions regarding the optimal time to launch innovative products when they imply considerable extra effort on consumers' end. It also underlines the importance of consumer insight and solid market positioning.

Therefore, the dissertation carries important content for Marketing and Strategy related courses, once readers face difficult decisions when companies lack specific insights. Students get in touch with a particular business model and application of concepts such as innovation, *premium* products, rollover, marketing mix elements, leader's stand when competition adopts imitator approaches, amongst others. By analyzing this case, the main goal is to understand the particularities of *premium* products, consumers' expectations, and the need of solid base for decision making.

II. Teaching Suggestions

The instructor should provide both case and questions from one class to the next (at least), giving time for a thoughtful analysis. The lecture should start by inviting students to briefly summarize the case and stand out major issues. On a second moment, the professor could chose/ask for two volunteers to play "angel and devil" and answer the first question on innovation's pros and cons. The audience would be divided to provide arguments for each side – in case there is too much consensus, the instructor may participate and provide arguments for the losing side. This would break the ice for further discussion and show the decision to innovate is not that simple.

Next, the class would be split into groups of around 6 students (per row so reorganization doesn't waste too much time). Each group is responsible to reach a consensus regarding the remaining 4 questions, knowing answers will be presented to class. Such interrogations are intended to lead students across the main conclusions desired to retrieve. According to the

inputs, the professor should stimulate class discussion by “provoking” students throughout the discussion.

III. Teaching Questions

1. What are pros and cons of innovation? (Answers based on the Literature Review)

Some arguments in favor of innovation are: it brings long term success and survival; generates excitement in consumers and contributes to customer loyalty; reaches competitive advantage; differentiates from competitors; it may be a response to turbulence that creates new needs for which the brand is the first giving answer to.

Some arguments against innovation are: there are few people that adopt early in the product lifecycle and firms may not have that much time to wait for return on investment; change requires new practices and routine changes that are entrenched; with the reduction of product lifecycles, it’s difficult to keep the same launching rhythm so, if innovation is the solution, it will be on the short run; it implies political resistance.

2. In your opinion, what differentiates the decision to innovate on *premium* or non-*premium* products? (Answers based on the Case Study)

As an opinion question, no answer will be purposed on the present teaching note – but is expected students refer consumers’ extra effort regarding monetary investment, as well as time, comparison and searching costs *premium* products imply; it also requires a big investment on firms’ end and the priority given to high quality for the new product’s survival. This question’s goal is that students understand the specificities of *premium* products and consumers’ expectations regarding it.

3. What are the researcher’s main starting difficulties when facing the decision on the time to market innovation? (Answers based on the Case Study)

First, Bimby responds to Vorwerk and the mother company’s headquarters is located in Germany, which translates in a big power distance. Then, it’s a worldwide brand and such a decision involves many locations. Furthermore, it can’t overlook all the differences between consumers across countries – one big difficulty is the lack of a market research for Portugal. From this consumer insight gap, another issue rises with the lack of knowledge about the

positioning recognized by consumers. Therefore, there's no idea about consumers' expectations, needs and wants.

4. If Bimby launched a new product, what should be some of its characteristics?
(Answers based on the Market Research)

According to the market research, a new product should honor the brand's order winners (quality, user friendliness/simplicity and services' strength) and also have innovative technology. It should bear in mind consumers don't wish products to revolutionize their routines, but to add an advantage, change a specific aspect and be directed to those with the need it tries to answer. From the context given before the Market Research, one knows Bimby's source expects the next machine to integrate all Wi-Fi technology within the machine and a focus on services and ways to interact with the robot, for example. From the literature review, it can also be concluded that investments on aesthetics, playfulness, efficiency and customer ROI are also valued on new technologies.

5. After the conducted Market Research, what may be Bimby's targeted segment?
(Answers based on the Market Research)

The Market Research allows to elect a segment of consumers that most accept Bimby: female respondents (61% vs. 39% male respondents); the younger crowd (83% until 39 year olds); higher degree of education (89% with an bachelor and/or master degree – even though the two respondents with a doctorate don't desire a new machine); the ones with a busier routine (94,4% are students and workers vs unemployed and retired people); with an annual family income between 10.000€ and 50.000€ (61% of respondents); single (66,7%); with a household composed by 2 to 5 people (66,7%).

10. APPENDIX

Appendix 1: Kitchen Robots' comparison



Appendix 2: Interview script

Interview – 26/09/2017

to Isabel D'orey

Bimby's Success Case: Time to market innovation on premium products

1. Who is Vorwerk? How about Thermomix?
 - a. In how many countries is Thermomix present?
 - b. In how many homes is the product present?
 - c. Do you still hear “I love cooking, so I hate Bimby”?
 - d. Is the new model a cannibal of TM31?
 - e. Do you have physical stores?
2. How do you characterize the Kitchen Robots' industry?
3. How's the Portuguese market?
 - a. Tell me about the brand in Portugal
 - b. Who are the consumers?
 - c. How and who is the competition?
 - i. Do you have any idea of their sales numbers and market share?
 - ii. Did sales increase when competition entered the market?
 - d. What are the critical success factors?

- e. What is Bimby's positioning?
 - f. What would be your SWOT analysis for the brand?
 - g. Marketing Mix (product, price, promotion and place)
4. What's the time frame on which Bimby intends to innovate/update products?
- a. With what results?
 - b. What results better and not so well?
 - c. Innovation would never be on products other than the kitchen robot, using the name Bimby?



Thank you,
Teresa Freitas

Appendix 3: Online Survey

My name is Teresa Freitas and I am a student at Católica Lisbon School of Business and Economics, currently doing my Masters' thesis about innovation on *premium* products. I appreciate your help by answering this survey, whose results are essential to my conclusions.

Please answer until the end and to all questions, which are 100% confidential.

In order to answer properly, you should know the concept of ***premium products/brands***:

Premium products/brands are those recognized as superior and/or unique and imply an extra effort for the consumer, either for its investment/price or by the comparison obligation with similar products, until a decision is reached.

I Technologic Framing

1. Do you buy technological products? (Yes/no).
2. If you do, please list the ones you buy most commonly
 - a. Cell phones
 - b. Domestic devices (such as televisions, washing machines, vacuum cleaners, etc.)
 - c. Computers
 - d. Tablets or similar
 - e. mp3/mp4 players or similar

- f. Watches
 - g. Others
3. Do you consider yourself a *premium* product consumer? (yes/no)
4. If you do, list the *premium* products which the purchase is most common
- a. Cell phones
 - b. Domestic devices (such as televisions, washing machines, vacuum cleaners, etc.)
 - c. Computers
 - d. Tablets or similar
 - e. mp3/mp4 players or similar
 - f. Watches
 - g. Others
5. In which product categories are you most inclined to purchase *premium* products? (elect 3 products)
- a. Cell phones
 - b. Trips
 - c. Restaurants
 - d. Domestic devices (such as televisions, washing machines, vacuum cleaners, etc.)
 - e. Computers/Tablets
 - f. Hotels
 - g. Vehicles
 - h. Gadgets
 - i. Other

6. Answer according to the degree on which you agree with each sentence:

	Utterly Agree	Agree a lot	Agree	Don't agree nor disagree	Disagree	Disagree a lot	Utterly Disagree
"I am a technology oriented person"							
"I am an emotional person regarding the choice of technological products for domestic use"							
"When choosing a technological product I usually prefer the latest generations"							
"The more <i>premium</i> is the product, more innovation I'll demand"							
"The more <i>premium</i> is the product, more quality I'll demand"							
"The more <i>premium</i> is the product, more features I'll demand"							

demand”							
“The more <i>premium</i> is the product, the more time I’ll need to make a decision”							

7. When purchasing technological products, by which steps do you go through? Select all the ones that apply
 - a. Price comparison
 - b. Comparison of technical aspects (like memory, technology, innovation etc.)
 - c. Comparison of aesthetic aspects
 - d. Choice of the purchasing site
 - e. Seeking friends and family members’ advice
 - f. Seeking store employees’ advice
 - g. Other
8. On average, how long do you take until you decide to buy a technological product?
 - a. Less than a day
 - b. Between 1 and 6 days (inclusively)
 - c. Between a week and a month
 - d. More than 1 and less than 6 months
 - e. More than 6 months
9. On average, how long do you take until you decide to buy a *premium* technological product?
 - a. Less than a day
 - b. Between 1 and 6 days (inclusively)
 - c. Between a week and a month
 - d. More than 1 and less than 6 months
 - e. More than 6 months
10. In what time interval do you expect a brand to innovate with new packaging?
 - a. Every semester
 - b. Annually
 - c. Every 2 years
 - d. Every 5 years
 - e. More than 5 in 5 years
 - f. I don’t expect brands to innovate on this field
11. In what time interval do you expect a brand to innovate with new formulas/ingredients?
 - a. Every semester
 - b. Annually
 - c. Every 2 years
 - d. Every 5 years
 - e. More than 5 in 5 years
 - f. I don’t expect brands to innovate on this field
12. In what time interval do you expect a brand to innovate by launching product upgrades?

- a. Every semester
 - b. Annually
 - c. Every 2 years
 - d. Every 5 years
 - e. More than 5 in 5 years
 - f. I don't expect brands to innovate on this field
13. In what time interval do you expect a *premium* products' brand to innovate with new packaging?
- a. Every semester
 - b. Annually
 - c. Every 2 years
 - d. Every 5 years
 - e. More than 5 in 5 years
 - f. I don't expect *premium* products' brands to innovate on this field
14. In what time interval do you expect a *premium* products' brand to innovate with new formulas/ingredients?
- a. Every semester
 - b. Annually
 - c. Every 2 years
 - d. Every 5 years
 - e. More than 5 in 5 years
 - f. I don't expect *premium* products' brands to innovate on this field
15. In what time interval do you expect a *premium* products' brand to innovate by launching product upgrades?
- a. Every semester
 - b. Annually
 - c. Every 2 years
 - d. Every 5 years
 - e. More than 5 in 5 years
 - f. I don't expect *premium* products' brands to innovate on this field
16. A restructuring innovation, meaning, that brings significant change:
- a. Completely changes my routine
 - b. Changes a specific aspect of my routine
 - c. Maintains my routine
 - d. Maintains my routine, adding an advantage
17. A restructuring innovation, meaning, that brings significant change:
- a. Revolutionises the market
 - b. Adds something to the market
 - c. Leaves the market unaltered
18. A restructuring innovation, meaning, that brings significant change:
- a. Is for everyone
 - b. Is for a specific public
 - c. Is for those with the need which it tries to answer
 - d. Is for no one in specific

II About Bimby

1. Which of the following brands do you know?
 - a. Bimby
 - b. Yammi
 - c. Cheff Express
 - d. Cookii
 - e. Cuisine Companion
 - f. My Cook
 - g. Ladymaxx Gourmet
 - h. Cooksy
 - i. Other
2. Do you have any kitchen robot? (Yes/No)
3. If yes, which one?
 - a. Bimby
 - b. Yammi
 - c. Cheff Express
 - d. Cookii
 - e. Cuisine Companion
 - f. My Cook
 - g. Ladymaxx Gourmet
 - h. Cooksy
 - i. Another
 - j. I don't have a kitchen robot
4. What do you most value on a kitchen robot? Rank from the most to the least important
 - a. Design
 - b. Quality
 - c. Innovation
 - d. Technology
 - e. Simplicity/user friendliness
 - f. Other (What?)
5. If you are a Bimby user, with which frequency do you use it?
 - a. Less than once a month
 - b. Between once a month and once a week
 - c. Once a day
 - d. Several times a day
6. Do you consider Bimby a *premium* product? (yes/no)
7. Do you consider it is worth its' higher price comparing to competition? (yes/no)
8. Would you like to have a Bimby? (already have it/yes/no)
9. Why/why not?
10. Answer according to the degree on which you agree with each sentence:

	Utterly agree	Agree a lot	Agree	Don't agree nor disagree	Disagree	Disagree a lot	Utterly Disagree
"Bimby makes my day easier"							
"Bimby is just another device"							
"Bimby is a kitchen gadget"							

11. Observe the following images:



12. Which is your Bimby version?

- a. TM21
- b. TM31
- c. TM5
- d. I don't have any

13. In case you have one of the older versions (TM21 our TM31), would you like to have most recent version (TM5)? (yes/no)

14. In case you already have a Bimby, would you like to buy a new version? (yes/no)

15. In case you already have a Bimby and you're not willing to buy a new version at the moment, in how long would you be are not interested?

- a. Never
- b. In less than 6 months
- c. Between 7 months and 1 year
- d. Between 1 and 2 years
- e. Between 2 and 5 years
- f. In more than 6 years

16. In case you don't own a Bimby, when would you be willing to buy one?

- a. Never
- b. In less than 6 months
- c. Between 7 months and 1 year
- d. Between 1 and 2 years
- e. Between 2 and 5 years
- f. In more than 6 years

III Demographic profile

17. Gender (male/female/I rather not say)

18. Age

- a. < 25
- b. 26 – 39
- c. 40 – 55
- d. 55 – 65
- e. \geq 66

19. Educational level

- a. Primary School
- b. Basic School
- c. Secondary School
- d. Undergraduate
- e. Masters
- f. Doctorate

20. Occupation

- a. Student
- b. Worker
- c. Unemployed
- d. Retired

21. Family household annual income

- a. < 10.000€
- b. 10.000€ - 20.000€
- c. 20.000€ - 50.000€
- d. 50.000€ - 75.000€
- e. > 75.000€

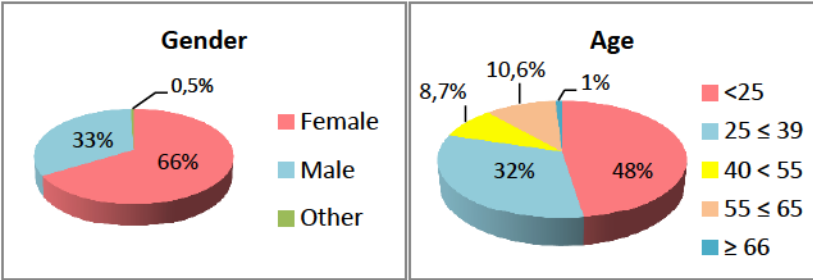
22. Marital status

- a. Single
- b. Married
- c. Divorced
- d. Widowed

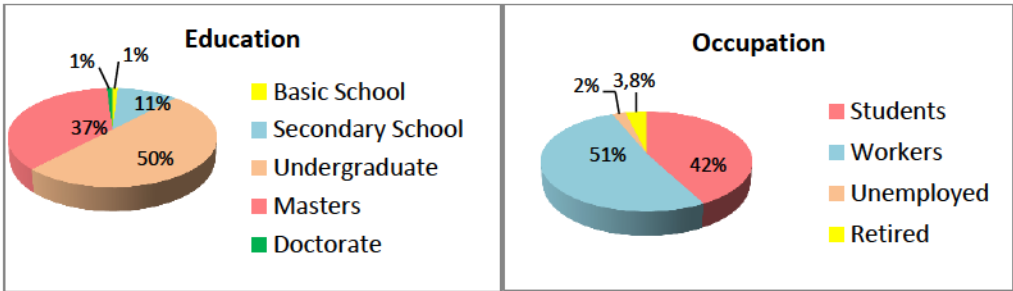
23. Number of people with whom you live

- a. Alone
- b. With 1 or 2 people
- c. With 3 or 4 people
- d. > 5 people

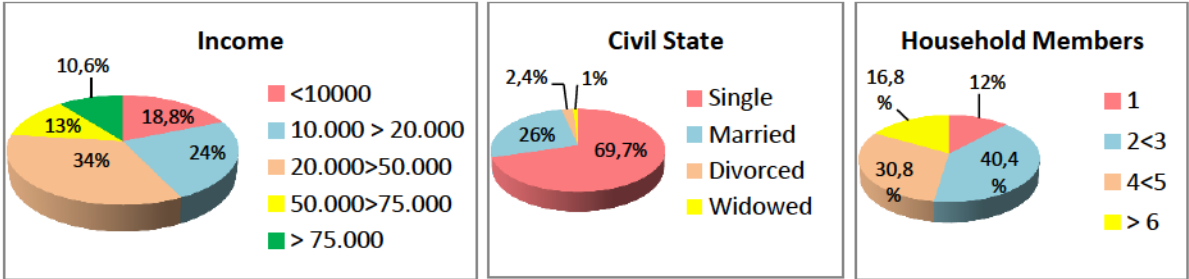
Appendix 4: Respondent's demographic profile



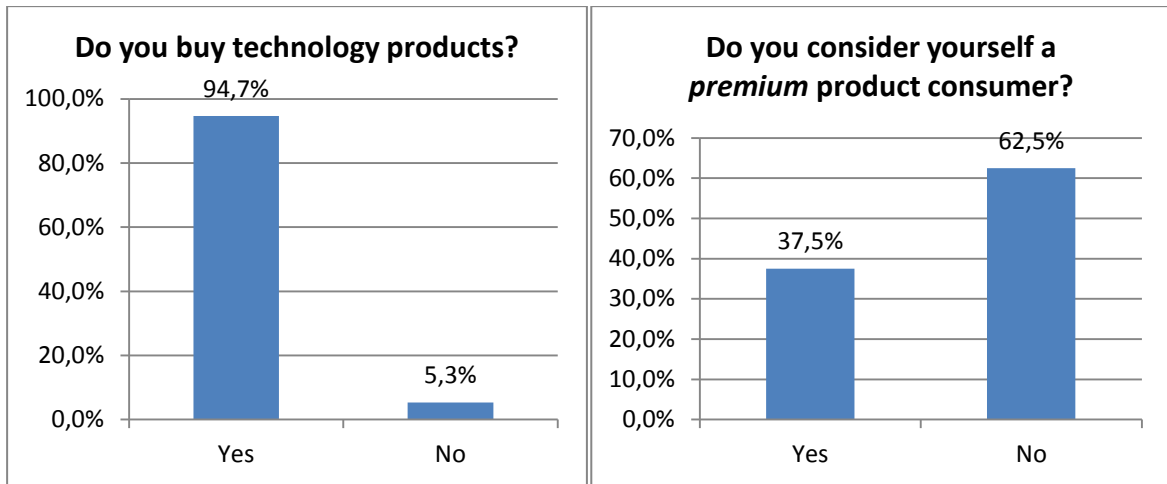
Graph 5: Respondents' gender and age distribution



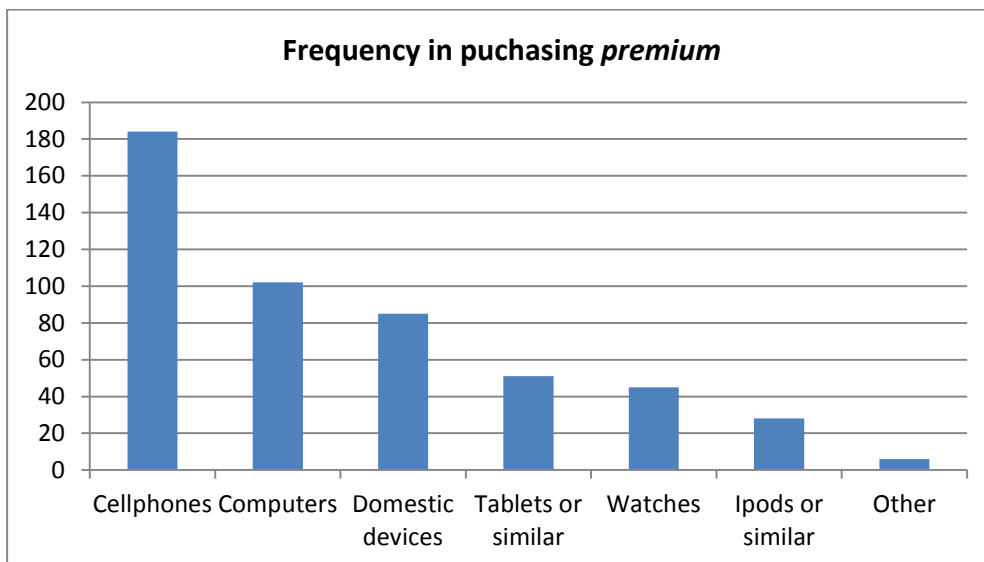
Graph 6: Respondents' Education and Occupation distribution



Graph 7: Respondents' Income, Civil State and Household members' distribution



Graph 8: Technology purchasing willingness | **Graph 9:** Consumers inclined in purchasing *premium*



Graph 10: Number of people that purchase *premium*, by product category

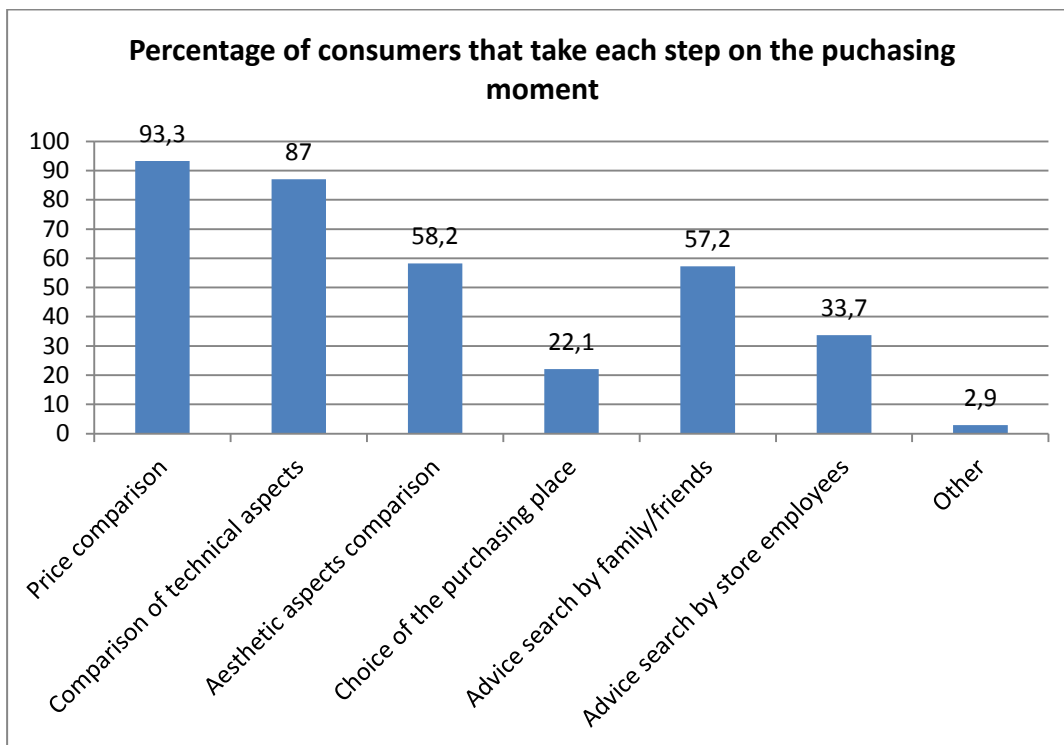
Appendix 5: Exhibits for KRQ1

Correlations

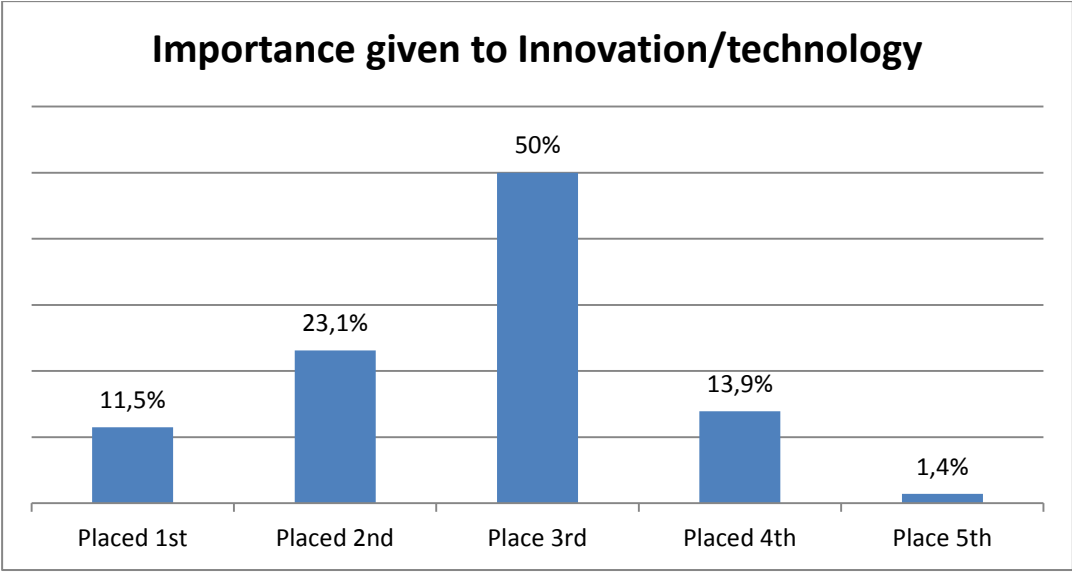
		I am a technology oriented person	When choosing a technological product, I usually prefer the latest generation
I am a technology oriented person	Pearson Correlation	1	,548**
	Sig. (bilateral)		,000
	N	208	208
When choosing a technological product, I usually prefer the latest generation	Pearson Correlation	,548**	1
	Sig. (bilateral)	,000	
	N	208	208

** . **Significant correlation at level 0,01 (bilateral).

Table 5: Pearson Correlation on KRQ1

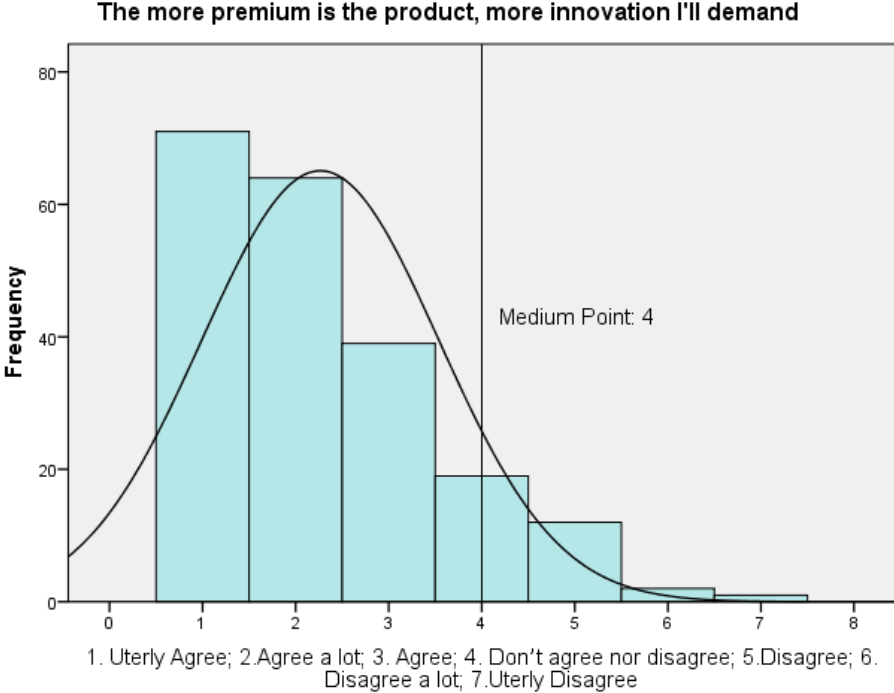


Graph 11: Purchasing steps percentage

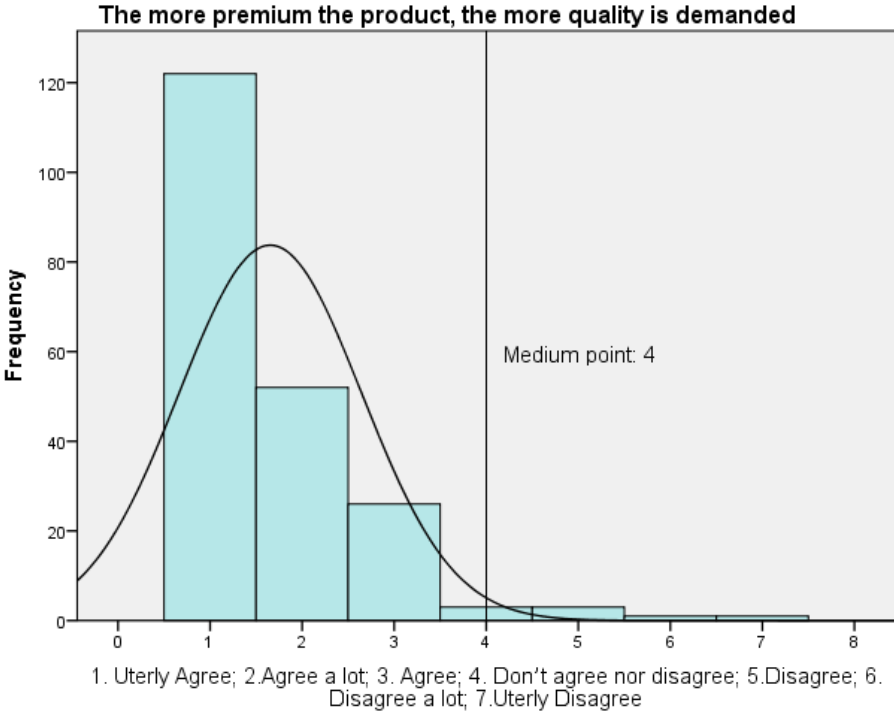


Graph 12: Degree of importance given to innovation/technology on kitchen robots

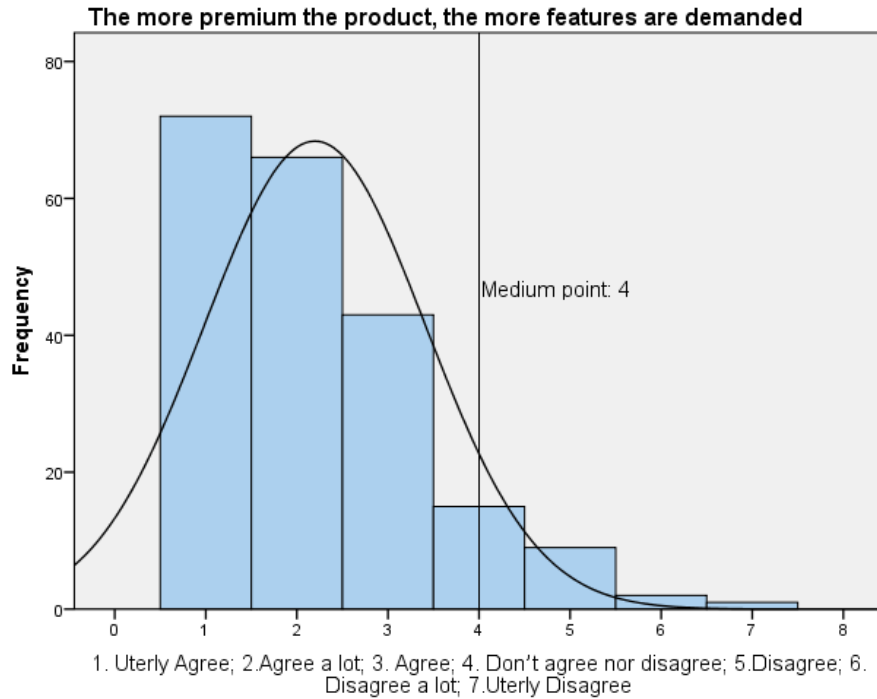
Appendix 6: Exhibits for KRQ2



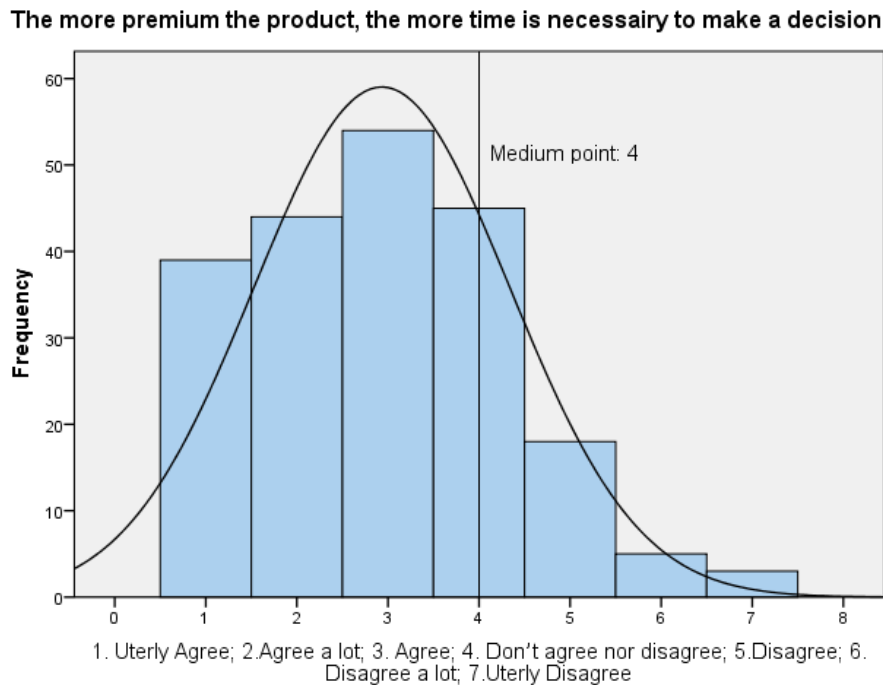
Graph 13: Degree of agreement with the more *premium* the product, the more **innovation** is demanded.



Graph 14: Degree of agreement with the more *premium* the product, the more **quality** is demanded



Graph 15: Degree of agreement with the more *premium* the product, the more **features** are demanded



Graph 16: Degree of agreement with the more *premium* the product, the more **time** is necessaire to make a decision

Appendix 7: Exhibits for KRQ3

Time interval respondents expect premium brands to innovate by upgrading products

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Every Semester	60	28,8	28,8	28,8
	Every year	94	45,2	45,2	74,0
	Every 2 years	27	13,0	13,0	87,0
	Every 5 years	7	3,4	3,4	90,4
	More than every 5 years	2	1,0	1,0	91,3
	I don't expect a premium product's brand to innovate on this area	18	8,7	8,7	100,0
	Total	208	100,0	100,0	

Table 5: Comparison on the expected time for innovation on *premium* product upgrades

Time interval respondents expect premium brands to innovate on packaging

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Every semester	26	12,5	12,5	12,5
	Every year	76	36,5	36,5	49,0
	Every 2 years	46	22,1	22,1	71,2
	Every 5 years	11	5,3	5,3	76,4
	More than every 5 years	6	2,9	2,9	79,3
	I don't expect a premium product's brand to innovate on this area	43	20,7	20,7	100,0
	Total	208	100,0	100,0	

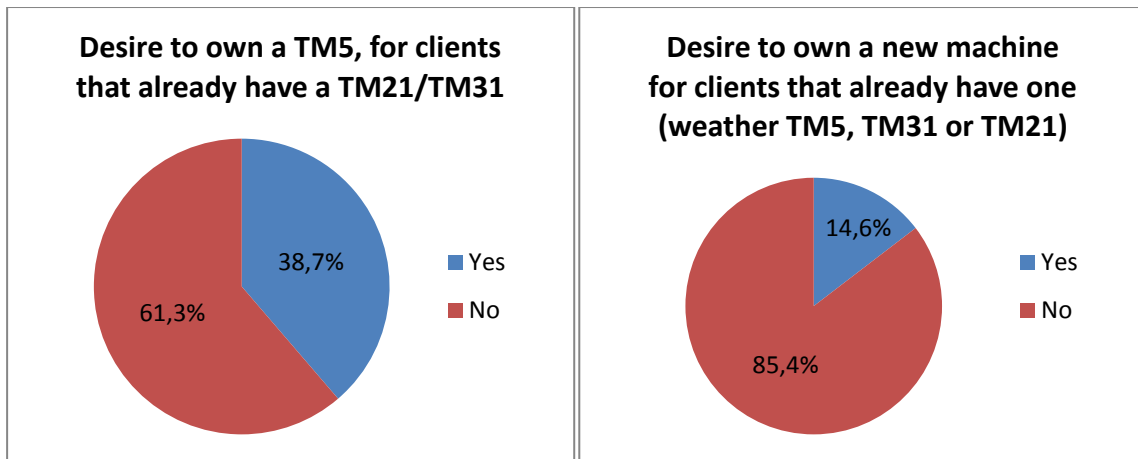
Table 6: Comparison on the expected time for innovation on *premium* product's packaging

Time interval respondents expect premium brands to innovate on formulas/recipes

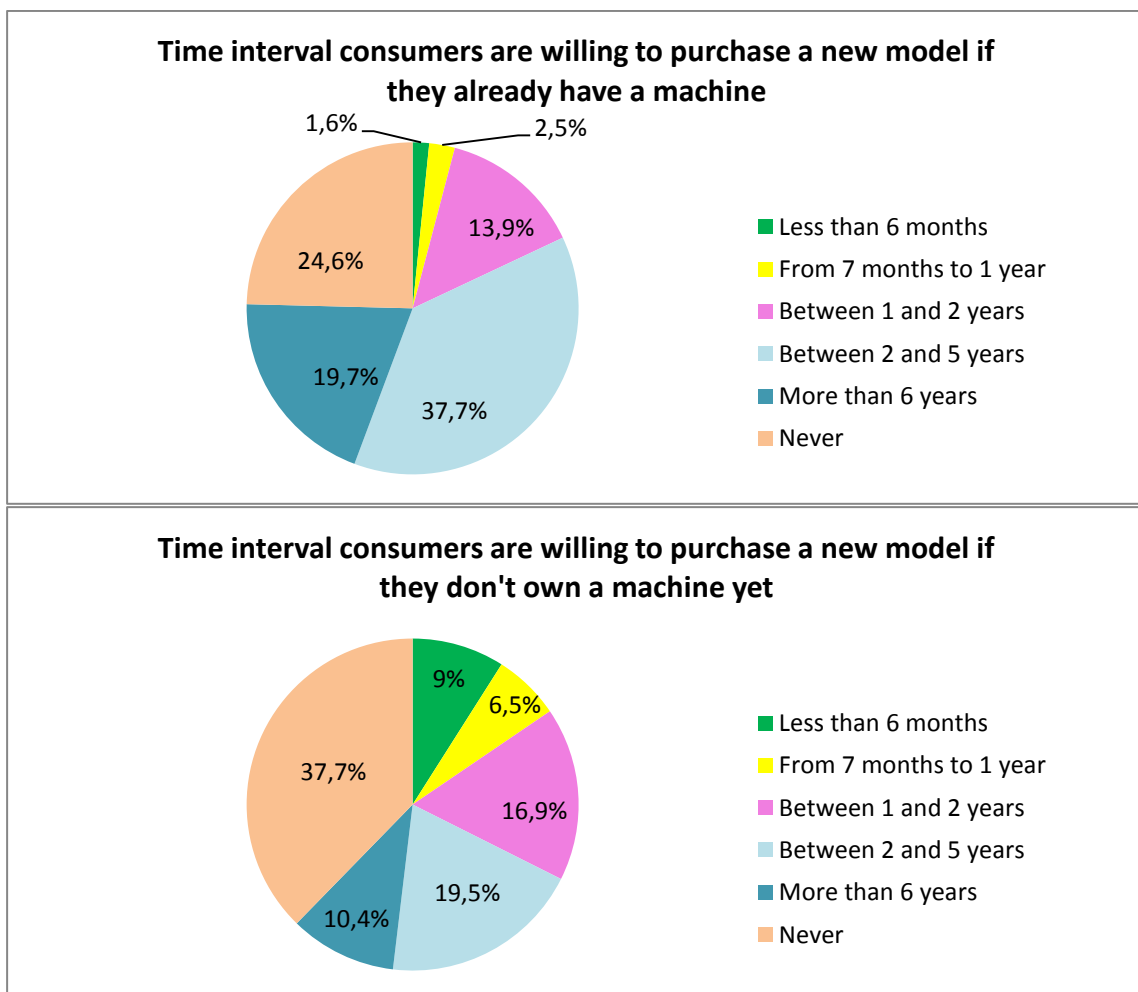
		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Every semester	42	20,2	20,2	20,2
	Every year	89	42,8	42,8	63,0
	Every 2 years	38	18,3	18,3	81,3
	Every 5 years	9	4,3	4,3	85,6
	More than every 5 years	1	,5	,5	86,1
	I don't expect a premium product's brand to innovate on this area	29	13,9	13,9	100,0
	Total	208	100,0	100,0	

Table 7: Comparison on the expected time for innovation on *premium* product's formulas/recipes

Appendix 8: Exhibits for KRQ4

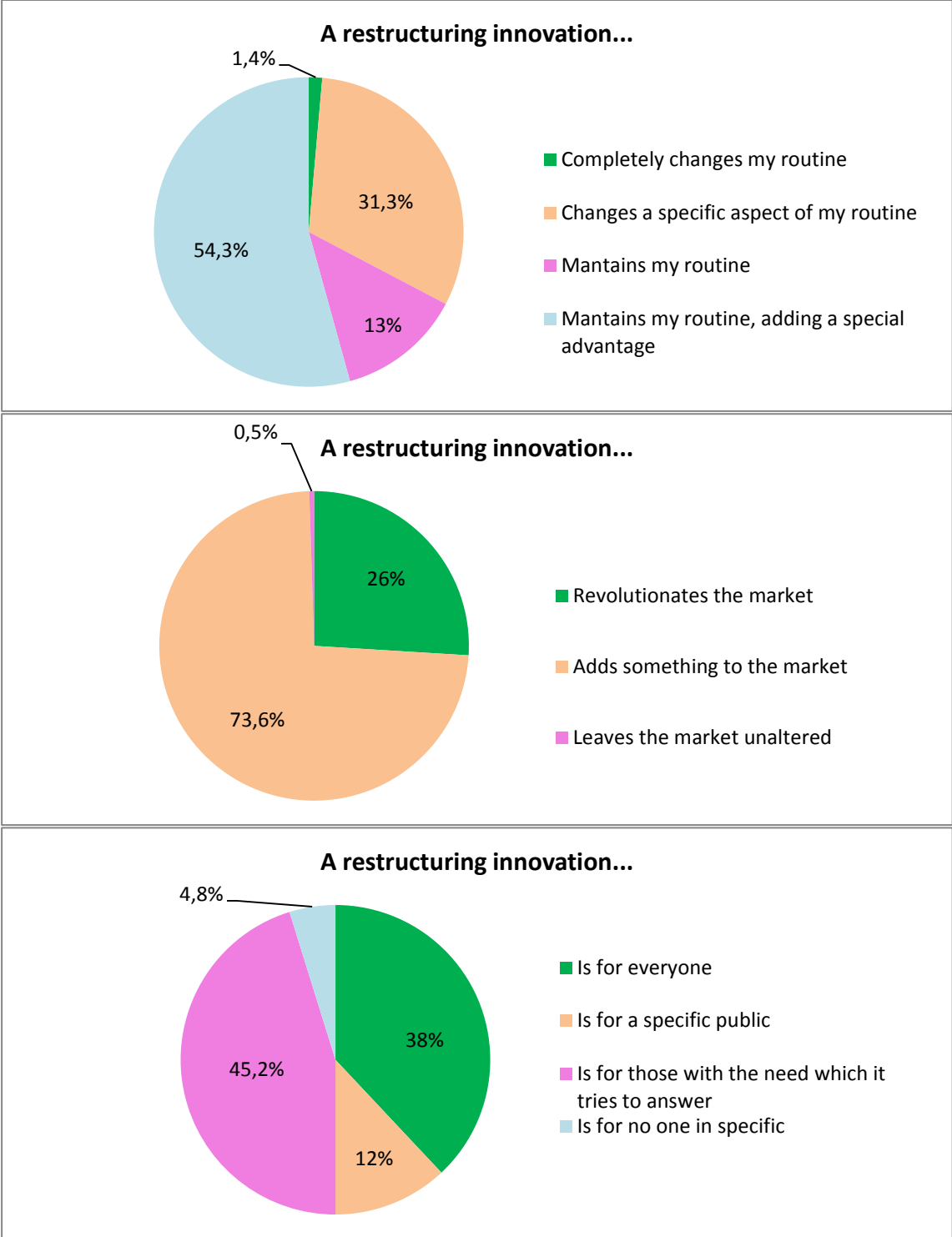


Graph 17: Desire to own Bimby



Graph 18: Time interval for expected willingness to buy a machine

Appendix 9: Exhibits for KRQ5



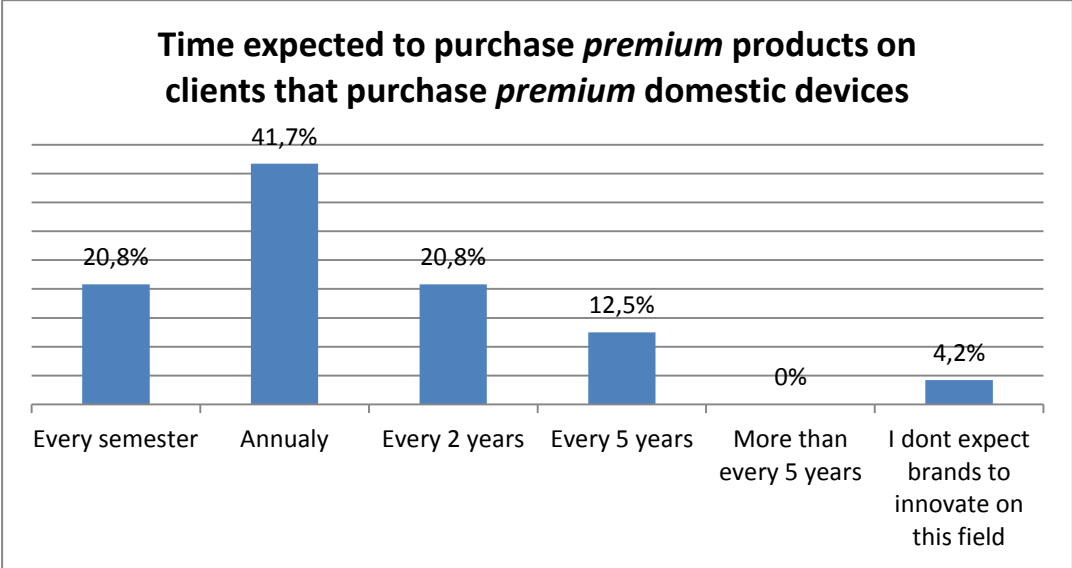
Graph 19: Respondents' expectations regarding restructuring innovation

Appendix 10: Exhibits for Conclusions

Statistics

		How long do you take until you decide to buy a technological product?	How long do you take until you decide to buy a premium technological product?
N	Valid	208	208
	Missing	0	0
Mean		2,59	2,91
Median		3,00	3,00
Mode		3	3
Standard Deviation		,869	1,029

Table 8: Comparison of time people need to make a decision to purchase *premium*/non-*premium* products



Graph 20: Time *premium* domestic devices' consumers expect brands to upgrade products

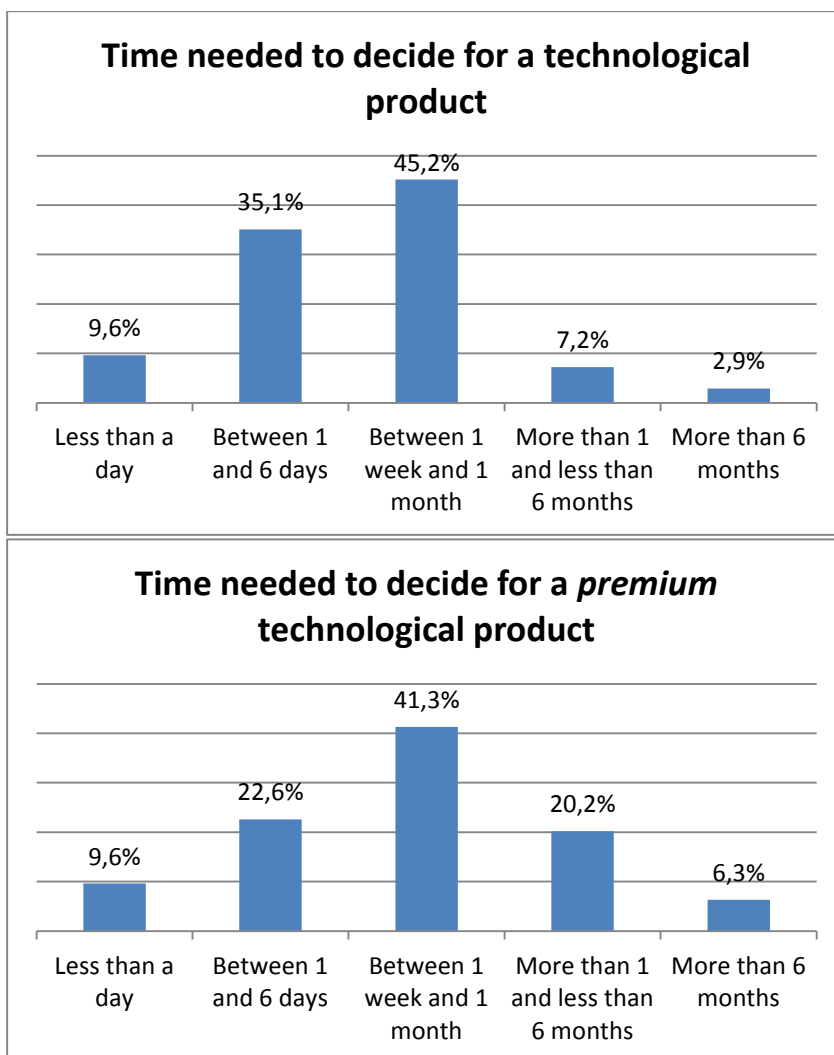
Correlations

	In what time interval do you expect a premium product's brand to upgrades its products?		In what time interval do you expect a premium product's brand to upgrades its products?	The more premium is the product, more innovation I'll demand
Spearman r ρ	In what time interval do you expect a premium product's brand to upgrades its products?	Correlation Coefficient	1,000	,142*
		Sig. (bilateral)	.	,041
		N	208	208
	The more premium is the product, more innovation I'll demand	Correlation Coefficient	,142*	1,000
		Sig. (bilateral)	,041	.
		N	208	208

*. *Correlation is significant at level 0,05 (bilateral).

Table 9: Spearman Correlation

Appendix 11: Exhibit for Additional findings



Graph 21: Comparison on the time necessary to decide for *premium*/non-*premium* technological product

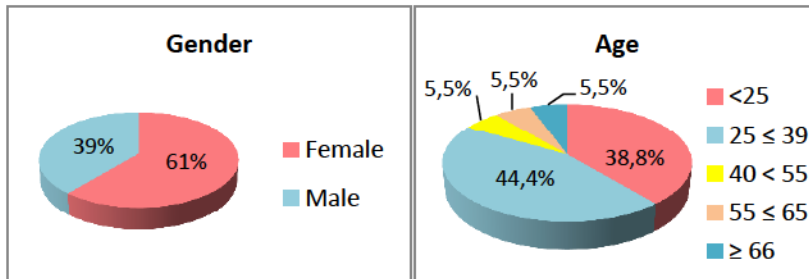
Correlations

		In case you have a TM 21 or TM31, would you like to have the TM5?	In case you have one of Bimby's models, would you be interested in purchasing a new version?	In case you don't own a Bimby, in how long would you be willing to purchase one?	If you already have a Bimby and you aren't willing to buy a new version now, when would you be?
In case you have a TM 21 or TM31, would you like to have the TM5?	Pearson Correlation	1	,449**	,270*	,372**
	Sig. (bilateral)		,000	,023	,000
	N	106	101	71	95
In case you have one of Bimby's models, would you be interested in purchasing a new version?	Pearson Correlation	,449**	1	,410**	,307**
	Sig. (bilateral)	,000		,000	,001
	N	101	123	73	113
In case you don't own a Bimby, in how long would you be willing to purchase one?	Pearson Correlation	,270*	,410**	1	,695**
	Sig. (bilateral)	,023	,000		,000
	N	71	73	154	76
If you already have a Bimby and you aren't willing to buy a new version now, when would you be?	Pearson Correlation	,372**	,307**	,695**	1
	Sig. (bilateral)	,000	,001	,000	
	N	95	113	76	122

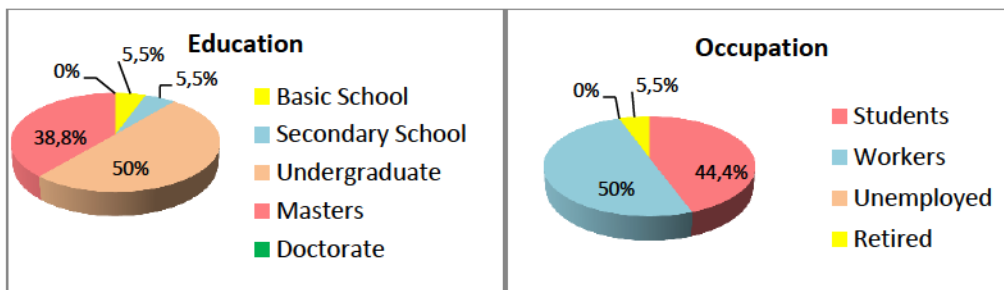
** the correlation is significant at level 0,01 (bilateral).

* the correlation is significant at level 0,05 (bilateral).

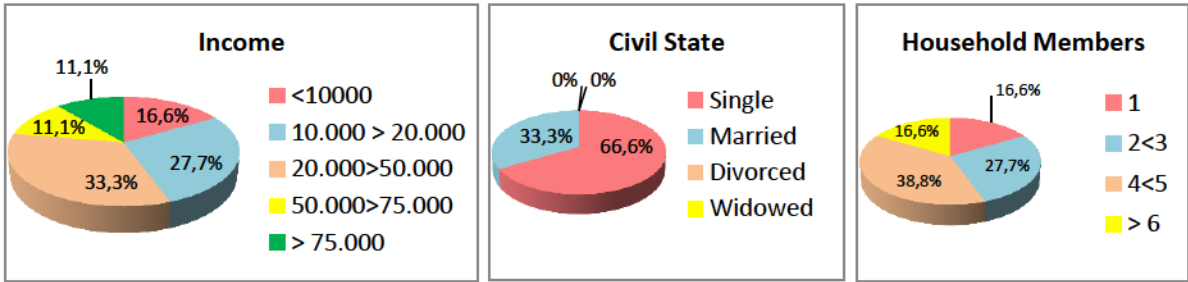
Table 6: Pearson Correlation with additional findings



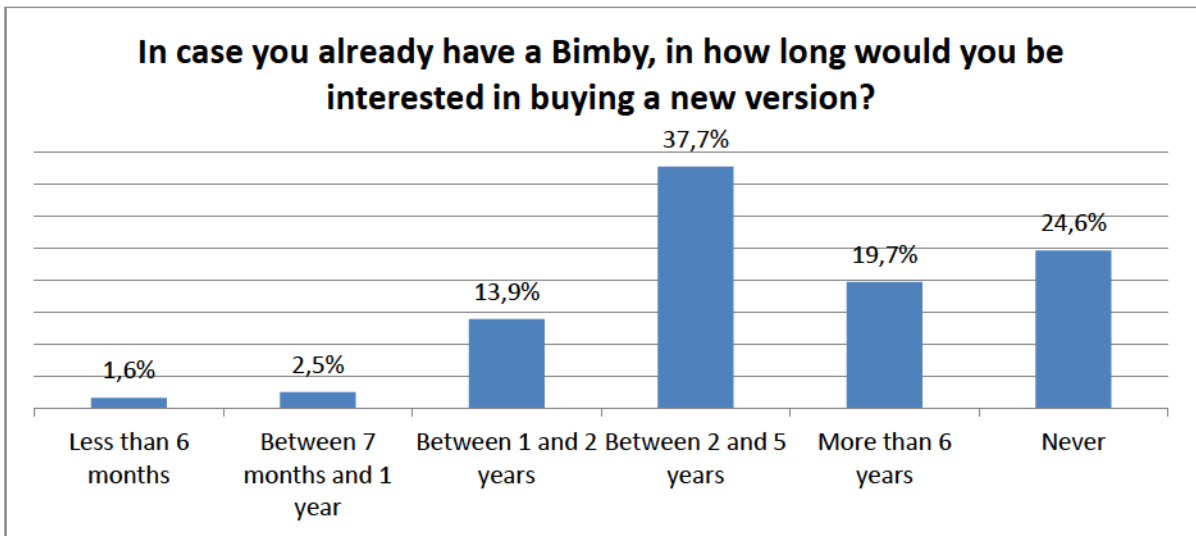
Graph 22 & 23: Respondents' gender and age distribution when it comes to the will to purchase a new Bimby model



Graph 24 & 25: Respondents' Education and Occupation distribution when it comes to the will to purchase a new Bimby model



Graph 26, 27 & 28: Respondents' Income, Civil State and Household members' distribution



Graph 29: Time expected for willingness to purchase a new Bimby model