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**THE VINTAGE INNOVATION**

**TO INNOVATE LOOKING AT THE PAST**

**RELATORE:**

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## ABSTRACT

L'approccio classico all'innovazione, sia essa tecnologica o di prodotto, è fortemente improntata e proiettata sul futuro. Quando il termine stesso "innovazione" viene pronunciato, lo si collega quasi istintivamente ad "invenzione". Tuttavia, non è necessariamente vero che innovare significhi inventare. Nella maggior parte dei casi, infatti, l'innovazione si concretizza nell'applicazione di qualcosa che è stato precedentemente inventato (anche molto tempo prima) al fine di ottenere un prodotto commercializzabile.

Un altro collegamento quasi automatico quando si parla di innovazione è pensare alla scomparsa dei prodotti e delle tecnologie antecedenti all'innovazione trattata. Ancora una volta, questo argomento è confutabile.

La confutazione di quest'ultimo argomento, o meglio, della necessaria scomparsa di prodotti e tecnologie antecedenti ad un'innovazione rappresenta il focus di questo elaborato.

Le varie teorie che concernono l'innovazione e che implicano in un certo qual modo la scomparsa di prodotti "antiquati" verranno presentate e discusse in primo luogo. Successivamente, la teoria della "Vintage Innovation" verrà introdotta, facendo spazio all'idea che alcuni prodotti e tecnologie correlate possono sopravvivere in mercati iper competitivi, se strategicamente posizionati in nicchie di mercato.

Dopo aver discusso teoricamente la possibilità di optare per una strategia di vintage innovation di nicchia, tre casi aziendali saranno presentati. In tutti e tre i casi (il ritorno della Polaroid, il successo senza tempo del Vinile e l'inaspettato rilancio del Nokia 3310) è presente una significativa evidenza del fatto che quest'approccio all'innovazione sia molto più che una mera fantasia, ma presenta risultati concreti e tangibili se supportata da una gestione efficace del marketing aziendale.

## INTRODUCTION

The word innovation comes very often along with the idea of coming up with something new. Indeed, innovation itself has little to do with the act of inventing. According to Business Dictionary, innovation can be defined as “the process of translating an idea or invention into a good or service that creates value for which customers will pay”. Therefore, the process of innovating consists in the translation from the idea (or invention) to the tangible, marketable and economically sustainable product.

Innovation itself will not be the focus of this paper though. What will be presented and discussed here are two theories related to product disappearance from the market caused by innovative products and technologies. These theories are Product Life Cycle and Dominant Design.

Subsequently, the “vintage innovation” theory will be presented and analyzed according to current research. At this stage the theoretical feasibility of such approach will be analyzed. Finally, three different business cases will be displayed, to assess both the real possibility and the outcomes of implementing a vintage innovation strategy.

When dealing with innovation, it comes natural to take a future perspective. People are driven to think that innovation means a step further towards the future. Indeed, that is true in most cases. However, there are some exceptions. The aim of this paper is to take one of those exceptions and argue that innovating looking to the past, instead of to the future, can represent a valuable strategic choice to diversify a company’s offer that targets a certain market niche. Again, that does not mean that innovation should always look behind and not forward, because it would mean the death of progress. It only means that in an increasingly competitive market a different approach is possible, leading to a sort of “nostalgic monopoly”.

Moreover, research on such exceptions and, more precisely, on vintage innovation is very scarce, while pragmatic examples of companies (of all sizes) implementing this approach abound. The three cases presented in this paper are enough indicative of such a phenomenon:

- The success of timeless vinyl;
- The new Nokia 3310 relaunch;
- The new Instax cameras.

Given such gap in available research, this paper’s objective is to propose a valuable study in a theoretical as well as a pragmatic perspective by assessing real and concrete cases through the available research.

For what concerns the research question, thus, it is to evaluate whether a vintage innovation could be seen as a potential new strategy to satisfy the needs of a market niche that gathers users who want to keep using old products, at the same time benefiting of technological. As it



will be shown below, those users can be even considered an important source of innovation themselves, as it is the case of the more well-known lead users, with the proper distinction. The hypothesis is that, under the right conditions, this approach is possible and can lead to firms' profitability.

## **CHAPTER 1**

### **INNOVATION AS FULLY ORIENTED TO THE FUTURE: A LITERATURE REVIEW**

Two concepts which are relevant to this paper will be presented throughout this chapter:

- The product life cycle (PLC);
- The dominant design.

These two topics, discussed below by means of an extensive literature review, are key to display the tendency to consider any “old product” dead as soon as a “new product” appears on the market. In fact, according to the PLC theory, each product and its related technology experience four phases. The last step within this process is the product disappearance from the market.

Accordingly, for each new dominant design that emerges within a certain industry, it is a matter of time, but volumes sold decline.

#### **1.1 The Product life cycle**

The most basic life cycle in the industry and market area is product life cycle (Shahmarichatghieh, Tolonen & Haapasalo, 2015). It considers the path of a product from its birth to the last phase of its dead, in terms of sales. To invest in any product development or production project, companies have to discover its technology stage within the life cycle (Gao et al., 2012). It is important to know exactly at what stage the technology is situated, in order to properly plan the corresponding levels of production, inventory, sales staff, distribution, marketing, and advertising (Golder and Tellis, 2003). Moreover, costs and prices decline substantially over the life cycle, especially during the early stages. In the other hand, consumers' sensitivity to price goes up over the stages of the life cycle (Golder & Tellis, 2012). Managers must therefore understand the sales patterns and change their strategy accordingly. Because of its critical impact on marketing strategy, the PLC has become over years a central framework in marketing.

Besides the product point of view, the customer's frame should also be taken into account to better understand such dynamics. The customers in various stages are classified by their behavior against technology as well as their reasons for buying the technology, along with their satisfaction.

Before going into phases definition, it is of utmost importance to correctly distinguish between product life cycle and technology life cycle. According to Shahmarichatghieh, Tolonen and Haapasalo (2015), the two life cycle paths may seem defining the same concept, nevertheless they are quite different from each other under various aspects. Apparently, PLC is based on an

individual or limited series of products while technology life cycle embraces life cycle of different platforms. Each platform, in turn, could introduce various products. Thus, technology life cycle is more based and focused on macro level data than PLC (Kim, 2003). Furthermore, PLC starts with the product introduction to the market, while TLC starts with the idea creation of a new, before inexistent, concept. A further set of TLCs, that themselves include many PLCs, is market life cycle (MLC). Any market life cycle could contain thousands of PLCs. In literature there are plenty of definitions regarding PLC. Some authors believe product life cycle is the fluctuation of a product sales from the beginning of its creation until the end (Cox, 1967), while others look at the idea from a macro perspective and describe it as something based on market changes during the product existence (Klepper, 1997). Other authors, such as Hofer (1975), emphasized on the important role of PLC on strategic decisions, as it was mentioned above, or stated that PLC represents a crucial factor in both product planning and control (Cox, 1967). Introduction, maturity and decline, as they will be shown and discussed below, are the peak points of strategy renovation in any product life cycle. Forrester defines the scope of PLC in a way that the industry and products should be very homogenous in terms of characteristics and customer view point to define the PLC stages and analyze them. It is, again, of very help to develop new products and understand market opportunities in a scientific and objective way. The most generic and well-known product life cycle classification is as follows:

- **Introduction:** During the introduction, pessimism abounds and managers usually feel an increasing pressure to pull the plug on the new product (Golder and Tellis, 2003). Predicting, with all the necessary analysis, the turning points of takeoff and slowdown is essential to avoid premature withdrawal or excessive investments (Golder & Tellis, 2012). The product is new in market and the customer is not very familiar with its concept or its application (Anderson, Zeithmal, 1984). Sometimes the customers do not even know their potential need to buy the product by the time the demand for the product is growing (Anderson, Zeithmal, 1984). Two different lives for any product can be distinguished as follows: “commercial life” and “catalogue or market life” (Cox, 1969). Commercial birth begins when the product sales increase by a 20% monthly trend. Therefore, the product is fully available and is already known within the market. On the other hand, catalogue birth starts when the product is first presented, or introduced, to the market. Thus, only a little audience knows about it at this stage, in a shallow way. Introduction stage of PLC is therefore defined as the duration between “catalogue and market births” (Cox, 1969). This stage is characterized by uncertainty and a very high level of risk (Nieto, Lopez, Cruz, 1998). In fact, not all products manage to access to

the next stage. Product development according to the feedbacks that companies and firms should collect in this stage is a crucial activity (Hofer, 1975) in order to lower risks and adapt products to users' needs.

- **Growth:** Cox (1967) defines the Growth stage as the duration between “commercial birth” and monthly sales revenue highest (peak) point. Throughout this phase, optimism abounds and managers are eager to meet what seems to be an insatiable market demand (Golder and Tellis, 2003). During this stage it is key that the company builds a reliable supply chain since production has to work efficiently and the demand is at its peak (Anderson, Zeithmal, 1984). Furthermore, competitors are coming to the market, leading to price adjustments by the first mover (the innovative company), that can benefit from an already existing profitability. When the product stays at this stage, consumers are aware of its existence, and in some industries users can also benefit from network economies, perceiving the product as more and more valuable along with the adoption rate increase. That leads to several advantages for the first mover, such as economies of scale thanks to which it can lower the price and threaten potential new players, and lock-in mechanisms that increase the switching costs that consumers experience while even thinking about switching to other companies' products. Moreover, successive incremental innovations increase the technology performance rate of the product (Nieto, Lopez, Cruz, 1998).

The way advertisement is carried out is also important during this stage. Instead of training the product concept to the customer the company should focus its marketing effort on promoting the advantages of its product in comparison with the competitors' (Hay and Ginter, 1979).

- **Maturity:** According to Cox (1967), the peak of sales revenue is the beginning of “maturity stage” and it ends with a “commercial death” that is characterized by a reduction of 10-20% in terms of constant demand. Consequently, strategic moves such as product development, cost reduction, promotional strategies and improvement in services or quality could help the company maintain market shares. Products variation should be also increased, production efficiency should be maximized and the supply chain should be optimized to lower costs. Moreover, at this stage market segmentation and customer classification could be helpful to keep the market share while the competition is high (Hofer, 1975; Hamermesh and Silk, 1979). For what concerns the supply chain, distribution channels should be lessened as the volume of demand is going to fall significantly. As competition is very dense at this stage, the company must design

an effective strategy choosing to present either the cheapest price or the best product and services quality to customers (Hall, 1980; Buzzell and Wiersema, 1981).

- **Decline:** Saturation or decline stage can be observed between “commercial death”, the fall in sales, and “Catalogue/market death”, which identifies the product disappearance from the market (Cox, 1967). At this stage the preference is to cut all possible costs and reduce inventories (Just in Time approach) (Hofer, 1975), with a consequent reduction in outlet distribution channels (Hay and Ginter, 1979). The price and non-price promotions should help to speed up withdrawing the product and decrease inventory level (Cox,1967).

### **The product life cycle and the international trade**

Another field of application concerned by the product life cycle is international trade. With its regard, the product life-cycle theory is an economic theory that was developed by Raymond Vernon in response to the failure of the Heckscher-Ohlin model to explain the observed pattern of international trade. The theory suggests that in the early stages of a product's life-cycle all the parts and labor associated with that product come from the area where it was invented or first produced. After the product becomes adopted and used in the world markets, production gradually moves away from the point of origin, usually towards countries where there is either a vantage in capital or in labor, depending on the product itself. A commonly used example of this is the invention, growth and production of the personal computer with respect to the United States.

In the new product stage, the product is produced and consumed in the US; no export trade occurs. In the maturing product stage, mass-production techniques are developed and foreign demand (in developed countries) expands; the US now exports the product to other developed countries. In the standardized product stage, production moves to developing countries, which then export the product to developed countries.

The model demonstrates dynamic comparative advantages. The country that has the comparative advantage in the production of the product changes from the innovating (developed) country to the developing countries.

## 1.2 The Technology life cycle

According to the Patent based Technology Life Cycle, the stages of the life cycle are the same as PLC, as well as the X axis of the diagram which still presents time as variable. Nonetheless, the Y axis comes up with patent index as a variable.

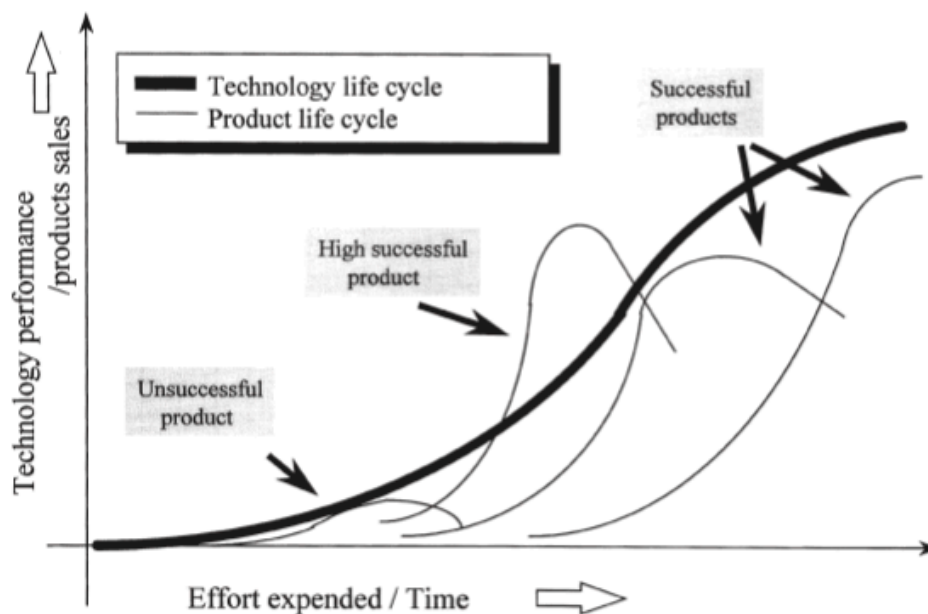
- **Introduction(Emerging):** In this phase R&D teams focus their efforts to find out the concept of a new technology that has still long way to be applicable. Therefore, the application is low and as the risk of investment is apparently high there are not numerous companies who are willing to take part into the circle (Haupt et al., 2007). As previously mentioned, there is a huge amount of uncertainty that leads, sometimes, to long time for a technology to move from concept into a real application. Consequently, the vast majority of projects are declined or suspended during the early stages and do not make to next stages (Callon, 1980; Abernathy and Utterback, 1978).
- **Growth:** Once the concept has been discovered, and the tendency of findings went from radicals to applicable and useable products, technological applications will increase. Risk of investment decrease, as well as uncertainty, and more companies start entering the completion. At this point technology enters the growth stage (Haupt et al., 2007). However, although there are more players in the market using and developing the same technology, there is not integration for products and processes yet (Little, 1981).
- **Maturity:** When the number of patent applications does not change any more, and the new patents belong to mostly major and minor enhancement, the technology reaches its maturity stage. The risk of investment at this stage is very low, nonetheless the number of competitors is at its peak point (Haupt et al., 2007).

## 1.3 The S-Curve

The product life cycle, as it was presented above, follows the path of a s-shaped curve. In different managerial works, the term life cycle has been used to describe some generic models, where it is possible to find technology and product life cycles. The most widespread among them, however, is the product life cycle. PLC theory was initially formulated by Levitt in 1965, carrying the four stages that were presented above: introduction, growth, maturity and decline. One problem that has traditionally been associated with the use of such models is the definition of a unit analysis. Thus, depending on how branded products, product forms, product categories or industries are treated, different life cycles can be developed (Nieto, Lopez and Cruz, 1998).

The technological factor affects the product forms and brands to a lower degree than product categories. The effects of fashion and other commercial variables become watered down by the similarities within the total offering of manufacturers. The duration of the different stages and the total life of the product also depend on factors of technological nature. When the diffusion speed of new technologies is increased, for instance, product performance improves and/or the efficiency of the processes increase (Nieto, Lopez, Cruz and 1998). In the figure below we can see how PLC can change depending on such technological factors, and what paths it can follow. It is also easy to graphically see the various stages that were discussed above, with their respective growth rates.

Figure n°1.3.1 (source: López, Nieto, Cruz (1998), “Performance analysis of technology using the s-curve model: the case of digitalsignal processing (DSP) technologies).



#### 1.4 The dominant design

A further topic related to new and old products birth and disappearance (and their relative technology paradigm) is dominant design. The point of departure is the idea that dominant designs shift the terms of competition in a certain industry. A dominant design is a specific technological paradigm which establishes dominance among competing design paths (Utterback and Suarez, 1993.). According to Clark (1985), design trajectories are influenced by both technical and market factors. A dominant design usually embodies the requirements of many classes of users of a specific product. However, for the purpose of this paper it is of utmost importance to clarify that a dominant product may not meet the needs of a particular

consumer class (a market niche) to quite the same extent as would a customized design. Nor is a dominant design necessarily the one which embodies the most extreme technical performance, as very often there are products constructed upon a technology that works way better than the “dominant” one. Nonetheless, they do not make to be the most spread among users. A dominant design will, nevertheless, represent a transition point in the life of an industry (Anderson & Tushman, 1990; Tushman & Anderson, 1986). The emergence of a dominant design, which refers to a single architecture that establishes dominance in a product class (Anderson and Tushman, 1990), has received researches’ attention in different fields such as technology and innovation (Abernathy & Clark, 1985; Pavitt, 1989; Teece, 1986; Utterback & Abernathy, 195; Utterback and Suarez, 1992), organization research and product standardization in economics (Farrel & Saloner, 1987; Gabel, 1987; Hergert, 1987; Linl, 1983).

#### **1.4.1 The emergence of a dominant design**

The process of emergence of a dominant design has been described as a black box (Rosemberg, 1982), since many different factors and conditions act to support the probability of any design to become the accepted standard of a certain market. This process can be triggered internally whether there is a total selling or buying power belonging to either buyer or seller, or by external agreements with other manufacturers (Farrell and Saloner, 1987). A dominant design can also be accelerated by an industry committee, a government regulation or even international standardization commissions (Lee, O’Neal, Pruet, Thomas,1995). Research from multiple disciplines provides significant insights to this black-box puzzle. Previous literature suggests that non-technological factors may also have an impact on the emergence process (Arthur, 1989; Anderson & Tushman, 1990; Teece, 1986; Tushman & Rosenkopt, 1992). Technology and innovation literature underlines the critical role of users in influencing the adoption of a new design. Anderson & Tushman (1990), for instance, address the emergence from a social and organizational perspective, stating that the emergence of dominant designs is characterized by the interaction among different players such as individuals, the organization, and networks of organizations. Tushman and Rosenkopt (1992) extended this view by arguing that the technological change within an organizational community is the result of the interaction among technological complexity as well as socio-political processes. Beyond these non-technological factors, historical events might also strongly influence the adoption of technology, given that such sometimes unpredictable events could create lock-in mechanisms, blocking technology suppliers and users into a particular design due to the existence of increasing returns to scale, for instance, and thus prevent them from adopting other late-coming technologies, even though they can present significant advantages in terms of both efficiency or efficacy (Arthur, 1989).



Therefore, once a new design becomes “dominant”, all the product in the same industries should be designed and manufactured following these new standards, especially in terms of technological performances.

### **1.5 The product survival**

The natural conclusion that is supposed to be drawn is that all the previous products, designed upon an obsolete technology, are going to disappear, soon or later. People will start to switch to the new technological paradigm, that will in turn follow the path presented in the product life cycle, with an introduction, a rapid growth that will lead to its maturity stage, to conclude with its subsequent decline and death, once the new design will become itself obsolete and will be replaced by a newer one. Furthermore, most of the existing literature on R&D is based on the assumption that firms developing new products do not need to even consider old technologies as a possible innovation source (Schiavone, 2010). The only way they could exploit past technologies is to seek to improve an existing technology to introduce an incremental innovation to better manage their product portfolio (Cohen e Levinthal, 1990). In other words, firms, according to the classic way innovation is considered, should look forward and not behind to define their own R&S and marketing strategy (Schiavone, 2010). Instead, old products can survive, even though new and evolved products, along with their related technologies, have been introduced onto the market, if well adapted (Schiavone, 2010). Research on technology competition and, more generally, on the types of relations that can occur between old and new technologies that aim at satisfying the same needs of firms or individuals, is not scarce in economic literature (De Liso e Filatrella, 2008; Freddi, 2009; Nelson e Winter, 1982; Patel e Pavitt, 1994; Rosenberg, 1994). What is surprising, nevertheless, is the scarcity of contributions within managerial studies upon such interrelated technological relations (Schiavone, 2010).

## **CHAPTER 2**

### **THE VINTAGE INNOVATION**

Once a new product has been introduced onto the market, some market niches arise, gathering users who are nostalgic of the prior product. Consumers belonging to such market niches are characterized by the unwillingness to switch to the new product and fully embrace its related advanced technology. However, they do want to stay current with new possibilities offered by the latest technological paradigm. Thus, they seek a way to use their beloved “old” products, benefiting, at the same time, from progress. As it will be detailed later on this paper, this can be seen as a great opportunity for companies that want to introduce a “vintage innovation”. This way, the product born by such innovation does not only “survive” along with the prior technological paradigm, yet it allows companies to innovate by developing new marketing strategies that can lead to new hybrid products specifically thought for “nostalgic consumers”. Therefore, the vintage innovation consists in the integration between old and new technologies through the development and commercialization of a third vintage product which is neither the old products based on an obsolete technological paradigm, neither the new one that brought the technological breakthrough that has changed industries’ “rules”. In fact, any technological breakthrough introduces into the market a certain knowledge that is different from the preceding one (Tushman, 1990; Dezi and Gatti, 2000). Nevertheless, this evolution does not always lead to the old product’s disappearance from the market (Schiavone, 2009).

#### **2.1 The innovation diffusion**

Once companies have incorporated their know-how and capabilities into a current technology, their main problem becomes the rapidity through which the new paradigm and its related products will be spread among costumers or consumers. This diffusion, however, is considered as being the last step within the process of technological change. To quote Rogers (1995), the diffusion of a new technology is a process through which an innovation is distributed through certain channels, by individuals belonging to a social system, within a certain time T. The diffusion, thus, is the sum of all the adoptions from each user in a certain market (Schumpeter, 1942). Again, if a diffusion consists in the sum of many adoptions, it is of utmost importance to define what the adoption is. According to Rogers (1995), it is the choice of taking advantages from an innovation since it is the best absolute available option. Furthermore, five different and chronological phases into the entire process of adopting a certain innovative product can be distinguished. They are the following (Beal and Bohem, 1957):

1. **Product awareness:** The individual is simply aware of the innovation existence. This form of awareness is usually driven by outside and/or tacit sources of information.

2. **Product interest:** The individual wants more information. They begin wondering if the innovation can be valuable for them. They may actively look for new information, both explicit and tacit. Sources can be both outside and inside the community at this stage.
3. **Product evaluation (costs and benefits):** The individual mentally examines the innovation using the information collected, determining whether it will really have an impact on its work and how it will make their effort easier or better. This is a critical stage and the first one where the voices of the community (i.e. coworkers, friends or neighbors) represent often the largest influence on an individual, rather than outside contacts.
4. **Product trial:** The individual, at this stage, tests the innovation to see if reality matches his or her expectation, usually with small-scale, experimental efforts. Individuals seek specific help for their specific need.
5. **Product adoption:** The individual adopts the innovation wholeheartedly. It is applied to all areas of relevant use and the individual often becomes a strong advocate for the innovation in the community trying to convince others. Community voices are very important at this stage.

## 2.2 Users categories

Therefore, any innovation adoption is not successful if the majority of its potential users does not find it interesting, refusing its adoption (Beal and Bohen, 1957).

At the same time, also users can be categorized depending on when, from the launch of the new product, they decide to switch to the novelty. According to the above quoted Rogers (1995), users can be classified as:

- **Innovators:** They love exploring for the sake of exploring and are usually risk-lovers.
- **Early adopters:** Within this category are often collocated opinion leaders. They are similar to innovators in how quickly they adopt, but they are more concerned about maintaining their reputations as being ahead of the curve on new ideas.
- **Early majority and late majority:** Here can be found the critical mass that ensures adoption. The early majority seeks productivity and practical benefits, while late majority is similar but also expects a lot of help and support before effectively adopting a new product.
- **Laggards:** This is the slowest category to embracing a certain innovation. They are the most resistant to change and do so only when forced to adopt because everyone else has.

### **2.3 The factors accounting for adoption success**

Innovation's characteristics, innovators and the external environment are generally considered to be the variables that account for a product adoption (Wejnert, 2002).

However, a critic variable is often unconsidered: the nature of relationships between old products along with their related technologies and the innovative products that are supposed to meet and satisfy the same consumers' needs (Schiavone, 2009).

In fact, such relationships can be either competitive or collaborative. There is competition if a new product or a new technology substitutes the previous one, both from the demand and the offer side, whereas there is collaboration if firms or users decide to integrate old and new know-how, capabilities and knowledge aiming at taking advantages from their joint use.

With regard to the demand side (D), several studies have demonstrated that a technological product can survive to an innovative product even for a long period (Geroski, 2000; Norton and Bass, 1987).

As it has been presented above, the diffusion process depends on numerous and different variables of social, economic and technical nature (Grubler, 1996). Thus, if those factors support the adoption process, it will probably be successful, otherwise it will not. Furthermore, independently from the innovation success, there will be a period when old and new technological paradigms have to coexist, at least until all late adopters have switched to the new technology (Schiavone, 2009).

### **2.4 The sailing ship effect**

Besides the coexistence of two different paradigms due to late adopters, there is another case, observed for the first time in 1935 by Gilfillan, named "The sailing ship effect". According to this theory, if a product has been the dominant design in its market for a long time, it can survive to technological innovations by means of an innovation acceleration. Nonetheless, that implies a market segmentation and then targeting, since cannot be possible to address the whole number of consumers anymore. In fewer words, it is necessary to reduce the whole market to a market niche. Before deciding to invest in such innovation acceleration, however, it is of utmost importance to ensure to have a sufficient number of potential consumers who are not willing to upgrade to the new paradigm and thus keep using the prior one. As a result of such innovation process upon the previous technological paradigm there is the emergence of the integration between new and old technologies.

For what concerns the offer side (O) Nelson and Winter (1982) developed an evolutionary model in which they describe how, in a certain nation, a new technology substitutes the previous one. The rapidity of such process depends on three main factors:

- The difference, in terms of productivity costs, between the two technologies;
- The expectation of entrepreneurs;
- The availability of technological complementarities and infrastructures.

Moreover, a firm can choose between three strategic responses once a new technology that can threaten the one it operates upon is about to enter the market (Howells, 2002):

- The exit from the market;
- The upgrade to the new technology;
- The innovation on the previous technological paradigm through the sailing ship effect.

Also numerous studies on dominant design have seen as their focus the substitution between technologies and thus products that are not peers (Abernathy & Utterback, 1978; Anderson & Tushman, 1990). The rise of a new dominant design leads to a technological breakthrough, which in turn drives to discontinuity (Fig. n°2).

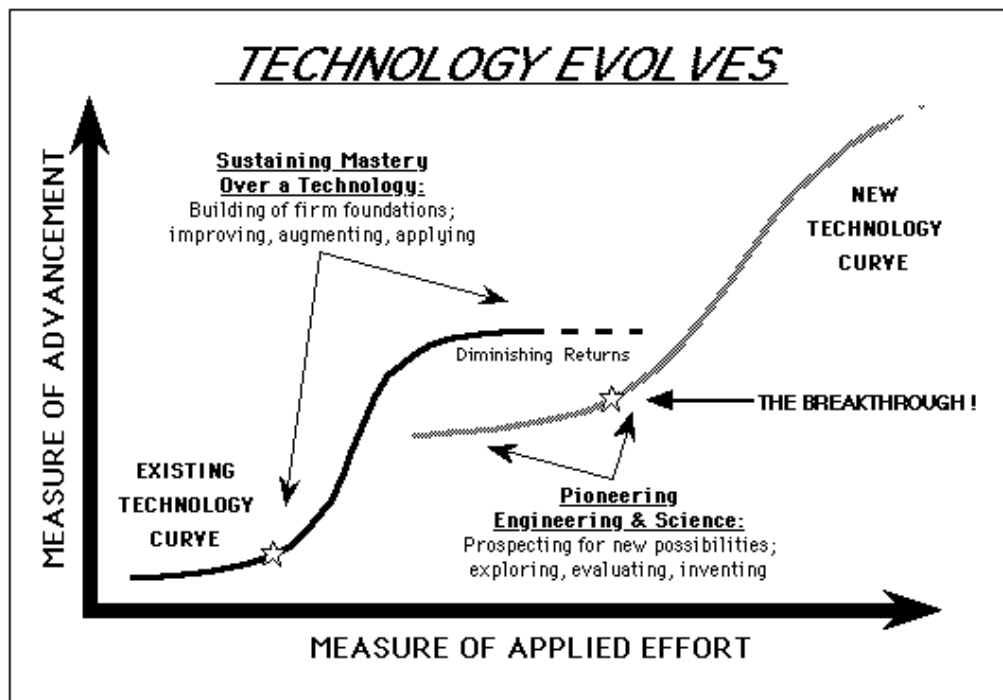


Fig. n°2.4.1, source: Wordpress

Each time a technological breakthrough happens, there is a new cycle characterized by a struggle in which emergent technologies aim at becoming the new dominant designs in the industry (Anderson & Tushman, 1990). However, as it is mentioned above, companies do not forcedly have to put products and technologies in competition, yet they can opt for collaboration between non-peer products and technologies. For instance, the level of interdependence and interrelation between new and old technological paradigms can be of three types (Freddi, 2009):

- New technologies are developed independently from the previous ones within the same firm or industry;
- There is a technological complementarity between the two paradigms, however technologies remain independent;
- The firm decides to opt for the fusion between new and old paradigms.

Nonetheless, a fusion between technological paradigms can be only possible when there is a certain level of synergy between them, as well as a great integration capability of the company. Moreover, there can be other factors accounting in favor of integration at the expense of substitution, such as network externalities that create lock-in mechanisms towards the old paradigm, or the industry dimension that can be so big to play against structural changes. There can also be, finally, cultural or social constraints (Schiavone, 2009).

### **2.5 Niches of users adverse to innovation**

In all likelihood, therefore, market niches composed by users who are adverse to changes can appear in the market. Such niches are not only characterized by laziness, as it could be the case of late adopters, yet it is often more a matter of loyalty towards the previous product and, consequently, a sense of nostalgia, even though old paradigms can be defined as obsolete and are very often underperforming (Schiavone, 2009).

Market niches, in general, are key to product innovation. Although in literature there is an important focus on lead users to achieve innovation (Von Hippel, 1988), “vintage users” should be considered either (Schiavone, 2009). Such vintage users want to, at the same time, both continue using the old paradigm upon which they have achieved a great expertise, and benefit from technology advancement. The emergence of such niches, therefore, offers great business opportunities to firms, since they can develop “hybrid products” that can in turn set integration relationships, rather than simple substitution. In such a context, therefore, companies could opt for a vintage innovation strategy, developing and launching onto the market a technological innovation that requires the joint use of both new and old products that could potentially meet consumer needs by themselves (Schiavone, 2009).

### **2.6 Innovation also benefits old products**

New technologies, besides being considered as a threat for declining or already-obsolete technologies and products, can be now seen as a potential source of newness and improvement for such almost out-of-the-market paradigms (Mowery, 1999; Patel & Pavitt, 1994).

The objective of the Vintage Innovation is not only the entrance into a market niche composed by nostalgic consumers. In fact, this strategic approach can also be chosen to extend the duration

of the product life cycle of mature dominant designs or to exploit efficiently all the R&S capabilities located within a certain company. The result of such approach should be an independent innovation that, as it was mentioned above, integrates new and old technologies and their relative products.

## **2.7 The technological network**

Whenever a firm decides to opt for a vintage innovation approach, it requires the integration of three different types of products (Schiavone, 2009):

1. One or more old technological products, based on a technological paradigm no longer current;
2. One or more new technological products, based on a technological paradigm which is actual and directly concurrent of the old product;
3. A vintage technological product, that is a product which is born after the launch of the newest product that is in turn substituting the older product and its related technology. Such a Vintage product allows users exploit both old and new products, in fact creating a bridge between the two technological paradigms. A vintage product, thus, creates a technological network between not-peer products.

However, that comes along with the necessity of knowing, at least basically, how to use the three technologies and consequently their related products, especially within the market niche that had been previously targeted.

Small high-tech firms appear to be the organizations that can best focus their offer on vintage products. Their flexibility and their capability of diversifying, being profitable even if addressing a single market niche with highly customized products and higher prices, make them perfectly suit this task. Accordingly, big companies would not be suitable for such a task since, in order to be profitable, they have to address the mass with standardized products.

## **2.8 The vintage community of practice**

The vintage product's fitness to a specific market niche, composed by individuals who are emotionally attached to a certain old product, can depend on various factors. Among all, the existence of a community of practice (CoP) can be of very help to this cause. A CoP can be defined as a group of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly, thanks to knowledge sharing (Wenger *et al.*, 2002). Research on CoPs has focused on how they support knowledge creation to achieve innovation (Swan *et al.*, 2002; Coakes and Smith, 2007; Wenger *et al.*, 2002; Brown and Duguid, 1991). Knowledge creation and sharing, in fact, is a fundamental process in every CoP, as it was true

for the above quoted case of lead users. Regular interactions between members of a CoP support the development of a *spiral of knowledge*, which is critical for continuous innovation (Nonaka, 1991; Nonaka *et al.*, 2000). These communities' primary concern is to preserve selected old technology-based products from obsolescence, at the same time integrating useful aspects of the new technology to promote its acceptance and adoption by old technology users (Schiavone and Agrifoglio, 2012; Schiavone, 2013a). In fact, such communities perceive the vintage product as a means that is capable of extending the life cycle of their beloved product. Furthermore, besides this effect, it allows users benefit of the new technological advancement. Vintage users, therefore, have the great potential of becoming key players, along with lead users, in what is called "open innovation", as well as in product co-development. Both categories have advanced technological needs, yet lead users are able to forecast and anticipate mass market's needs, while vintage users remain a market exclusive niche highly differentiated from the mass.

The past can therefore be considered as a new potential source of technological innovation for both new and already-existing firms (Schiavone, 2009).



## CHAPTER 3

### INNOVATION AS A DIVE INTO THE PAST: THREE CASE STUDIES

Once it has been displayed and discussed how vintage can represent a valuable strategy to market new (yet old) products onto market niches, three different examples of successful initiative concerning this way of innovating will be shown.

The above cited case studies that will be presented are:

1. The vinyl ever growing market and the vinyl emulator;
2. The surprising relaunch of the famous Nokia 3310.
3. The new birth of Instax cameras;

Each case is characterized by a unique path, yet the three of them have in common the courage that firms have had to resume a “dead” product developed on an overpassed technology paradigm, making it compete or collaborate with their more technologically-advanced “relatives”.

#### 3.1 The vinyl

In a period characterized by digital revolution, there is no one, even among young people, who has never heard about vinyl.

Vinyl have significantly marked the history of music worldwide, and perhaps, as it is going to be shown, they are still doing so.

##### A rise in sales

Sales of vinyl in 2016 reached a 25-year high as consumers young and old have once again embraced physical formats of music.

More than 3.2m LPs were sold last year, a rise of 53% on the previous year and the peak since 1991.

The statistics show that this is the ninth consecutive year that vinyl has grown in terms of sales, thanks to events such the increase in shops selling vinyl. Supermarkets such as Tesco, which is not operating in Italy, yet it can be found in several UE countries such as Ireland, now stock vinyl. Furthermore, both HMV and Rough Trade have created more floor space to sell more records having understood the ongoing trend in favor of physical-format music.

At least 30 albums sold more than 10,000 copies in 2016, marking an important step forward compared to 2007 when digital downloads began to take hold and a meagre total of 200,000 LPs were sold overall. Also significant is the fact that not only older people are going back to vinyl, but also the younger generation are discovering it in a way they weren't before, thanks to the vintage recognition as an alternative yet valuable fashion choice.

People think millennials just stream and are just digital but actually we are going to see increasingly over this coming year that young people still want something tangible and real and that's where vinyl is taking on the role that the CD used to have, stated Vanessa Higgins, the CEO of Regent Street and Gold Bar Records, adding that it used to be music discovery was mainly limited to the radio, but now people are free to look and listen to all sorts of music, so people are hearing so much more new or different music than they were before. They are finding music through streaming and if they love it, they are going out and investing in it in a physical format. Furthermore, as demand is going up, price is increasing too, as a result of a basic economic equation. Moreover, the price to manufacture has gone up either within the last year. Higgins has made a further prediction that can be however debatable, saying that the digital streaming will disappear entirely over the next few years as it will become redundant.

### **Back to willingness to pay for music**

Even though vinyl sales still only account for 5% of the whole albums market, they are gaining importance as sources of income for record labels and musicians.

Jamie Osborne, the manager of Mercury said that there has been a cultural shift where people are willing to pay for music again, which is brilliant. Moreover, he confirmed that the margins on vinyl are huge, thus vinyl sales represent a significant source of revenue for his company.

The boost in vinyl sales can be considered as only a part of a general and diffused shift in the music industry back to turning a profit again.

Geoff Taylor, the chief executive of the BPI and the Brit Awards, reported that the growth in UK music consumption in 2016 was marked by the enormous rise in audio streaming, which has gone up by 500% since 2013, and relative resilience from physical formats. He also believes that this performance is indicative of the promise of a new era for music, where recorded music's investments in a digital future fuel compelling benefits for fans, artists and the entire music ecosystem at last.

### **Vinyl overpass digital**

What may be even more surprising is that 2016 was the first year that vinyl sales overpassed digital music ones. One reason that may have been accounting for this phenomenon is the deaths of some music giants such as David Bowie's, who became the bestselling vinyl artist of 2016, counting five albums in the top 30.

In a statistically recorded week in 2016 (first week of December 2016), vinyl sales hit £2.4m compared with the £2.1m obtained from digital music purchases, further proof that record shopping has gone mainstream.

The interest in buying a physical format of music on vinyl has experienced a resurgence in the past months. In December 2015, to make a comparison with 2016 data, the sale of vinyl albums reached £1.2m while digital sales were £4.4m. Vinyl has also experienced eight consecutive years of growth, despite almost becoming extinct around 2006.

Fig. 3.1.1.1 (source: Google images)



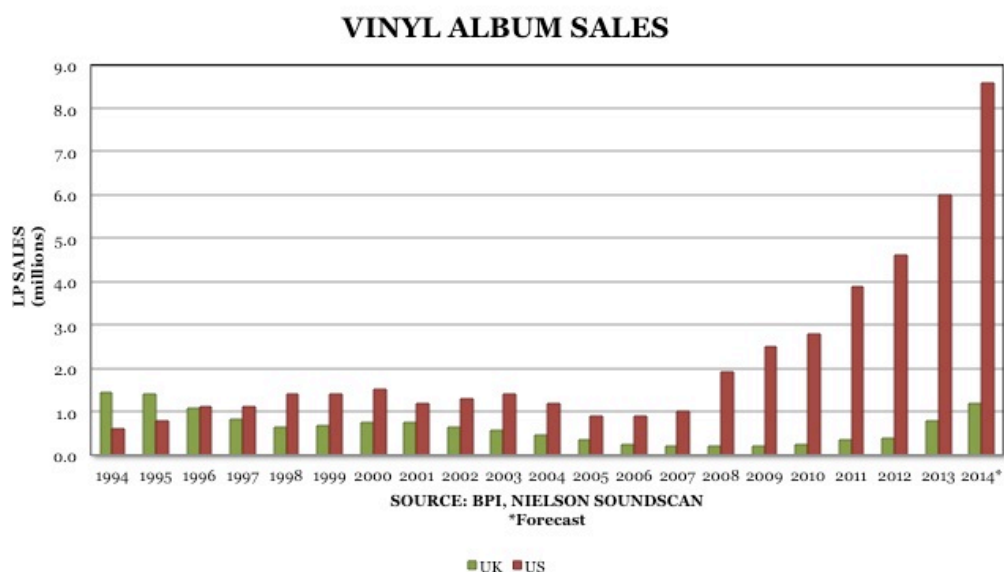
Kim Bayley, chief executive of the Entertainment Retailers Association, attributed the surge in part to the above cited number of places now selling records across the UK. As it has been already mentioned, there has been a significant increase in number of vinyl-only record retailers too, along with supermarkets such as Sainsbury's and Tesco and even high street interiors shop Tiger now distributing vinyl, making them so much more easily accessible. Moreover, Bayley stated vinyl had experienced a particular boost in the last weeks of December 2016 because it was becoming an increasingly popular choice for Christmas presents, that underlines the general trend towards reconsidering them at 360 degrees. The vast majority of releases are coming out in vinyl now confirms Bayley. While before it used to be that only heritage acts or niche albums would come out as a record, now everything does, such as pop albums, compilations, film soundtracks and all other genres. The top 10 records sold this week speak to the variety of people now buying vinyl. Kate Bush, Amy Winehouse and Busted are in the chart, alongside the Guardian of the Galaxy film soundtrack and Now That's What I Call Christmas compilation album. As a further confirmation of what has been stated above, Bayley added that they can count on a new generation buying vinyl, lots of teenagers and lots of people under 25, who now want to buy their favorite artists on vinyl and have something a bit more tangible, a bit more collectible. People have become keen to support their favorite artists by buying into that ownership concept. In fewer words, according to him it's very difficult to demonstrate your love of an artist if you don't have something to hold on to. Sean Forbes, who

manages record shop Rough Trade West in London, which has been selling vinyl since 1979, reported a further “massive increase” in people buying vinyl and that new racks had been put in all Rough Trade shops to meet demand. Now it’s everyone who comes in to buy it, from 10-year-olds to 90-year-olds, so they get the whole breadth, said Forbes. To better clarify the broad range of customer that can be addressed by vinyl, he reports that they now get a lot of people come in with their kids, and mum and dad want to start them off with a starter pack of good records. Therefore, it hasn’t changed completely. Naturally, he recognized that record companies were and still are noticeably taking advantage of the renewed interest in vinyl and hiking prices, saying that the mark-up on vinyl now is ridiculous. However, he said people were increasingly willing to spend up to £25 on a single record, and even more for a limited edition. Kate Bush’s triple-disc live album *Before the Dawn*, for instance, which was selling at Rough Trade for £65, had completely sold out in its shops within one day. Forbes admitted that the resurgence in people buying all types of music on record has been surprising for him, even though he welcomed it as a change from the “first adopter” who used to buy certain heritage albums as a memento rather than to really listen to them.

To conclude, he predicted that people will still be buying Pink Floyd *Dark Side of the Moon* on vinyl when we’ve all been dead a hundred years, as well as they are doing nowadays.

This statistic (Fig. n°3) displays the sales volume of LPs both in the United Kingdom (UK) and United States (USA) from 1994 to 2014, in million units. In 2014, more than 8.5M vinyl LPs were sold in the United States, compared to 1.2 million sales in the United Kingdom. From 2000, the lowest level of vinyl sales in both UK and US took place during 2005 and 2007, that was the peak of the digital revolution. The trend is clearly moving towards the return of vinyl as a protagonist in the nowadays competitive music world.

Fig. n° 3.1.2 (source: thevinylfactory.com)



## **Vinyl are not dead**

Vinyl records are forecasted to sell 40 million units in 2017, with sales estimated for almost \$1 billion for the first time this millennium. Such volume has not been thinkable since the peak of the industry in the 1980s. While explosive by today's standards, according to Deloitte, in its heyday ('81), total vinyl album sales surpassed 1 billion units.

Again, according to Deloitte, new vinyl records and revenue will experience a seventh consecutive year of double-digit growth in 2017. But there is still much to do since the potential market is much more larger and continually increasing. With broader music industry revenues projected to be around \$15 billion this year, vinyl will account for only 6%.

For Spalding Toddrick, director of music at the trailer production agency Mob Scene, there are infinite reasons why vinyl is superior to any other music listening format, but the most valuable are fidelity, romanticism and ritualistic nature of the experience, all of those have the characteristics of the Vintage experience. He argues that listening to vinyl is a physical act as long as it's an active choice to go to the rack and pull out a record from the sleeve and then flip the side to continue listening. It physically forces you to act and interact, contrary to playing a song playlist on Spotify.

Many of today's consumers just want to own something that they can hold in their hands, as it can be a book in the paper format rather than a digital one, or a vinyl instead of a song saved on your Youtube playlist.

## **The bridge between old and new: The vinyl emulator**

A recently released vintage product (2004), in the sub-industry of DJ equipment is the vinyl emulator, an artifact that allows a technological connection between the turntable (old technology) and some complementary products to compact disc players DJ. More precisely, the vinyl emulator allows the DJ to use the turntable as an interface for sending commands to the PC.

This is a DJ equipment made up of a special mixer and PC software that can be used to connect turntables with PCs, software and CDs. This product, which unlike a CDJ does not allow reading a CD, was developed by some historical companies such as Stanton, Numark, Rane and Torq for those DJs unwilling to adopt the new technology as they are still tied to the use of traditional turntables.

Back to the above discussed theory on vintage innovation, the vinyl emulator allows the use of both new and old technologies and products that meet the same need (music playback), also representing a complementary product of vinyl.

Within its sub-sector, however, the vinyl emulator is a product of extreme niche and therefore did not interrupt the general replacement process between CDJ and turntable, which was already widely advanced when this vintage product was launched on Market for the first time.

### **Future perspectives**

At this point the natural question that has to be asked is: will future generations still buy vinyl? According to all the new initiatives and business models that have been developed in the past months, the answer seems to be “YES”. There are growing subscription-model businesses such as “Vinyl me, please” which monthly delivers a new special edition vinyl album to your door. Another modernization on the classic industry is the annual Record Store Day (April 22 this year), which is hosted by local record labels and record stores to celebrate and sell vinyl. For those looking forward to really live the music, not just listening to it, yet experiencing it through all the 5 senses, vinyl provides a priceless experience. Although it could be said the exact same for CDs and cassettes, it seems they do not really carry the same sentimental weight. Vinyl records offer a nostalgic listening experience for all generations, whether it only was previously a favorite pastime, or a time capsule for those discovering it for the first time. In a time where everything is digital and almost inexistent, listening to a vinyl, touching it, looking at it while it rotates can be a nostalgic, fabulous experience.

### 3.2 The new Nokia 3310

#### **An astonishing groundswell of interest**

New Nokia 3310 (Fig. n°3) launch was the biggest surprise of this year's Mobile World Congress event. The global exhibition is where all the major manufacturers show off their latest flagship phones, and the retro 3310 stole the show playing the role of the absolute protagonist. Even though giants such as LG, Huawei, Motorola and BlackBerry all revealed their newest hi-tech devices, everyone wanted to know about Nokia's return to the world of phones.

According to Andrew Wilson, UK director of buying at Carphone Warehouse, there has been an astonishing groundswell of interest in the Nokia 3310 after the launch announcement of this reinvented classic. In fact, the news was followed by incredibly strong levels of pre-registrations at Carphone Warehouse, proving that it's not all hype and that consumers really want the new version of this successful historical masterpiece that has indelibly marked the history of phone industry.

Fig. n°3.2.1 (source: Google images)



The Nokia brand has also experienced a renewed interest from the audience thanks to the new launch. Following the announcement, searches for Nokia went up by 797 per cent, according to research from Captify, which also said the most popular features of the new 3310 are Snake, the camera and the battery life, all elements that made the first edition become that famous worldwide.

According to Dom Joseph, chief executive of Captify, people really did want to buy the product well ahead of its release, and at the time they were already starting to make decisions about which network they would use to do so.

### **Competiveness and threatens to modern market**

However, analysts have suggested that HMD, having a ten-year license to manufacture Nokia devices, should not be focusing exclusively on the 3310. In fact, the device could hinder the Finnish startup's ability to compete with Apple and Samsung. On the same line, the concentrated attention towards Nokia 3310 feature phone threatens to overshadow HMD's modern smartphones. Thus, HMD must avoid the Nokia brand being seen as a purely nostalgia brand, yet it should position itself as a modern and competent competitor for giants on the marketplace.

Back to Nokia 3310, it may be natural to wonder what made this revisited phone capture all this attention. Indeed, there is a quite simple answer. The new Nokia incorporates some features and characteristics that have disappeared from phones after the birth of the well-known smartphones. Those cited characteristics make this new phone sound very vintage. Moreover, it involves feelings that will provoke a profound sense of nostalgia among modern phone users.

If you want to sum up the new Nokia 3310, then inputting text is the best way to do so. That is a concept that counters the modern touchscreen, so that people can remember “the old way of doing things” and consequently desire to feel it back. Therefore, the return of the Nokia 3310 as a product name leans heavily on nostalgia, as many remember the ridiculously long-lasting battery, the first camera to always be available in people’s pockets, the portable music player that has nothing to do with the sophisticated iPod, and the ability to work efficiently even with minimal coverage.

### **Design and features**

In terms of design the new Nokia 3310 is not a simple replica of its predecessor, yet there is enough echo of that 2000 form to remind you of the old, faithful and indestructible communication tool. The new design is curvier, thinner and the screen, now color, is much larger, and there is a four-way cursor with a central button. The only appearance of the T9 keyboard makes costumers smile, as does the whole design that can be defined as “pleasant”. All the buttons are on the front fascia and there is no extra volume. It’s an updated design, but it clearly reminds the original with some new flourishes to take account of modern technology.



Furthermore, it has to be clarified that this is not a modern smartphone. Thus, it's still a feature phone. It is provided with a web browser, yet web technology has moved on.

2.5G data connectivity is also limiting given that mostly any new smartphone comes along with a 4G connectivity. To sum up its functioning, it just allows you to basic operations such as Facebook connection.

Another point to be addressed is Snakes, which was the game that most contributed to the success of the previous model. There is a game called Snakes on the new Nokia, but it's not like the 3310 original.

Finally, it can be said that when trying to resume history, while trying to improve and adapt it, maybe you risk losing the very sense of it.

### **Different markets and strategies**

As HMD is facing an engaging challenge, it can reasonably consider the BRIC countries as a market to be addressed. People in those countries are still transitioning from feature phones to smartphones and the new Nokia 3310 could represent a crucial step in that process.

It is the 'new' Nokia that is generating revenues for HMD right now, and it gives the Finnish start-up a financial inflow that will give it time to get to know the market and its dynamics, so that the company will be able to adapt itself and play a protagonist role into such a competitive and innovation-intensive marketplace.

For what concerns western markets it is a difficult task for the Nokia 3310 to gain large market shares. It's here that the nostalgia card has to be played heavily. For those who want 'just a phone' there is a good argument for a phone like the Nokia 3310, since it is not difficult to use, it's efficient in terms of battery and basic functions, and above all, it is reliable. It perfectly suits situations such as a multi-day outdoor music festival, a camping trip, a long drive, where you will probably just want to make some calls. The same argument can be deployed when you definitely need a phone that can reach a month of standby and 22 hours of talk time on a single charge, when you need a robust phone, or when you simply want to get away from software updates, notifications, and one-hour-lasting battery life. In all the above quoted cases, the new Nokia can represent a real and value-delivering solution, and so it has to be advertised and "sold" to potential customers. In fewer words, in all those cases it can be what you need.

## **What potential customers to address**

According to Counterpoint Research, the installed base of feature phones is almost 400 million and in the past few years, there has been an important jump in feature phone users switching to modern smartphones. However, in late 2015, there was a decline in the rate of growth of users upgrading to smartphones, which is actually a good news for Nokia 3310.

In order to better understand how the company wants to position its new product, it is useful to look at what Juha Sarvikas, HMD's chief product officer, described the phone at the launch in Barcelona. He described it as a "detox weekend phone". Thus, if youth cannot be seen as potential customers, the new Nokia 3310 might find clients in an audience that maybe needs digital detoxification. Digital detox refers to a period of time during which a person refrains from using electronic connecting devices such as smartphones and computers. It is seen as a potential opportunity to lower stress or focus on social, physical interaction.

## **The figures**

The retro darling 3310 has sold out in its first week, with Carphone Warehouse and Vodafone stating a "one to two week" wait for stocks to be replenished. Carphone Warehouse even said there was ten times more pre-registration interest for the Nokia 3310 than any other flagship devices out of MWC in the retailer's history.

## **The expected level of sales**

Some experts think nostalgia does not sell by itself in the technology industry. They state innovation is the only way forward, unless you cut the price. Several brands are dead, this market is brutal, they argue. If the average buyer is 20 years old, he or she is very unlikely to have any memory of this brand. Nostalgia is not a relevant concept in the mobile phone segment, they conclude.

Nevertheless, others are convinced by the opposite, believing that the memory of the old product, that comes along with its myths, would be enough to make the product sell, if targeted to a niche audience. This is the case, among all the others, of Sanjay Kapoor, telecom expert and chief executive of Airtel (India's largest telecom company). He believes nostalgia will be a strong selling point, thanks to the memory associated with it. Old world designs attract the relative niche within the market. The comparison it makes is launching a vintage car in the market, which suits quite well the concept. However, the revisited model is unlikely to find

takers among youth which swears by smartphones, and so became a “new old dominant design” for the entire market.

Nevertheless, available data so far are undisputedly positive. Besides the astonishing level of interest that has arisen towards the device, pre-registration flows were also incredibly intensive. As Warehouse and Vodafone stated, they experienced 10 times more pre-registration interest for the new 3310 than any other flagship devices out.

Perhaps the most important variable to be taken under control is the level of interest after that the “Nostalgia effect” will be disappeared, and how HDM will move in response to that. Unfortunately, we are not able to predict the future, thus we cannot do anything but seeing how the company will play its cards and, above all, whether the Nokia 3310 will be a success or a disappointing failure.

### 3.3 The Polaroid

#### What's left from the famous Polaroid

During its heyday in the 1970s, Polaroid had as much as \$2 billion in annual sales, which correspond to about \$12 Billion nowadays. Furthermore, it counted around 50,000 employees. Exactly like Apple today, it was the most admired consumer tech company, according to Christopher Bonanos's book *Instant: The Story of Polaroid*. However, the company paid the price of years of mismanagement that led to its collapse.

Florian "Doc" Kaps, an Austrian biologist, approached Polaroid in 2005 with an innovative marketing plan based on social media and the exploitation of e-commerce. Kaps began selling Polaroid film for more than twice its original price on his website "unsaleable.com", along with old Polaroid cameras he purchased and refurbished on EBay. After three years, when Polaroid announced its closure, Kaps collected \$204,000 to buy the plant's equipment and closed a deal with the landlord to take over the lease. Then he purchased Polaroid's remaining film stock for \$1 Million, in order to sell them to finance the renovation of the company at a total cost of €4 million. That operation, along with the project and the vision beyond and behind it, was named Impossible Project.

When Impossible Project released its first product the results were embarrassing. Sometimes a whole eight-picture pack of film would spit out of a camera at once. The photos took as long as an hour to develop, which is not very instant as it is supposed to be with an instant camera.

Finally, the company creates its own camera, the I-1, on sale at the price of \$299.

The I-1 puts together digital controls with analog photography. The camera's mechanics evoke Polaroid's legacy, but Smolokowski is eager to point out that the I-1 was not a Polaroid product. Until that time, his company made film working only in vintage Polaroid cameras. With the market for contemporary instant-film cameras quickly growing into a profitable niche for Japan's Fujifilm and others, the I-1 offered the first real chance to decouple Impossible Project's future from Polaroid's past.

Fig. n° 3.3.1: New and old Polaroids (source: Google images)



## **The industry renaissance**

Film has experienced a small yet significant renaissance over the recent years, led by Fujifilm and its colorful Instax camera. The Japanese company reports it sold 5 million cameras last year, that is an important result given the fact that the peak for Polaroid cameras sales was 13 million in the late 1970s. What may be surprising is that, differently from what it was shown in the Nokia 3310 case, here marketers for Instax target young consumers and highlight the fun, novelty factor. It's not nostalgic, It's a new thing for them, according to Manny Almeida, president of Fujifilm North America's imaging division.

Impossible Project sold 28,000 refurbished Polaroid cameras last year and more than a million film packs, according to Smolokowski. The film is faster: Black-and-white now develops in about 10 minutes, color in 40, compared to the a-hour-lasting development of the earliest products. However, the company needs to sell twice as much film as it does to be profitable, and it's not an easy obstacle to overcome since there is a limited supply of vintage cameras.

## **The trends**

Fujifilm's latest numbers show that digital camera sales are down on the whole, with steady sales of higher-end products. Despite that, Fuji's imaging solutions division experienced an increase in operating income up to 12.4 billion yen for the first half of the financial year, seeing a 2.7x improvement year-on-year. Surprisingly it credits the increase to strong sales of instant cameras and related products such as instant film.

In contrast to the strong sales of instant products, digital camera sales went down. The astonishing earnings Fujifilm makes with Instax are minding the economic gap left by the development costs of the X-series cameras. Without Instax, Fuji's imaging division would hardly be profitable. On the same line with what we saw in Canon and Sony recent reports, Fujifilm confirms that sales of its higher value X-series products were solid, as they address a market niche which remains stable in terms of demand. Within the ten months preceding November 2014 there was a 75% registered increase in the 18-25 demographic, with teenagers switching from digital cameras towards something more tangible. Again, according to Creed O'Hanlon, CEO of The Impossible Project, the volume of films sold doubled from May and November 2014, getting to refurbish more than 30,000 classic Polaroid cameras, with an expected x2 for the consequent year. According to Stephanie Sian Smith, a photographer who shoots for magazines *Vice* and *i-D*, Young people today are more nostalgic than ever and they love the old film look, hence the rise of Instagram. The cameras look cool and the pictures remind people of something from the past, resuming a concept that has been already discussed throughout this paper: nostalgia.

Furthermore, O’Hanlon agreed, added that the classic square white frame is probably the most known printed photographic format. A new generation of photographers are embracing it because they’re distinctive, one-off, and above all, tangible, as we have seen with the vinyl case.

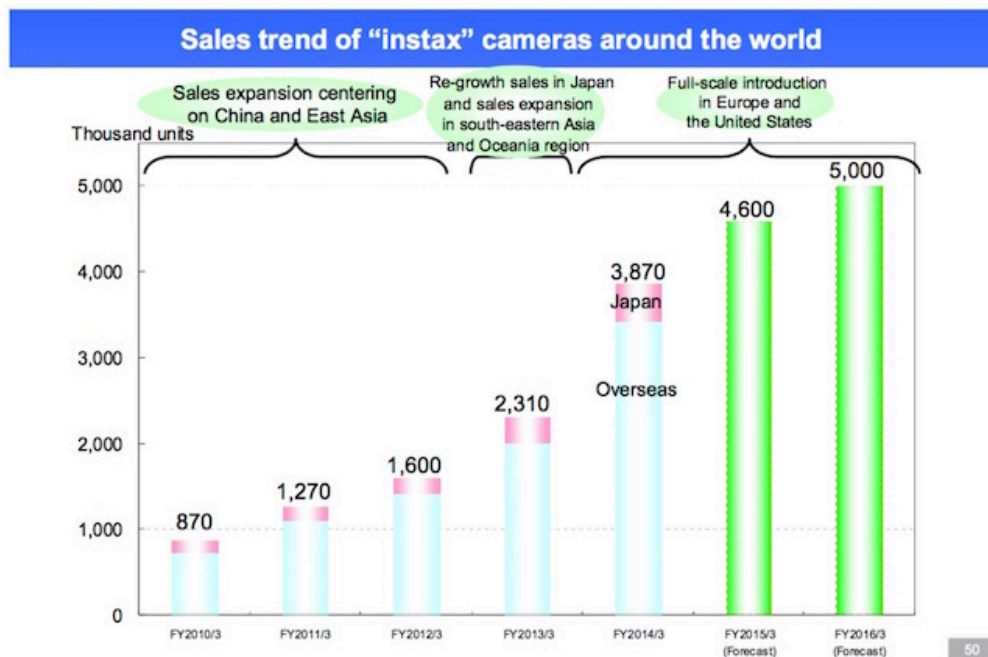
As It happens in almost every industry, a special part in the product diffusion is played by opinion leaders. A famous star that has played an important role in Instant resurrection is Taylor Swift. Her new album, *1989*, which sold 5.8 million copies in America in its first week, features Polaroid artwork, and each physical copy of the record comes with a set of imitation Polaroids.

### Sales volumes

The Wall Street Journal has collected the following data regarding sales of Instax Cameras over the past few years, also estimating future trends according to current figures:

- 100.000 Instax Cameras sold in 2004
- Expected 4,6 Million instant-film camera units sold in 2015 (compared to the 1.4 million digital cameras expected to be sold in 2015)
- More than 5 million instant-film cameras sales expected in 2016
- 30% Instax sales in Asia, 30% sales in USA, 15% sales in Europe

fig. n° 3.3.2 (source: imaging-resource.com)



No surprise that over the last few years, the overall camera ranking at AmazonUS is dominated by Fujifilm Instax Products.

## CONCLUSIONS

It is possible to draw important conclusions from the analysis carried throughout this paper.

First of all, the current way of thinking with regard to innovation, which is profoundly future-oriented, has been presented. As it was displayed, the well-known theories of product life cycle and dominant design, among all the others, present the end, or better the death, of a certain product and its related technology once a new and better developed product has entered the market causing a breakthrough.

Within such theories there is no space for not-peer products' coexistence, if not for the time it takes for the new technological paradigm to substitute the obsolete one.

Subsequently, the vintage innovation theory was discussed. This theory argues that product belonging to two different and competing technological paradigms may coexist steadily and co-operate for consumers' needs satisfaction. As it was discussed, such a coexistence can be possible only in presence of a certain factors such as: the compatibility between the two technologies, the proper infrastructures and, above all, the existence a market niche large enough to lead to an innovation acceleration on old and obsolete products, aiming at keeping them competitive. At the same time, such factors should be in charge of making firms (especially small and highly specialized ones) create economic value.

As we have also seen in this second chapter, the previously quoted market niches gather nostalgic users, which can be also considered as an important and significant means of innovation by firms, to quite the same extent of the more well-known lead users.

Once the possibility of implementing a vintage innovation strategy had been detailed in its benefits and risks, we moved on presenting three concrete business cases of companies that had the courage and the vision of launching, or better, re-launching successful products into the market. This way what had been previously discussed as a mere theoretical possibility, was displayed in real and tangible cases, with relevant data and figures collected from reliable sources.

For instance, with the first business case, the growing market for vinyl was displayed. Companies are thus approaching this vintage product more and more. Distributors such as Tesco even started to reserve a place for vinyl in their supermarkets. As a consequence of such important increase in consumers' interest and willingness to pay for tangible-format music, investing in a vintage innovation approach appears to be a choice that will pay off in the short as well as medium and long run, as profitability margins are also very high on LPs (especially if compared to digital music). The example of the successful vinyl emulator was provided to demonstrate how companies are following such innovative path. Secondly, new Nokia 3310's launch was presented. This case was surprising since in an era characterized by annual high-

tech innovations in the phone industry, a revisited “not-smart” phone stole the scene to the latest smart-phones, which are certainly way more performant. Again, it is a success due to a vintage innovation strategy. This choice made by the Finnish company that decided to purchase Nokia 3310’s rights was however very courageous and the success it had was not easily forecastable. This case was the proof that whenever a product becomes a “myth”, as it was the Nokia 3310 thanks to its legendary features such as snakes, its long-lasting battery and its indestructibility, it can survive to technological upgrades and still have a place within a market niche composed by nostalgic users. This case also provides the basis for a theoretical expansion of the vintage innovation described in literature so far. As it was quoted, this approach focuses on the co-operation of old, new and vintage products. Instead, the Nokia 3310 relaunch was just about resuming a vintage product and adding “modern” features such as internet connection and a color screen. However, it neither works together with last-generation physical technological products nor can it compete against modern smartphones.

Finally, Polaroid’s case gave the last positive feedback to this study. As it was shown, sales of Instax cameras have been growing exponentially over the past few years, compensating the decrease on digital camera sales. This was again very surprising since instax cameras were about to disappear from the market after the digital revolution that has taken place at the beginning of the current century.

From the joint analysis of the three case studies, considered from the point of view offered by the related literature that was reviewed, it seems to be possible to conclude that the vintage innovation is not a simple possibility, yet is a concrete reality that firms that want to distinguish themselves in a more and more competitive market might take into account. Therefore, to respond to the initial research question, it is possible to innovate considering not only the future, yet taking a glance at the past, at least whether small firms seek to achieve differentiation addressing a market niche.

For what concerns the limits of this paper, there is to say that literature is not very broad on vintage innovation. Furthermore, there are not available data on the products that have been studied in the three case that refer to nowadays figures. However, the trend until two to three years ago has been that coherent that we may assume it is still going as it was presented.

With regard to the impact of this paper on available research, it enriches the available number of studies on innovation, with a special frame on vintage innovation strategies. Moreover, what could be the most interesting part of this paper is the analysis of the three cases of products, belonging to three different industries (even though the three of them concern technology), in the light of such a scarcely debated topic as the vintage innovation is. In fact, all figures appear to confirm the importance of the discussed strategic approach.



In conclusion, I expect an increasing interest on this field of innovation in the incoming years, since nowadays markets and industries are characterized by an increasing competitiveness, that drive companies to seek new ways to be perceived as “different” from customers. In such a panorama, the vintage innovation can represent a valuable and rewarding choice for small and highly-specialized firms.

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