Voluntary Disclosure of the Business Model in Italian IPO Prospectuses: a Comparative Analysis

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ABSTRACT

How do companies to be listed actually deal with voluntary disclosure of their business model? Is it true that firms with greater knowledge-based resources and technological innovation endowments have a lower propensity to adopt fully open communication behaviors? This paper aims to identify the voluntary disclosure choices adopted by three Italian companies in their Initial Public Offering (IPO) prospectuses to investigate whether any differences may depend on the type of innovation underlying each business model. A series of interviews conducted with the top management allows to understand more deeply the business model of each company. Further, a content analysis is performed to compute a measure of disclosure and point out the strategic concepts and their relevance. The study provides evidence that companies with a business model based on technology-push innovation have a lower propensity to full disclosure of their intangible components, particularly of those mainly based on knowledge as these are also invisible. The study aims to make a contribution to the ongoing debate on business and financial reporting.

KEYWORDS: Voluntary Disclosure, Initial Public Offering (IPO), Business Model, Innovation, Intangible Resources.
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1. INTRODUCTION

In recent years, there has been a strong debate among business and financial reporting scholars on the role of mandatory financial reporting with respect to the emergent knowledge economy based on innovation. Many of them agree on the limits of such information in enabling the effective communication of the even more complex firm’s value creation mechanisms (Francis and Shipper, 1999; Lev and Zarowin, 1999), leading to emphasize the importance of voluntary disclosure of intangible resources since they are key drivers for product and process innovation (Leitner, 2011; Subramaniam and Youndt, 2005).

At the same time, another intense debate has taken place among strategy scholars about the relative importance of product and process innovation compared to business model innovation. More and more management scholars believe the latter to be at least as important as the more traditional product and process innovation (Govindarajan and Gupta, 2001; Markides, 1997). However this debate is quite recent and has been highlighted only in a marginal way in the business and financial reporting studies (ICAEW, 2010; Novak, 2011).

This study aims to fill this gap and claims a need to shift the focus of voluntary disclosure from the intellectual capital to the business model. The latter, in fact, allows us to understand a company’s intangible resources and how these interact with the other components of the business model in order to create value.

More precisely, this study aims to identify the business model voluntary disclosure choices made by three Italian manufacturing companies in Initial Public Offering (IPO)
prospectuses in order to investigate whether any differences may depend on the type of innovation underlying the firms’ business models.

The research is carried out on the narrative sections of the IPO prospectuses of three Italian companies. The analyzed companies are located in the North-east region of Italy and listed on Borsa Italiana Stock Exchange. They presents similarities with respect to the traditional variables that the accounting literature identifies as the main determinants of voluntary disclosure (Chavent et al. 2006) and to the timing and outcomes of the listing process. They rather differ in terms of business model composition and innovation type standing at the basis of their value creation.

We chose a case study as the preferred methodology to address the research questions given its ability to “illuminate” a decision or a set of decisions (Yin, 1984/2009). A series of in-depth interviews with the top management of the companies allows to better understand the companies’ mechanisms of value creation and their choices in terms of voluntary disclosure of the business model.

To investigate the level of disclosure a content analysis is performed by means of a text analysis software (T-LAB), which provide a measure of frequency and commonality for each strategic item disclosed in the IPO prospectus. Further, the software allows to recognize the concepts holding more associations within each other in order to ensure a most effective interpretation of the outcome and their relations with the other business model components.

The results shows that all companies put similar emphasis on the description of the customers, product and processes components of the business model. Particularly, all companies describe in detail the first two and adopt an outside-in strategic perspective. The companies placed rather different emphasis on the description of the suppliers and
especially the *resources* components. What appears differentiating most the voluntary disclosure choices of companies to be listed lies in the scant disclosure of resources (and their interactions with other components), whenever the latter are “invisible” rather than intangible. These findings suggest that the type of innovation underlying the business model of a company can significantly affect business model voluntary disclosure choices in the IPO setting.

The paper contributes to the financial and reporting literature in various ways. First, it adds to the ongoing debate on corporate reporting practices by focusing on a new object of inquiry, that is the business model, and investigating its disclosure. The existing strategic management literature concentrates on the role of the business model as a useful tool to explain how value is created, delivered and captured throughout the company’s life. This research indicates that the business model plays an even important role in allowing external actors to understand a company’s value; thus companies’ strategic communication should be shaped accordingly. Despite the number of research papers devoted to exploring business models over the last few years, structured research bridging the former with business and financial reporting topics is still rare.

Further, this study differs from previous literature in that it uses Italian manufacturing companies in the IPO setting. The Italian financial systems presents a set of unique characteristics, while the IPO is an interesting setting since it offers a unique opportunity to investigate the amount and the type of voluntary information given that the company has a full incentive to present itself in the best possible light in order to maximize the proceeds of the share issuance.

The paper is organized as follows: In the first section, voluntary disclosure, its implications, and the concept of the business model are illustrated through a review of
prior studies. Then we frame the research question and the theoretical propositions of the study. In the third section, we justify the choice of the companies and explain why we perform the analysis on the IPO documents. Then, the methodology is described. In the fourth section, we show and discuss the results. The last section is dedicated to concluding remarks, limitations and suggestions for further research.

2. LITERATURE REVIEW AND RESEARCH QUESTIONS

Since the early Nineties, several accounting associations and regulatory bodies put forward guidelines and proposals to improve the ability of the annual report’s narrative sections to communicate a company’s mechanisms of value creation (AICPA, 1994; CICA, 2001; FASB, 2001). Some research emphasizes the increasing relevance of narrative reporting, as well as the declining value of information conveyed within financial statements (Francis and Shipper, 1999). New intangibles such as staff competencies, customer relationships, models, and computer and administrative systems receive no recognition in the traditional financial and management reporting model.

The growing globalization of the markets, the rapidity of technological development - primarily of ICTs - and the evolution of consumers’ behavior (who are increasingly interested in the intangible components of the value proposition), push companies to innovate their products, processes, and especially their business models with greater frequency (Amit and Zott, 2012; Teece, 2010). Consequently, the value creation mechanisms become more complex and difficult to understand by only means of the rigid financial statements required by law (Francis and Shipper, 1999; Lev and
Zarowin, 1999). Preceding literature put a great deal of emphasis on the disclosure of intangible resources, recognizing the latter as key drivers for innovation.

In the business and financial reporting literature the intellectual capital disclosure has assumed a greater importance as an object of research, leading to the production of reports and empirical research on the topic with specific reference to the Italian context (Bozzolan et al. 2003; Upton, 2001; Zambon, 2003). The latter provide evidence of an increasing disclosure of intellectual capital made especially by high tech companies, whose mechanisms of value creation are largely based on intangible resources (Cordazzo, 2007). However, it is noticeable that even though disclosure of information by companies has been increasing, there are no clear signs that investors’ and analysts’ information demands have been met and an information gap still exists between companies and investors, meaning that disclosure contained in the financial reporting is still insufficient to allow a complete understanding of the value creation mechanisms (Bagnoli and Vedovato, 2004; Eccles et al. 2001).

Nielsen and Bukh (2011) suggest the need to shift the focus of disclosure from intellectual capital to the business model, in order to fill this gap. The business model, in fact, allows to understand a company’s intangible resources but also their interactions with the other components of the business model (product, processes…) in order to create value. In 2010 also the International Accounting Standards Board (IASB) recognized the role of the business model as a preeminent factor in classifying a company’s financial assets by issuing the International Financial Reporting Standard (IFRS) 09.

According to Nielsen and Bukh (2011), the above-mentioned gap is an understanding gap, which depends on company’s inability to effectively communicate
its own business model rather than on its will to retain strategically sensitive information.

However, research on voluntary disclosure claims that a listed company may have incentives, especially if operating in highly uncertain markets, to not disclose strategically “sensitive” information in order to avoid the risk of a competitive disadvantage, even though this would reduce information asymmetry and thus the cost of risk capital (Verrecchia, 2001). That is why a company’s business model might be regarded as the most strategically “sensitive” information to be communicated. One of the reason why a company might want to withhold information is concerned with the presence of a large base of intangible resources. Indeed, from a strategic perspective human, relational and structural capital, as part of the intangible base of resources, are used to create knowledge to enhance firm value.

This study therefore suggests that the information gap between companies and investors does not depend on the inability of the former to effectively describe their business models, rather it depends on their will to keep information private.

The study relies on the hypothesis that different types of innovation underlying a company’s business model give rise to differing levels of disclosure in IPO prospectuses. In particular, innovation can be regarded as relating to the following three classes (Verganti, 2008):

- Market-pull innovation, which comes from the analysis of users’ needs and the search for technologies that can satisfy them better. It implies an incremental improvement of existing products and services to meet existent customer needs (consolidation of existing markets and minimum level of uncertainty in development forecasts);
- Design-driven innovation, which acts on emotional and symbolic aspects and results in radically new meanings and languages of existing products or services to meet customers’ latent needs (reconfiguration of existing markets and average level of uncertainty in development forecasts);

- Technology-push innovation, which derives from the exploration of new patterns of technological opportunities and is characterized by radical improvement in product performance to generate non-existent customers’ needs (creation of new markets and maximum level of uncertainty in development forecasts).

The types of innovation mentioned above may be associated with different and increasing level of market uncertainty, that is why the descriptions of each business models might represent a strategically more “sensitive” information with respect to others. The study therefore suggests that companies adopting a business model based on market-pull, design-driven and technology-push innovation are progressively more reluctant to pursue full disclosure.

The trade-off between the opportunity to communicate the value creation mechanisms and the threat that this might attract the interest of competitors is even more critical during the listing process (Jenkinson and Ljungquist, 2001). Admission for listing on the stock exchange has a powerful meaning since companies to be listed do not have a publicly available track record of past financial performances. This contributes to explaining why a company needs to communicate its business model in the most effective way in its IPO prospectus.

The IPO prospectus plays an important role in fund-raising. Consequently, its content is more exposed to legal liabilities than is the annual report and it represents an additional incentive to full disclosure (Trueman, 1997). The listing process attracts
also competitors’ interest, since they could benefit from the information included in the IPO prospectus, thus acting against the company and causing competitive disadvantages (Healy and Palepu, 2001).

The requirements imposed by law and regulations allow some degree of discretion regarding the form of the document at the time it is issued, contributing to explain a further incentive to not disclose strategically “sensitive” information. For all these reasons the IPO prospectus represents a meaningful context for the recognition of costs and benefits associated with the voluntary disclosure of the business model (Beattie, 1999).

The study attempts to identify the business model voluntary disclosure choices of Italian manufacturing companies hypothesizing that different types of innovation pursued by a company might lead to different levels of disclosure of the business model in the IPO prospectus (given the degree of uncertainty to which each innovation type is associated).

This consideration leads to the following research questions: “How do manufacturing companies actually deal with voluntary disclosure of their business model given the trade-off between costs and benefits of communicating strategically sensitive information?”, and “How do different types of innovation underlying a company’s business model affect voluntary disclosure choices?”

The research questions can be reported in brief in the form of the following theoretical propositions, which are subject to further refinement:

P1: companies characterized by a business model based on technology-push innovation are less prone to full disclosure of the business model in the IPO prospectus compared to those based on market-pull and design-driven innovation;
P2: companies characterized by a business model based on market-pull innovation are more prone to full disclosure of the business model in the IPO prospectus compared to those based on technology-push and design-driven innovation;

P3: companies characterized by a business model based on design-driven innovation are more prone to full disclosure of the business model in the IPO prospectus compared to those based on technology-push innovation but less prone compared to those based on market-pull innovation.

Many empirical studies investigate the voluntary disclosure choices of companies in their annual reports and the related determinants, namely: industry, size, profitability, age, ownership, internationalization, type of management and country (Chavent et al. 2006). Fewer studies address the issue considering the IPO prospectus (Bukh et. al., 2002; Bukh et al. 2005; Cordazzo, 2007), and very few focus on voluntary disclosure choices of Italian companies in their annual reports (Bagnoli, 2005; Bagnoli and Mantovani, 2012). This study differs from previous literature in that it considers the business model as object of voluntary disclosure choices using Italian manufacturing companies in the IPO setting.

The lack of business and financial reporting studies on the business model as object of analysis is mostly likely due to the difficulties in defining the concept itself, given that it has only recently been explored in the strategic literature (Teece, 2010). However, several authors agree on the recognition of the business model’s fundamental components: suppliers, resources, processes, products and customers, emphasizing the need to investigate voluntary disclosure of the business model as a whole.
This paper contributes to fill an important gap in the literature of business and financial reporting borrowing ideas that have recently emerged in the strategic management literature.

3. RESEARCH DESIGN AND METHODOLOGY

To address the research questions we rely on a case study given its ability to “illuminate” a decision or a set of decisions (Yin, 1984/2009). The case study is the preferred methodology to build knowledge about the phenomenon because the existing contributions on voluntary disclosure of the business model in IPO prospectuses are still limited. The research method is also justified by the difficulty of isolating what we refer to as a new determinant of business model disclosure - the innovation underlying business models -, compared to other determinants of voluntary disclosure choices (sector, size, profitability, etc.). The case study, in fact, is useful for in-depth analysis of a real phenomenon when the boundaries between the latter and its context are not clear.

However, case study research suffers from a lack of rigor and an excess of bias. There is no assurance of either reliability or internal validity. That is why using a case study for anything more than exploratory purposes is risky (Bromley, 1986). In addition, this method does not provide experimental controls. Therefore it is assumed to not allow for “scientific distance”, it has no built-in corrective against the possible biases of the researcher who will tend to confirm his/her assumptions (Flyvbjerg, 2006). Critics also claim that the case study does not accurately measure independent and dependent variables (Stoecker, 1991).
Nonetheless, the study resorts to multiple case studies as they provide a logic of replication and each case is treated as a single experiment to confirm or reject inferences arising from others. The logic adopted is “theoretical” rather than “literal” (designed to obtain similar results) in order to obtain expected but mixed results (Yin, 1984/2009). The use of multiple case studies within a “theoretical” logic makes it possible to achieve more robust results and a level of generalization that a single case per se does not permit (Santos and Eisenhardt, 2009).

The research focuses on three manufacturing companies located in the North-east region of Italy and listed on Borsa Italiana Stock Exchange (STAR segment), namely: Eurotech, Nice and Zignago Vetro. The choice of manufacturing companies is related to the greater complexity of their business models compared to those of commercial or service companies, thus provides the best setting in order to carrying out the research.

The focus on the Italian context depends on the deep differences with respect to the U.S. context, where most of the studies on voluntary disclosure have been developed. Italian listed companies are characterized by the scarce presence of institutional investors within their ownership structures, as well as by the low percentage of shares traded on the market. In addition, the entire financial system presents a lower legal protection of investors, increasing competition for government securities and dominance of the banking system. Thus, the generalization of preceding results to the Italian financial context is still dubious (Francis et al. 2005).

We selected the STAR segment of the Italian Stock Exchange as it is reserved for mid-size companies with high transparency and communication requirements, as well as high liquidity and rules aligned to the international standards of corporate governance.
With respect to the type of innovation as a determinant of business model disclosure, the choice of the three companies is related to the deep differences characterizing their business models.

With respect to the IPO setting, the companies present similarities in terms of timing and results of the listing process. Eurotech, Nice and Zignago Vetro are the last north-east manufacturing companies to be listed on the STAR segment of the Italian Stock Exchange before the 2008 crisis. The crisis increased the level of uncertainty, thus modifying the voluntary disclosure strategies at least with reference to the external environment (Bagnoli, 2009). We therefore choose not to consider companies listed after 2008. With regard to the listing process outcomes, all the three companies stand out for the positive market reaction at the time of listing. The outcome translates into a positive bid-ask spread, as well as an increase in the share prices in the first fifteen days after listing (Schrand and Verrecchia, 2005).

As for the traditional variables that literature identifies as main determinants of voluntary disclosure choices, the three companies operate in the same industry - manufacturing -, but in different sub-industry. They are similar in size and level of profitability at the time of listing. Although they show clear differences in numerical terms, they all can be refer as to mid-size profitable companies.

Eurotech and Nice are founded in the same period, while Zignago Vetro shows some changes in the ownership structure due to a variation of its shareholders base in the same years. At the time of listing all three companies are characterized by a small ownership, and after IPO only Eurotech become a public company. Finally, the companies share the same geographical region (north-east of Italy), operate in an international context, and are led by powerful, charismatic leaders.
The analysis is carried out on IPO prospectus (1), with particular reference to its narrative sections. Managers use the latter to report past economic and financial results in order to foster investors’ confidence. The goal is to recount the past in order to create an expectation for the future (Gioia et al., 2002). They then describe the logic underlying the achievement of economic results and the business model, while avoiding the disclosure of strategically sensitive information. Hypotheses about future performances and the definition of a business plan seem to be implicitly left to analysts.

The study relies on a content analysis in order to compute a measure of disclosure, as it is widely used in the studies on voluntary disclosure (Guthrie et al., 2004). A text analysis software, T-LAB, is employed to identify the frequency of the concepts contained in the IPO prospectuses. Successively, a cluster analysis helps to group them by using a statistical criterion such as the Ward's agglomerative hierarchical method with Euclidean distance (Lancia, 2004). In this case, the procedure for choosing the pair of clusters to merge at each step is based on the optimal value of an objective function. We then rely on the dendrogram (tree structure representing progressive grouping) in order to make it possible the identification of each cluster, and cut it exactly at the point where it shows the highest jump.

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The outcome of this method reflects three main clusters, namely: Corporate Governance, Economic Value and Business Model. The analysis is then limited to the

(1) The Italian IPO prospectus consists of two sections preceded by the following paragraphs: "Definitions and Glossary", "Company risk factors" and "Summary Note". For our purpose of research, the analysis is limited to the first section, particularly to the first nineteen chapters that show a narrative structure.
concepts included in the “Business Model” cluster, and we observe their frequency and commonalities with respect to the other IPO prospectuses(2). Frequency serves a proxy for the relevance of each concept (Beattie and Thomson, 2007), while commonality is used as a measure of the non-specificity of each concept. As a result, the analysis focuses on two main concept categories: “frequent and common” and “frequent and exclusive”. T-LAB also allows to recognize the most associated concepts through the computation of the cosine coefficient(3). Further, we explore the “elementary contexts” function in order to attribute the right contextualization and meaning to each concept (4).

The frequent concepts are then linked to the business model components identified in the literature. For each concept the most associated ones are listed(5). We provide the reader with one table representing the “frequent and common” concepts and three different tables (one for each company) representing the “frequent and exclusive” ones and their associations (see tables 2, 3, 4 and 5).

Additional data are collected using interviews. From mid 2009 to late 2011 we conduct 30 interviews with the top management of the companies (typically with the chairman/founder and/or CEO)(6), in order to better understand the companies’ mechanisms of value creation and their choices in terms of voluntary disclosure of the business model. The interviews are structured around a set of questions aimed at

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(2) Concepts with a frequency higher than the average of the cluster to which they belong are defined as “frequent”. Concepts that are present in at least two IPO prospectuses are defined as “common”.

(3) We considered only the concepts that show an association coefficient greater than 20%.

(4) These represent part of the text corresponding to one or more sentences in which the presence of a concept is detected. Their analysis allows us to avoid, for example, confusing nouns (i.e. “prodotto”/”product”) with verb forms (i.e. “prodotto”/”produced”).

(5) The associated concepts are represented in each table following a decreasing order of the value of the association coefficient. We use bold to highlight those concepts considered as highly frequent, (i.e. showing a frequency value at least equal to 35). We then use capital letters for those concepts previously identified as “common and frequent” and “frequent and exclusive”.

(6) The 30 interviews are divided as follows: 5 with the Chairman and MD of Eurotech, 3 with the CFO and 3 with the Investor Relator; 5 with the Chairman and MD of Nice and 3 with the CFO; 5 with the Chairman of Zignago Vetro, 3 with the MD and 3 with the CFO and Investor Relator.
identifying the company’s business model, its fundamental components, and the interactions among the latter (see Appendix A).

We adopt the open-question technique to leave each party free to express and enrich their response with details. This allows us to grasp all the subjective interpretations. Each interview lasts on average two hours and respondents generally adopt a similar level of depth and precision in dealing with the various issues. The results are explained by means of a graphic format to make them easier to understand, and summarized as follows.

The three companies’ business models are respectively based on: technology-push innovation (Eurotech), design-driven innovation (Nice) and market-pull innovation (Zignago Vetro) (7). Eurotech operates in the business-to-business sector. It designs, develops and commercializes miniaturized and high-power computers used in the defense, transportation and medical industries. Its mission is to foster the integration of technologies in everyday life making them even more pervasive. The company generates customers’ non-existent needs through the creation of new product features. Its vision is about achieving growth by upgrading from the simple production of components to that of “ready to use” products. The company’s production model is “fabless” as it is characterized by the complete outsourcing of production. As a result the sale price is related to the value perceived by customers, thus highlighting the importance of the intangible component of services. For Roberto Siagri, President of Eurotech: “... the great secret of the knowledge economy is that the added value of a

(7) In order to make the reader catch the companies’ business models more intuitively, these are graphically represented by an isosceles trapezoid formed by three equilateral triangles. At the top of the left triangle are the inside-out strategic perspective components (i.e. suppliers, resources and processes). At the top instead of the right triangle are the outside-in strategic perspective components (i.e. customers, products and processes). The central triangle is representative of the “economic value” created. See Figures 1, 2 and 3.
product consists of a service component that you are able to identify while your competitors are not”. Technology-push innovation is the key driver for the company’s success and business growth, and gives rise to the strong interaction with the research world in order to develop radically new technological products.

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Nice operates in the business-to-business sector. It designs, develops and distributes integrated automation systems for gates, roller shutters, garages, etc. Its mission is to simplify everyday movements through the use of intelligent and easy automation systems. It creates new meanings for existing products to meet customers’ latent needs. Lauro Buoro, President of Nice, says: “... we produce electronic devices which can become symbols or luxury objects. For instance, we produce some radio devices by using fashion materials such as gold or silver”. The company’s vision is to foster geographical expansion and growth through the penetration of young markets. As in the case of Eurotech, the production model is “fables”. It makes it possible to combine flexibility and efficiency while maintaining constant supervision of the critical phases of the value chain. Design-driven innovation is the key driver for success and business growth. The company’s business model gives rise to a huge investment in the research and development of new materials, shapes and colors in order to create radically new products or improve existing ones (in their technological, aesthetic and ergonomic aspects). As Lauro Buoro says: “We believe in the diversity of ideas to create innovation”.

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INSERT FIGURE 2 ABOUT HERE
Zignago Vetro operates in the business-to-business sector. It designs, develops, produces and sells high quality glass containers used in the food, beverages, cosmetics and perfumery industries. Its mission is to promptly satisfy customers’ needs by offering high quality, innovative and personalized products. The company pursues an incremental improvement of existing product performance to meet customer needs. Its vision is related to growth in the glass industry while maintaining a high level of profitability. The production model operates continuously and is characterized by flexibility in order to meet customers’ requests in an efficient and effective way. For Luca Marzotto, President of Zignago Holding: “... there still exists a market that doesn’t care about the production quantity, instead it is interested in personalized products. Thus, we must be more flexible and accept smaller and changing batches, being at the same time very efficient. No other competitors compete on this idea, since they have larger size and the industry is highly concentrated”. Market-pull innovation is the key driver for success and business growth. The company recognizes the importance of combining quality, innovation, operational efficiency and flexibility to meet market niches demand.

The three companies’ business models satisfy markets characterized by different levels of uncertainty. The latter, indeed, affects the ability to forecast market developments and influence the magnitude of proprietary costs for each company. Zignago Vetro shows the lowest degree of uncertainty. Uncertainty increases in the case of Nice, and it is highest for Eurotech, which creates new markets with high
potential growth rates. For Roberto Siagri: “...before the market exists there is information asymmetry ... afterwards, all producers will offer the same products”.

4. RESULTS AND DISCUSSION

The content-analysis leads to the identification of a set of “frequent and common” concepts which can be interpreted as the fundamental components of every business model.

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The presence and description of these concepts appear to be necessary to all the three companies. The concepts are: industry, market, customer, product, development, and with a lower level of frequency: commercial, industrial, system, internal, manufacturing, production.

The high frequency and degree of association between industry and market, between customer and product and among market, product and development, highlight the importance attributed by all the three companies to the dynamics of the industry, in order to create value for customers through an appropriate product offering.

Customer and product represent the key components of the business processes, as shown by the high degree of association between: customer and commercial; commercial and development; commercial and industrial; product, production and manufacturing.

The two concepts system and internal are related to the presence of an internal auditing system that is required by accounting regulations for each company to be listed. Among at the “frequent and common” concepts, those linked to suppliers and
resources are very few. This confirms the adoption of an outside-in strategic perspective, which leads to neglect the description of the distinctive resources owned by a company when describing its business model.

The analysis points out the existence of a set of “frequent and exclusive” concepts for each company. The latter can be interpreted as the fundamental components of a business model, whose presence and description is critical only to one of the companies.

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Eurotech’s “frequent and exclusive” concepts are mostly attributable to the product component of the business model. Among the most frequent and strongly associated concepts we find: hpc, computer, nanoPC, solution and technological, which refer respectively to the two types of products, as well as to the upgrading that the company is currently engaged in from mere producer of goods to that of ready-to-use solutions.

The two concepts capacity and computation refer to the product’s performance. Finally, software and modules identify product components.

The only exceptions are the concepts: institute, projects and research. The latter are related respectively to the suppliers and processes components. Their importance comes from Eurotech being defined in its IPO prospectus as a “factory of ideas” focused on research projects through partnerships with universities and research centers, which act both as suppliers and customers.

For Roberto Siagri, President of the Group: “The partnership has to be made with suppliers and customers... Nowadays customer relations are essential, unless the product is a commodity. But if customers don’t want a long-term relationship we tend
to reject them... Indeed, I do not believe that those customers are the right ones for our type of business”.

Within the category of “frequent and exclusive” concepts any reference to the resources component is absent, as to demonstrate that Eurotech devotes very little attention to their disclosure and confirm company’s propensity to an outside-in strategic perspective.

Although the key driver of the company’s success is the technology-push innovation which is based on research and development of new scientific knowledge, there are no references to human capital except for the relational capital as shown by the association between collaboration and projects.

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As far as Nice is concerned, the “frequent and exclusive” concepts are mostly attributable to the product component, but also to the processes one.

Among the most frequent and strongly associated concepts we find: line, systems and automation, which recall the product types and lines; electronic, which identifies the main component of the product. Finally, design, technological and innovation, are related to the tangible and intangible outcome of the design process.

Also the concepts: distribution, marketing, supply and manufacturing, are attributable to the processes component. The strategic goal of the company is indeed to strengthen the relationship with customers in order to spread and increase brand awareness. The concept brand can thus be interpreted either as an attribute of the product or as a distinctive resource.
Nice uses product design as its main communication tool. This is shown by the high degree of association between the concepts marketing and communication, marketing and design, marketing and brand.

Less relevance is reserved to some concepts related to the processes component (as for safety and quality), to the product component (as for items, housing, family and quality) and to the customer component (as for International and Europe).

The only concept that can be related to the suppliers component is subcontractors, which recalls the main role of partnerships in outsourcing for Nice. This result confirms company’s propensity to adopt an outside-in strategic perspective.

Although, the key driver of the company’s success is a design-driven innovation based on intangible resources (such as design), there are no references to human and relational capital. The only exception is the concept brand, which refers to the structural capital.

INSERT TABLE 5 ABOUT HERE

As far as Zignago Vetro is concerned, the “frequent and exclusive” concepts are mostly attributable to the components product and processes, but also to customers and resources.

Among the most frequent and strongly associated concepts we find: cosmetics and perfumery, which identify the markets served by the company. The concepts line, service, and bottle, identify product types and lines. Finally, quality and shape refer to the tangible and intangible performances of the product.

Also the concepts: line, capacity, safety and process, are attributable to the processes component and are characterized by a high degree of association with each
other. The concepts: equipment, factory, furnace and work are instead related to the resources component, but only the last three are characterized by a high degree of association with each other as they are tangible resources. The high degree of association between quality and process, and between process and equipment, highlights the important role of tangible resources in the development of the production cycle. In addition, the high degree of association between equipment and regulation, between work and safety, safety and regulation, emphasizes the company’s focus on worker safety so as to reduce the associated risks and comply with current laws and regulations.

The references to human and structural capital, although limited to supply contracts, show that the company’s propensity to adopt an outside-in strategic perspective is combined with an inside-out one, despite the fact that the key driver of success is a market-pull innovation model.

The research shows that all companies put similar emphasis on the disclosure of some of the business model components identified in the strategic literature, namely: customers, product and processes. Particularly, all companies describe in detail the first two and adopt an outside-in strategic perspective.

The companies placed rather different emphasis on the description of the suppliers and especially the resources components.

Eurotech does not provide a description of its resources even though its business model is based on breakthrough technology-push innovation and characterized by the importance of scientific knowledge. More precisely, we refer to the knowledge about new technologies which allows product performance radical improvement or the introduction of new product features. This choice might be interpreted in the light of a
further distinction within the company’s resource base. Indeed Eurotech owns resources which are not only intangible but even “invisible”, both to the financial and competitive market.

Nice does not provide a description of its resources either, even though its business model is based on design-driven innovation and is therefore characterized by the importance of human knowledge. We refer to the knowledge related to new social behaviors which lead to the radical change or new creation of product meanings. Nice limits its disclosure to the discussion of “visible” intangible resources, even though these are not reported in the financial statements imposed by law (e.g. brand), and to the “visible” effects deriving from the exploitation of these resources (e.g. the design of the products).

Conversely, Zignago Vetro fully describes its resources. This is due to the fact that its business model is based on market-pull innovation, and therefore characterized by the preeminent role of tangible and “visible” resources, which are clearly reported in the financial statements imposed by law (e.g. equipment, including the furnaces for glass).

5. CONCLUSION

The study aims at identifying the voluntary disclosure choices of the business models made by three Italian companies - Eurotech, Nice and Zignago Vetro - in their IPO prospectuses to investigate whether any differences may depend on the type of innovation underlying each business model.

Assuming that differing types of innovation give rise to likewise differing level of uncertainty in the markets, the results suggest that the type of innovation underlying
the business model of a company significantly affects its voluntary disclosure choices in the IPO prospectus. More precisely, the trade-off between costs and benefits arising from communicating strategically “sensitive” information to the financial market confirms our initial research propositions. Moreover, what appears to differentiate most voluntary disclosure choices of companies to be listed lies in the low disclosure of resources (and their possible interactions with other components) when these are “invisible” rather than only intangible.

The results partially contradict previous findings pointing out a higher level of voluntary disclosure of intangible resources in the IPO prospectuses of Italian companies operating in technology-push innovation industry (IT, biotechnology, etc.) (Bukh et al., 2001). Nevertheless the different result may depend on the research method that has been used, being the previous empirical studies. Preceding research generally uses quantitative methods, allowing a bigger sample to be considered, but at the same time limiting the in-depth analysis of the companies, and thus the recognition of strategically “sensitive” information to be communicated.

The presence of invisible resources makes a business model more difficult to understand by only means of the rigid financial statements imposed by law, or by simply analyzing company products (as they are the most visible component).

The difficulty in disentangle the composition of the resources component of a business model suggests the need of a deeper level of detail with respect to the narrative sections of the IPO prospectus, in order to make investors fully aware of the company’ value and companies able to benefit from the related positive effects (reduce information asymmetry, reduced cost of risk capital, increased share performance...).
The study then suggests the need to address the issue of voluntary disclosure of the business model by first distinguishing “visible” intangible resources (not necessarily in the rigid financial statements imposed law) from those that are “invisible” (both to financial and competitive markets). This can be fostered by the active role of professional associations and regulatory bodies in implementing new rules and frameworks aimed at improving the ability of IPO prospectuses to effectively communicate a company’s value and resources. To this end, a greater focus on the classification schemes that are emerging from the strategic literature seems necessary.

The importance of these results is strengthened by a series of phenomena (such as globalization of markets, speed and complexity of technological development, changes in consumer behavior, etc..) which will increase the importance of invisible resources within the business model of a growing number of companies, thus making even stronger the role of technology-push and design-driven innovation, and consequently making their disclosure more critical.

The study has a major limitation in the generalization of results since it uses Italian companies. However, Bukh et al. (2002) did not detect significant differences in the voluntary disclosure of intangible components in IPO prospectuses of companies from different national contexts.

Concerning the use of the case study method, this clearly represents the main weakness of the research as it excludes whichever generalization, but at the same time also its main strength since it allows for a greater level of detail in the study of the companies.

As a future objective we suggest expanding our analysis to a larger and diversified sample of companies to be listed, belonging both to the national and international
context. We further suggest the implementation of a quantitative method of research consistent with the traditional research in business and financial reporting.

APPENDIX A - In-depth interview on business model scheme

COMPANY: ____________________

REPLIER:  □ PRESIDENT  □ CEO  □ CFO  □ OTHER___________

DATE: ______________

MISSION AND VISION
- What is the purpose for which your company exist?
- Which are your assumptions about the dynamics of the external environment?
- Which values characterized your vision?
- Do you adopt a strategy focused towards productivity (efficiency gains by reducing direct and indirect costs) or growth (promote revenue growth with appropriate policies)?
- What are your choices at the corporate level?
- What is your business perspective in the medium-long term? What are your ambitions for the future?

ECONOMIC VALUE
- What about your current economic and financial performance?
- How are your costs structured? Are them fixed or variable?
- How do you set the prices?
- How would you described your revenue model?

SUPPLIERS
- Who are your key suppliers?
- What kind of relationship do you have with them? Do you have bargaining power?
- Are you integrated with your key suppliers?
- Which resources and core competencies do you acquired from them?
- To what extent are your mission and goals aligned with those of your suppliers/partners?
- What kind of competitive advantage the relationship with suppliers generate?
- Do the supply channels allow you to gather the resources you need when required?

RESOURCES
- What kind of resources do you possess? (Tangible: financial, physical, or intangible: relational capital, reputational, structural, human …)
- Do the resources used belong to your own or to external parties?
- How well do they complement and support each other?
- To what extent the core competencies allow you to offer benefits to the buyers?
- How unique is your resource base? And how difficult is it for competitors to imitate it?

PROCESSES
- Which are the main processes that characterize your company? (Production, distribution …)
- Does your industry include companies that enjoy significant cost advantages deriving from their experience in performing some activities?
- Which are your most critical processes (the processes that create more value for customers and have a high degree of specialization)?

PRODUCT
- What kind of product do you offer? (commodity, good, service, experience …)
- How do you characterize your value proposition? (Price, reliability, availability, performance, quality, technology, safety, image, style, customization …)
- Is your product a standard one?
- What architecture does your product have? And how is it designed?
- What is the final destination of your product?
- What is the role of each of your products in the range offer?
- What is the level of financial feasibility of each of your products?
- Which factors affect competition for substitute products?
- How important are R & D activity and product innovation? And what is the role of technological progress within your industry?

CUSTOMERS
- What value or benefit do you distribute to customers?
- What is your target market? Is it segmented? And which are the segmentation variables that you use?
- What is the rate of growth of each market segment?
- Do some buyers have bargaining power due to a high volume of purchase?
- What kind of relationships do you establish with customers? (Price, benefit offered, confidence, know-how possessed ...)
- Which communication channels do you use?
- Which distribution channels do you use? Do you have a strong network of distributors and dealers?

References


**FIGURE 1** - The business model of “Eurotech”

**FIGURE 2** - The business model of “Nice”
FIGURE 3 - The business model of “Zignago Vetro”

![Diagram of business model]

FIGURE 4 - The dendograms

**Eurotech**

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Zignago Vetro
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Table 1 shows that several authors investigated the business model in the strategic literature. Almost all of them agree on the recognition of the business model’s fundamental components, namely: suppliers, resources, processes, products and customers.
Table 2 shows the set of “frequent and common” concepts which can be interpreted as the fundamental components of the business model. Concepts with a frequency higher than the average of the cluster to which they belong are defined as “frequent”. Concepts that are present in at least two IPO prospectuses are defined as “common”. The table indicates the frequency of each concept for the three companies (freq E, freq. N, freq. Z) and the most associated concepts (ass.>0.20).
Table 3 shows the set of “frequent and exclusive” concepts of Eurotech, their frequency in brackets, the most associated concepts and the relative coefficient of association. The concepts considered as highly frequent (i.e. showing a frequency value at least equal to 35) are highlighted in bold. There are no “frequent and exclusive” concepts belonging to the resources and processes components.
### Table 4 - “Frequent and exclusive” concepts, Nice

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Table 4 shows the set of “frequent and exclusive” concepts of Nice, their frequency in brackets, the most associated concepts and the relative coefficient of association. The concepts considered as highly frequent (i.e. showing a frequency value at least equal to 35) are highlighted in bold. The majority of the concepts belong to the processes and product components.
Table 5 shows the set of “frequent and exclusive” concepts of Zignago Vetro, their frequency in brackets, the most associated concepts and the relative coefficient of association. The concepts considered as highly frequent (i.e. showing a frequency value at least equal to 35) are highlighted in bold. The concepts disclosed belong to all the five components of the business model.