

## PARADIGM SHIFT FROM "BUSINESS MODEL" TO "ENTREPRENEURIAL MODEL"

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### ABSTRACT

*Academic and non-academic literature, after exploiting the term "business model", increasingly make referral to "entrepreneurial models" or "entrepreneurial business models". Besides frequent confusion and alternation of terms, there are several papers stressing "entrepreneurial models" as distinctive concepts from "business models". The phrase "entrepreneurial model" nevertheless still lacks a formal definition. This paper presents a synthesis of the recent literature available in journals indexed in international databases of mainstream publications about business models and entrepreneurial models. After critically analysing common and divergent features of business models and entrepreneurial models, the study identifies and presents the key elements defining entrepreneurial models: innovation and technology, financing solutions, qualitative human resources, strategic partnerships and a social mission, interconnected through the governance structure implemented. By analysing these elements as well as the interaction between them, it attempts to generate a comprehensive definition of the concept.*

**KEYWORDS:** *Business Model, Entrepreneurial Business Model, Entrepreneurial Model.*

**JEL CLASSIFICATION:** *M10, M13, M15, M21.*

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### 1. INTRODUCTION

The phrase "entrepreneurial model" is relatively frequently used by media. A simple search using the Google search engine generates 129,000 results for "entrepreneurial model" and 43,400 results for "entrepreneurial business model". However, the literature does not present an unanimously accepted definition of the concept, and sources use this random phrase by giving it different meanings. By performing an analysis of current academic publications, we see that the expression "entrepreneurial (business) model" is present in 22 article titles starting in the year 1989, 94 article abstracts since 1968, and 1495 articles since 1965. Analysing the meaning these articles assign to the entrepreneurial model, we distinguish the following trends:

- the expression "entrepreneurial (business) model" is often used in connection with the academic sector;
- entrepreneurial models are often perceived as business models developed in small innovative businesses;
- the expression "entrepreneurial (business) model" is often used to describe the business model of social entrepreneurial organisations;
- the entrepreneurial model often refers to corporate governance. Some authors speak about the "entrepreneurial business model" referring to companies that although they have grown exponentially, are still governed centrally, similar to start-ups. Others give the phrase a diametrically opposed meaning, as a model involving the delegation of the decision-making power from the mother company's board to the management of divisions and subsidiaries.

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The IT domain and its development underpinned the development of the "business model" and "entrepreneurial model" concepts. Companies launched by highly innovative, publicly-funded young people gave birth to the concept of entrepreneurial business model, which became very popular in the 1990s (DaSilva & Turkman, 2013; Engelhardt, 2004). The "entrepreneurial (business) model" concept is also often associated with universities. Robinson is among the pioneers of the university reorganisation theory following an entrepreneurial model (Robinson, 1992).

A decade later, Meek and Clark and Bruno-Jofre resurrected the idea (Clark & Bruno-Jofre, 2000). Meek uses the phrase "university entrepreneurial model" in his attempt to demonstrate that maintaining curricular diversity in the university education system is incompatible with addressing university education as a good in a free market (guided by the invisible hand). He associates the university entrepreneurial model with the following key words: educational property; educational enterprise; entrepreneurial approaches to education; educational services; projects, packages, sponsors, goods and consumers; value-added education; the user chooses and pays. The entrepreneurial model refers to the particularity of how knowledge is generated based on technological (digital) and telecommunication development (Meek, 2000).

Rappaport reiterates the idea of encouraging entrepreneurship in higher education units by detailing it. He explains the need to create a university framework that allows and encourages the entrepreneurial activity of academic and teaching staff in universities as well as students (Rappaport, 2003) and uses the phrase "entrepreneurial model" in the title of his article to expose this idea. Another use of the phrase refers to the introduction of electronic courses at MIT ("MIT rejects entrepreneurial model," 2001). In both cases, the syntax appears only in the title of the article and is no longer present in the later text. The lack of other references to the term "entrepreneurial model" in the actual paper indicates a potential arbitrary use of the term.

Another author who addresses this topic is Hyatt, who emphasises the close link between the development of university education towards an entrepreneurial model and the need for financial resources faced by the education system (Hyatt, 2007). He also notes that this development is also based on the desire of potential students to be involved in private-funded research projects during their studies.

Mets defines the main features of the entrepreneurial model in education as being (Mets, 2010):

- the creation and implementation of new transferable knowledge, and
- the actors' behaviour in this process.

These relate directly to the issue of funding research and development, inventions and property rights to patents. The author does not consider patenting itself as evidence of entrepreneurial behaviour of the university, but this is one of the first steps towards implementing new knowledge created in the business environment.

Lightcap is also among those who develop the idea of organising universities on an entrepreneurial model with a case study (Lightcap, 2014). The study analyses a model of university self-government (entrepreneurial model) based on increased stakeholder involvement and instrumentalisation of competition for students and resources between departments and between universities in determining curricular and investment priorities. The approach presents the relationship between the entrepreneurial model for the promulgation of the neoliberal ideology of institutional reorganisation and the role that education plays in democratic politics.

Various authors use the entrepreneurial model syntax to describe the business models of social entrepreneurial organisations. Thus, Mair and Schoen make a comparative analysis of the entrepreneurial models approached by such organisations in Bangladesh, Egypt and Spain, analysing how these organisations succeed in generating economic and social added value (Mair & Schoen, 2007).

The Bill and Melinda Gates Foundation is also a good example in the context of social entrepreneurship. Hopkins draws attention to the Foundation's entrepreneurial model with more than 240 employees identifying specific issues such as the fight against HIV and then designing of a

strategy based on scientific research and funding grounded on income from technological advances (Hopkins, 2006). According to Bill Gates, the main component of the adopted entrepreneurial business model is "philanthropy itself and how it works". Two major points of differentiation from models adopted by other foundations are the funding source and research and development as integrated activities of the organisation (most foundations use funds to facilitate the distribution of already developed drugs. This can only be achieved through strategic partnerships with pharmaceutical companies that, in another context, would not address low-potential research topics such as the malaria vaccine, a disease that kills more than 2,000 children in Africa daily.

Gradeless uses the term "entrepreneurial model" in the description of a case study of a dental office run by two doctors. The "entrepreneurial model" of this particular case study refers to an example of a good entrepreneurial initiative (Gradeless, 2007). Another case study in the medical sector is presented by Muehrcke, who uses the syntax of entrepreneurial model referring to the example to follow but also as a synonym for business model (Muehrcke, 2009). He points out in his article that innovation starts from the hospital's mission. The whole concept of the business revolves around a healthy lifestyle and meeting the needs of the target audience. The hospital addresses a policy of attracting the community into its facilities and thus constantly creating new potential clients (Healthy people who have a "health coach" at the hospital and are accustomed to attending the hospital to shop, eat, work, or other social events and therefore will probably consider hospital services in case of health problems).

A number of articles use the phrase "entrepreneurial model" to define the entrepreneurial activity of some regions or their framework for the development of entrepreneurial activity. This is how we can read, for example, about the Larimer region in the US, which has organised its communal services in an entrepreneurial model - in this case the entrepreneurial model defining an economic activity based on demand and supply (Larimer Commissioners approve ground-breaking entrepreneurial model, 2012). Other authors analysed the regions Shanghai (Xu, 2011) and Wenzhou (Walcott, 2007). Wenzhou is given as an example of "bottom-up" entrepreneurial self-development, facilitated by a new financing model that integrates the three previous economic experimentation periods of the region. The entrepreneurial model refers to the example that the region can represent for other metropolitan areas in China.

Yu presents Hong Kong as an environment conducive to the development of adaptive entrepreneurship listing some of the key features of companies' entrepreneurial models which are active here (Yu, 2000):

- implementation of guerrilla strategy,
- use of imitation and commercial arbitration,
- the ability to exploit small profit margins in order to survive global competition.

Rothbart uses the phrase "entrepreneurial model" referring to the corporative (intra-corporate) entrepreneurship model adopted by the British Petroleum Group (Rothbart, 1990), idea followed by See (1995) and ten years later by Stokes in Entrepreneurship (Stokes, 2010).

Hulet uses the term "entrepreneurial model" to describe how some active organisations are working against pesticide use in yards and gardens. According to this author, organisations like "Guelph Environment Network" or GEN, do not aim to create large organisations with complex structures and decision-making processes in the group. They opt for a "go for it" entrepreneurial model that they promote to the public open to such approaches - which is, according to Hulet, very numerous (Hulet, 2001).

Hotch uses the phrase referring directly to the governance of the MRV laser technology company (Hotch, 2000). The company in question operates, according to the author, although it has nearly 1,000 employees like a start-up. The author defines start-up attributes as follows:

- the frequency of overtime,
- in-depth costs control,
- top management that maintains control over all operational details.

Strikwerda uses the syntax diametrically opposed. He highlights the entrepreneurial model of governance as one that implies the delegation of decision-making powers from the management of the mother company to the boards of divisions and subsidiaries (Strikwerda, 2003). To highlight the features of this model of governance, the author starts from the MIT Sloan.

Hotch describes with reference to MRV and the company's "new entrepreneurial model", which implies a change from the original one by delegating the majority of decision-making powers to start-ups developed within the company. According to MRV CEO, "With small small-scale entrepreneurial start-ups, creators are activating the sense of "ownership" which will mobilize them to lead projects to successful results" (Hotch, 2000).

In an attempt to delimit the idea of an entrepreneurial model (necessary to be implemented in order to reorganize credit co-operatives), Lisa Freeman merely states that it involves implementing a hybrid strategy consisting of:

- maintaining the core business and
- exploiting new business opportunities to generate growth and revenue (Freeman, 2000).

Here we can see a similarity with Muehrcke's approach (Muehrcke, 2009), which highlights the same points in describing the successful entrepreneurial model adopted by the Henry Ford Hospital in West Bloomfield, Michigan. However, this statement describes any successful strategic approach.

One last article to which I would like to refer in this chapter is the concept of entrepreneurial model in the biotechnology sector. PR Newswire published an article about Tahitian Noni International's new general manager and its entrepreneurial model at TNI ("Tahitian Noni International Hires New Managing Director of European Operations: Dr. Peter Verdegem Brings a Wealth of Knowledge and Experience to the Position", 2010). TNI is a globally active company, the first based on research and the production and distribution of noni (*morinda citrifolia*) products outside the Tahiti area. Thus, the basis for differentiation is primarily the product itself. An important role in their business model plays an alternative distribution channel to specialised trade through direct marketing and rewarding customers who identify new customers through special prices (wholesale price) and gifts, thus encouraging the widening of the customer base.

## **2. KEY ELEMENTS OF ENTREPRENEURIAL MODELS**

Clark and Bruno-Jofre present the entrepreneurial models implemented by the University of Trente and the University of Joensuu highlighting the following key components (Clark & Bruno-Jofre, 2000):

- building basic skills,
- decentralisation of the budget,
- identifying "institutional interest" through dialogue and computer systems that are allowed performance measurement,
- flexible work volume annually negotiable,
- fixed-term work contracts for teachers,
- creating new combinations of existing units, focusing on computer science, computers and educational technology,
- creation of Transfer, Research and Development Offices to facilitate the transfer of knowledge and technology from the university to small and medium-sized enterprises,
- stimulating (motivating) graduates and researchers to set up their own "knowledge-based society"
- the development of a third flow of financial funds from corporate sources, the European Union, as well as other governmental institutions providing additional funding for the development of infrastructure (promotion units, the Transfer Office),
- the establishment of a scientific park which will be additionally developed by further interested companies joining the network,

- the privatisation of parts of the university (eg. the School of Business Administration of Trento).

Kettler and Casper attribute the accelerated development of the German biotechnology sector, as opposed to that of the United Kingdom or the US, to a favorable climate for the development of German entrepreneurial business models, and identify in this context some of the models' defining components (Kettler & Casper, 2001). Entrepreneurial business models or "entrepreneurial business practices" (as they call them) are business models developed in small innovative enterprises that are associated with the development of three key competences:

- access to technology,
- the availability of "high risk" funding sources,
- developing human resources in a "skill-destructive" environment and developing motivational incentives that are strong enough for employees.

Access to technology can only be achieved in the context of the successful marketing of basic research results, a factor that largely depends on policies designed to facilitate the creation of spin-offs in the university environment (Rosenberg & Nelson, 1994). This explains the thematic leverage to the university field, highlighting the role of studying business models in the context of higher education. In order to efficiently exploit the scientific basis, an infrastructure facilitating the transfer of technology from the public to the private sector must be available, especially in the case of emerging technologies.

Even when the commercial implications of research results are obvious, many new technologies require extensive commercial development before their market potential can be exploited. Intellectual property laws, rules governing the transfer of research results from the public sector to the private sector, as well as the funding of technology transfer offices in universities and public laboratories should also be considered.

In most technologically intensive sectors, the financial effort for the introduction of new technologies on the market is very high (Kettler & Casper, 2001). Although products, once they are launched, may generate very high revenues, sometimes more than a decade can pass between product development and revenues. Many startups fail at this stage due to the very high investment requirement and very intense competition between technology developers. While large companies can rely on funding from a range of sources, most entrepreneurial technology firms are using warranty-based financing options.

Early stages call for venture capital, later ones for the banking community and third-party investors by offering shares. Exit options imposed by risky technology investors generate continuous pressure on project managers who are forced to demonstrate at each stage that their projects have growth prospects and future revenues that justify current capital investments. The creation of adequate financial market institutions to support equity-based growth strategies must be matched by overall market confidence.

Attracting and maintaining human capital in the extremely risky and dynamic environment of technology intensive start-ups is a challenge many companies face. For a start-up to have a chance of success, scientific discoveries by researchers must be coupled with commercial expertise of experienced managers who can commercialize those ideas and potential products to prospective donors and buyers. The development of these skills is strongly influenced by the structure of the labor market and employment practices.

In order to obtain and preserve the necessary human and financial resources, companies must create organisational structures to foster innovation. Companies are challenged to motivate staff in demanding, competitive and time-intensive work environments where they need to contribute their knowledge and skills to the research team. Recognition for important breakthroughs, or financial rewards are key components of entrepreneurial business models. Start-ups often use performance-based incentives and stock options that may be motivating, hoping that the value of the shares will multiply when the company's shares are publicly quoted. The prospect of large financial rewards balances the incentives given to scientists with the expectations of managers (Miller, 1992).

Another approach used to motivate researchers is the recognition generated by the publication of important results in scientific journals.

Mair and Schoen (Mair & Schoen, 2007) identify in the analysis of social entrepreneurial models the following components that lead to their success:

- proactive creation of an own network of companies sharing the same social vision;
- developing resource strategies as an integral part of the entrepreneurship model;
- integrating target groups into the social value network.

In the context of social entrepreneurship, Hopkins (Hopkins, 2006) identifies the following key elements of the entrepreneurial model implemented by the Bill & Melinda Gates Foundation:

- philanthropy itself and how it works;
- identifying a specific problem;
- designing a strategy based on research and development as an integral part of the organisation;
- strategic partnerships with R & D centers;
- revenue-based funding from technological advances.

Gradeless (Gradeless, 2007) and Muehrcke (Muehrcke, 2009) determine "innovation" as being the key element of their case studies in the medical sector, which must be found in the company's mission.

Authors such as Rothbart (Rothbart, 1990), See (See, 1995), Wilson and Mador in Entrepreneurship (Stokes, 2010), Strikwerda (Strikwerda, 2003) and Hotch (Hotch, 2000) connect the entrepreneurial dimension of business models to the size and governance structures of companies. While for the first of these, the entrepreneurial model adopted in corporations relies on the delegation of decisions to the divisions and subsidiaries, Hotch (Hotch, 2000) and Hulet (Hulet, 2001) are pointing out exactly the opposite:

- simple structures,
- costs controlled in detail at top management level,
- operational decisions taken at top management level,
- centralised decision-making processes.

Another recent article on the expansion of the financial services provider Benjamin F. Edwards & Co in New Jersey uses the phrase "entrepreneurial business model" referring to flexible business models that enable companies to take advantage of new competitive advantages ("Financial Services; Benjamin F. Edwards & Co. Expands Its Presence in New Jersey", 2013).

The component that led to the success of the entrepreneurial model implemented by Tahitian Noni International was the innovation in defining distribution channels. By analysing the principles on which TNI is based (<http://www.noni juice.us/noni-company-history.htm>), we identify the following key elements of the implemented entrepreneurial model:

- fair relationships based on honesty, integrity and gratitude with all stakeholders: distributors, employees and customers,
- governance structure based on strong leadership,
- exploring new opportunities to generate growth and revenue (keeping open horizons - because valuable contributions can come from various sources),
- constancy in activities and processes (sustained efforts).

Fawcett et al. highlight in their research the importance of managing the supply chain as a component of business models, particularly in the case of entrepreneurial models (Fawcett et al., 2009). They even use the phrase "entrepreneurial business model," but only in the title of the article, referring to the business model of a small or medium-sized firm that manages its supply chain in co-operation. The main feature of the entrepreneurial model is the outsourcing of all activities that do not directly contribute to the value proposition to other collaborators, superior in the exercise of those activities. Thus, small businesses can benefit from the complementary skills found across the supply chain to increase their performance. According to the authors, supply chain management is a

key element in the formulation of value proposition and in the design of the entrepreneurial model, so that unique capabilities, more than resources or economies of scale can become the key to survival and success.

The key role that human capital plays in entrepreneurial business models is highlighted by a number of articles ("Allison + Partners Appoints Managing Director", 2013; "Cubellis, Cubellis Celebrates Success as Visionary Sponsor of AIA National Convention in Boston, Massachusetts", 2008; Business Editors/Health/Medical Writers, B. K., 2003; Kettler & Casper, 2001; Youngblood, 1998). Cubellis builds its entrepreneurial model by offering young talented architects the prospect of a dynamic career as well as an exceptional work environment. This sponsorship activity led, according to the CEO of the firm, to the company's leader position within the sector. Allison + Partners is a group-based company that simultaneously serves employee passion and customer needs by ensuring that experienced employees (seniors) are involved in each company project. The company also highlights another aspect, the role of CSR in the business plan. CSR is not only a differentiation factor from competitors but also a good base for recruiting and maintaining top talent among employees ("Allison + Partners Appoints Managing Director", 2013)

Youngblood presents the "entrepreneurship model" implemented in an IT consultancy firm (SafeNet), which is synonymous with a system based on employee freedom of decision on working hours and very generous bonuses both for winning new customers and for recruiting qualified staff (Youngblood, 1998). In order for the entrepreneurial experience to be complete, employees are not paid for working hours in which they do not provide paid consulting services.

Hotch also insists on motivating staff so that middle management can act as individual entrepreneurs. "With small, start-up entrepreneurial projects, creators are empowered with a sense of" ownership "that will mobilize them to lead the projects to successful results "(Hotch, 2000).

Another article on entrepreneurial model components implemented by OneWorld (Business Editors / Health / Medical Writers, 2003) presents several similarities to those identified by other authors:

- highly qualified and motivated staff (explicitly see for similarities above),
- the existence of a social (explicit) mission,
- technological basis for developing, testing and obtaining approvals (by default),
- strategic collaborations with partners from the pharmaceutical industry, biotechnology, philanthropic environment, academic partners and government institutions (explicitly see for similarities above).

An article on the main components underpinning the success of the entrepreneurial business model adopted by the biometric fingerprint solutions provider, UPEK ("Newly Formed UPEK Raises \$ 20 Million in a First Round Financing Led by Sofinnova Ventures and Sofinnova Partners," 2004) emphasises the importance of:

- uninterrupted product availability alongside
- providing increased customer support through focusing and corporate engagement at a corporate level.

Perez emphasises, besides the importance of software availability, the role played by innovation with a positive impact on the environment when creating new entrepreneurial models (Perez, 2008). Further on, Market America's entrepreneurial business model was successful thanks to the combination of the following elements ("Market America Partner, Carmelo Anthony, Named Basketball's Player of the Week Again as He Continues His MVP Quest: Both have partnered to develop nutritional supplement Isotonix (R) Champion Blend Plus, so everyone can be on their way to becoming a champion", 2013):

- technology (online shopping engine),
- a comprehensive cash back program,
- special offers (Hot Deals) and
- social integration of shopping.

The articles on UPEK and Market America attach more value to product value proposition and special offers as well as customer relationships than all other articles on the analysed

entrepreneurial models. At the same time, the article on Market America highlights the relevance of technology and the need for a social mission.

Last but not least, Lightcap reiterates the idea of increased involvement of all stakeholders and the instrumentation of competition for resources and for members of the target group (students) to determine the value proposition (curricular priorities) and budget allocation as defining the success or failure of implementing an entrepreneurial model in the university environment (Lightcap, 2014).

### 3. FINDINGS

The subsequent tables present a synthesis of the business models' defining elements. They are extended by elements specific to entrepreneurial models identified by the research of specialised literature.

Table 1 refers to strategy elements. Thus, we see differences between business models (BM - business models) and entrepreneurial models (EM) based on differentiation, strategies on core competencies, strategic assets, distribution channels and product strategy. Entrepreneurial models present developments as compared to business models by the relevance attributed to the identification of a specific issue to solve, innovation as an integral part of the mission and the idealistic, social mission component. While the success of prosperous business models presented by the literature is attributed to focusing on core competencies, many new entrepreneurial models stand out by exploiting new competitive advantages or hybrid strategies. It is worth mentioning that the theory of entrepreneurial models does not explicitly address strategic assets and gives less importance to distribution channels.

**Table 1. Synthesis of BM and EM elements described by the research literature with regard to the key element STRATEGY**

<b>BM Dependent Elements</b>	<b>EM - Dependent Elements</b>
The basis for differentiation: - the mission (Hamel, 2001).	The basis for differentiation: - identifying a specific problem (Hopkins, 2006); - innovation as part of the mission (Gradeless, 2007; Muehrcke, 2009); - the social mission (Business Editors/Health/Medical Writers, B. K., 2003; Hopkins, 2006; Mair&Schoen, 2007).
Building Key Kompetecies (Hamel, 2001; Lecocq et al., 2006)	Building Key Kompetecies (Clark & Bruno-Jofre, 2000; Freeman, 2000)
	Hybrid Strategies: Diversification / Exploitation of new competitive advantages (Freeman, 2000; Muehrcke, 2009; „Benjamin F. Edwards & Co”, 2013; "Tahitian Noni International Hires New Managing Director of European Operations: Dr. Peter Verdegem Brings a Wealth of Knowledge and Experience to the Position”, 2010)
Strategic assets (Hamel, 2001)	
Product / Service (Hamel, 2001)	Uninterrupted product availability ("Newly Formed UPEK Raises \$ 20 Million in a First Round Financing Led by Sofinnova Ventures and Sofinnova Partners," 2004)
Distribution channels (Johnson et al., 2008; Morris et al., 2005; Osterwalder & Pigneur, 2010)	Exploitation of innovative distribution channels ("Tahitian Noni International Hires New Managing Director of European Operations: Dr. Peter Verdegem Brings a Wealth of Knowledge and Experience to the Position”, 2010)

*Source:* own adaptation based on the articles listed as sources

Table 2 shows the key elements presented by the literature, highlighting the similarities and differences identified with regard to the value proposition in business models as well as in entrepreneurial models. Derivatives of the value proposition, characteristic in business models, are rarely mentioned as defining for performing entrepreneurial models, except for customer relations. The idealistic nature of the entrepreneurial models can provide a possible explanation for the total neglect of some important issues in business models such as cost structure, price structure and income / profit formula. The defining values promoted by the entrepreneurial models described so far lie in the social sphere (CSR), philanthropy and environmental protection.

**Table 2. Synthesis of BM and EM elements described by the research literature with regard to the key elements VALUE PROPOSITION and CUSTOMER RELATIONS**

<b>BM Dependent Elements</b>	<b>EM - Dependent Elements</b>
Defining and differentiating offers - cost structure (Johnson et al., 2008; Morris et al., 2005; Osterwalder & Pigneur, 2010) - income / profit formula (Johnson et al., 2008; Morris et al., 2005; Osterwalder & Pigneur, 2010) - price structure (Hamel, 2001).	Defining and differentiating offers - special offers ("Market America Partner, Carmelo Anthony, Named Basketball's Player of the Week Again as He Continues His MVP Quest: Both have partnered to develop nutritional supplement Isotonix (R) Champion Blend Plus, so everyone can be on their way to becoming a champion", 2013); - philanthropy (Hopkins, 2006); - environmental protection (Perez, 2008) - CSR (Business Editors/Health/Medical Writers, B. K., 2003; "Allison + Partners Appoints Managing Director", 2013; Mair & Schoen, 2007; "Market America Partner, Carmelo Anthony, Named Basketball's Player of the Week Again as He Continues His MVP Quest: Both have partnered to develop nutritional supplement Isotonix (R) Champion Blend Plus, so everyone can be on their way to becoming a champion", 2013).
Targeting - Selection and segmentation of customers (Hamel, 2001; Johnson et al., 2008; Morris et al., 2005; Osterwalder & Pigneur, 2010) Customer service. Information and understanding, Customer support (Hamel, 2001; Johnson et al., 2008; Morris et al., 2005; Osterwalder & Pigneur, 2010) Dynamics of Relationships (Hamel, 2001).	Customer Support: Increased Customer Support by Focusing Strategies ("Newly Formed UPEK Raises \$ 20 Million in a First Round Financing Led by Sofinnova Ventures and Sofinnova Partners," 2004) Customer loyalty through a cash-back program ("Market America Partner, Carmelo Anthony, Named Basketball's Player of the Week Again as He Continues His MVP Quest: Both have partnered to develop nutritional supplement Isotonix (R) Champion Blend Plus, so everyone can be on their way to becoming a champion", 2013).

*Source:* own adaptation based on the articles listed as sources

Table 3 summarises the elements of business models and entrepreneurial models described by the research literature on strategic resources. In both business models and entrepreneurial models, strategic resources are assigned a key role for the success or failure of the implemented model. Resource strategy is seen as an integral part of the model. The major difference between the two concepts is given by the nature of the resources of interest. Entrepreneurial models are distinguished by the increased importance of technological resources, human resources and funding sources. Access to technology, technological innovation, infrastructure development and technology transfer, computerisation, intellectual property laws and technology transfer are all defining elements for the performance of the studied entrepreneurial models. The brand and other Marketing and PR elements on the other hand are considered secondary to the success of entrepreneurial models.

**Table 3. Synthesis of BM and EM elements described by the research literature with regard to the key element STRATEGIC RESSOURCES**

<b>BM Dependent Elements</b>	<b>EM - Dependent Elements</b>
„Key Resources” (Hamel, 2001; Morris et al., 2005; Lecocq et al., 2006; Johnson et al., 2008; Osterwalder & Pigneur, 2010).	Resource strategy as an integral part of the model.
Information (Johnson et al., 2008); Brand (Johnson et al., 2008).	Infrastructure for communication and promotion activities (Clark & Bruno-Jofre, 2000).
	Overall market confidence (Kettler & Casper, 2001).
Personnel (Johnson et al., 2008; Osterwalder & Pigneur, 2010).	Qualified Personnel & Human Resources Development (Kettler & Casper, 2001 Business Editors/Health/Medical Writers, B. K. , 2003)
	Motivating human resources - Flexible workload (Clark & Bruno-Jofre, 2000; Hotch, 2000; Kettler & Casper, 2001; Business Editors/Health/Medical Writers, B. K. , 2003; Youngblood, 1998) Fixed-term employment contracts (Clark & Bruno-Jofre, 2000) - Motivation through "sponsorship" / Collaboration senior employees with juniors ("Cubellis", 2008; "Allison + Partners Appoints Managing Director", 2013) - Incentives (bonuses, share options, visibility) (Kettler & Casper, 2001; Youngblood, 1998) - CSR ("Allison + Partners Appoints Managing Director", 2013; Business Editors/Health/Medical Writers, B. K. , 2003)
	Sources of financing - Industry funds / Technological progress gains / Sponsors (Clark & Bruno-Jofre, 2000; Hopkins, 2006; Business Editors/Health/Medical Writers, B. K. , 2003; Meek, 2000; - Public funds (Clark & Bruno-Jofre, 2000; Business Editors/Health/Medical Writers, B. K. , 2003); - Financial institutions supporting R & D (Kettler & Casper, 2001); - Guarantees (Kettler & Casper, 2001); - High risk financing sources (Kettler & Casper, 2001).
Technology & Equipment (Johnson et al., 2008).	Technology & Equipment - Access to technology (Kettler & Casper, 2001); - Information technology (Clark & Bruno-Jofre, 2000; Perez, 2008; "Market America Partner, Carmelo Anthony, Named Basketball's Player of the Week Again as He Continues His MVP Quest: Both have partnered to develop nutritional supplement Isotonix (R) Champion Blend Plus, so everyone can be on their way to becoming a champion", 2013).
	Technology & knowledge transfer - Infrastructure (Clark & Bruno-Jofre, 2000; Kettler & Casper, 2001; Business Editors/Health/Medical Writers, B. K. , 2003; Mets, 2010) - C & D (Mets, 2010; Hopkins, 2006) - Laws & Rules on Intellectual Property and Technology Transfer (Kettler & Casper, 2001; Business Editors/Health/Medical Writers, B. K. , 2003; Meek, 2000; Mets, 2010).
	Innovation - Technological innovation (DaSilva & Trkman, 2013; Engelhardt, 2004; Gradeless, 2007; Muercke, 2009); - Environmental friendly innovations (Perez, 2008).

Source: own adaptation based on the articles listed as sources

Human resources, although considered to be strategic elements of great importance for both business models and entrepreneurial models, enjoy increased attention in the case of entrepreneurial models. According to the cited articles, their availability and development are key elements for achieving performance in entrepreneurial initiatives. Maintaining and motivating employees to act in their turn as entrepreneurs are also defining elements of entrepreneurial affairs.

If funding plays a secondary role within the business model theory, the availability and diversity of accessed sources of funding is mentioned by most articles on entrepreneurial models and is considered to be decisive for the destiny of entrepreneurial businesses. Entrepreneurial initiatives generally require substantial financial resources, but are also characterised by low bankability due to high risk exposure. In this context, solving the problem of financing requires considerable efforts from entrepreneurs in order to find viable solutions.

From the point of view of internal and external organisation, we also identified several common and distinct defining elements of business models and entrepreneurial models, summarised in Table 4 and Table 5.

**Table 4. Synthesis of BM and EM elements described by the research literature with regard to the key element INTERNAL ORGANISATION**

BM Dependent Elements	EM - Dependent Elements
Decisions - Political decisions (Casadesus-Masanell & Ricart, 2010); - Company assets (Casadesus-Masanell & Ricart, 2010); - Governance structure (Casadesus-Masanell & Ricart, 2010).	Decisions - New asset combinations (Clark & Bruno-Jofre, 2000); - Governance structure; - Complex Structures / Decentralisation of Decisions (Rothbart, 1990; See, 1995; Stokes, 2010; Strikwerda, 2003); - Simple structures / decisions taken at the top level (Hotch, 2000; Hulet, 2001, "Tahitian Noni International Hires New Managing Director of European Operations: Dr. Peter Verdegem Brings a Wealth of Knowledge and Experience to the Position", 2010); - Centralised Cost Control (Hotch, 2000); - Budget Decentralisation (Clark & Bruno-Jofre, 2000); - Determining budget allocation based on division results (Lightcap, 2014).
Key activities (Johnson et al., 2008; Morris et al., 2005; Osterwalder & Pigneur, 2010)	Key activities - Identifying "institutional interest" through dialogue and computer systems (Clark & Bruno-Jofre, 2000) - Research and Development (Hopkins, 2006; Mets, 2010) - Constancy in activities ("Tahitian Noni International Hires New Managing Director of European Operations: Dr. Peter Verdegem Brings a Wealth of Knowledge and Experience to the Position", 2010)
Key processes (Hamel, 2001, Johnson et al., 2008, Morris et al., 2005, Osterwalder & Pigneur, 2010)	Constancy in processes ("Tahitian Noni International Hires New Managing Director of European Operations: Dr. Peter Verdegem Brings a Wealth of Knowledge and Experience to the Position", 2010)
Rules and Norms (Johnson et al., 2008)	

*Source:* own adaptation based on the articles listed as sources

Governance and decision-making structures are considered key elements for both business models and entrepreneurial models. However, the literature on entrepreneurial models gives them greater importance. Thus, we learned from the materials consulted that the increased level of decentralisation of decisions and budgets contributed significantly to the performance of some of the analysed models. Decentralising decisions also requires complex governance structures. On the contrary, other authors point out that, as well the existence of simple structures and the taking of all decisions, including centralised operational ones at the top management level, form the

organisational form that best contributes to the performance of the entrepreneurial model. Centralised detailed cost control is another defining element for entrepreneurial models. This is correlated with the difficulty in accessing finance that entrepreneurial businesses face. Another distinctive feature of the entrepreneurial models studied is the internalisation of research and development activity, both neglected by the articles quoted on business models. These activities are decisive for the availability of the technological resources on which a large part of the entrepreneurial businesses depends. The synthesis of the internal organisational elements that determine the performance of the business models and entrepreneurial models identified in the researched articles can be found in table 4.

**Table 5. Synthesis of BM and EM elements described by the research literature with regard to the key element EXTERNAL ORGANISATION**

<b>BM Dependent Elements</b>	<b>EM - Dependent Elements</b>
Rules and Norms (Casadesus-Masanell & Ricart, 2010).	Rules and Norms: Intellectual and technology property transfer (Kettler & Casper, 2001; Business Editors/Health/Medical Writers, B. K. , 2003).
Value Network Suppliers (Hamel, 2001).	Supply Chains: Supply Chain in Co-operation (Fawcett et al., 2009).
Partners (Hamel, 2001; Johnson et al., 2008).	Strategic Partnerships <ul style="list-style-type: none"> <li>- Network of companies sharing the vision (Hopkins, 2006; Mair &amp; Schoen, 2007; Business Editors/Health/Medical Writers, B. K. , 2003);</li> <li>- Motivating partners (Clark &amp; Bruno-Jofre, 2000);</li> <li>- Enhanced involvement of all stakeholders (Lightcap, 2014; "Tahitian Noni International Hires New Managing Director of European Operations: Dr. Peter Verdegem Brings a Wealth of Knowledge and Experience to the Position", 2010);</li> <li>- Integration of target groups into the social network / philanthropy itself (Mair &amp; Schoen, 2007; Hopkins, 2006; "Market America Partner, Carmelo Anthony, Named Basketball's Player of the Week Again as He Continues His MVP Quest: Both have partnered to develop nutritional supplement Isotonix (R) Champion Blend Plus, so everyone can be on their way to becoming a champion", 2013).</li> </ul>
Coalitions (Hamel, 2001).	

*Source:* own adaptation based on the articles listed as sources

Table 5 summarises the elements relating to the external organisation of business models and entrepreneurial models.

We have noticed that entrepreneurial models appeal within the external organisation to a larger extent to strategic partnerships. Thus, we learn that their performance depends on decisions such as managing the supply chain in cooperation with other businesses, belonging to corporate networks that share their vision, increased involvement of all stakeholders, and motivation of all partners.

#### 4. CONCLUSIONS

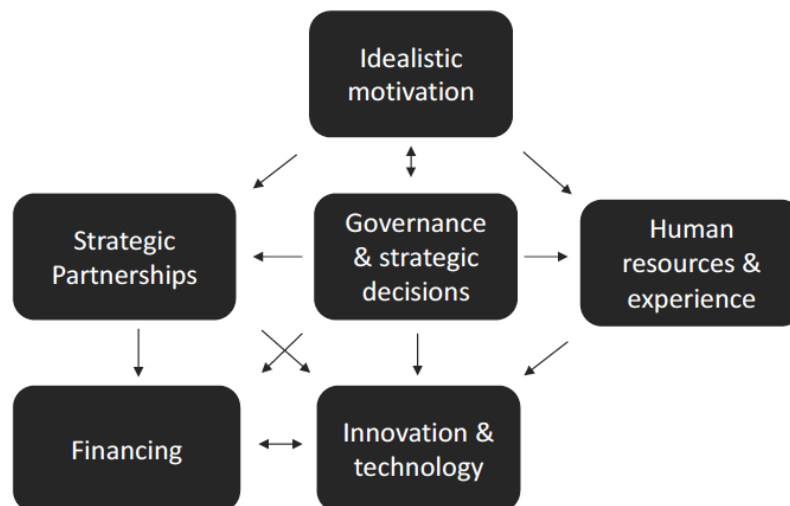
Following the analysis of the common and divergent factors of business models and entrepreneurial models, we found that the latter is defined by the following key elements: technology, funding,

human resources, strategic partnerships and the social mission interconnected by the governance structure implemented.

Technology is a subject approached by the vast majority of scientific articles on entrepreneurial models - technology availability, technology transfer, innovative technology development, computerisation, technological infrastructure and, last but not least, current technology regulations. The availability of a new technological resource (own or third) leads to the possibility of exploiting a new competitive advantage.

Funding is the second most sensitive point in the success of entrepreneurial models, which is often very difficult in the early stages of projects. In addition to the availability of public funds for innovative entrepreneurial initiatives, entrepreneurs are turning to various solutions to fund their projects - from budget transfers from other activities, regular bank loans to high risk financing sources.

The availability of quality human resources, their development, their motivation, and maintenance in entrepreneurial projects is another element that decides on the success or failure of an entrepreneurial model. Being, in most cases, entrepreneurial initiatives in very innovative areas, fluctuations in staff can lead to bankruptcy.



**Figure 1. The key elements of the entrepreneurial model and their interdependencies**

*Source: own illustration*

Strategic partnerships are relevant not only in terms of funding but independent of it. In the case of entrepreneurial models, target groups interpenetrate, strategic suppliers and distributors are of major relevance, clients often play a role as a financier, sometimes even a distributor of the products and services offered, and all these partners must be motivated so that the relationship can continue successfully. The entrepreneur can focus on its core competencies, using partnerships to cover all the related needs for the continuation of the project and the development of the business.

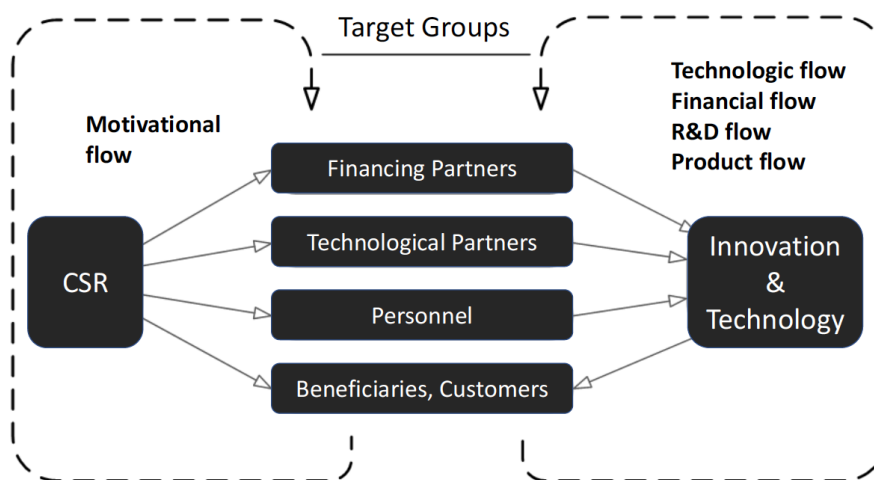
The sectors being approached by entrepreneurs are often at an early stage of development, idealism is much more important than business models. Whether we are talking about developing environmental technologies, combating incurable diseases or simply paying more attention to CSR activity, the social mission is often an integral part of the business model and the basis for the implemented strategy.

The way a company, whether it is a start-up or a corporation with intra-corporate activities, manages its above-mentioned elements and makes decisions is given by its governance. Decisions can be made centrally or decentralised, the resources involved and processes can be internal or

external, and funding can come from different sources, depending on strategy, solvency, and availability of external funding sources.

Another major point of interest is the way these key elements interact. Figure 2 shows the entrepreneurial model in terms of financial, technology and motivational flows.

Social motivation is a determinant for all stakeholders: business financiers, technology partners – when using partnerships to develop or deploy innovative technologies and products – company employees and customers or beneficiaries of the outcome of entrepreneurial action alike. For many of the entrepreneurial models studied, the limitation between stakeholders is not very clear, with personnel, technology partners and customers acting as financiers (equity, pro bono, philanthropy), and staff are also beneficiaries of various CSR programs. Social integration of target groups is a common strategy for entrepreneurial models.



**Figure 2. Entrepreneurial model from the financial, technology and motivational flows' perspective**

Source: own illustration

The interpenetration of the roles adopted by the stakeholders of the entrepreneurial model makes the pursuit of financial flows more complicated, and individual approaches for each studied model are necessary. As far as the technological flows are concerned we have noticed that the involvement of technological partners and personnel through R&D activities, in order for the result of technological progress to reach the beneficiaries, has a major role in defining the characteristics of entrepreneurial models.

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