CRITICAL REALISM BASED ENTREPRENEURIAL ACTION THEORY: ENTREPRENEURIAL VALUE CREATION FRAMEWORK

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ABSTRACT

We propose to use critical realism as the basis for ontology and epistemology in entrepreneurship research. Further, we argue that the teleology of entrepreneurship is value creation. Based on these assumptions we propose that an essential part of the entrepreneurial process is the creation of a business model that shows conceptually how the value will be created. This model can be categorized in three different categories along with the value system continuum: stable value system, redefined value system and emerging value system. We propose an entrepreneurial value creation framework that describes elements that are essential to the value creation.

Keywords: entrepreneurship, critical realism, business opportunity, role of entrepreneur, business model, value continuum, value creation system.

INTRODUCTION

From the ontological point of view it is clear that the objectivist approach located in realism (Burrell and Morgan, 1979; Gioia and Pitre, 1990; Guba and Lincoln, 1989) forms the scientific basis for the dominant approach in entrepreneurship literature. The dominant view sees the environment as external to the actor involved in the entrepreneurial process (e.g. Alvarez, 2005a). This is the case regardless of whether or not the concept of entrepreneur is defined as a role played by an individual or a team of individuals.

It seems to be widely accepted in the recent literature on entrepreneurial process and opportunity creation that actors involved in the process, i.e., the entrepreneurs, are not treated as 'lonely riders' (Øyhus, 2003), but rather as laymen playing the role of the entrepreneur who are embedded deeply in the natural and social environment. The existing reality, however, can be understood only imperfectly by these actors. It is also widely accepted in the field that there is a close relation between the actor involved in the process, the environment and the process. This relationship is so evident that it will actually characterize the whole entrepreneurial process. It will be argued here that the nature of the entrepreneurial process is teleological because the core purpose of the process is to generate value for all of the stakeholders included within it. This kind of statement is parallel with the definition of *'business'* as a social structure (or mechanism) for generating value for whoever or whatever is related to it.

One other issue concerning the relationship between the key actors in the process has been presented quite ambiguously in the previous literature. This issue is about the origin and nature of the idea on which the intended business venture will be built or created. It has been – and it may still be – a common way to think like Sarasvathy *et al.* (2003) that since there are opportunities endlessly in the environment, we need just to grab onto at least one of them at the time. However, it is made clear in this paper that this is not the whole case: it is **not only** about the existing ideas, i.e., those commonly treated as 'opportunities' in the established definitions in the literature, on which a new business venture could be started. But, it is **also** about the ideas treated as sources available for the creation process of the business opportunity (the BOC process). The BOC process means the other part of a double-barreled entrepreneurial process, namely the discovery process, according to the vocabulary of Shane and Venkataraman (2000). In this latter situation the ideas existing are indeed as *'ready–to–be used as such'* but only as sources for the BOC process rather than as final solutions to be exploited in the market.

One well known example of the 'ideas as sources' approach is given by Shane (2000) who describes how one particular invention, the three-dimensional printing invented at the Massachusetts Institute of Technology (MIT), was transformed into several different kinds of business ventures depending on the process conducted by the entrepreneurs in question. According to Shane, *"technological change does not generate obvious entrepreneurial opportunities, which allows anyone to discover any given entrepreneurial opportunity which results from that change"* (ibid: 465). In other words, the business opportunity – interpreted here as the 'outcome of the creation process of the business opportunity' – needs to be made, i.e., built, or created, by the people who will intentionally start to play the role of entrepreneur in order to continue in the BOC process.

It is recognized in the literature that people who operate in the process (whether or not it is called the discovery process by Shane and Venkataraman (2000) or the BOC by the present researchers) keep firmly interacting with the environment. Thus, it is clear that the environment, i.e., both the natural and social reality (Perry, Riege, and Brown, 1998) influences the entrepreneur. On the other hand, the effect of the entrepreneurial process on the people is also important. That is, the outcomes of the process will directly generate the sources for the new business ideas, and, more indirectly, the ways the entrepreneur perceives all the numerous alternative solutions to put ideas to work in the real-life context, namely the market.

The recursive nature of the interaction between the entrepreneur, the BOC process, and the environment opens up a question about whether the strict objectivist approach (Burrell and Morgan, 1979) is too restrictive in understanding the creation process of the business opportunity. The fact is that the kind of approach based on pure objectivism neglects the effects of human activities in the creation of inventions or other various sources upon which business opportunities could be created. That is, from the dominant perspective of entrepreneurship, people who will play the role of the entrepreneur are seen merely as discoverers of what already exists in the environment.

The problems connected to a strictly objectivist line of thinking argue for alternative approaches. The challenge is presented in the literature (e.g. Alvarez and Barney, 2006a;

2006b; Hjorth, Jones and Gartner, 2008) by including the concept of creativity into the theory of entrepreneurship in order to limit the influence of the dominant approach that, in fact, *"appears to actively discourage creativity"* (Hjorth, Jones and Gartner, 2008: 81; also Gilad, 1987). The critique presented above is in line with the basic theoretical assumptions of the present study, i.e., the critical realist ontology. According to Eriksson and Kovalainen (2008, 15), critical realism *"takes reality as material, but acknowledges that people interpret it differently in different times and contexts"*. This means that both the natural and social reality are treated as existing as given because the social reality, particularly, has been created by people of the past. However, people of the present are still able to interpret and change that reality. In the same vein, Fleetwood (2005) opens up further the question around what is meant by entities exist independently of their identification in the approach of critical realism:

> *"Critical realists claim that an entity can (which does not mean it does) exist independently of our knowledge of it." … "*Saying an entity can exist independently of its identification *implies that it can exist without someone observing, knowing and constructing it." (Fleetwood, 2005: 198–199, underlined words added to imply italics in original)*

According to Fleetwood (ibid.), this also implies that in some cases the entity is knowledgeable but only as tacit knowledge. This means that an actor actually knows how to perform a work task but cannot explain how he or she actually does it. In Fleetwood's own words: *"they know 'how' but they don't know 'that' (see Fleetwood, 1995, Ch. 7)."*(199). By following this line of thought it is easy to agree with Weick (1995) who argues that *"people can know what they are doing only after they have done it"* (24).

One other point that is extremely interesting in Fleetwood's ideas is that, according to him, critical realists accept that *"there is no (defensible) theory-neutral observation, description, interpretation, theorizing, explanation or whatever. There is, in other words, no unmediated access to the world: access is always mediated."* (Fleetwood, 2005: 199, parentheses and italics in original). This is in line with Davidsen (2005) who claims that structures in social reality have real existence as emergent properties irreducible to individuals or individual actions.

In practice, to apply the logic of critical realist perspective presented by Fleetwood (2005), this means that in the role of the entrepreneur individuals and teams, as well as all other people operating in some specific context, interpret, make sense of, understand, and act based on both their individual beliefs and opinions and social or inter-subjective theories, perceptions or social norms (through one's pre-understanding or 'double hermeneutics' in Nörreklit, 2006). Furthermore, according to critical realism, it is necessary to accept that the reason why people (in the role of the entrepreneur, or whatever) interact more or less with the environment is to become more thoroughly informed of the yet unknown factors that may enhance his or her individual activities or activities together with other people – for example, to create new business opportunities for the benefit of oneself or of anybody related in that process.

The article is organized as follows. We start by discussing the scientific assumptions of the study, the critical realism. Then we describe value system continuum and discuss value creation systems as business models. In the third chapter we describe our entrepreneurial value creation framework and scrutinize it with two examples. Discussion on the theoretical and managerial conclusions ends the article.

BACKGROUND

Critical Realist perspective to social reality

> *"Critical realism is a philosophical approach to sciences (Bhaskar, 1978, 1979, 1986) that criticises the study of the social domain as a 'closed' system, typical of positivist approaches in the social sciences. At the same time, it opposes the idea that reality can simply be reduced to our interpretation of it, as has been argued in different forms in the past by idealist and conventionalist scholars."* (Castellacci, 2006: 861)

Critical realism (or critical realist perspective) is becoming an increasingly important approach to study phenomena in the domain of management in general. As Fleetwood and Ackroyd (2004: 1) say *"there is, in fact, a significant intellectual movement now going on in the field of organisation and management studies (O&MS), in which the philosophy of critical realism is being more and more widely appreciated and put to use"*. Parrish (2007), influenced by Easterby-Smith, Thorpe, and Lowe (1991), prefers critical realism to constructivism since several researchers in management *"are making increasingly explicit reference to the critical realist basis of their research (e.g., Baum and Rowley, 2002; Fleetwood and Ackroyd, 2004; Mutch et al., 2006; Van de Ven and Poole, 2005)"* (82, brackets in original). To provide a middle ground between the established paradigms of positivism and interpretivism (McEvoy and Richards, 2006) Easterby-Smith et al. treat critical realism as *"bridging between the two extreme viewpoints"* (1991: 26).

The ontology of critical realism refers to the reality that is divided into two parts: the natural and social reality (Collin, 1997). To focus on the social reality then makes it possible to claim that underlying structures and mechanisms of the socially constructed reality determine social arrangements and our understandings of it. In fact, Bhaskar (1978) states clearly that *"the relationship between science and reality seems problematic only if one either accepts the social character of science, but denies that its object of study is independent of all social activity (the epistemic fallacy), or if one accepts the independence of reality, but denies the social character of science (ontic fallacy)"* (Zembylas, 2006: 668).

The key to the critical realist approach is that society has existed prior to human action, and it thus defends *"the separability of 'agency' and 'structure' on the grounds that it makes it possible to expose restrictions upon agency that would otherwise go undetected; and, relatedly, it enables human beings to make more informed, strategic calculations about how to transform the social world in ways that will eliminate such restrictions"* (Willmott, 2005: 758, single quotes in original). The world perceived through critical realism is not only about *"events, states of affairs, experiences, impressions, and discourses, but also of underlying* *structures, powers, and tendencies that exist, whether or not detected or known through experience and/or discourse"* (Patomäki and Wight, 2000: 223).

While critical realists state that an entity in its context "*can exist independently of our knowledge of it"* (Fleetwood, 2004: 29, underlined word as italic in original), however, it is important to note the actual interaction between human agents (or the entrepreneur from the perspective of the present study) and the overall structures of the particular context. This is especially evident with artefactual, social, and ideal type of entities which are dependent for their existence on human activities, but not with material entities which exist even if human beings are omitted (ibid; Sousa, 2008). Furthermore, Fleetwood (2005: 203–204) emphasizes that the interaction between 'some but not all' human activities of 'some but not all' human beings, for example, the becoming or acting entrepreneurs, and the structures in which these agents are embedded is a continuous and cyclical flow over time: "*here are no empty spaces where nothing happens, and things do not just begin and end"* (Fleetwood, 2005: 203).

Bhaskar (1998) argues for the relations between society and individuals as follows: *"people do not create society"* (39), since it both pre-exists them and is a necessary condition for their activity. However, society does not exist independently of human activity. It is to be regarded as "*an ensemble of structures, practices and conventions which individuals reproduce or transforms, but which would not exist unless they did so"* (ibid.). *'Socialization'* is referred to as the process in which for example, various skills, competences and habits feasible in a given context are either reproduced or transformed by the individuals. According to Bhaskar (1998) the given society, on the one hand, is a necessary condition for intentional human action, and, on the other hand, these intentional human actions are also the necessary conditions for it.

By acknowledging what is stated above, it is possible to describe the overall process of these continuous actions of human beings in either reproducing or transforming the existing reality. According to Archer's model, called 'The Transformational Model of Social Action' (Archer, 1998: 376, quoted in Fleetwood, 2004: 41; 2005: 204), the starting point here is some prior cycle (T^1 on upper-left in Fig. 1). Based on these pre-existing structures and mechanisms, that is, the elements of the social reality with *"powers and liabilities capable of generating events"* (e.g. Easton, 2002: 104), and the structural conditions prevailing the social interaction will start at T^2 where *"these agents do whatever it is they can do given the nature of these pre-existing structures – i.e. they are constrained and enabled by them"* (Fleetwood, 2004: 41).

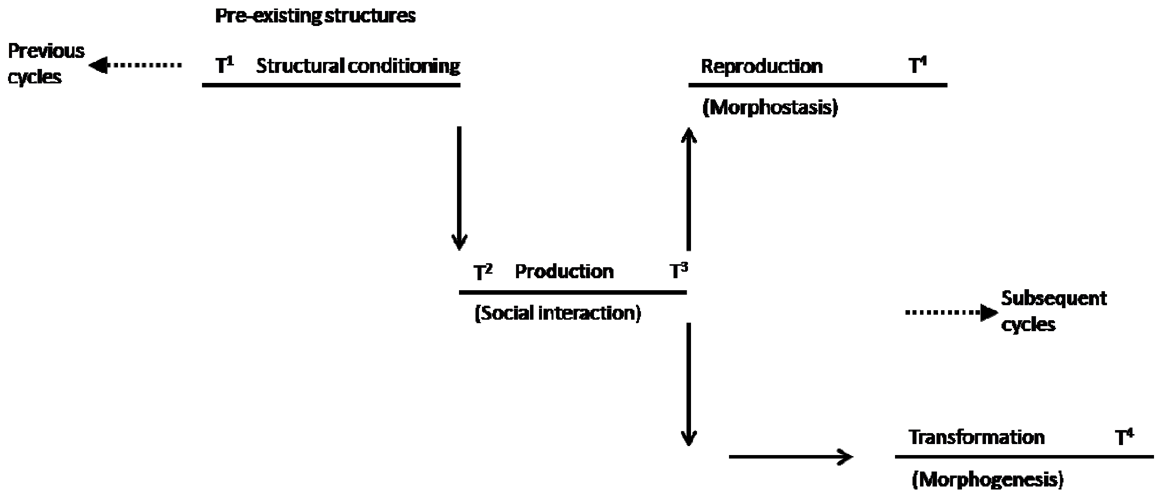

Fig. 1. The Transformational Model of Social Action (Source: Archer, 1998: 376, quoted in Fleetwood, 2005: 204)

According to Fleetwood (2004; 2005) the results of the interaction between T^2 and T^3 will present themselves as changes of the pre-existing structures. These changes will be completed by T^4 where the pre-existing structures will be either *"reproduced (i.e. morphostasis occurs) or transformed (i.e. morphogenesis occurs)"* (Fleetwood, 2004: 41; 2005: 204). The former type of change refers to the process in complex system-environment exchanges that tend to serve or maintain a system's given form, organization, or state (Heylighen, Joslyn, and Turchin, 2000a), whereas the latter is more about creating new organizational forms (Heylighen, Joslyn, and Turchin, 2000b). After T^4 the pre-existing structures and conditions are either confirmed as feasible enough or changed into something totally different. In both of these cases a new cycle may start.

Fleetwood (2005) concludes clearly that both the reproduction and transformation are activity dependent, and the process is about *'who does and who does not do what, when and how'*. However, as Leca and Naccache (2006) emphasize, based on critical realism the social structures and actions of entrepreneurs (as well as actions of all other actors) are at the same time both separate and related entities. This means that they can neither collapse into nor conflate onto each other (Sayer, 2000). Thus, it can be concluded with Castellacci (2006) that there is a strict link between the agents and the structure of society in a way that society pre-dates individual existence. At the same time, however, the social reality, the human society, will be either reproduced or transformed (Fig. 1) by the people of that very same society. Thus, while '*individuals do not create societies'* (Castellacci, 2006), the active agents in every society are the only ones who are able to reproduce and transform it repeatedly. It is the critical realist perspective that gives primacy to the ontology due to the form of the transcendental framework (Boylan and O'Gorman, 2006).

Value System Continuum

Möller and Svanh (2003) introduced the idea of using a value system continuum to describe a value creating system (VCS) based on Parolini's work (Parolini, 1999), and they based this on three ideal value creating systems: stable value system, redefined value system and emerging value system (See also, Möller and Rajala, 2007; Möller and Törrönen, 2003). This value system continuum (Fig. 2) can be used to categorize different value creating systems and be applied to entrepreneurship.

Fig. 2. Value system continuum

Stable value creating system. The activities are well known and specified. We know the actors in the value creation and each of them has a pre-defined role to play in the VCS. The business processes and used technologies are well known by the key players. We know what capabilities and resources are needed for turning inputs into value-added outputs. IKEA might have once been very innovative and it redefined the furniture business value creating system. However, nowadays the value creating system is treated as very stable since other players in the field have copied more or less thoroughly its VCS. Other examples of very stable value creating systems are e.g. Volvo's or Nokia Mobile Phones'.

Redefined value creating system. Here the target value system is fairly well known, but the entrepreneur will make some improvements on the existing value creating system. These improvements may consider the whole set of components of the VCS, or just one or two of its specific factors. Quite often these changes will influence the final products (or services) so that customers will get improved value (or same value for less). It is possible for the entrepreneur to get a good idea of who is the customer and so to perform pre-marketing to create understanding about how the new redefined VCS is evaluated in the market place.

One feasible way to describe redefinition of the VCS is to look at it as a stepwise improvement of the product or production process. An example of this kind of work is iTunes. Although iTunes did not know beforehand how it would succeed, all the needed components were already present: mp3 players, e-stores for music, DRM system. But it was iTunes web-shop and software that successfully implemented this. That is, together with Apple's credibility, the very innovative and 'sleek' mp3-player design, and the growing need for new feasible products that were able to merge technology with real-life activities, it managed to break through.

Emerging value creating system. These are VCSs that are still emerging and it is not clear how the value is created. Here it is aimed at creating totally new way of providing value to customers, and, of course, also to all people relating in some way to the business venture. Quite often the emerging value creating system needs the capability of utilizing new technology. The innovations that are used are not incremental innovations as they were in the case of redefined value system above, but radical innovations. More often it is the ways in which business processes or technologies are combined or created that are unheard of among the other players in the field. One would suspect that Google was like this when it started. Though its emerging value creating system included the basic idea of the born net company, however, it was quite ambiguous about how the money would come into the business venture. Perhaps it only had high expectations that the money would somehow come along with a big customer base. Now also its EVCS has become quite well known and it can be characterized as a more or less stable VCS.

Examples of sources for emerging VCS could be new technological innovations such as printable electronics or flexible displays. Flexible display, for example, has both some old and some new ways of using this technology. While they are not yet as good quality as existing LCD displays there seems, however, to be various new applications to utilize flexible display technology, e.g. it can be integrated in clothes and used as wearable displays. Printable electronics is yet another area which will be even further developed in the future, although where it will be utilized is yet to be seen. The common thing is to come up with some kind of new and exciting application of new technology. The same kind of thing is happening with Amazon's Kindle and Apple's iPad, which are expected to change the way books and other printed materials are read and bought if successful.

Value Creation Systems as Business Models

Normann and Ramirez (1993) introduced the concept that firms are moving from traditional value chains to value constellations and called them value-creating systems. According to Norman and Ramirez, every product and service is created through many activities among suppliers, customers, employees and managers, and that all economic revolutions redefine value-creating systems. It seems that ever-tightening competition drives firms to reconfigure their business opportunities, in general, and their VCSs, in particular. According to Sanz-Velasco and Magnusson (2004: 288), it is quite clear that the *"business opportunity development does not only take place before or in the very beginning of the venture, but continues throughout the lifetime of the venture"*. This is in line with Johnson, Christensen and Kagermann (2008) who express this as follows: You should reinvent your Business Model! In all, if a firm fails in re-creating their business they will be outperformed by other firms.

Above, it is shown that the business model (BM) is one key element of the business opportunity. While the BM is commonly used in the context of business ventures, Morris et al. (2005) conclude in their study that considerable work still remains to properly understand the business model and its components. We believe that BM and VCS are tightly intertwined, and we always have to remember that when we speak of BM it is always in the light of VCS (see Parolini, 1999: 62-63). We suggest a rudimentary approach here, which we hope to be a first stepping stone for further understanding of the business model.

The definition of the business model of Amit and Zott (2001) *"depicts the content, structure, and governance of transactions designed so as to create value through the exploitation of business opportunities"* (511). Amit and Zott based their construction of this definition on some of the main theoretical frameworks of strategic management and entrepreneurship, namely Schumpeter (1942), Porter's value chain framework (1985), the resource-based view (Barney, 1991), strategic network theory, and transaction cost theory (Williamson, 1975). A business model view of value creation answers two questions: (1) How do the participants in a transaction enable it, and (2) How is value created in enabling transactions? It is also important to make a clear distinction between business model and revenue model, something which is defined as *"a revenue model refer[ing] to the specific modes in which a business model enables revenue generation"* (Amit and Zott, 2001: 515).

Whereas Amit and Zott focus on transactions, Morris et al. (2006) define their business model concept as a model that *"is used to describe a company's unique value proposition (the business concept), how the firm uses its sustainable competitive advantage to perform better than its rivals over time (strategy), and whether, as well as how, the firm can make money now and in the future (revenue model)"* (28).

Hence, by drawing on both Amit and Zott and Morris et al., we consider in the present study that the business model describes the conceptual description of the value creating system of the expected new business venture. Accordingly, it is treated as one of the key components of the creation process of the business opportunity. Matthyssens et al. (2006) argue that *"value innovation is more important than ever"* (752) since recently the already established and successful *"business models will be challenged (Stabell & Feldstad, 1998), imitated, diluted and commoditized due to intense rivalry"* (ibid). But of course, some business models, such as IKEAs, are very hard to copy though they are fairly well known.

ENTREPRENEURIAL VALUE CREATION FRAMEWORK

Value Creation Systems

To consider the teleology of entrepreneurship as value creation means that the two sub-processes, i.e. opportunity creation and exploitation, are also related to value creation. In the case of opportunity creation process there are several definitions of what kind of process it is. One of the most widely shared definitions is based on Sarasvathy, Dew, Velamuri and Venkataraman (2003) who categorize the process in three categories: recognition, discovery and creation. Their definitions parallel well the definition of Alvarez and Barney (2007): While the recognition and discovery can be related to the Discovery Theory in Alvarez and Baron, the creation refers to the Creation Theory, respectively.

From the point of entrepreneurship literature the value system continuum of Möller and Svanh (2003) shares the idea of the tripartite category with Sarasvathy et al. and Alvarez and Barney: stable VCS – opportunity recognition; redefined VCS – opportunity discovery; emerging VCS – opportunity creation. This means that the phenomena under scrutiny here, the VCS – the opportunity recognition, discovery, or creation - are actually about all these issues. However, the problem is that at the moment there is a lack of an ontological and epistemological basis to understand them all from the one theoretical perspective. The answer that is proposed in the present study is the critical realist perspective, in general, and the transformational model of social action of Archer (1998; Fig. 1), in particular.

It has been shown in the literature on entrepreneurial process that the relation between the two processes, the creation and the exploitation, should be seen as continuous, cyclical and parallel processes (e.g. Davidsson, 2005; 2006). Based on the nature of cyclicality it is possible to start the observation of the actions of the entrepreneur in the value creation process from some arbitrary point, while bearing in mind that actions do not just start and end (see Archer, 1998; **Fout! Verwijzingsbron niet gevonden.**). Starting with opportunity creation, we begin from some point on the value system continuum: with a radical non-existent idea on which the VCS is expected to be built, or with more conventional improvement to existing business logic perhaps copied from another business field. The VCS may move between the ends of continuum during the process of business opportunity creation, incorporating well-defined business solutions and inventing new ones if needed. At the end of opportunity creation this oscillation of movement will eventually diminish before the well-defined and stable proposal for value system is ready to be exploited as an input of the next sub-process of the BOC process, the Business Planning[i]. With this we then propose that all opportunity creation must obey certain well-defined business practices and it cannot escape the key business-like (or economic) restrictions. At the end of the process of the business opportunity creation there must be a feasible and identifiable logic for value creation and a definite plan for implementation so that we can move on to opportunity exploitation.

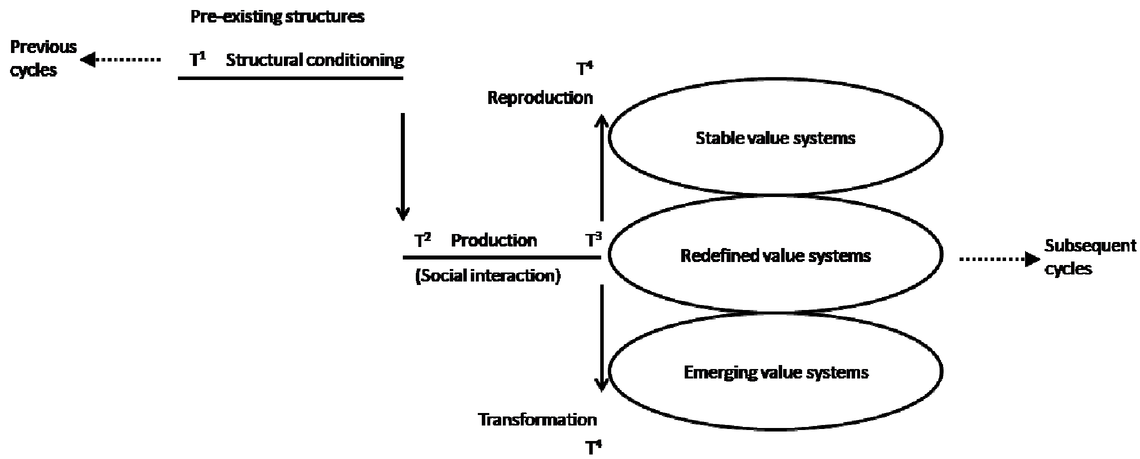

Fig. 3. Framework of entrepreneurial value creation

We propose that much of the more or less radical VCS (or the business opportunity) must also contain enough familiar ingredients so that people will accept the value it creates. Thus, although our initial idea would be radical and includes novel ways to create value for the customer there must be enough familiar points so that people can firmly anchor their value perception. So, in the case of Amazon.com and Kindle books are technological equipment and writing is bits in its memory and the new radical value is that you can carry your library with you. Thus, the VCS improvement will also include some existing stable components (or ideas), some must be adapted and some are totally new.

Process of creating business model

In this section we present a process model that describes how business model (or the VCS) develops over time and ends up being ready. The process is teleological in a sense that it aims at producing a business model that can be exploited later to create value in the real-life context. Hence, it could be seen that the business model is a vehicle to create value. Also, the process is based on the assumption that it is created purposefully and adaptively (see Van de Ven, 1992). We propose a process model based on the six business model components identified by Morris et al. (2006) (see Table 1). Each component includes a number of factors.

The creation process of a new business model starts when a person believes that he or she has an idea on which one could to create a business opportunity, i.e. to create value. One key part of the process is the creation of the business model. This initial idea for a new business model may include one or many components and factors from the business model (Table 1). After this the process continues by incorporating a component and factor at a time into the business model. This continues as long as there are components and factors left. If the new component or factor to-be-included does not fit into the existing set of components and factors in the new business model, one must change either the incorporated components and factors or the component or factor-to-be-included.

The initiating idea of the business opportunity creation may lead to a business model that can reside in any value system category (**Fout! Verwijzingsbron niet gevonden.**). This means that the 'me too' type of business model works at times when there is lots of demand in the markets. For example, in the middle of the 90s any company creating web pages could create value even if it had nothing new to offer but free resources. However, there is often some differentiating twist in business models that is accepted by customers as value creating. Here, the fitting of the components and factors into the current market situations becomes important.

When we are fitting new components or factors to the business model we may have to move along the value system continuum. Some components must be from the stable VCS. At other times, however, we may have to consider a totally new approach. So, while we take a component or factor at a time we may have to do some work with it and maybe create something new or even rely on the emerging VCS. There should be some components from the stable VCS since customers must be able to understand the benefits of the offer. If everything is brand new and unrelated to existing value systems there may be a danger that the whole business opportunity, as an entity, is too far ahead of its time.

Two Examples

An example of a very simple business model creation which is firmly based on the stable VCS is to make an agreement to start as franchisee, e.g. a Koti-Pizza[ii] license. Here the main difference between each pizzeria, i.e. franchises, is location. To be a little bit over simplistic the key component of the business model is created by drawing a circle with a pair of compasses. The rules are that the area should include more than 10 000 inhabitants and should not include another Koti-Pizza. So the appropriate point is to find a suitable location. The part that differentiates different Koti-Pizzas is location, thus belonging to the Morris et al.'s framework called "Market Factors". The main separating factor is location. The resulting business model belongs to stable value system. One could argue that location brings a little bit uncertainty to the equation and thus even these kinds of concepts are not fool-proof, because their value creation capabilities need to be tested in the actual market context. Thus, we could argue that when creating new 'koti-pizza' based on market factors belonging to established value system its value creation capability must be validated by markets.

Another example is Amazon.com's Kindle concept. The underlying vision is: *"every book, ever printed, in any language, all available in less than 60 seconds"* (Amazon, 2009). This idea has required lots of different kinds of solutions for business model components and they have all belonged to different value systems. Of course, it is impossible to reconstruct the actual process of creating the business model but we can identify in hindsight to which value system each component belongs. To start with, the first component the offering factors (Table 1) we can identify that there are some factors which have changed quite substantially. Although the primary product is a book and it has well-identified ways of creating value to the customers, the total offering includes innovative parts. The book that is sold is bits, i.e. it is in electronic form. The standard is proprietary AZW-standard and owned by Amazon.com. However, Kindle does support other formats too. Further, to be able to download the book in less than 60 seconds Amazon.com has had to develop a device, Kindle, to support this vision. Kindle allows Amazon.com to move content wirelessly into it. In addition, to support the electronic book format, Amazon.com has created Kindle-readers for PC, Mac and iPhone.

The second component market factors are almost the same as earlier. However, there is the possibility to gain new customers from e.g. newspaper readers, since Kindle allows you to download content and newspapers quickly and wirelessly into your device. At the moment, the business model is still emerging and we will see how this turns out.

The third component is internal capability factors. Here we can identify that Amazon.com has improved substantially its supply chain management by excluding a few steps from the chain. Amazon.com is skipping printing houses and logistics firms since it has turned the physical book into a bit format. This is not a brand new idea but packaged with the Kindle-reader this logistic chain works seamlessly and the end user can easily carry the electronic books around inside the Kindle and can download them everywhere via GSM network.

The fourth component of competitive strategy factors indicate to the user that Amazon.com is bringing some new value to them with the Kindle concept and the overall idea belongs to the emerging value system. The users and customer identify that Amazon.com has innovation leadership and that this whole idea finely supports their overall vision of being at the forefront of cost leadership. The product and service availability and efficiency are something unheard of and thus belong firmly to the emerging value system area.

The fifth component, economic factors, has certainly included some new ways of distributing profits among the partners. Undoubtedly, there are new ways of paying for digital rights to the publishing houses and both Amazon.com and publishing houses have to reconsider what kind of margins and volumes might be in question.

The sixth component of personal and investor factors remains the same as for the whole company. The Kindle concept supports Amazon.com’s long-term aim of giving customers the ability to buy ‘anything with a capital A’.

Amazon.com’s Kindle concept business model’s components belong to different value creation systems. Some are stable ones, some are established and quite a few are emerging ones. The components fit well together and it should not come as a surprise if this is the prevalent way of doing book business in the future.

Table 1. **The core components of the business model (Morris et al., 2006: 36)**

How do we create value? (select one from each set) • Offering: primarily products / primarily services / heavy mix • Offering: standardized / some customization / high customization • Offering: broad line / medium breadth / narrow line • Offering: access to product / product itself / product bundled with other firm's product / service • Offering : internal manufacturing or service delivery / outsourcing / licensing / reselling / value added reselling • Offering: direct distribution / indirect distribution (if indirect: single or multi-channel)	**(factors related to the offering)**
Who do we create value for? (select one from each set) • Type of organization: B2B / B2C / both / other • Local / regional / national / international • Where customer is in value chain: upstream supplier / downstream supplier / government / institutional / wholesaler / retailer / service provider • Broad or general market / niche market • Transactional / relational	**(market factors)**
What is our source of competence / advantage? (select those that apply) • Production / operating systems • Selling / marketing • Information management / mining / info, packaging • Technology / R&D / creative or innovative capability / intellectual • Financial transactions / arbitrage • Supply chain management • Networking / resource leveraging	**(internal capability factors)**
How do we differentiate ourselves? (select those that apply) • Image of operational excellence / consistency / dependability • Product or service quality / selection / features / availability • Innovation leadership • Low cost / efficiency • Intimate customer relationship / experience	**(competitive strategy factors)**
How do we make money? (select one from each set) • Pricing & revenue sources: fixed / mixed / flexible • Operating leverage: high / med / low • Volumes: High / med / low • Margins: High / med / low	**(economic factors)**
What are our time, scope and size ambitions (select one) • Subsistence model • Income model • Growth model • Speculative model	**(personal / investor factors)**

CONCLUSIONS

It is argued that the entrepreneurial process is teleological and it aims at creating value which can be captured in a conceptual level by the value creating system, i.e. business models. This paper presents a critical realism based entrepreneurial value creation framework to describe how entrepreneurs create value. In addition, the process of creating a business model is described. The resulting business models can be categorized into three different categories along a value system continuum, namely, stable value systems, redefined value systems and emerging value systems (see Fig. 3). While the business model is under construction the components and factors (see Table 1) may belong to different value system categories, so the resulting business model can have components belonging to different locations along the value systems continuum. The value system continuum is not a stage model that describes the evolution or revolution of business models. Rather it describes at a certain point of time how well a business model's capability to create value is known. Even the most innovative and radical business models will become industry recipes if their capability of creating value is superior to existing ones. We used two examples to scrutinize our entrepreneurial value creation model.

The entrepreneurial implications are that entrepreneurs should pay close attention to all components of the business model and see that they fit well together. All of the components must be thought through. The value continuum view gives managers an extra dimension so that they can evaluate the newness of the concept and thus articulate it forward, for example to the investors. Also, the newness of a given business model should advise entrepreneurs to decide how much and what sort of education and marketing material the markets need. A very new business model must show very convincingly how it creates value for the customer. Also, new value creation models may be needed for the education of customers.

The research implications lie in the use of critical realism as a basis of entrepreneurial research. Lindgren and Packendorff (2008) argue that there is a 'lack of research literature discussing underlying scientific assumptions within entrepreneurship' and this paper aims to fill, at least a little bit, that gap. Further, we hope that we have demonstrated that critical realism may have an opportunity to work as unifying epistemology and ontology in entrepreneurial research so that we can see that creation and discovery theories may indeed belong to the same phenomena. This study is only a first theoretical step towards a more comprehensive model of the entrepreneurial model. Here we have only considered the phase of creating a business model, but not the exploitation of the model and the actual value creation. This needs to be done in the future. Also, the model of entrepreneurial value creation that is presented here should be scrutinized with empirical results. In conclusion, it would be interesting to see if it is possible to evaluate business models based on their components and factors to see in which value system category they belong. This kind of tool might be of great value for venture capitalists and business angels.

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ENDNOTES

[i] Since the focus of the study is on the business model only, the other elements of the BOC process are excluded from the article.

[ii] Koti-Pizza (www.kotipizza.fi) is a Finnish pizza franchise with more than 250 firms in 130 cities around Finland. More than 95% of firms are run by independent entrepreneurs.