

*Full Length Research Paper*

# **A reference model perspective for conventional business narrative analysis: An essay on an entrepreneurial narrative**

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**When analysing a case study, using personal descriptions, involving interviewers, data analysis, and so many other possible elements, a simple qualitative method of application was revealed to be insufficient since it did not permit further analysis of the analyst's point of view, his ability to reproduce the heard reports and his personal or particular perspective on the facts. Even using narrative analysis, in its complete and diverse ways, one has always to cope with the fact that it may reveal to be incomplete when referring to the possibility of rapidly and effectively viewing the possible interrelations and crossings among actors, either physical or human. This way, the contribution given to narrative analysis by some auxiliary new tools and graphic visualisation of the total process of narrative analysis enhanced that cross-viewing ability.**

**Key words:** Narrative analysis, case study, Timmons model, business model canvas, business narrative modelling language (BNML).

## **INTRODUCTION**

Narrative analysis in human sciences refers to a family of approaches to diverse kinds of texts, which have in common a storied form (Riessman, 2005). The definition of personal narrative deserves several and different approaches, often connected to other disciplines, and therefore, we are constantly in contact with diverse references to this concept: In anthropology and social history, narrative can refer to an entire life story, embedded from interviews, observation, and documents; in sociolinguistics and other fields; narrative is a restricted concept, referring to brief, specific topic stories around characters, setting, and plot; in sociology and psychology fields, personal narrative involves sections of speech/ or

discourse – long accounts of lives through single or multiple interviews. Researchers' definitions of narrative defines a set of different methods of analysis, but all require the construction of texts for further analysis, that is, the selection and organisation of documents, field notes, transcriptions from interviews for later inspection. Narratives are not self-sufficient, requiring interpretation of the collected data.

In narrative theory, stories are abstract conceptual models used in explanations of observed data, encoding all kinds of data that are relevant to a wide range of organisational phenomena (Pentland, 1999).

This way, narrative can reveal itself as particularly valuable for an insight of the organisation. In organisation theory, "organizational story and storytelling research has produced a rich body of knowledge unavailable through other methods of analysis" (Stutts and Barker, 1999 in

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Rhodes and Brown, 2005).

As Rhodes and Brown (2005) state, the earliest explicit uses of narrative approaches to inform research methodology in management and organisation theory date from the 1970s, continuing its growing path along the following decades, in order to develop the use of narratives to explore the meaning of organisational experience.

Many times the research developed around a certain organisational experience is based on case studies methodologies, since a case study is an ideal methodology when a holistic, in-depth investigation is needed (Feagin et al., 1991).

The history of case study research is marked by periods of intense use and periods of disuse. The earliest use of this form of research can be traced to Europe, predominantly to France (Tellis, 1997). The case study research design has evolved over the past few years as a useful tool for investigating trends and specific situations in many scientific disciplines. A good case is more than just a description. It is information arranged in such a way that the reader is put in the same position as the case writer was at the beginning when he or she was faced with a new situation and asked to figure out what was going on. This method of study is especially useful for trying to test theoretical models by using them in real world situations.

Basically, a case study is an in depth study of a particular situation rather than a sweeping statistical survey. Case study research is not sampling research; in fact, the unit of analysis is a critical factor in it. It tends to be selective, focusing on one or two issues that are fundamental to understanding the system being examined. In a case study, nearly every aspect of the subject's life and history is analyzed to seek patterns and causes for behaviour. The hope is that learning gained from studying one case can be generalized to many others.

Typically, case studies can be single or multiple-case designs, knowing that a multiple design must follow a replication rather than a sampling logic. Yin (1994) pointed out that generalisation of results, from either single or multiple designs, is made to theory and not to populations. Multiple cases strengthen the results by replicating the pattern-matching, thus increasing confidence in the robustness of the theory.

The use of a case study approach is determined by four factors: The nature of the research questions; the amount of control the researcher has over the variables under investigation; the desired end product; and the identification of a bounded system as the focus of investigation (Merriam, 1988).

As mentioned by Barkley (2006), insights into small business development are provided through an extensive research base consisting of the analysis of secondary data, surveys of samples of the populations of interest,

and case studies of select individuals, enterprises, or programs. A common use of the case study research methodology is the "evaluation" of businesses aiming the identification of potential explanations for their successes or failures.

Typically, in traditional narrative analysis the collected data of a given organisation enables us to evaluate its surface but never allowing the uncovering of the deeper and underlying structure, the most interesting data for a business analyst to collect.

In the present paper, the authors propose themselves to move from the surface (the collected data driven from the analysis of a particular business case study) to the underlying structure, raised by the use of a specific data analysis tool that enables the visualisation of direct and underlying connections of a series of events described by the narrative present in the case study.

The authors' approach on the analysis of a given case study narrative relies on the fact that it was based, at first, on some typical features of a narrative text (or discourse), such as the event's sequence in time, the main actor or actors, the narrative voice (here represented by the author of the analysed case study) and the context. But these traditional features revealed to be insufficient for the understanding of the underlying structure of the analysed case study narrative, since they revealed to be unable to allow the increase of accuracy in the coding process of the case study.

This way, the authors' intent of going deeper in the case study narrative analysis, led to the belief that this specific case study (as any other case) needed the explanation concept which, according to DiMaggio (1995), is the story that describes the process, or sequence of events, that connects cause and effect. Explanation is essential to theory and practice since we all need an explanation of what causes observed outcomes (Pentland, 1999).

The use of this particular added feature – explanation – revealed to be a powerful method which, when applied to a visual methodology of presenting the case study's narrative collected data, enhanced the possibility to generalise and find related sequential patterns that may enable analysts to perform more modern narrative analysis to other case studies and, therefore, help them analyse entrepreneurs' stories (and, by consequence, their endeavours) as important resources to define the impact entrepreneurs have in modern economic systems. And, even more, as said by Steyaert and Dey (2010), "experiments with visual methodologies might prove most helpful in enhancing the (...) interventionist potential of (...) [business] research".

The use of computational models of narrative structures has been tried in the last decades. Examples such as the ones presented by Christian and Young (2002) are proof of that and as mentioned by them "A growing number of applications seek to incorporate

automatically generated narrative structure into interactive virtual environments" (Christian and Young, 2002). In their paper they evaluate a representation for narrative structure generated by an automatic planning system by (a) mapping the plans that control plot into conceptual graphs, and (b) using methods to determine if the plan structures can serve as effective models of the understanding that human users form after viewing corresponding stories played out within a virtual world.

As they mention, "...detailed, immersive 3D virtual environments are increasingly commonplace in applications ranging from entertainment to social interaction to education and training. While many of these virtual environments include a narrative, the interaction within them is generally prescribed with little dynamic capability" (Christian and Young, 2002).

As they continue saying, some recent work keeps seeking the development of algorithms that dynamically generate narratives for such environments. Another example of these recent attempts is the work performed by Tuffield et al. (2006), where they seek for a Narrative modelling.

Taking into account that a single-case research design is useful if the case is an extreme, unique, or revelatory case; a representative or typical case; or a longitudinal case (Yin, 2003), and that a multiple-case design enables the researcher to make generalisations based on the observations of patterns or replications among the cases, the present paper clearly intends to develop a crossover between narrative analysis elements, business analysis methods and visualisation tools, in order to start from a single-case design analysis aiming the identification of patterns that allow it not only to be replicated but also compared to other similar cases (entrepreneurial cases, in the present paper).

This way, a graphic visualisation of the entire story of the case study was needed, in order to accomplish the desired cross-viewing of the total case.

As part of our study, the present paper will build a straight connection between the Narrative Analysis method and;

1. The Timmons Model (2004): used to frame the entrepreneurial endeavour rationale;
2. The Business Model Canvas (2009): used to set the context for the actual business plan;
3. The Enterprise Ontology (1998), the Game patterns (2005) and the Tangible and Intangible Assets (2008): used for the construction of a list of terms that will feed the creation of a coding scheme.
4. The Business narrative modelling language (BNML, 2011) was also used as a visual methodology for entrepreneurship research, allowing the intersection of the case study narrative analysis' collected data.

This paper will, therefore, first present some formulated

reflexions on the background research in order to enable the definition of the research path which led to the discussion of the research question and the methodology used by the authors to perform the coding scheme, and consequent construction of the analysis model of a specific entrepreneurship case study.

Make notice that, in the present paper, the presented example is a singular, particular and very restricted example of the total work and experience performed by the authors on the entrepreneurial case study in question.

Secondly, the presentation of the used case study – its background – leads the authors to the presentation of a concrete analysis, making use of the traditional narrative analysis features supported by visually modelling tools of coding and visualising collected data, leading the present work to the discussion moment, ending up with the presentation of a conclusion, indicating how the development of modelling tools of graphic and visual presentation of a narrative analysis enhances the improvement of the entire analysis process itself and, therefore, of the ability to perform entrepreneurial case studies' cross-viewing and possible comparisons.

## BACKGROUND RESEARCH

### Narrative analysis

When it comes to make reference to models of narrative analysis, several typologies exist. Despite the hierarchical or evaluative typology we chose, one cannot forget that the different approaches can always be combined: they are not exclusive and their boundaries can be revealed as fuzzy. Looking at some examples of narrative analysis typologies, there are several that can be mentioned, as follows (Riessman, 2005):

1. Thematic analysis: where the emphasis is on the content of a text - what is said more than how it is said, the told rather than the telling. A case study is a good illustration of this type;
2. Structural analysis: the emphasis is mainly on the telling, the way a story is told. This structural approach analyses the function of a clause in the overall narrative.
3. Interactional analysis: the emphasis is on the dialogic process between teller and listener, where the storytelling is seen as a process of co-construction, where teller and listener create meaning collaboratively. In some cases, some research questions require this interactional analysis. This specific approach is useful for studies of relationships between speakers in diverse field settings.
4. Performative analysis: going beyond the interactional approach, in this approach interest extends the spoken word and storytelling is seen as performance – by a "self" with a past – who involves, persuades, and moves an audience through language and gesture, "doing" rather

than telling alone. Performative analysis is emergent in narrative studies, and is seen as an appropriate approach for studies of communication practices, and for detailed studies of identity construction.

As seen, narrative analysis is no longer confined to the literary studies and, in modern analysis of all sciences and practices, it revealed to be suited to study personal experience and lives, despite the field of action.

Throughout the years, many have been the researchers developing theories and studies around the field of narrative analysis. As mentioned by Tuffield et al. (2006), Narratives have long been considered a primary way in which human beings communicate with one another. The traditions of oral storytelling that have evolved into our contemporary modes of narrative have been recognised as the basis of transferring knowledge within societies. This way, there are numerous studies and research results around the subject of narrative analysis.

Although, there is not a precise definition, scientifically accepted among researchers, for the term "narrative", it is agreeable that "to narrate" is a basic element of the linguistic activity. It is, in fact, seen as a proper type of daily communication (Hanke, 2003). Assuming that a narrative analysis is the analysis of a chronologically story (told by someone), it is based on how elements are sequenced, why is the evaluation made to some elements different from others, how the past moulds one's perceptions of the present, how that present moulds perceptions of the past, and how both mould one's perceptions of the future (Garson, 2011).

In order to develop a coherent and sustained narrative analysis one has to fully understand the true meaning of a narrative structure. For this reason, it is compulsory for narrative analysts to develop a well structured definition of the narrative structure scope. First of all, it is compulsory to clearly define where the narrative acting is; what is its field of action. Once the field/scope/scenario is defined it's a question of defining the target: what do we want to hear about? Everyone likes stories! Stories are part of our lives, of our daily business performance. This way, it is a question of correctly directing the right speech to obtain the right stories.

As Stewart (2004) argues, "Stories engage. They catch, hold and focus our attention. In a well-told story, the facts come alive, and the neophyte finds himself or herself immersed". It is always a question of looking at the text/speech in a certain context. Context defines it all, and the text or speech one uses to simply write/talk about something is all about the context. Assuming that a text exists on a macro linguistic level, the level of discourse, it is sure to state that a narrative structure comes in to organize the content of that discourse. On this basis, we can afford saying that a narrative structure carves the total amount of the speech into its particular, smaller and

more manageable units, in order to present and process them in a logical and sequenced way, distributed in time.

As stated by Pentland (1999), event sequence is the core of narrative structure. It is also an important point of reference because it is frequently the only aspect of narrative structure that is analysed. From this definition, we can assume that, in general terms, an acceptable definition of narrative structure would be the one that defines it as a way to process and partitioning events, enabling their gathering across time.

The presence of time in a narrative analysis is, in fact, the distinguishing point. Time plays a major role on what concerns the analysis, evaluation and definition of a business narrative (whatever kind of narrative in business ambience). Assuming the three characters of a narrative structure – speech events, logical sequence, and time – it is assumable that narrative structure is the only one that enables a fully based ground for understanding a business event (whether it's in a form of a simple story – the culture of a business company –, a communication process – data distribution –, or a visionary strategy – a glance in the future).

Narratives are a very common form of human communication, since people can and do make sense of their experience by linking events through plot lines, thereby constructing narratives (Polkinghorne, 1988).

As history proves, Narratives have been quite a good ally to business management. As mentioned by Arthur Frank (2002) "Stories give lives legibility; when shaped as narratives, lives come from somewhere and are going somewhere. (...) Narrative analysis begins with an attitude toward stories". There are several methods and methodologies (models, in fact) that have been helpful for the understanding of a narrative model, for the deconstruction of the story of how a business was raised and developed, and how the endeavour of a business project can be described.

In fact, as said by Frank (2002), narrative analysis has to be seen as far beyond the production of knowledge from and about people's stories. The process of narrative research – the kind of research as participating in storytelling – has the potential to model how members of society can most usefully recognize each other's stories. And most of all, if narrative analyses are supposed to offer readers ways to hear in the story what Taylor calls "a standard of what we ought to desire", the main goal would be to gather a narrative analysis with business analysis models and provide our entrepreneurs with a way of recognising how can their endeavour be seen and supported and what kind of examples can they profit from in order to establish where their entrepreneurial path is leading.

When pioneering new ways of using narratives as empirical materials, researchers have also developed new methodological positions in terms of the narrative nature of research itself. As mentioned by Rhodes and

Brown (2005), in reviewing case studies in organisation and management theory, Dyer and Wilkins (1991) made the observation that such studies gain their power from their narrative elements rather than just their abstract concepts. They suggested that these stories use the theory as a plot and are highly effective and persuasive means of communicating research (especially in contrast to statistical demonstrations of theory).

Today, narratives are recognised not only as a form of data, but also as a methodological approach, indicating and constructing the present narrative's impact. Since the most essential element of a case study is the identification of the case itself, it therefore allows the identification of certain features occurring within the boundary of the case as well as other features outside it. As mentioned by Stake (1994:5, in Denzin and Lincoln), the end result of a case study can draw:

1. The nature of the case itself;
2. The historical background of the case;
3. The physical setting in which the case is bounded;
4. Other contexts, such as economical, political and legal, that impact upon the case;
5. Other cases, through which the case is recognised;
6. Those informants through whom the case can be known.

This can be assumable and useful for all types of case studies. But when it comes to analysing a business case study, some visually modelling tools reveal to be extremely useful for an analyst's work. This way, the authors assumed the introduction of the Timmons model (1997), the Business model canvas (2009) and the Enterprise ontology (1998) along with the traditional narrative analysis (Labov, 1972) as an extremely valuable tool to develop a reference model to perform narrative analysis on business cases.

As presented on Table 1, it becomes easy to envision how a business case narrative analysis can be done with the help of some different visually modelling tools and methodologies' term-crossing, enlightening the possibility to establish some precise and direct relations between a form of narrative analysis (part of Labov's contents of a narrative analysis) and these visually modelling tools (Timmons' model main elements, Business model canvas main elements, and the Enterprise ontology main elements).

### **Timmons model**

As Goldman and Valencia (1997) say, "The key factors in the Timmons' model are the entrepreneur and the founding team, the opportunity, and the resources that are mustered to start the new organization. Put simplistically, the Timmons' model is normative. The key

ingredient is the entrepreneur." Compelled by the right issue, directed to opportunity finding, focused on the obtained results from the search for opportunity, success becomes a matter of time and will.

When analysing the Timmons' model (Figure 1) it becomes understandable that the three main "intervening characters" are based on the notions of opportunity, team and resources. All together, facing the demanding of the exogenous forces (covered by the Capital Market Context) and the Ambiguity (covered by the Uncertainty), force the intervention of the model's items related to leadership and creativity. Above and under this entire "cycle" there's the presence of two of the major intervening forces: The founder and communication.

### **Business model ontology (business model ontology canvas, 2009)**

As stated by Osterwalder and Pigneur (2002) "a Business model (BM) stands for a conceptual tool that contains a set of elements and their relationships and allows to express the business logic of a specific firm."

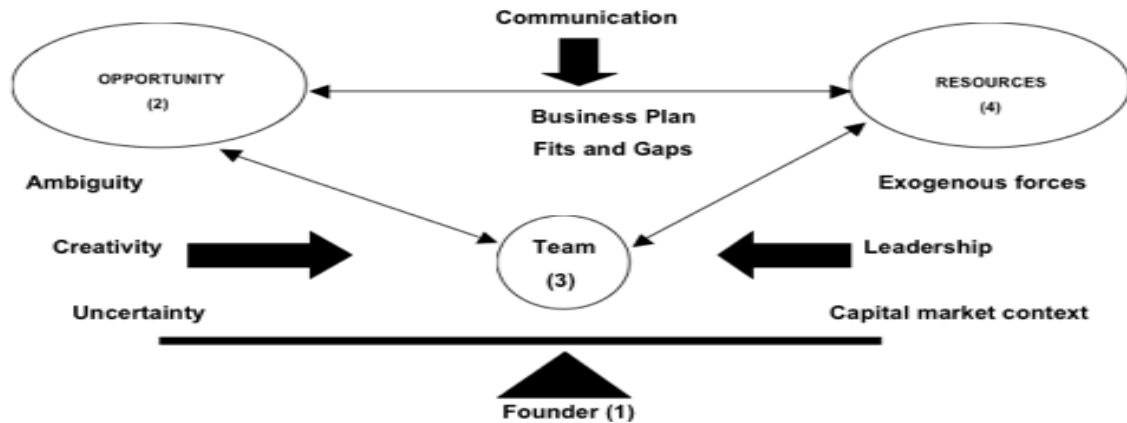
The design of a business and its deep understanding goes through the "totality of how a company selects its customers, defines and differentiates its offerings, defines the tasks it will perform itself and those it will outsource, configures its resources, goes to market, creates utility for customers, and captures profit. It is the entire system for delivering utility to customers and earning a profit from that activity" (Slywotzky, 1995).

For Osterwalder and Pigneur (2002), the question is raised on what concerns the "what", the "who" and the "how" of a business, as well as the "how much". In their words, "... these pillars allow to express what a company offers, who it targets with this, *how* this can be realised and how much can be earned by doing it". Such a schematic description of the company's business system, they say, can serve as a basis for discussion or as a plan for implementation. The Business model framework (BMF) presented in their "Business Model and Their Elements" (2002) is a generic model with which companies can express the business logic underlining their firm. The framework presented by them is composed of a set of objects that relate to each other and that can be classified among the mentioned categories of "what", "who", "how" and "how much", being the "what" related to the product innovation (the value proposition); the "who" related to the customer management (the target customer, the channels, and the customer relationships), the "how" related to the infrastructure management (the capabilities and resources, the value configuration, and the partnership); and the "how much" related to the financial aspects (the revenue model and the cost structure). This classification, when sustained and accompanied by a narrative analysis, enlarges the

**Table 1.** Labov's and Timmons, BM canvas, and enterprise ontology probable connections.

Labov's narrative analysis contents	Timmons' model contents	Business model canvas contents	Enterprise ontology contents
3. Complication (the problem to be solved <sup>1</sup> )	Opportunity (opportunity starts as an idea, has a variety of origins. It goes through various stages of refinement (anywhere from one to five years in our sample) before launch; and the intention is to create value <sup>2</sup> ).	Product Innovation/Value Proposition <sup>4</sup> (What)	Meta-ontology <sup>5</sup> (achieve, actor, role, attribute, entity relationship, state of affairs, and theme)  Activities and Processes <sup>5</sup> (activity, capability, doer, effect, execute, planning, process, resource, skill)
4. Evaluation (significance of each action to the story as a whole and to its theme <sup>1</sup> )	Business plan (Fits and gaps: Resources and team to catch up? How large and profitable can we become? <sup>3</sup> ).	Customer management <sup>4</sup> - the target customer, the channels, and the customer relationships (Who)	Organisation <sup>5</sup> (asset, corporation, ownership, partnership, share)  Strategy <sup>5</sup> (assumption, critical factor, purpose, objective, risk, strategy, vision)
	Opportunity -> Resources ( <u>Opportunity</u> as "various stages of refinement" + <u>Resources</u> as "initially garnered by bootstrapping, networking, making critical alliances, and using other people's resources" <sup>2</sup> ).	Infrastructure management <sup>4</sup> - the capabilities and resources, the value configuration, and the partnership (How)	Marketing <sup>5</sup> (customer, price, brand, competitor, image, market, need, product)
5. Resolution (solves the problem <sup>1</sup> )	Opportunity -> Creativity ( <u>Creativity</u> as "the 'unwritten goals' (...) the essence of social entrepreneurship; yet they tend to be intangible in nature and less amenable to measurement." <sup>2</sup> ).	Financial aspects <sup>4</sup> - the revenue model and the cost structure (How much)	
	Resources -> leadership ( <u>leadership</u> as the way the leader "learns and teaches; the resilient [who] deals with adversity; [the one who] exhibits integrity, dependability, honesty; [the one who] builds culture and organization" <sup>3</sup> ).		

<sup>1</sup>Labov William (1972). Language in the inner city. Labov Ed. Philadelphia: University of Pennsylvania Press. <sup>2</sup>Goldman and Valencia (1997). The Timmons model. Babson College. <sup>3</sup>Timmons and Spinelli (2008). The Timmons model of the Entrepreneurial process. Source: New Venture Creation, Entrepreneurship for the 21<sup>st</sup> century. Innovation Ventures. <sup>4</sup>Osterwalder Alexander, Pigneur Yves (2009). Business model generation. Amsterdam: self published. <sup>5</sup>Uschold et al. (1998). The Enterprise Ontology. UK: Cambridge.



**Figure 1.** Timmons and Spinelli (2008) *New Venture Creation, Entrepreneurship for the 21<sup>st</sup> Century*. Innovation Ventures.

possibility of a true awareness of the story behind a business project.

### Enterprise ontology

According to Fraser et al. (1995), the Enterprise ontology was developed as part of the enterprise project in a collaborative effort to provide a method and a computer tool set for enterprise modelling, creating an enterprise modelling framework for integrating methods and tools. The ontology's major role is to act as a communication medium; in particular, between: Different people (including users and developers, across different enterprises); people and implemented computational systems; and different implemented computational systems.

Also, and very importantly, the ontology is intended to assist acquisition, representation, and manipulation of enterprise knowledge (such assistance is via the provision of a consistent core of basic concepts and language constructs); structuring and organising libraries of knowledge; and the explanation of the rationale, inputs and outputs of the Enterprise tool set modules.

Predicting a wide interest on this Enterprise ontology, it became evident that it would be of great value for codified knowledge in the enterprise modelling domain as well as for the achievement of an integrated enterprise, since it facilitates a better communication between humans. The Enterprise ontology would contain most or all of the general terms relating to an enterprise (for example, sale, activity and strategy), which have been chosen, as far as possible, to match the natural use of English words by people managing enterprises. In general terms, the Ontology definitions have a normative role and define how a limited set of terms are to be used

in relation to each other. Above all, the central purpose of the Enterprise Ontology is to achieve effective sharing of meaning.

### RESEARCH

#### The research path

Along the last decades, researchers sought new ways to incorporate stories into research. Often connected to social constructivist framework (Boyce, 1996), the use of narratives as data enabled researchers to examine emotional and symbolic lives within organizations (Van Buskirk and McGrath, 1992; Gabriel, 1998).

Assuming Brown's et al. (2005) words, the term "organisation" is a spatial metaphor that implicates a shared discursive space in which meanings are ascribed to, and understandings produced, of actors, events, actions, and contexts. This way, it is assumable that narrative within organisations can be seen as the "structures" through which action reveals its purpose.

This paper emerges therefore, in the context of a research project concerning the use of narrative analysis and some of its tools, to enable a deeper understanding of the organisational process. As mentioned previously, narrative analysis provides a wide scale of data concerning the life history of business endeavours. Through narrative analysis, it is possible to become aware of what people think about their performance, the whole organisation, the total performance of the company, the possibilities of progression (their own and the company's one), and so many other data.

For the present research work, the authors decided to study how this visual way of doing narrative analysis

(joining traditional narrative analysis with visually modelling tools and methodologies) can help understanding how new businesses, entrepreneurial business most of all, are faced and how they can be explained, understood and told about.

The authors knew that, above all, in order to totally construct a well-based and sustained narrative analysis of an Entrepreneurial endeavour, each analyst has to focus some of his time on understanding and questioning, namely by trying to answer questions such as:

1. What was the product and/or service idea?
2. Who was the creator/founder/entrepreneur?
3. What atmosphere embedded the business?
4. What kind of support did the entrepreneur have?
5. How was the team reunited?
6. What kind of resources did the entrepreneur faced?

The answer to these questions will bridge the gap between: the narrative analysis of the Entrepreneurial endeavour, upon the launching of a new business endeavour; and the Timmons' model framework, on what concerns the driving forces of value creation in the entrepreneurial process. The business model concept, in Osterwalder and Pigneur's (2002) words "stands for a conceptual tool that contains a set of elements and their relationships and allows expressing the business logic of a specific firm" will also emerge from this analysis further reinforcing the contextual analysis.

As said before, context defines it all, and the entrepreneur's Narrative will depict context as well as the entrepreneurial endeavour life history. For this purpose, to be accomplished in a faster way and, most of all, in a way in which it was possible to cross-view the entire interveners along the life history of the entrepreneurial endeavour, the use of visual analysis tools was revealed to be crucial in the present study.

### **Motivation and research question**

The 1<sup>st</sup> author's experience on narrative analysis was done during 4 years (from 1998 to 2002) as part of a PhD thesis on a Capeverdean social, cultural, historical and literary "phenomenon": emigration. The author was compelled to drive an accurate analysis on several data present in different sources, such as literary texts, newspapers, political propaganda, historical and sociological essays, and so many others. After a precise data collection, the author preceded with a 3 h focused interview to one of the major capeverdean authors who dedicated his entire life (social, political and literary life) claiming for a solution to this incomparable phenomenon that was driving the capeverdean people to a deeper poverty and a lack of motivation to stay in their lands.

The use of "traditional" data collection and data coding scheme took a great amount of time and severe difficulties on processing the amount of collected information. Those years of research revealed to the author that the use of a current way of narrative analysis and the traditional way of collecting and processing information was not sufficient and, most of all was not practical to allow the development of a visual and direct relation between background data, facts, events, actors, and a timeline. Narrative analysis, in its traditional way of doing, allowed the compilation of several important issues that were extremely important to establish a direct connection between the historical, cultural and social behaviour of the archipelago and the continuity of the severe phenomenon of emigration, along with an important view over the feelings of native speakers (authors, politicians, historians, etc.) concerning the land, the latent impossibility to live on it and a strong willing of defending and reverse this on-going phenomenon. Nevertheless, this entire purpose took the author near 4 years to be done (time between data collection, interview and narrative analysis of the collected information).

In this context, and aligned with the presented research path, our research question is:

*"How can Narrative Analysis be used in the dissection of an Entrepreneurial endeavour in a way as to allow a deeper and cross-viewed presentation of its process interrelations?"*

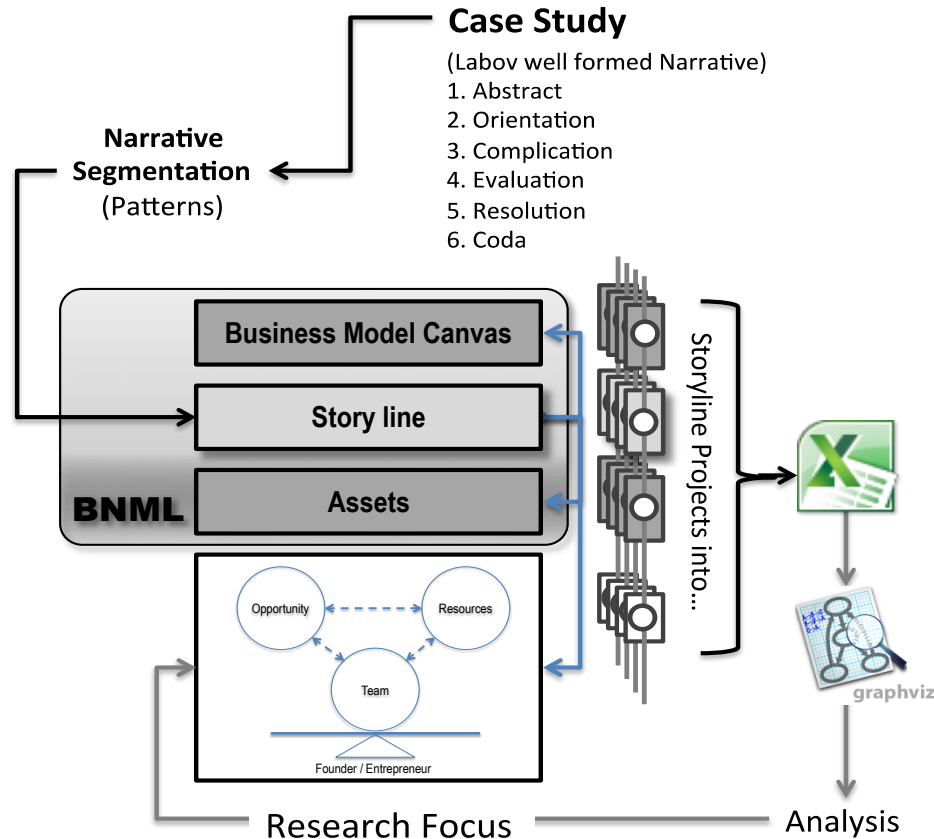
### **METHODOLOGY**

Based on the statement that argues that Entrepreneurship reveals "a conscious state of mind that directs attention (and therefore experience and action) toward a specific object (goal) or pathway to achieve it (means)" (Bird, 1989 cited in Hamidi et al., 2008), in this paper we build upon this perspective using an interpretive research approach (Walsham, 1995) combined with some narrative research methods in order to analyse the path followed (and created) by an entrepreneur.

This research builds on a specific case study. This case study documents, step by step, on the attempt of an entrepreneur to turn his conscious state of mind on a particular field, into a reality. The authors' research, partially presented in this paper, uses narrative analysis combined with visual analysis tools in the dissection of an Entrepreneurial endeavour.

Labov's (1972) well-formed narrative, based on the sequence: Abstract; Orientation; Complication; Evaluation; Resolution; and Coda, was the underlying sequence used by the 1<sup>st</sup> author on her first experience on narrative analysis. The available time frame for analysing the entrepreneurial case study narrative led the authors to use the business narrative modelling language (BNML) developed by Oliveira and Ferreira (2011) as a method to facilitating qualitative research in business studies. Because the above mentioned 1<sup>st</sup> author's first experience of traditional narrative analysis' application revealed to be immensely time-consuming, the authors of the present paper decided to try a mixed model, as a new tool for a deeper and cross-view analysis possibility. The experience of this new tool was performed in the analysis of a total





**Figure 2.** Case study analysis strategy. Business model canvas (Osterwalder and Pigneur, 2009). Story Line: Uschold's et al. (1998) Enterprise Ontology; Bjork and Holopainen's (2005) Game Patterns; Allee's (2008) Value Exchange. Assets: Allee's (2008) Tangible and Intangible Assets. Timmons model: Based on Timmons; Zacharakis and Spinelli (2004). "Business plans that work: A Guide for Small business.

case study narrative. For the present paper, the author's experience will only be partially presented as an example of the tool's usage.

Business narrative modelling language (BNML) developed by Oliveira and Ferreira (2011) is a method to facilitating qualitative research in business studies. This method is outlined in Figure 2 and unfolds as follows: (1) The process starts by segmenting the Narrative as Patterns coded as Game design patterns (Bjork and Holopainen, 2005); (2) These semantically meaningful patterns are parameterised using the Enterprise ontology (Uschold et al., 1998); (3) Each of those patterns is finally projected into the entity Asset (Allee, 2008) usage and/or construction, and into the Business model canvas (Osterwalder and Pigneur, 2009)

The BNML is finally projected into the analysis domain that, for this research, is the actual Timmons Model. In this context, the narrative segmentation allows the construction of a direct relationship between each narrative text segment and a narrative pattern and, as a consequence, with all other items (Business Canvas, Assets and the Timmons Model) used as a coding scheme for the analysis.

The resulting relationships are structured as a table in Microsoft Excel. Pivot tables are finally used to select the desired views on data that is, finally, exported as a text file to Graphviz that enables the clear visualization of relationships among the keywords used in the coding scheme.

## A NARRATIVE ANALYSIS

In the authors' research team, there is a generalised interest in the study and analysis of how entrepreneurship works, and how can it be studied. This way, for the present study, the authors' intent was to choose an available and public entrepreneurial case study and develop a reference model to perform modern narrative analysis, capable of enabling wider and spreader perspectives of a common context. The entrepreneurial case study was chosen in STANFORD – Graduate School of Business, IDEAAS and professional service automation (PSA). Replication in the Amazon Case E-264.20/07/2007 seemed to have the necessary data and entrepreneurial endeavour description in order to perform the desired narrative analysis experience.

## Background

As the study "IDEAAS and PSA: Replication in the Amazon" (2007) mentions, in 1983, Fabio Rosas had just finished his engineering degree as he became secretary of agriculture for Palmares does Sul, an agricultural community in a Brazilian region with around 10,000 inhabitants. When in direct contact with this population, he was surprised to find that 70% of them did not have access to electricity, which happened to be their main pain point. Fabio began

exploring possible solutions to the problem. Compelled to address what he saw as the most critical problem ahead of him, Fabio began trying to adapt a more cost-effective form of energy generation and distribution to the situation. After much work, Fabio developed a more cost-effective form of energy distribution which he called "Low Cost On-Grid Rural Electrification System".

In 1984, Fabio implemented the solution in three prototype installations, and successfully refined the model. Most importantly, he obtained approval from the government to roll out the solution. Between 1985 and 1988, Fabio implemented the project in 420 households in the region. In 1988, Rosa founded the "Simplified Rural Electrification" project seeking to extend the same model. Five years later; in 1994, the project was successfully completed, bringing electricity to 6,200 families (31,000 people).

Later, in 1995, Fabio's model was further consolidated, as the country's most populous state of São Paulo approved its implementation in 425 municipalities. Fabio decided to expand beyond the south of Brazil, and launched a new non-profit in April 18, 1997. Headquartered in the city of Porto Alegre, Rio Grande do Sul, he founded the IDEAAS. Fabio launched IDEAAS to develop, install and replicate sustainable development models to underserved rural populations. The recognition of his business value became visible when in 1994, the Ashoka Society, based in Washington, D.C. began supporting its work.

Later, Fabio Rosa's organization was also selected as one of the partners of the Schwab Foundation for Social Entrepreneurship, based in Geneva, Switzerland. After analyzing his options, Fabio found that the Amazon region appeared to be a better home for IDEAAS. It had a larger number of inhabitants, many of whom lived at the lowest income levels.

In July 19, 2004, Fabio met the Scannavino brothers Eugenio and Caetano Scannavino, founders of an organization called Projeto Saude e Alegria (PSA). A replication project had just been seeded. The IDEAAS/PSA replication pre-viability project was officially kicked-off in October of 2005.

### Coding scheme for the construction of the analysis model

The coding scheme that, afterwards, fulfils the frame of the multi-possibilities of the narrative analysis is based on a simple Microsoft Excel. This tool allowed the authors to input several different data collected from the traditional narrative analysis, plus the application of the main items driven from the Timmons' model, the Osterwalders' Business model canvas, the Uschold's Enterprise ontology, the Bjork and Holopainen's Game patterns, and the Allee's Assets, as seen in Table 2, where the authors present the terms that were used to develop the analysis, based on the referred ontology/glossary/library used during the case study analysis. These main items were used in the performed analysis of the case study.

This way, we have a first column where the time line is established (in the analysed case study the authors divided the analysis in two major groups: the first project, and its time phases, in Rio Grande do Sul; and the second project, and its time phases, in Amazonia). The following five columns relate to a list of terms extracted from the previous mentioned literature (Table 2). After these columns were established, we have another column containing the each line direct connection of the points extracted from the analysed case study document (IDEAAS and PSA: Replication in Amazon), with the items of each previous column. This sixth column is followed by another one that contains direct quotations from the Case Study document (IDEAAS and PSA) to support, as proof of, the evident connection between what the document reveals and what that revelation means in entrepreneurial

business terms.

The coding ends with a last column where some programming was done in order to allow the creation of Pivot tables that enable the analyst to select clear and visual relationships among the keywords used in the coding scheme. Figures 3 and 4 illustrate the usage of the coding scheme and of the analysis tool. The first shows a sample of the Microsoft Excel table used for coding the case study narrative as "Text\_evidence". The result of that coding, for each line, is in the last column of the Microsoft Excel table.

These Pivot tables, when exported (as a text file) to the Graphviz application enable a clear, accurate and total visualisation of the relationships among the case study narrative analysis' selected data. Figure 4 shows a portion of the resulting PivotTable on the Amazon Project (AMZ) and, on the left, the graph obtained using the Graphviz visualization tool. The fact that we have evidence from the case study to support each connection in the graph really accelerates the whole analysis process. This modern methodology, created by Oliveira and Ferreira (2011), the BNML, is a visual methodology extremely useful for entrepreneurship research, since it allows the intersection of the case study collected data driven from the performed narrative analysis.

### ANALYSIS

Entrepreneurship research has long examined the vast impact of personal history and social context on the propensity to engage in entrepreneurship by starting one's own business (Katz, 1992 cited in Hamidi et al., 2008). As commonly accepted, and mentioned previously (Bird, 1989, cited in Hamidi et al., 2008), an entrepreneurial intention has been described as "a conscious state of mind that directs attention (and therefore experience and action) toward a specific object (goal) or pathway to achieve it (means)". Taking this statement into consideration, subsequent Figures result from a profound analysis of the IDEAAS narrative, allowing us to read and understand the time line, the events, the logical sequence, and time space, the description and classification of what and how things happened, to end up revealing the culture of a business company and its owner's visionary strategy.

Fabio Rosa's story is divided in two different phases corresponding to the two major project implementations he overcame: The Rio Grande do Sul Project and the Amazonia Project. Focused on these two phases, it becomes possible to envision several steps of the Entrepreneurial process, such as:

1. Rio Grande do Sul: The spotted opportunity, the required Resources and the Post-Project phase;
2. Amazonia: the spotted opportunity, the required resources and the launching of the project.

On what concerns the first project (Rio Grande do Sul), one can say that the opportunity (Figure 5) Rosa found came from the action based on an analysis paralysis observation (*Analysis Paralysis: "The players can spend considerable amounts of time planning their actions,*

**Table 2.** List of terms used in the coding scheme.

Ontology/glossary/library	Terms used
Business canvas (Osterwalder and Pigneur, 2009)Business model canvas]	KR, CS, KP, VP, CH, KA, COST_S, CR
Timmons' model [(Timmons et al., 2004). Business plans that work: A guide for small business]	TM_Founder, TM_opportunity, TM_exogenous_forces, TM_resources, TM_uncertainty, TM_creativity, TM_resources, TM_leadership, TM_capital_market_context, TM_team, TM_ambiguity
Enterprise Ontology (EO) [(Uschold's et al., 1998). Enterprise Ontology]	EO_Role, EO_Need, Actor, EO_Vision, EO_Asset, EO_Strategic_planning, EO_Process_specification, EO_Planning, EO_Product, EO_Market_segment, EO_Potential_customer, EO_Mission, EO_Strategic_purpose, EO_Stakeholders, EO_Goals, EO_Shareholder, EO_Goal, EO_Relationship, EO_Market_need, EO_Asking_price, EO_Resource_allocation, EO_Market_research
Game pattern (GP) [(Bjork and Holopainen, 2005). Game Patterns]	GP_Betting, GP_Analysis_Paralysis, GP_Agents, GP_Construction, GP_Area_Control, GP_Alignment, GP_Clues, GP_Communication_CH, GP_Cooperation, GP_Committed_goals, GP_Converters, GP_Previleged_movement, GP_Investments, GP_Constructive_play, GP_Producer_consumer, GP_Rewards, GP_Empowerment, GP_Alliances, GP_Helpers, GP_Resource_generators, GP_Public_information, GP_Competition, GP_Communication_channels, GP_Mutual_goals, GP_Exploration, GP_Arithmetic_Rewards_for_Investments, GP_Dynamic_alliances, GP_Experimenting, GP_Higher_level_closures_as_gameplay_progresses, GP_Levels, GP_Perceived_chance_to_succeed, GP_Competence_areas, GP_Collaborative_actions, GP_Closed_economies, GP_Score
Builds / Uses [(Allee, 2008). Tangible and intangible assets]	Uses_knowhow, uses_technicalknowhow, builds_capital, builds_marketinsights, builds_newpolicies, builds_confidence, builds_innovationcompetence, builds_opportunity, builds_market_development, builds_partnernetwork, uses_competence
ROSA case study key points of extraction (*)	Rosas background, rural_community_of_palmares, state_owned_electricity_communities, key_idea, ownership, project_growing, aims, public_meetings, ideaas_first_attempt, project_attempts, consumer_benefit, project_1ststep_riograndesul, project_development, ideaas_first_steps, customer_relations, customer_benefits, ideaas_adaptation, national_government_luladasilva, luladasilva_government, enlarging_ideaas, conferences, schwab_foundation_for_social_entrepreneurship_geneva, project_basis, amazonia, project_focus, alliances, project_saude_alegria_psa_scannavinobrothers, PSA_agreement, amazonia_project_idea, amazonia_attempts, amazon_need, partners_agreement, investments, deals, shareholders, models, project_viability, viability_preliminary_data, success_possibility, amazonproject_team, project_2ndstep_amazonia, amazon_possibility, amazon_entering, activities

(\*) Detailed information is given in explanation of “Key Points of Extraction” on Appendix 1.

Ex-Ante Ex-Post Launch				Patterns			Assets	ROSA Case Study Key Points Extraction	Case Study Narrative Analysis	
TimePosition	Business Canvas	Timmons' Model	Uschold_Ontology_1998	Pattern	Instantiates_Modulates	Instantiatedby_Modulatedby	BUILDS/USES	ROSA_CaseStudy_Key PointsExtraction	Text_evidence	Graph
Ex_Ante_RioGrandeSul_1a	KR	TM_Founder	EO_Role	GP_Betting	Risk_reward	Strategic_knowledge	USES_KnowHow	Rosas background	Fabio Rosa started	GP_Betting->RGS
Ex_Ante_RioGrandeSul_1b	KR	TM_Founder	EO_Role	GP_Betting	Risk_reward	Strategic_knowledge	USES_KnowHow	Rosas background	In 1983, he became	GP_Betting->RGS
Ex_Ante_RioGrandeSul_1c	CS	TM_Opportunit	EO_Need	GP_Analysis	Down_time	Cognitive_emersion	USES_TechnicalKnowH	Rural_community_of_Palmare	Interviewing nearby	GP_Analysis Para
Ex_Ante_RioGrandeSul_2a	KP	TM_Exogenous	EO_Actor	GP_Agents	Competition		USES_TechnicalKnowH	State_owned_electricity_comn	Fabio began explor	GP_Agents->RGS
Ex_Ante_RioGrandeSul_2b	KP	TM_Exogenous	EO_Actor	GP_Agents	Competition		USES_TechnicalKnowH	State_owned_electricity_comn	At the time, the gov	GP_Agents->RGS
Ex_Ante_RioGrandeSul_3	VP	TM_Opportunit	EO_Vision	GP_Construct	Constructive_p	Producers_resources	USES_TechnicalKnowH	Key_idea	Fabio's brainchild	GP_Construction->
Ex_Ante_RioGrandeSul_4	VP	TM_Founder	EO_Asset	GP_Area_Cor	Ownership	Gain_ownership	BUILDS_Capital	Ownership	Headquartered in	GP_Area_Control-

Figure 3. Sample of Microsoft excel table coding.

▼ AMZ

▼ TM\_Ambiguity

TM\_Ambiguity->Ex\_Ante\_AMZ->Exploration

▼ TM\_Capital\_Market\_Context

TM\_Capital\_Market\_Context->Ex\_Post\_Proj\_AMZ->Producer\_consumer

▼ TM\_Creativity

TM\_Creativity->Launch\_AMZ->Collaborative\_actions

▼ TM\_Opportunit

TM\_Opportunit->Ex\_Ante\_AMZ->Analysis\_Paralysis

TM\_Opportunit->Ex\_Ante\_AMZ->Competition

TM\_Opportunit->Ex\_Ante\_AMZ->Dynamic\_alliances

TM\_Opportunit->Ex\_Ante\_AMZ->Experimenting

TM\_Opportunit->Ex\_Ante\_AMZ->Levels

TM\_Opportunit->Ex\_Ante\_AMZ->Perceived\_chance\_to\_succeed

TM\_Opportunit->Ex\_Ante\_AMZ->Resource\_generators

TM\_Opportunit->Ex\_Post\_Proj\_AMZ->Area\_Control

TM\_Opportunit->Ex\_Post\_Proj\_AMZ->Score

TM\_Opportunit->Launch\_AMZ->Previleged\_movement

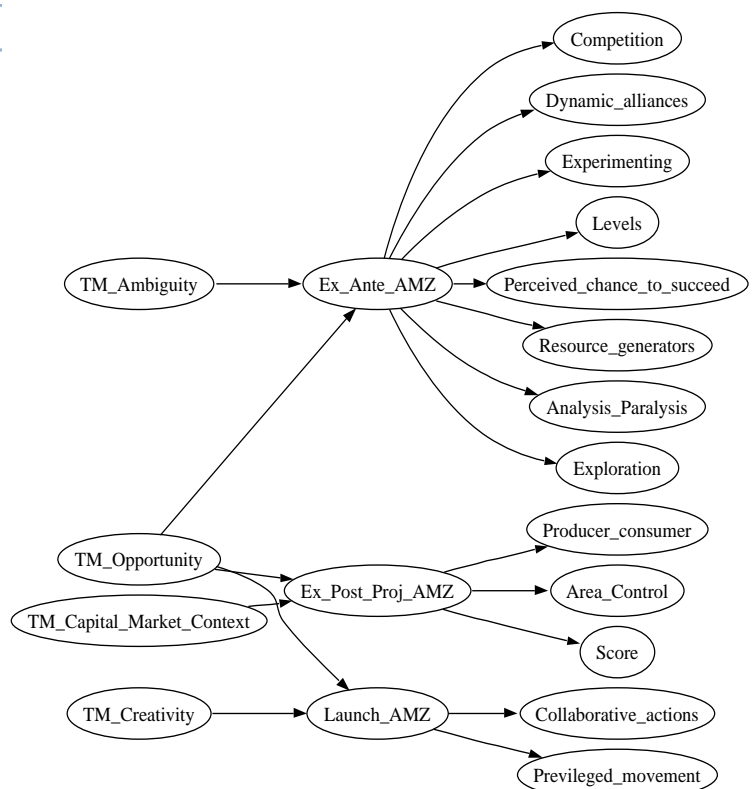


Figure 4. Sample of Microsoft Excel Pivot Table and corresponding Graph on “AMZ”.

because the consequences of the actions are at least somewhat predictable, and the number of possible outcomes grows exponentially the further in game time the players plan ahead’ (Bjork and Holopainen, 2005), where he became aware of the region’s necessity for an electric grid and, from that envisioned opportunity Rosa began to construct his key-idea which led him to establish a series of collaborative actions (Collaborative actions: “Compound actions that require several players to

simultaneously perform actions” (Bjork and Holopainen, 2005) in order to construct (Construction: “The action of introducing new game elements that are presented as intentional constructions into the Game World” (Bjork and Holopainen, 2005) the play he was about to perform. From that same cooperation net (Cooperation: “Players cooperate, that is, coordinate their actions and share resources, in order to reach goals or subgoals of the game” (Bjork and Holopainen, 2005) Rosa established

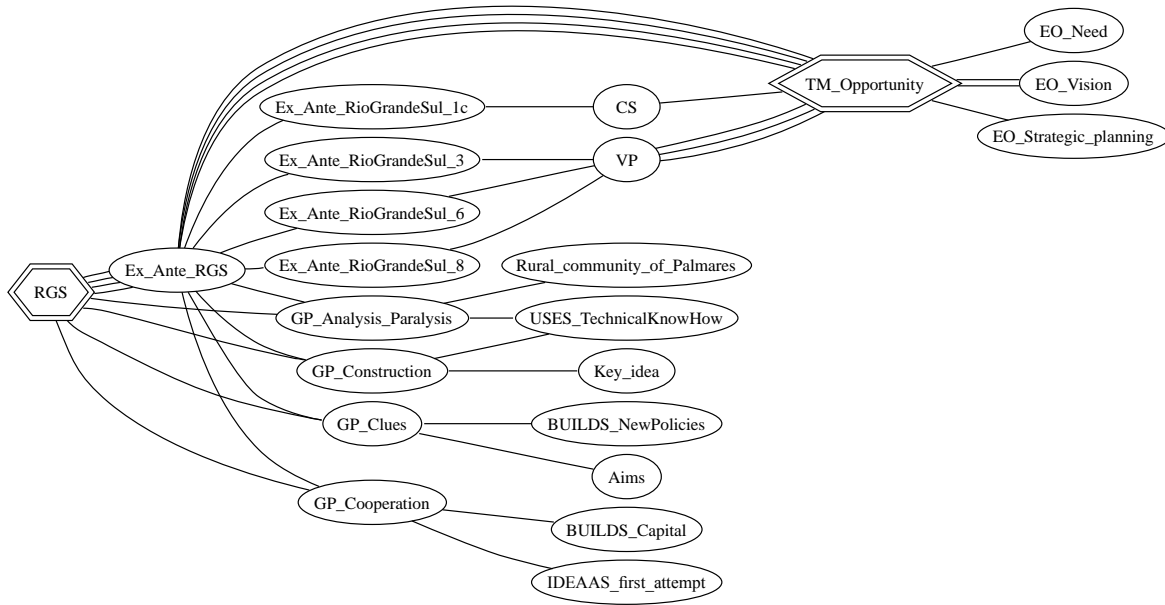


Figure 5. Opportunity\_RGS.

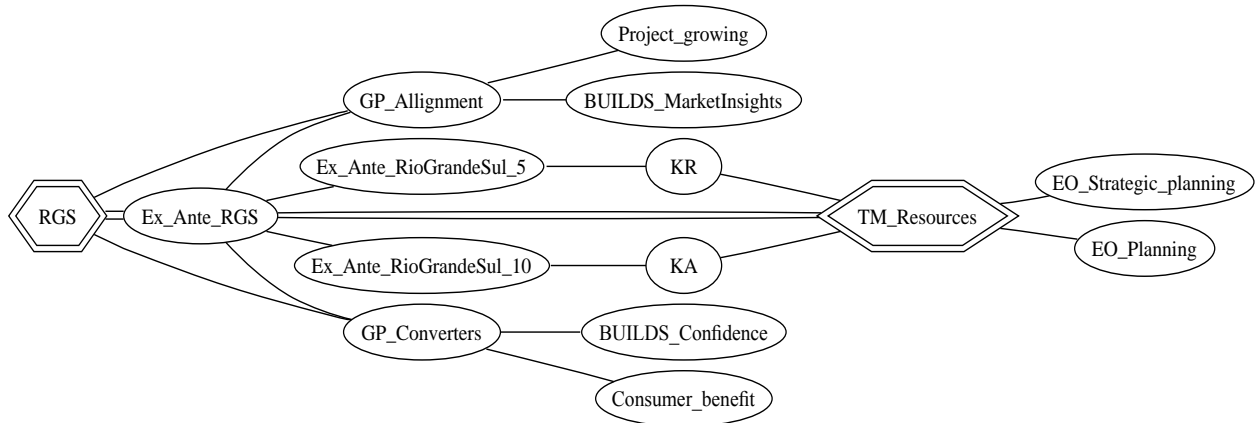


Figure 6. Resources\_RGS.

his own value proposition (*Proposition: “Describes the bundle of products and services that create value for a specific customer segment.”* Osterwalder and Pigneur, 2009) for the region, defining his target – his customer segment: (*Customer Segment: “The different groups or organisations an enterprise aims to reach and serve”* Osterwalder and Pigneur, 2009) in the rural regions of Brazil.

Summing up the scheme present in Figure 5 and connecting this part of the case study (the pre-project for Rio Grande do Sul) to the Timmons model (right part of the graph), it is possible to see how opportunity (“The

*heart of the project”* (Timmons and Spinelli, 2008) played a serious role on defining the concrete need (Uschold et al., 1998), transformed into a vision (Uschold et al, 1998) leading to the definition of a strategic planning (*Strategic Planning: “Strategy is designed as a Plan to Achieve a Strategic Purpose. Based on the concept of PLAN (...) the concepts key to Strategic Planning can be represented with the terms Decision, Assumption, RISK, and various kinds of Factor”* Uschold et al., 1998).

The resources (Figure 6) gathered by Rosa were based on a series of converting (*Converter: “Converter produces different types of game elements from other*

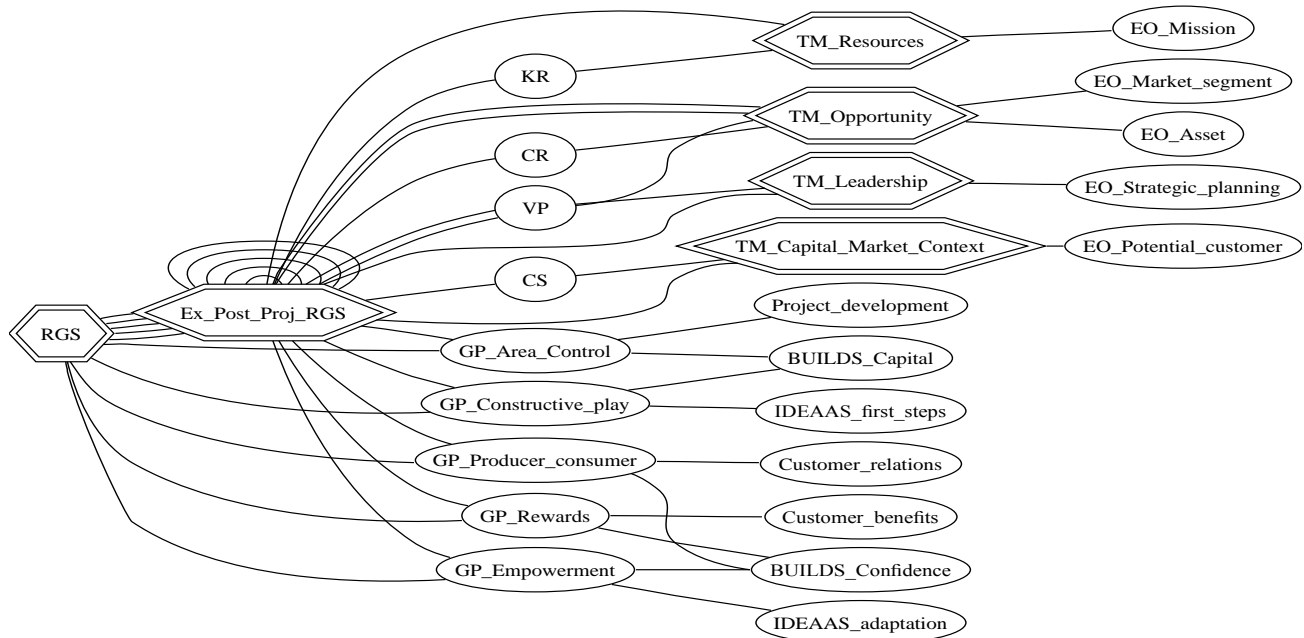


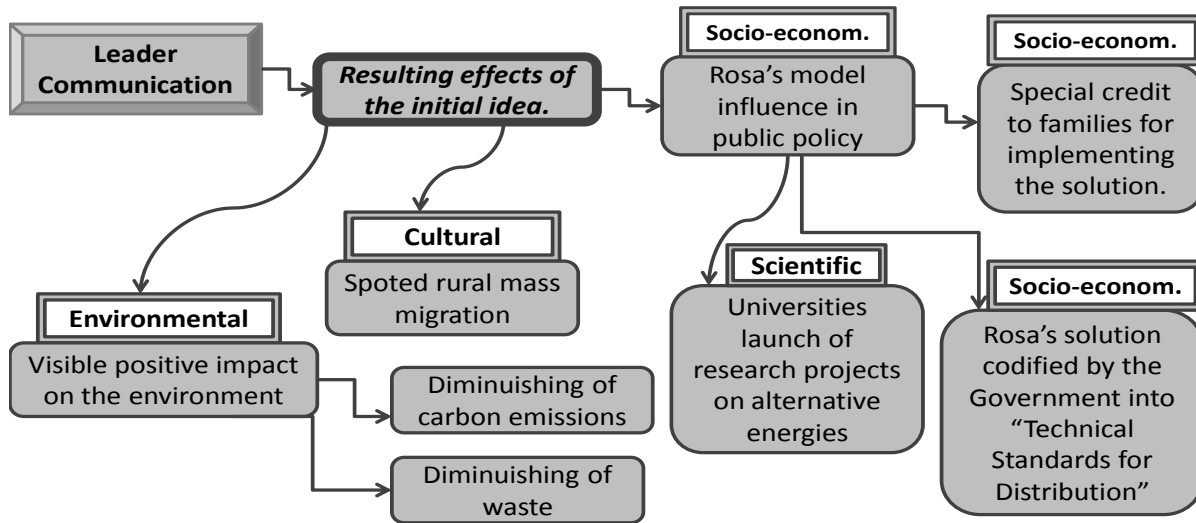
Figure 7. Post-project\_RGS.

game elements, typically from other resources. In essence, a Converter transforms game elements into other game elements." Bjork and Holopainen (2005) attempts to spot allies, able to align (*Alignment*: "This goal consists of forming a linear alignment of game elements." Bjork and Holopainen, 2005) with him on this growing project (Appendix 1) based and seriously concerned with major social entrepreneurial worries: the customer benefit (Appendix 1), and the progress indicators (*Progress Indicators*: "The player is given information about his current progress towards a closure in addition to the configuration of game elements involved" Bjork and Holopainen, 2005) for a specific region like Rio Grande do Sul. These gathered key-resources (*Key-Resources*: "The most important assets required to make a business model work. Allow an enterprise to create and offer a value proposition, to reach markets, to maintain relationships with customer segments and to earn revenue". Osterwalder and Pigneur, 2009) enabled Rosa through some project's key-activities (*Key-Activities*: "The most important things a company must do to make its business model work. The most important actions a company must take to operate successfully are required to create and offer value proposition, reach markets, maintain customer relationships and earn revenues depending on the business model type" Osterwalder and Pigneur, 2009) to consolidate his strategic planning (Uschold et al., 1998) for the targeted region.

Related to the post-project phase (Figure 7), one can

say that after the project's implementation in Rio Grande do Sul, the related developed actions (*collaborative actions*, Bjork and Holopainen, 2005) allowed Rosa and his allies (his *key-resources*, Osterwalder and Pigneur, 2009) to gain a producer-consumer (Bjork and Holopainen, 2005) confidence (enlarging their customer relations, Appendix 1), empowering (*Empowerment*: "Players feel that they can affect the events and the final outcome of a game" Bjork and Holopainen, 2005) Rosa's continuous goals (Bjork and Holopainen, 2005), and revealed competence area (Bjork and Holopainen, 2005): the electrical low-cost grid.

The gains from this Rio Grande do Sul project were major since the related rewards (*Rewards*: "The player receives something perceived as positive, or is relieved of a negative effect, for completing goals in the game" Bjork and Holopainen, 2005) were a recognized social status (*Social Status*: is defined by the extent to which the player is admired, esteemed or approved by the other players of the game as well as by persons outside the game" Bjork and Holopainen, 2005) for this entrepreneur, and the opportunity (Timmons and Spinelli, 2008) to test and experiment (*Experimenting*: "Performing actions to learn how the rules of cause and effect work in a game." Bjork and Holopainen, 2005) his initial entrepreneurial idea where, based on his undeniable ability for leadership (*Ability for Leadership*: "Resilient, deals with adversity, exhibits integrity, dependability, and honesty" Timmons and Spinelli, 2008) and with proper resources (Timmons and Spinelli, 2008), enabled him to truly envision a real



**Figure 8.** Resulting effects of Rosa's initial idea.

market segment (Uschold et al., 1998) with a specific and business promising need, that allowed him to redefine his strategic planning (Uschold et al., 1998), enlarging it to a new mission (Uschold et al., 1998): to bring the low cost electricity grid to the entire Brazilian rural areas, including the Amazonia.

The previous Figures were accomplished through a detailed analysis of how Fabio Rosas developed his idea of business; how did he come to find out and understand the opportunity; who were the people he had to involve and attach; what kind of resources were needed and available to establish a starting point and a path; along with all considerations related to ambiguous questions (framed by signs of uncertainty) and exogenous forces (framed by all the capital market context) connected to culture, society, economy and politics, resulting on the Figure 8 that shows the main force that the leader communication ability reveals to be on the story telling of the potentialities of this initial idea for Rio Grande do Sul, and how it influences all the related socio-economical, environmental, cultural and scientific aspect of this first phase project.

Above all these factors, the scheme presents the major forces of any business story: a face (the Founder, the name behind the idea); the ability to rely on self creativity (the idea itself and its possibility to make a statement); a natural willing of imposing a position and make followers; culminating on the ultimate way of presenting and defend the entire business model: the ability to communicate it.

Related to the second project (Amazonia), we can say that the opportunity (Figure 9) envisioned by Rosa was based on his previous successful experiments (Bjork and Holopainen, 2005) in Rio Grande do Sul.

Once again, after an analysis paralysis (Bjork and

Holopainen, 2005) destined to evaluate the previous experience, Rosa defined some learning curves (Bjork and Holopainen, 2005) from what he had just experienced and based on his actual ability for having a game-state overview (Bjork and Holopainen, 2005). Meaning: the model was created and experimented; it was totally project focused (Appendix 1), this way perceiving his chance to succeed (*Chance to Succeed: "Players believe, whether correctly or not, that they have a chance to succeed with actions in a game"* Bjork and Holopainen, 2005). All he needed now was to establish some secure dynamic alliances (*Dynamic Alliances: "The alliances are dynamic in nature, that is, new alliances can be created, old alliances can die out and the characteristics, especially the player composition, of an alliance can change during the game play"* Bjork and Holopainen, 2005) to generate the required resources (*Resources: "Shortage of quality entrepreneurs and opportunities"* Timmons and Spinelli, 2008) and gather the project's viability preliminary data (Appendix 1), to make Amazonia a successful possibility (Appendix 1). Amazonia's needs (Appendix 1) were there – Rosa new it from his market insights (Bjork and Holopainen, 2005) – so the project basis (Appendix 1) were clearly defined. The necessary actions to take place were now based on collaborative actions (Bjork and Holopainen, 2005) where mutual goals (*Mutual Goals: "The players, or some of the players, try to reach a goal within the game together"* Bjork and Holopainen, 2005) existed, in order to present to this specific customer segment (Amazonian people) his value proposition (Osterwalder and Pigneur, 2009). Once again, like in Rio Grande do Sul, Rosa had a vision on a specific goal and, along with his allies he was able to establish a strategic planning (Uschold et al., 1998), for

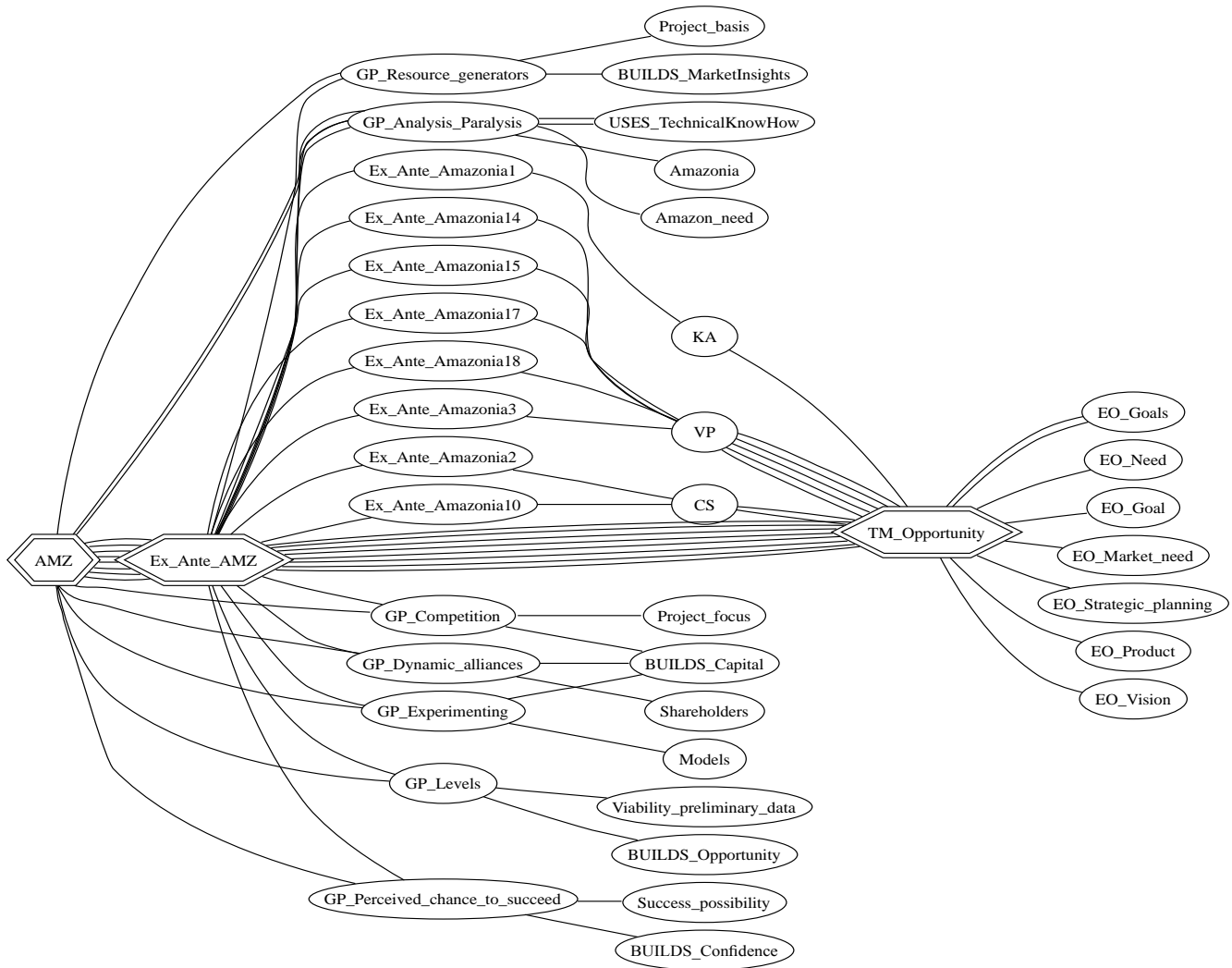


Figure 9. Opportunity Amazonia.

a specific market segment (*Market Segment*: “The MARKET is all SALES and POTENTIAL SALES within a scope of interest. The MARKET may include SALES by COMPETITORS. The MARKET may be decomposed into MARKET SEGMENTS in many ways in many levels of detail. This can be done by any properties of the PRODUCT, VENDOR, CUSTOMER, SALE PRICE or of anything else associated with a SALE.” Uschold et al., 1998) offering it a specific product (Uschold et al., 1998) to fulfil the market need (*Market Need*: “Analysis of a MARKET may involve understanding of FEATURES of PRODUCTS, NEEDS of CUSTOMERS, and IMAGES of BRANDS, PRODUCTS, or VENDORS” Uschold et al, 1998).

On what concerns the required resources (Figure 10), we can say that from the past experience in Rio Grande

do Sul and in order to make a statement in the consumer benefit (the building of its confidence (Bjork and Holopainen, 2005)), Rosa accomplished some arithmetic rewards for his investments (Bjork and Holopainen, 2005), finally starting to build capital (Allee, 2008) and define some specific investments (Appendix 1). At the same time, this Amazonian experiment enabled Rosa to define its precise cost structure (Osterwalder and Pigneur, 2009), in order to establish the necessary resources (Timmons and Spinelli, 2008) to enable the definition of a final asking-price (Uschold, 1998) for his entrepreneurial product.

The Launch of the Amazonia project (Figure 11) was the result of strong collaborative actions (Bjork and Holopainen, 2005) with the proper allies and partners, solidly selected from their competence areas (Bjork and



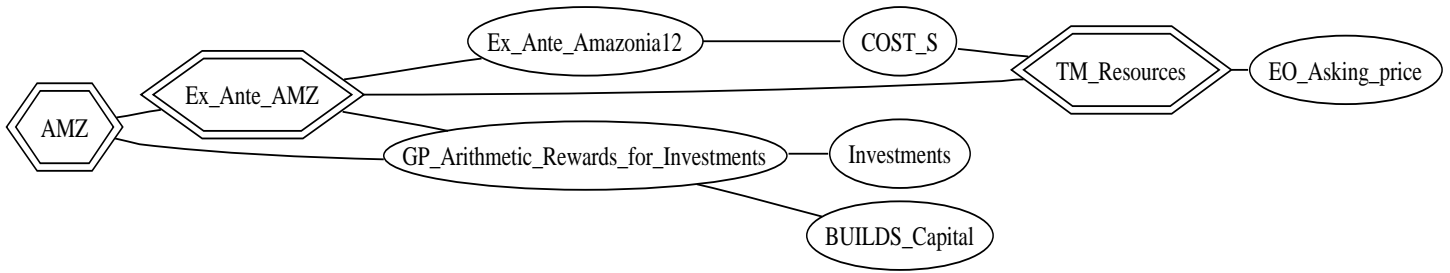


Figure 10. Resources\_Amazonia.

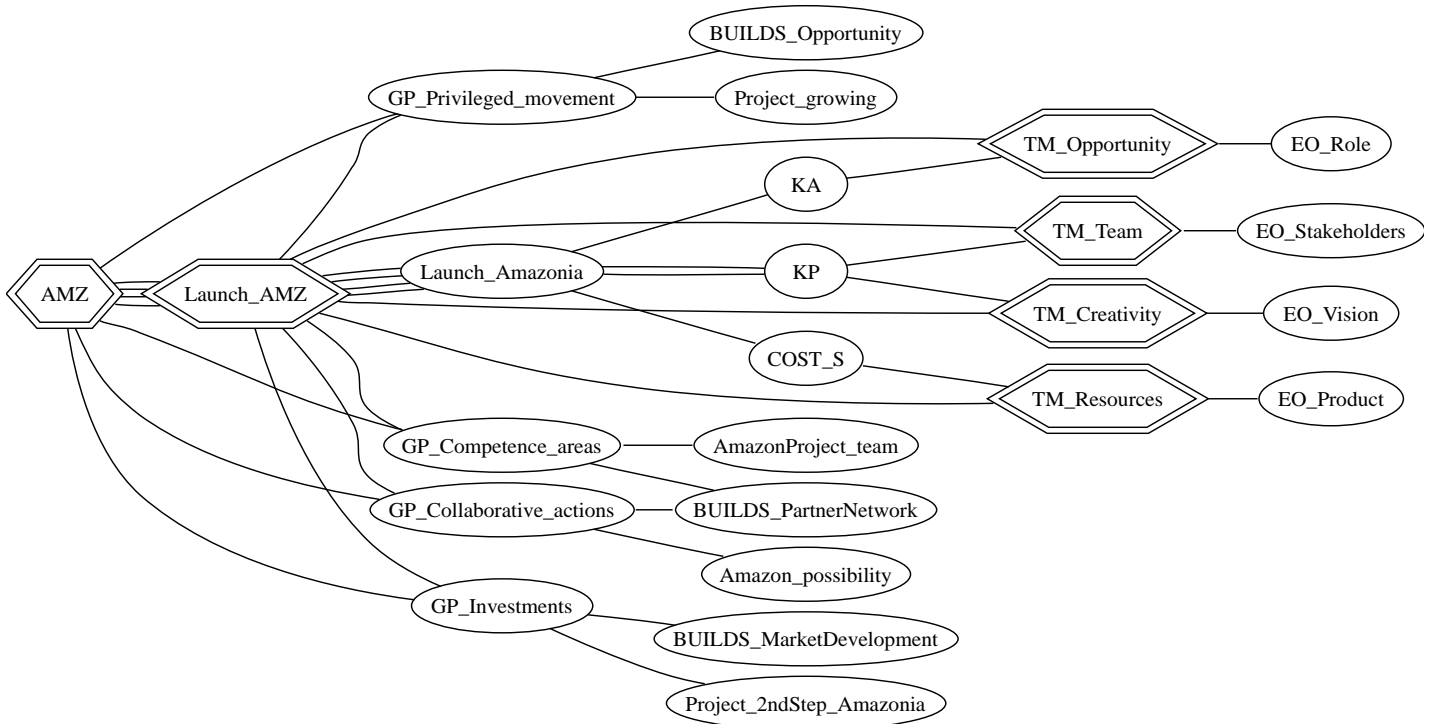


Figure 11. Launch Amazonia.

Holopainen, 2005), allowing the Amazonia project to be faced as a privileged movement, (*Privileged Movement: "Being able to do a form of movement that other game elements cannot."* Bjork and Holopainen, 2005) towards big investments: (*Investments: "Committing Resources for a certain amount of time to something in order to reap the rewards later"* Bjork and Holopainen, 2005) investment in the market, in the partner network (Allee, 2008) enlargement, and in a specific collaboration team (Timmons and Spinelli, 2008).

All together (the correct management of these characters – team, alliances, and resources) the launching of the Amazonia project revealed Rosa’s privileged abilities in the project growing (Appendix 1), in the definition of its

traces (Bjork and Holopainen, 2005) transformed in authentic goal-points (Bjork and Holopainen, 2005).

The Amazonia project itself was the higher point in Rosa’s entrepreneurial business, since it highlighted his most recognised strengths: creativity (Timmons and Spinelli, 2008), leading to his unique vision (Uschold et al., 1998) ability; capacity to gather a strong team (Timmons and Spinelli, 2008), moulding it into his own stakeholders (Uschold et al., 1998); awareness of the opportunity (Timmons and Spinelli, 2008), enabling the chance for playing a major role (Uschold et al., 1998) in social entrepreneurial businesses; and the skill to use the proper resources (Timmons and Spinelli, 2008) to build the spotted need for a specific product (Uschold et al

(1998).

## DISCUSSION

When facing the need and enthusiasm for studying the Entrepreneurship related to specific new businesses and Entrepreneurial case studies, the authors developed a concrete study based on the conceptual needs for the narrative analysis of the Fabio Rosas' IDEAS entrepreneurial endeavour. The question was that for a complete and multi-perspective analysis, the traditional way of doing a narrative analysis of a given case study was not sufficient, since it would only allow the authors to approach the case from a specific and chosen point of view or perspective. This way, the adding of some visually modelling tools for analysis (such as the Timmons model, the Business model canvas), along with some specific research tools that allowed the segmentation of concrete patterns (coded as Game Design Patterns) of the studied business, that are immediately parameterised into an Enterprise ontology and then projected into asset's use or construction, revealed to be a tremendous help on enabling a total codification of the case study story and, at the same time, a multiple possibility of framing the context one wants to analyse.

The final use of the BNML enabled the visual presentation of these multi-perspectives' possible analysis, allowing the unveiling of the multi-relations between actors, facts, and time line, enlarging, this way, the possibilities of a narrative analysis through multiple perspectives.

### A reference model perspective for conventional narrative analysis

The classic way of analysing a story, a narrative, allows any analyst to understand and discover the intervening characters, the related facts, the place of action, than assisted by the plot structure, given by the way how things were done and the time line of the occurred facts.

Geertz's (2000) idea of research as clarification of things, ideas and thoughts became important to define and use in the present study, since it revealed to be a precious method to help clarifying or revising the studied entrepreneurial endeavour as a golden opportunity to present entrepreneurs and their oriented organisations as potential value creators in modern society.

This clarification of things was accomplished by adding up to a typical narrative analysis some visually modelling and business typical tools: Timmons' model was used as a base to start up the analysis of the business process idea; Business model canvas was used to dissect the major interveners of a business plan; and the use of the

Uschold's Enterprise ontology (1998) along with the Bjork and Holopainen's Game Patterns (2005) and the Allee's Tangible and intangible assets (2008) were used to extract a complete list of terms to be used in a created coding scheme able to allow the intersection of these total amount of the case study narrative analysis' collected data.

Nevertheless, a graphic visualisation of the entire story of the case study was needed, in order to accomplish the desired cross-viewing of the total case. This way, the use of the recently created Business Narrative Modelling Language (Oliveira and Ferreira, 2011) proved to be a major and very important help to enable the clearer view and understanding of the underlying narrative, making the analyst's task easier when he has to totally understand the intervening characters, the straight connections between them, the actions performed by them, and the related consequences of their actions (in time and in place), meaning: the total business plan story.

With an established reference model, it became evident that no matter the narrative in question, it would only depend on what kind of perspective an analyst would want to use. This enabled a clear conclusion that this new reference model will surpass the possibilities driven from the classic way of doing narrative analysis, since it would spread and greatly enlarge a multi perspective possibility of analysing any narrative. The model (the reference) was created; it was now a question of directing the use of this tool in accordance with the final result an analyst wanted to achieve, depending on his own knowledge expertise.

## Conclusion

The traditional way of doing narrative analysis only allowed the immersion of a single and limited view or perspective, limited to the analyst's expertise field. As a matter of fact, at the time of the 1<sup>st</sup> author's experience on using narrative analysis for analysing a concrete phenomenon (back in 1998), it became evident that this traditional narrative analysis' was limited to a specific area, since it only allowed the extraction of expertise data, closed up and confined to a specific area of knowledge.

The traditional narrative analysis' lack of cross-perspectives possibilities lead the authors to develop the present reference model, enabling a more practical and empirical way of doing narrative analysis, and processing the acquired data, creating a multi perspective narrative analysis that the traditional one could never allow.

This new reference model promoted a new vision on narrative analysis performances: no matter the studied case, the business (the narrative), this reference model allows a multi perspective approach; meaning, the reference (the narrative) can be the same but the possibilities of analysis' perspective are multiple.

Ultimately, we can say that this new tool, once created and developed, stays as permanent in its basis, allowing its use by multiple types of researchers and analysts, depending on what they want to analyse and see, what they want to search and extract from the context.

This way, the present paper aimed the presentation of a concrete narrative analysis of a specific entrepreneurship case study, supported by the use of the traditional features of narratives but also adding some more recent tools and a visual methodology, creating a concrete reference model, in order to enable a quicker and more accurate visualisation of the concrete interrelations between the total interveners of the mentioned case study, as well as the possibility of analysis from a multi-perspective way.

The idea underlying this attempt was to make proper use of a traditional way of analysing a given narrative, a concrete story, and to add some other and different (not usual) tools – graphic and visual ones – in order to accomplish the need of more structured ways of analysis able to accelerate the coding process and promoting comparability between similar studies.

The authors' desire is to promote this reference model as a concrete asset for business narrative analysis, since it allows the crossing between different areas of expertise, enhancing a more generalised and complete view over an organisation (independently of the organisation), culminating in a global analysis substantiated by different experts intervention, allowing the so desired total knowledge of the business.

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## APPENDIX

**Appendix 1.** Explanation of the terms created by the authors related to the ROSA case study key points of extraction.

<b>Case study key points of extraction</b>	<b>Explanation of the used terms</b>
Rosas background	Fabio Rosa's experience as an Engineering in rural areas of Brazil
Rural_community_of_Palmares	Rosa's first experience that enabled him to observe their needs
State_owned_electricity_communities	Some electricity companies already established in the country
Key_idea	The generation of Rosa's first idea to develop a solution for the Palmares' region
Ownership	The patent of Rosa's first product
Project_growing	The development of the first idea adding some detailed paths
Aims	Focused goals
Public_meetings	Public communication of the project to gather investors
IDEAAS_first_attempt	First experience of the project application
Project_Attempts	Series of experiments
Consumer_benefit	Added value for the local consumer (population)
Project_1stStep_RioGrandeSul	Decision to experiment the project on a well-known region
Project_development	Rearrangements after a first experience – goal: the spread out of the project
IDEAAS_first_steps	Install an electricity grid in other rural areas
Customer_relations	Detailed explanation of the product to local consumer – goal: teach how to use
Customer_benefits	Benefits for the locals in the use of the electrical grid
IDEAAS_adaptation	Revision of the project/product to adapt to other regions in Brazil
National_Government_LulaDaSilva/ LulaDaSilva_government	Lula da Silva, as President, and his involvement on the approval of the project
Enlarging_IDEAAS	Spread out of the product
Conferences	Public communication of the idea to gather new partners
Schwab_Foundation_for_Social_Entrepreneurship_Geneva	1 <sup>st</sup> Social Entrepreneurship Foundation to finance the revision (for expansion) project
Project_basis	Determination of new needs for expansion
Amazonia	2 <sup>nd</sup> local target for Rosa's project
Project_focus	Localisation decision; determination of specific needs
Alliances	New partners; new investors
Project_Saude_Alegria_PSA_ScannavinoBrothers	2 <sup>nd</sup> business association for project development
PSA_agreement	Business agreement for the Amazonia project
Amazonia_project_idea	Development of specific adaptation for the target region
Amazonia_attempts	Some attempts to experiment the product
Amazon_need	Detection of specific needs from the Amazonian people/costumer
Partners_agreement	Spread out of business agreement

**Appendix 1.** Contd.

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Investments	Localization of investors
Deals	Agreements with local investors
Shareholders	Ally members detaining a certain share of the Amazonian project
Models	Prototypes of the Amazonia project
Project_viability	Tests for the Amazonian project
Viability_preliminary_data	Amazonian data collection
Success_possibility	Obtained results that revealed a possible success
Amazon project_team	Formation of a specific team for this special Brazilian rural area
Project_2 <sup>nd</sup> step_Amazonia	Spread of the 1 <sup>st</sup> Amazonia project to other areas
Amazon_possibility	Confirmation of project enlargement possibility
Amazon_entering	Project application to the entire rural area of the Amazonia jungle
Activities	Series of actions to develop

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