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and  
**Norwegian School of Economics**

**Tools for Sustainable business model development:  
a comparative case study on a non-profit organisation**

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## Executive summary

There is a growing interest for sustainability-oriented business models, as they combine the advantages of business model – activity system units that can be innovated – and those of the triple bottom line approach to performance. Researchers have developed tools to help managers generate this type of business models.

The first purpose of this thesis was to evaluate and compare three sustainable business model development tools at the application stage to assess their practical implementation in the specific case of a non-profit organisation. The selected tools are the Sustainable Business Canvas, the Flourishing Business Canvas and the Value Mapping Tool. The evaluation and comparison are performed thanks to an analysis framework, the SUST-BMA. The second purpose of this research is to bring suggestions for improvement about this framework to make it more practical to use. Following an extensive literature review, this thesis presents a structured analysis of the business models generated.

The evaluation and comparison of the three sustainable business model generation tools yielded to two focus conclusions that differentiate the outcomes – the generated business models. Firstly, at some point, the reflection has to be specifically oriented toward the voice and power of the organisation's stakeholders. Secondly, the goals-oriented questions led to more complete answers than the value proposition-oriented ones, which were too narrow. The Flourishing Business Canvas emerged as providing the most valuable approach for the organisation. This tool has a specific block dedicated to the Governance. It also has a broader way of questioning about the activities.

Finally, the SUST-BMA confirmed its business model comparison function. A user guide concept was developed, and some adaptations were made to ease its use and make it more accessible to practitioners.

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# 1. Introduction

There is an increasing acknowledgement among researchers that developing sustainable business models is a powerful manner to ally the benefits of using business models and to pursue the research of performance at the financial, social and environmental levels. Managers need instruments to perform change in their current business models to integrate sustainability at the heart of their business (Schaltegger, Hansen & Lüdeke-Freund, 2016). This question of how managers can reflect on their business model has gained more interest in the recent years. Some researchers have developed tools to help managers rethink their business model, or completely build new ones. Regarding the ones recognised by Breuer, Fichter, Lüdeke-Freund & Tiemann (2018) as relevant sustainable business model development tools, they have been tested, used and exploited independently, but have never been compared in practice.

The assessment of the quality of a sustainable business model is another concern of managers. How can the goodness and quality of a business model be determined? (Wirtz, Pistoia, Ullrich & Gottel, 2016). And is sustainability correctly represented and pursued? Lüdeke-Freund, Freudenreich, Saviuc, Schaltegger & Stock (2017) have developed a framework to answer these questions. Only partially tested, this framework hasn't reached the business world yet.

In the form of a case study, this paper is an attempt to tackle both these issues faced by present-day managers who want to include sustainability in their business, whatever their motivation to do so. Concretely, this thesis tackles two research questions, complementary regarding the analysis process:

- 1) *How do tools for sustainable business model generation differ in practice?*
- 2) *How to ease the use of the SUST-BMA – the analysis framework?*

The case study takes place in a non-profit organisation, the Cultural Centre of Charleroi, Belgium. Willing to expand their catering division, they wanted a strong reflection on its organisation and its signification. Even if this setting is very specific, a first exploration into these questions was manageable.

This piece of work is organised as follow: a literature review introduces all the concepts further used in this research, namely the business model concept, the sustainability, the sustainability-oriented business model, the generation tools and the analysis framework. It continues with an introduction to the research setting, meaning the Cultural Centre and its Catering Division.

The methodology is then comprehensively detailed with specifications about the research design, the data collection and analysis. The research quality is also discussed. Lastly, to answer the research questions, the findings are finally presented and discussed.

## **2. Literature review**

This section presents and reviews the existing literature about the concepts that are relevant to the research questions tackled in this thesis and further. It also highlights the advantages of using these concepts in the business context. The chapter starts with a review of the ‘business model’ concept – its history, definition and characteristics. ‘Sustainability’ is then addressed, followed by ‘sustainability-oriented business models’ linking the two first concepts. Three tools for generation of sustainability-oriented business models are then presented. This section closes with an analysis tool – the SUST-BMA.

### **2.1 Business model**

#### **2.1.1 Concept history**

The concept of Business Model has existed and been used for over 50 years since Bellman, Clark, Malcolm, Craft & Ricciardi (1957) first used it (Wirtz, Pistoia, Ullrich & Göttel, 2016). The concept had not a clear definition. At first understood as an operative activity for system modelling (Wirtz et al., 2016; Foss & Saebi, 2017), the concept of Business Model, its significance and definition evolved with technology and the development of electronic/internet-based businesses (Wirtz et al., 2016; Zott, Amit & Massa, 2011). It is later defined as a representation of the business architecture, or finds its definition in its component (Wirtz et al., 2016). Foss & Saebi (2017) also highlight the holistic description of the firm, developed and applied by the entrepreneurship and strategy scholars. Yet, even though the term is more and more used by scholars (Wirtz et al., 2016; Zott et al., 2011), practitioners and the general public (Baden-Fuller & Morgan, 2010), Zott et al. (2011) emphasise the absence of agreement on the definition of the concept among researchers, would it be in peer-reviewed academic journals or in practitioner-oriented studies. Wirtz et al. (2016) talk about the literature as “very fragmented, due to its historical development and the different perspectives of the authors” (p.37). Among the different perspectives, Zott et al. (2011) argue the existing literature is developing in three silos: e-business and the information technology, strategic issues (value creation, performance and competitive advantage), and innovation and technology management.

## 2.1.2 Definition

### *Divergence*

Concretely, Osterwalder, Pigneur, & Tucci (2005) identified a need for discussion of the meaning and usage of the concept, highlighting the divergence of understanding especially between business-oriented and technology-oriented people. One of the reason advanced was that the term was used by different authors for different meanings (Osterwalder et al., 2005). In 2010, Teece was still arguing that the concept lacked theoretical grounding. Zott et al. (2011), in the same vein as Osterwalder et al. (2005), advance that the researchers use the same term for different purposes. ‘Business Model’ is used as an umbrella theme, under which they find e-business model archetypes, business model as activity system and business model as cost architecture (Zott et al., 2011, p.1036).

### *Emerging themes*

Authors have seen some themes or perspectives emerging out of the fragmented literature on business models. One stream concerns the business model used as a systemic perspective (Zott et al., 2011) helping to classify types of enterprises (Osterwalder et al., 2005; Zott et al., 2011; Foss & Saebi, 2015, 2017, Ritter & Lettl, 2018). A second stream sees the business model as a new unit of analysis, different from the firm or the network (Osterwalder et al., 2005; Zott et al., 2010); Foss & Saebi (2015, 2017) specify the idea as ‘unit of innovation’. Zott et al. (2011) and Ritter & Lettl (2018) suggest a view of the business model as activities boundary-spanning. Another theme concerns the business model as a factor of firm performance (Foss & Saebi, 2015, 2017), which is linked to the notion of business model logics of Ritter & Lettl (2018), and value creation and capture of Zott et al. (2011). Osterwalder et al. (2005) and Baden-Fuller & Morgan (2010) expose the notion of business model as a conceptualisation of an existing organisation, which could potentially be copied. Finally, a business model can also be understood thanks to its components (Osterwalder & Pigneur 2010; Ritter & Lettl., 2018), with an accentuation put on the need for these to be aligned and work well together (Teece, 2010; Ritter & Lettl, 2018).

### *Convergence*

Wirtz et al. (2015) see an increasing uniformity in the level of abstraction used by authors to define the business model. The trend goes toward a view of the business model as a broader representation of the firm. And even though Ritter & Lettl (2018) argue that there is still no clear definition of the concept, Teece’s (2010) definition of a business model seems to be the

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most understandable and used (Johnson, Christensen & Kagermann, 2008; Osterwalder & Pigneur, 2010; Foss & Saebi, 2015, 2017; Jørgensen & Pedersen, 2018):

*“A business model describes the design or architecture of the value creation, delivery and capture mechanisms employed”.*

### **2.1.3 Characteristics of the concept**

#### *Situation in the business*

Wirtz et al. (2015) argue that the business model is a result of the strategy and integrates a competitive and firm-internal view. This vision suggests that Magretta (2002) was wrong when writing that “business models don’t factor in [...] competition” (p.6). Osterwalder et al. (2005) explain that “the business model can be seen as the conceptual link between strategy, business organization, and systems” (p.17), and the authors declare that competition is part of the strategy.

#### *Components*

Defining the business model concept and situate it in the organisation were the first steps, the next one being the presentation of its components, or *building blocks* (Osterwalder & Pigneur, 2010). The most popular meta-model of business models is the Business Model Canvas (BMC) (Massa, Tucci & Afuah, 2016), developed by Osterwalder et al. (2005, 2010). This review of the BMC is justified as it is the base of the tools that are presented a bit later and used in this work. The BMC is a schematic representation composed of nine building blocks, grouped in four pillars, and is the schema of how a company will create, deliver and capture value. The pillars and their sub-parts, which were determined by Osterwalder (2004) in its Business Model Ontology, are the following:

- Product
  - Value propositions: the bundles of products and services offered which create value to the customers.
- Customer interface
  - Customer segments: the groups of people or organisations the company will try to reach and serve.
  - Distributions channels: means used by the company to get in touch with the customers.

- Relationships: types of relationship a company establishes between itself and the different customer segments.
- Infrastructure management
  - Key activities: the most important things a company must do in order to make the business work, meaning creating, delivering and capturing value.
  - Key resources: the most important assets required to make the business model work, to create and deliver value.
  - Key partners: the network of suppliers and partners the company needs to make the business model work.
- Financial aspect
  - Cost structure: all the costs resulting from the operationalisation of the business model.
  - Revenue model: the revenue generated thanks to each customer segment.

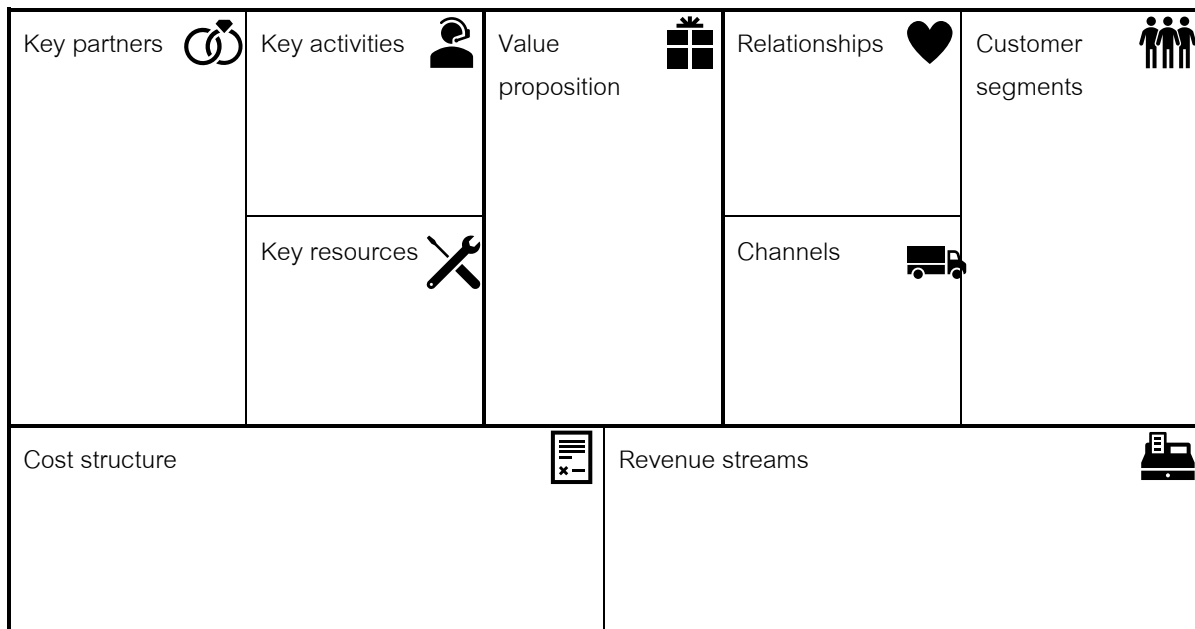


Figure 1. Business Model Canvas (Osterwalder & Pigneur, 2010)

Another representation was developed by Lüdeke-Freund et al. (2017) and reorganises the business model into five logics: financial logic, marketing logic, production logic, capabilities and resources logic and a non-market logic. This representation is further presented later in this literature review.

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## *Functions*

This last section concerns the usefulness of the business model concept. Some scholars talk about the *roles* of the business model, some others talk in terms of *managerial tool* with purposes.

On the overall, they agree to say that a business model helps to understand and communicate the way a company does business (Osterwalder et al., 2005; Baden-Fuller & Morgan, 2010; Magretta, 2002). Linked to the business unit understanding of the business model, it helps to analyse the strategic choices (Osterwalder et al., 2005; Magretta, 2002). The business model is useful to improve the management: “the business model concept helps ameliorate the design, planning, changing and implementation of business models” (Osterwalder et al., 2005, p.22). Magretta (2002) supplements the planning role of the business model by highlighting the global vision of all the “elements of the system [that] fit into a working whole” (p.6). The managing role also encompasses a notion of change: the business model is a unit which can be tested and revised (Osterwalder et al., 2005; Magretta, 2002) in an “ongoing and iterative [process]” (Shafer, Smith & Linder, 2005, p.207). In that way, Osterwalder et al. (2005) add a prospecting role to the business model, and Wirts et al. (2016) add the notion of decision-making tool.

The business model is proved to be useful for the human resources management as well. Magretta (2002) explains that thanks to a real-life case: “[it is] a basis for employee communication and motivation. Because a business model tells a good story, it can be used to get everyone in the organization aligned around the kind of value the company wants to create” (p.8).

Magretta (2002) argues that a good business model is crucial to every player – new or established – to be successful. She and Teece (2010) have developed the same list of imperatives a business model should encompass: it is about knowing one’s customers and what they value, the way the business is going to generate money and capture that value, and the appropriate cost logic that is linked to the creation and delivery of value. Because they “provide a set of generic level descriptors of how a firm organises itself to create and distribute value in a profitable manner” (Baden-Fuller & Morgan, 2010, p.157), the authors also talk about business models as scientific models or scale and role models, which, according to Osterwalder et al. (2005) might need to be patented. In that vein, Teece (2010) indicates that, on top of being a ‘good business model’, a business model has to be differentiated and hard to

imitate if we want it to yield profits. He adds, and this reinforces the iterative test process idea, that innovating the business model can be an approach to business model differentiation.

## 2.2 Sustainability

Glavič & Lukman (2007) note that research about sustainable development has increased, and with it, the interest for the topic and its terminology.

In 1997, Elkington (1997) considers sustainability as the 21st century paradigm. With Mebratu (1998), they share the opinion that sustainability is a new concept and a solution for the social and environmental problems which are topics gaining places in the international concern list.

This ‘hot topic’ feature is now confirmed in the scientific world. On the Scopus database, a ‘TITLE-ABS-KEY’ (= title + abstract + key-word) search on “environmental sustainability” gives 437 results in 1997, and 1887 results in 2018. A research on “social sustainability” gives 5 results in 1997, and 380 results in 2018. Finally, searching for “sustainable development” gives 888 results in 1997 (first appearance in 1974), and 17869 in 2018.

Furthermore, this topic is more than ever central in the public debate. For example, many students from around the world go on strike every week to protest against political immobilisation regarding the climate. The Swedish Greta Thunberg started the movement in September. She is even nominated for the Nobel Peace Prize 2019.

### 2.2.1 Definition

Schaltegger & Buritt (2005) differentiate sustainability and sustainable development. They say that sustainability is the goal to be reached with the process of sustainable development. The commonly used definition of sustainable development is the one from the World Commission on Environment and Development’s report (1987): “Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. This report is considered as a “major political turning point” (Mebratu, 1998, p.496) for the ‘sustainable development’ as it is the reason thanks to which the concept has leaked out of the scientific world to enter the political sphere (Schaltegger & Buritt, 2005).

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Elkington (1997) and Schaltegger & Buritt (2005) offer slightly different, and maybe more precise definitions of sustainability. Schaltegger & Buritt (2005) define a global vision of sustainability that “embodies hopes for a peaceful society with social equity and justice and economic prosperity in a clean, natural environment” (p.186). Elkington (1997) defines the concept as “the principle of ensuring that our actions today do not limit the range of economic, social and environmental options open to future generations” (p.20).

## **2.2.2 Sustainability in the business**

### *Corporate sustainability*

Concretely integrating sustainability in the business, Engert, Rauter & Baumgartner (2016) define corporate sustainability as “considering a company's needs, while protecting, sustaining and enhancing the human and natural resources that will be needed in the future” (p.2834). Schaltegger, Hansen & Lüdeke-Freund (2016) use the term of ‘sustainability management’ to define the approaches leading to corporate sustainability. The outcome could be a ‘sustainable enterprise’ that Hart & Milstein (2003) define as “one that contributes to sustainable development by delivering simultaneously economic, social and environmental benefits” (p.56).

The ‘sustainability’ definitions of Elkington (1997) and Schaltegger & Buritt (2005), as well as the ‘sustainable enterprise’ definition of Hart and Milstein (2003) reflect the new, more business-related, concept that Elkington introduced in his book ‘Cannibals with forks’ (1997): the triple bottom line. Corporate sustainability performance can thus be defined as the performance of a company on the triple bottom line (Elkington, 1997; Schaltegger & Buritt, 2005; Schaltegger & Wagner, 2006). The triple bottom line means focusing on economic, environmental and social performance, equally (Schaltegger, Lüdeke-Freund & Hansen, 2012), in an integrated manner and with a perspective that goes beyond the boundaries of the firm (Schaltegger et al. 2016).

Lüdeke-Freund et al. (2017) argue that corporate sustainability also takes into account the challenge for the company to survive in “radically changing ecological, social, and economic contexts” (p.2). Amini & Bienstock (2014) highlight the long-term characteristic of the triple bottom line approach.

## *Interests*

Why should companies aim at triple bottom line performance? The interests are twofold: because they can have great positive impacts *in-* and *outside* of their boundaries.

### **a. General sustainability**

There is a consensus of authors who argue that sustainable development can't be achieved without the sustainable development of companies (Schaltegger et al., 2012, 2016). Firstly, Elkington (1997) and Schaltegger & Buritt (2005) talk about the necessary resources to achieve sustainability that are controlled by corporations, which sometimes outnumber those controlled by nations. Secondly, Schaltegger & Buritt (2005) indicate that the sustainable development of companies is required because these are ubiquitous. Finally, Elkington (1997) claims that to guarantee efficiency and effectiveness in resource use, there should be some kind of coordination between the corporations. The latter could be a government policy, for which Schaltegger & Buritt (2005) say that corporations are practical and direct point of implementation.

### **b. Business case and other internal reasons**

Aiming at sustainable development strategically can also be a way to achieve greater economic performance and reduce costs (Martinuzzi & Krumay, 2013; Hart & Milstein, 2003; Schaltegger & Buritt, 2005; Schaltegger et al., 2012; Engert et al, 2016). This is what is called the 'business case for sustainability'. Lüdeke-Freund (2009) and Lüdeke-Freund et al. (2017) stress the purposeful nature of the procedure, and precise that a business case for sustainability "achieves economic success *through* (and not just *with*) the deliberate and voluntary management of ecological and social issues" (Lüdeke-Freund et al., 2017, p.171).

It can also help to gain and develop a competitive advantage and differentiate from the competition (Elkington, 1997; Schaltegger & Buritt, 2005; Engert et al. 2016). Because it fosters the communication with the stakeholders, corporate sustainability also supports the organisation in the identification, prevention/reduction and management of risks related to corporate impacts on the environment, compliance, reputation, operations (Schaltegger & Buritt, 2005; Engert et al., 2016). Other drivers cited by researchers are innovation, attractiveness, legitimacy, responsibility, moral commitment (Engert et al., 2016; Schaltegger et al., 2012; Hart & Milstein, 2003; Schaltegger & Buritt, 2005).

On the overall, authors state that corporate sustainability helps to identify strategies that contribute to the sustainability in the long-term of the organisation itself and of the world (Amini & Bienstock, 2014; Hart & Milstein, 2003).

### *Requirements*

This last section about corporate sustainability highlights the main prerequisites for an effective management of the sustainability.

As already mentioned, corporate sustainability goes beyond compliance, the voluntary dimension for a deliberate pursuit of the triple bottom line performance is an important part of the approach (Martinuzzi & Krumay, 2013; Lüdeke-Freund, 2009; Lüdeke-Freund et al., 2017). As a recall, it also implies a long-term perspective (Elkington, 1997; Amini & Bienstock, 2014).

Engert et al. (2016) say that corporate sustainability initiatives should be integrated at the normative, strategic and operational levels. Porter & Kramer (2006) reinforce this and argue that the lack of success experienced by organisations in sustainability efforts is primarily due to the non-integration of sustainability, and sustainability initiatives, in the business strategy. To be effective, corporate sustainability initiatives must be linked to the organisational strategy. Schaltegger & Wagner (2006) indicate that initiatives not integrated in the strategy face the risk of being cut back if the organization is confronted to financial difficulties. They also mention the lack of coherency regarding the basic vision of the triple bottom line integration if the firm just organises satellite efforts.

Engert et al. (2016) list some supporting factors for corporate sustainability as stakeholder engagement, management control, learning and knowledge management, transparency and communication, organisational culture.

Finally, Schaltegger & Buritt (2005) and Martinuzzi & Krumay (2013) expose a notion of change that the strategic sustainability initiative may lead to. In fact, taking social and environmental issues into account could guide to a rethinking of the business.

## **2.3 Sustainability-oriented business models**

According to Hart & Milstein (2003), having a shared roadmap “facilitates the creation of sustainable value for the firm” (p.58). On top of that, Lüdeke-Freund (2009) affirms that

companies can “improve their sustainability performance strategically and with a long-term perspective thanks to their business model” (p.7). Schaltegger et al. (2016) even talk about business models as “key initiating component of corporate sustainability” (p.3). These premises are found at the heart of the conceptualisation of the concept of sustainable business models. It allies the advantages to use the business model concept and those of researching triple bottom line performance.

### **2.3.1 Need for a rethinking of the classical business model**

Researchers advance the neoclassical economic worldview and existing tools/frameworks of business models count only for financial performance, aiming at maximising shareholder value (Stubbs & Cocklin, 2008; Birkin, Polesie & Lewis, 2009; Upward, 2013; Boons & Lüdeke-Freund, 2013). Doleski (2015) indicates that business models can integrate political and legal, economic, socio-cultural, technological and ecological conditions in their architectures. According to Upward (2013) the concept of business model that was used so far needs to embed a focus on the other elements of sustainability and create social and environmental value. In the same vein, Stubbs & Cocklin (2008) had already highlighted the need for the definition of a wider purpose that would embrace environmentally and socially sustainable activities. Bocken, Short, Rana & Evans (2013) promote a redesign of the business model, not only design and delivery improvements, to improve sustainable performance. “[It] offers a more holistic perspective that incorporates all three dimensions of sustainability (i.e. social, environmental and economic) within business planning” (Bocken et al., 2013, p.483).

### **2.3.2 Definition**

The definitions of ‘sustainable business models’ or ‘business models for sustainability’ or ‘sustainability-oriented business models’ (further called ‘SBM’) have the different following elements: sustainability concepts play an integral role, voluntary activities are oriented towards triple bottom line performance, other forms – than economic – of value are created for a broader range of stakeholders, there is a contribution to sustainable development of the company and society (Stubbs & Cocklin, 2008; Lüdeke-Freund, 2009; Schaltegger et al., 2012; Bocken et al., 2013). The most complete working definition of the concept was developed by Geissdoerfer, Vladimirova & Evans (2018) thanks to a synthesis of broad literature review: “we define sustainable business models as business models that incorporate

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pro-active multi-stakeholder management, the creation of monetary and non-monetary value for a broad range of stakeholders, and hold a long-term perspective” (p.403-404).

Stubbs & Cocklin (2008) precise that SBM also uses a triple bottom line perspective when measuring performance.

### 2.3.3 Interests

In the words of Lüdeke-Freund et al. (2017), “business models can lead to more effective ways of solving ecological and social problems, while maintaining or even enhancing an organisation’s competitiveness” (p.170).

Schaltegger et al. (2012) use the unit of innovation perspective of the business model and suggest that a change and development of the business model towards an SBM can lead to the creation of continuous business case for sustainability.

Besides for the creation of business cases and an increased competitiveness, an organisation can find other motivations to go for SBMs. According to Schaltegger et al. (2016), only the SBM is able to create the necessary radical change in organisations to influence industries and societies, and really achieve sustainable development. According to the same authors, the SBM perspective is also very interesting due to the accent it puts on the value created by an organisation and the impacts resulting from it.

Stubbs & Cocklin (2008) probably counted a lot on the moral commitment of managers when they wrote the following driver:

*“Sustainable organizations must make a profit to exist but they don’t just exist to make a profit. They pursue sustainability because it is ‘the right thing to do’ as well as the ‘smart thing to do.’” (Stubbs & Cocklin, 2008, p.121)*

## 2.4 SBM generation tools

To help managers in the rethinking or creation of their organisation’s business model, some researchers have elaborated sustainable business model development tools. Breuer, Fichter, Lüdeke-Freund & Tiemann (2018), after an extensive review of the literature, have identified six tools, which were relevant according to their two selection criteria: (1) sustainability had to be an “explicit normative orientation for business model development” (p.7), (2) “the tools’ underlying assumptions and theoretical foundations are explicated” (p.7).

In the context of this research, from the six tools, I selected three. This choice is justified by the time constraints and applicability context of the tools. This will be further explained in the Methodology section of this paper.

The three tools selected are the Sustainable Business Canvas, the Flourishing Business Canvas and the Value Mapping Tool. The following sections are dedicated to their presentation.

### **2.4.1 Sustainable Business Canvas**

The Sustainable Business Canvas (SBC) was developed by Fichter & Tiemann (2015) in the context of StartUp4Climate. According to them, the existing tools were to be used for different objectives and in different contexts. With the SBC, their goal was to integrate sustainability at the heart of the business model. They started from the BMC because of its clear structure, low complexity and room for experimentation<sup>1</sup> (Fichter & Tiemann, 2015, p.3). Also, as previously mentioned, the BMC was already popular and used in many various contexts. Using the BMC as a base would ensure a broad use of their new tool.

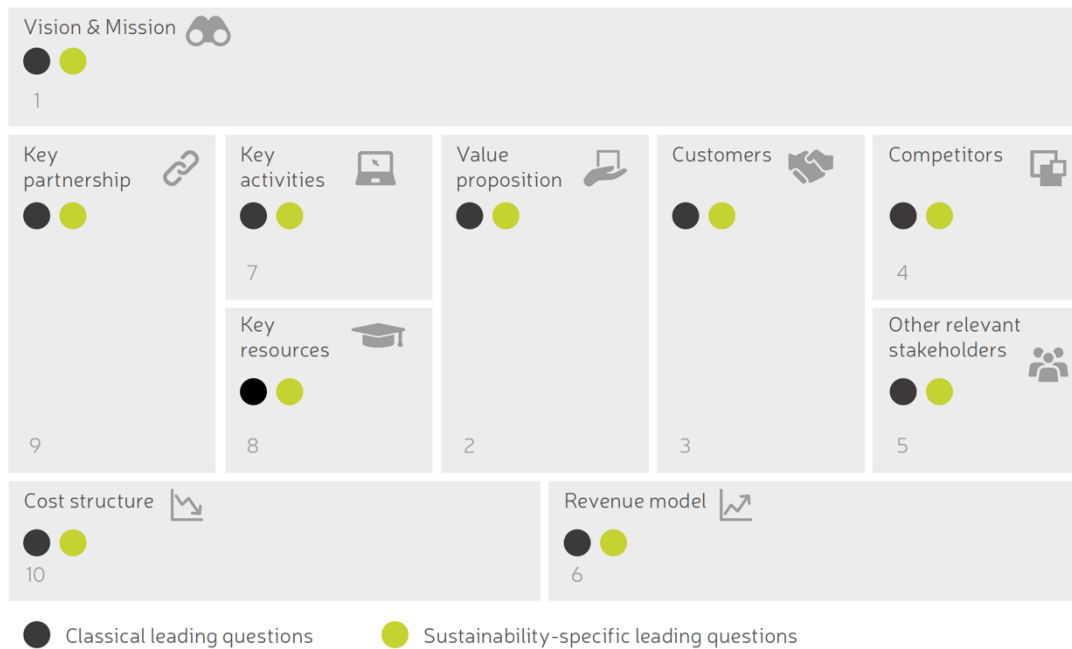
Concretely, to the BMC, they added three building blocks:

- Vision and mission → They provide guidance and identity
  - Competitors
  - Other relevant stakeholders
- } → They integrate the environment in the business model development

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<sup>1</sup> Personal translation

And they combined the three building blocks ‘customer segments’, ‘customer relationships’ and ‘channels’ under a general block ‘customers’. Additionally, they developed questions for each of the new building blocks and sustainability-oriented questions for each component of the canvas.



*Figure 2. Sustainable Business Canvas (Tiemann & Fichter, 2016)*

The authors propose a practical manual for conducting workshops (Tiemann & Fisher, 2016). The tool is accessible online and is free. They guide the facilitator who will direct the workshop with a proposed schedule, order of questions, hints and list of needed material.

Here is an example of questions group for the Value proposition element (Tiemann & Fisher, 2016):

- Describe your value proposition.
- Which customer problem will be solved with it?
- How can your value proposition be aligned with the principles of sustainability in concrete terms?
- Describe the positive impacts of your products and services on the environment and society.
- If a sustainability principle is violated, please describe which one. How can you compensate the negative impacts?
- How can customer utility be increased through sustainability?

## 2.4.2 Flourishing Business Canvas

The Flourishing Business Canvas (FBC) is based on Upward's (2013, 2016a) Business Model for Strong Sustainability Ontology. The purpose was to offer a technique to build a business model that would consider "all sources of opportunity and material risk relevant to all stakeholders" (Upward, 2016b). Taking the BMC as its base as well, the FBC is said to provide companies a common language and a visual tool to build a business model which encompasses the economic, social and environmental levels. "Do good *to* do well" is the catch phrase (FlourishingBusiness, n.d.). The objective is to achieve tri-profit: net sum of the costs and benefits arising from the environmental, social and economic activities performed by an organisation, in a given time period, measured in appropriate units (Upward & Jones, 2016).

Concretely, they renamed the four pillars/perspectives of the BMC and have added seven building blocks. The whole is embedded into the economic context, created by the social context, enabled by the environmental context. There are now 16 different elements/questions that the author qualifies as necessary and sufficient to describe a flourishing business model:

- Outcomes: what are the economic, social and environmental outcomes that show the goals have been achieved?
  1. Goals
  2. Benefits
  3. Costs
- People: who is involved in the business? In what manner?
  4. Ecosystem Actors
  5. Needs
  6. Stakeholders
  7. Relationships
  8. Channels
- Value: what value is co-created or destroyed by the business, now or in the future?
  9. Value co-creations
  10. Value co-destructions
- Process: how, where and with what does the organisation create value to achieve its goals?
  11. Partnerships
  12. Governance

13. Resources
14. Biophysical Stocks
15. Activities
16. Ecosystem Services



Figure 3. Flourishing Business Canvas (Upward, 2016b)

The tool is still being improved by the original author. He created a community of researcher to help him find the flaws and paths of improvements. The tool is freely available if one applies to be part of the ‘first explorers’ of the tool. I applied and gained access to many resources as a high-quality poster of the canvas, a list of specific questions aiming to help facilitators, an unpublished document named “Realizing the Flourishing Imperative in our VUCA World” by Antony Upward (2016a), power point presentations and an access to researchers ready to help.

### 2.4.3 Value Mapping Tool

The Value Mapping Tool (VMT) was developed by Bocken et al. (2013) to fill the gap related to tools for business model innovation for sustainability. They critique the customer-centric view of the BMC value proposition element. According to them, “it seems poorly suited for assisting a firm in generating wider sustainability across the full stakeholder network” (Bocken et al. 2013, p. 485). Their goal was to provide business practitioners with a triple bottom line-oriented, network-centric and easy-to-use tool to innovate business models, with a focus on the value proposition.

Concretely, they differentiated different forms of value:

- The value proposition of the network is the value created for the stakeholders.
- The value destroyed stands for the negative impacts and outcomes of the business. In the sustainability context, these mainly take the form of social and/or environmental impacts.
- The missed value “represents situations where individual stakeholders squander or fail to capitalise on existing assets, resources and capabilities” (Bocken et al. 2013, p.489).
- The value opportunities help to see the possibilities of market expansion, new product development, etc.

In the centre, we find a place for the purpose. After having defined the unit of analysis, the participants have to define the purpose of their *offer* rather than the purpose of the firm.

The tool has a circular form and is devised in sections to represent the stakeholders. It is network centric in the sense that the business is “diffused” in the network: the employees and shareholders don’t occupy the same segment.

The VMT is freely available on Bocken’s website, as well as a facilitator guide. The author suggests using a version of Osterwalder’s BMC that she adapted to the VMT approach. She also says to start from the current business model (if it applies) and change it where it is appropriate according to the completed VMT.

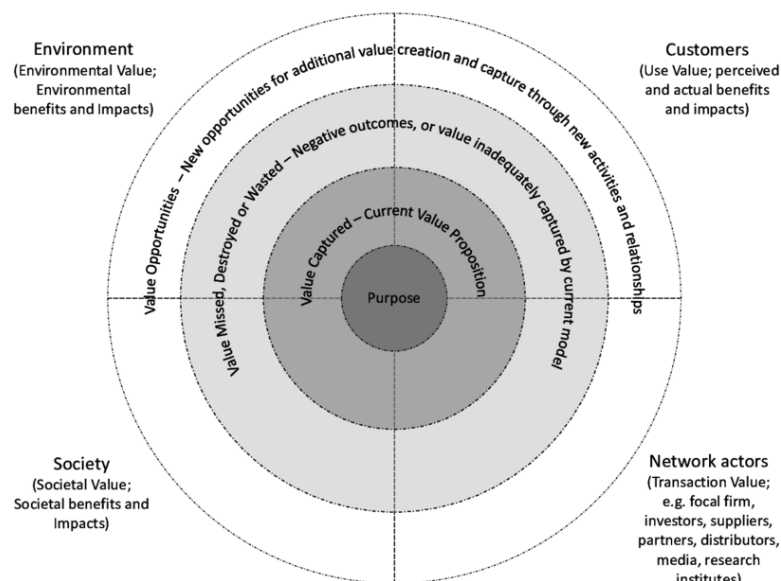


Figure 4. Value Mapping Tool, simplified version (Bocken et al. 2013)

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These tools have been tested and practiced independently in the contexts of research or workshops. Breuer et al. (2018) mention that they have never been empirically compared. Each of these is told to work well and we can see that they are constructed differently. But how do they differ in practice? This is one of the questions this paper tackles.

## 2.5 Analysis framework: the SUST-BMA

The SUST-BMA (*sustainability-oriented business model assessment*) is the product of a research led by Lüdeke-Freund, Freudenreich, Saviuc, Schaltegger & Stock (2017), of which findings are presented in the article ‘Sustainability-Oriented Business Model Assessment – A Conceptual Foundation’. According to the authors, “whether and how sustainable business models really act as business models for sustainability [...] is not just a matter of business model design but also of measurability and manageability” (Lüdeke-Freund et al., 2017, p.170). But so far, no standard management assessment procedure regarding the presumed positive sustainability effects of a business model exists. The authors have therefore developed the SUST-BMA framework to perform methodical evaluations and monitoring of sustainability performance of organisations at the business model level. The framework is said to be applicable to any type of organisation and industry.

The authors explain that the framework has at least three functions (Lüdeke-Freund et al., 2017, p.177):

- Systematic performance tracking to control the (non-)attainment of sustainability goals;
- Systematic information provision to modify and update business models and support strategic planning;
- Comparisons of alternative business models and their triple bottom line.

Practically, the framework is composed of two existing tools which have been combined: the business model and the sustainable balanced scorecard.

### 2.5.1 The business model

In the context of their research, after a comprehensive literature review, the authors have redesigned the business model organisation. It is now considered as a set of five distinct and interrelated logics: the marketing logic, financial logic, capabilities and resources logic,

production logic, and contextual logic. Altogether, they express the fundamental logic of organisational value creation.

- Marketing logic: concerns the interaction with the customers. It includes questions as: what is offered? To whom? How is it delivered?
- Financial logic: relates to the costs resulting from the business activity, as well as the revenues generated;
- Capabilities and resources logic: represents the requirements in terms of infrastructure, capabilities, people, knowledge;
- Production logic: relates to the activities that need to be performed, in or out of the boundaries of the firm;
- Contextual logic: encompasses all the aspects that are outside the functioning of the business model but have a great importance for the other four logics. It comprises aspects as legal requirements, technological improvements, the organisation's reputation.

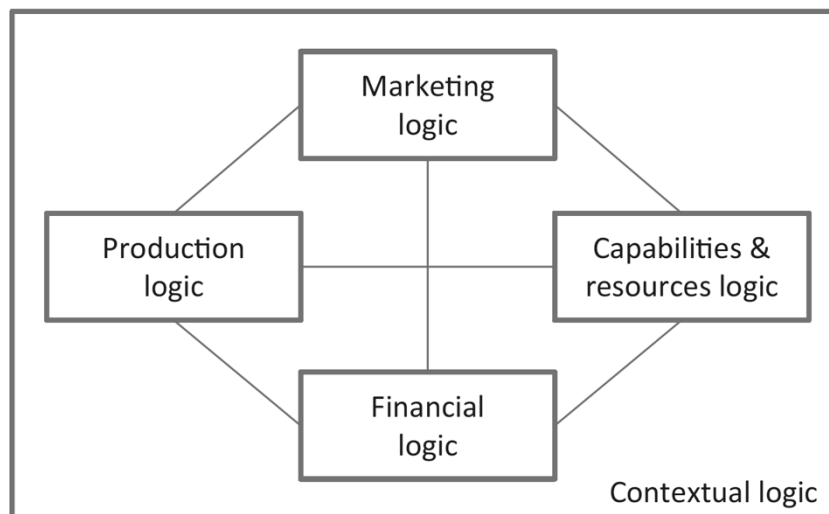


Figure 5. The five business model logics (Lüdeke-Freund et al., 2017)

This representation of a business model into five logics will also ease the linking to the following construct: the sustainability balanced scorecard.

## 2.5.2 The sustainability balanced scorecard

The sustainability balanced scorecard (SBSC) is an extension of Kaplan and Norton's original balanced scorecard (BSC), which is a multi-level performance measurement and management tool. The BSC is built to integrate financial, non-financial, quantitative and qualitative measures and KPIs, and balance short-term and long-term goals. The SBSC, the sustainable

extension of the BSC, integrates environmental and social aspects and shows the causal relations between the economic, social and environmental performance of firms (Figge, Hahn, Schaltegger, & Wagner, 2002).

The SBSC is based on the four original perspectives of the BSC, to which was added a fifth one:

- Financial perspective: relates to economic performance and viability;
- Customer perspective: helps to identify the current and future market segments and customers and to assess the performance regarding aspects as time, quality, service, cost of offerings;
- Internal business process perspective: refers to the efficiency and quality in the processes;
- Innovation and learning perspective: concerns innovation and improvement possibilities regarding the infrastructure, the technology, culture, the human capital training;
- Non-market perspective: covers the non-financial ecological and/or social aspects with a strong influence of the organisation's performance.

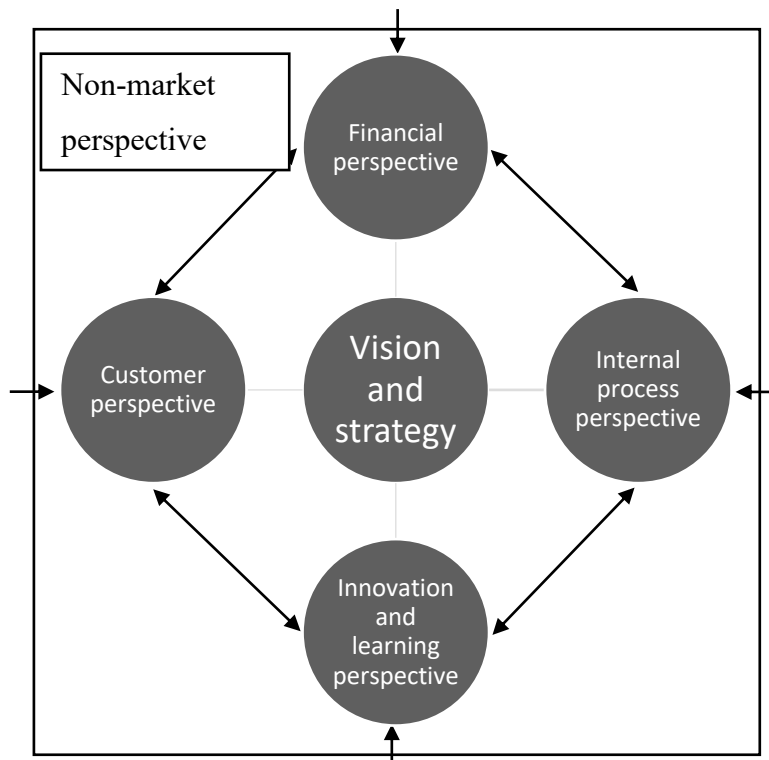


Figure 6. Sustainable Balanced Scorecard (Figge et al. 2002)

The SBSC translates the strategy into objectives. Additionally, in the specific context of an SBSC, the authors suggest an identification of the sustainable hot spots of the business model

thanks to a materiality matrix. This tool helps to prioritise the relevant aspects which are important for both the organisation and its stakeholders. Once the relevant aspects identified, these can be added as objectives in a specific perspective, and they also can be used to identify appropriate KPIs for the objectives already stated. The authors recommend the GRI framework (especially the G4 guidelines), for its prominence and broad use, to derive appropriate measures.

### 2.5.3 The SUST-BMA framework

Similarities between the business model and the balanced scorecard had already been pointed by other scholars: they have “complementary roles in ensuring the achievement of strategic aims through day-to-day business operations” (Lüdeke-Freund et al., 2017, p.189-190). Lüdeke-Freund et al. (2017) aligned them for the specific objective of constructing the SUST-BMA framework, a framework aimed at assessing an SBM and its performance regarding sustainability.

Concretely, the strategy guides the BM design and the development of the performance measurement and management concept. The BM represents the way an organisation creates

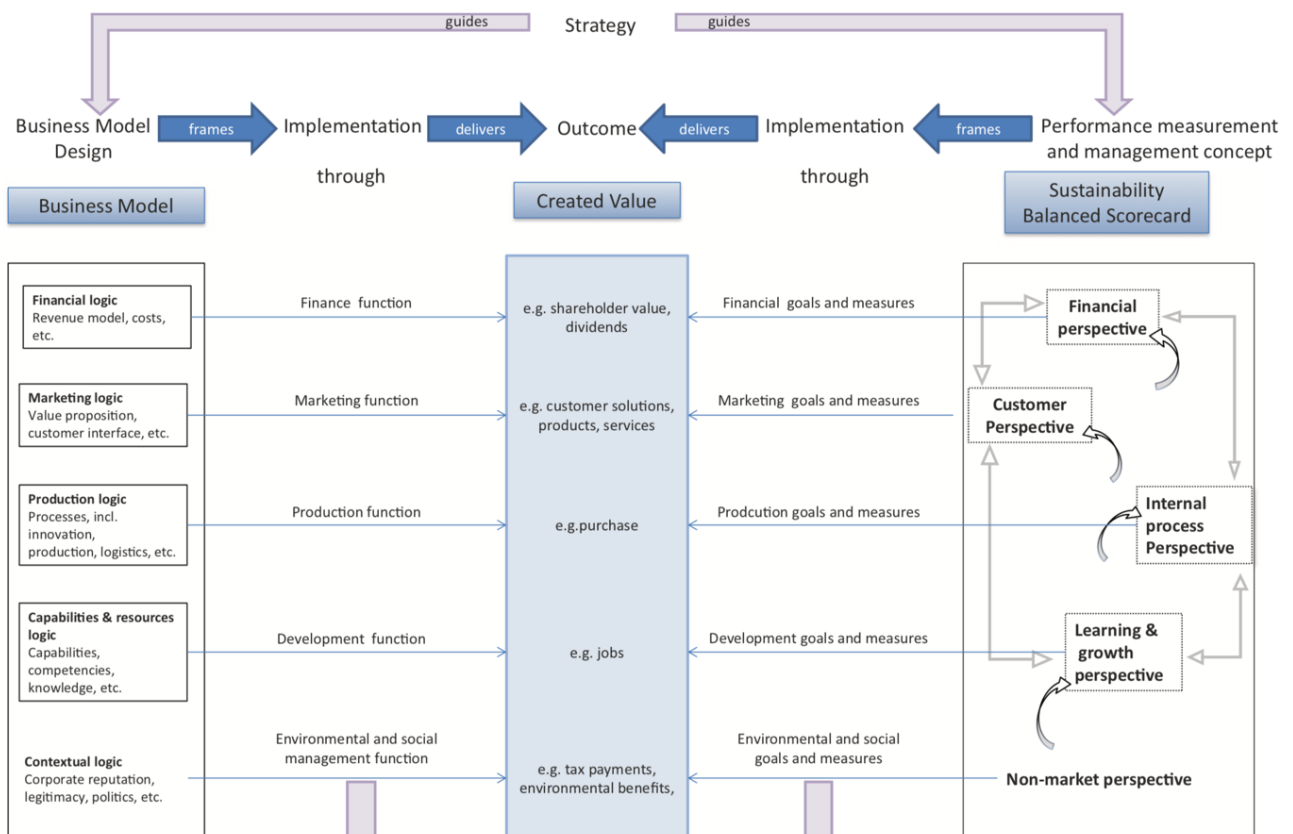


Figure 7. SUST-BMA framework (Lüdeke-Freund et al., 2017)

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value thanks to resources and activities (the HOW). The SBSC synthesises the organisation's goals and assesses their achievement (the WHAT). At the junction, there is an evaluation: are the performed activities of the BM in line with the organisation's strategic goals?

In the SUST-BMA, the five BM logics and the five SBSC perspectives are counterparts. So more specifically, the assessment consists in evaluating whether or not the value actually created in the BM logic is consistent with the value set out to be created in the SBSC perspective.

After the assessment, action could be recommended depending on the result. "Depending on the logic that an [SBSC] indicator is mapped to, conclusions can be drawn about necessary changes to improve a business model's performance with regard to that indicator" (Lüdeke-Freund et al., 2017, p.197). By this, we understand that the goal behind the use of this framework is to identify the flaws of an organisation's business model regarding its sustainability performance, and to improve it to make it more performant with respect to the organisation's strategic goals. As already stated, another use of this framework is the comparison of different business models. After this explanation, the process is clearer: by analysing each business model individually, we can see which one is the most performant, or needs the least change, against the organisation's strategic goals.

While this framework seems very promising for the good management of an organisation and the improvement of its business model, it actually has not exited the scientific world yet. In fact, thanks to a discussion by mail with two of the authors, I learnt that I am among the first ones who try to make it work. As I explain in the methodology section of this paper, I struggled a bit with the operationalisation of the tool. The authors acknowledge that this part was left vague and open, their article being the starting point of the reflection. Improving this tool and making it more actionable and easier-to-use is the other ambition of this paper.

## **Section summary**

The objective of this literature review was to give key insights into the concepts further used in this research. The business model is an activity system that can be innovated, and the integration of the triple bottom line at its heart should have positive impacts in- and outside the firm's boundaries. The SBM development tools were presented, as well as the analysis framework. The latter probably needs to be deconstructed to really understand its functioning.

### 3. Research setting

This section briefly presents the organisation – the Cultural Centre of Charleroi, named ‘Eden’ – and the specific analysed branch – the catering space – that form the setting for this thesis. This case presentation is a summary of the organisation involved and is provided to serve as background information and to give context. Primary and secondary sources provided the information to complete this section. Those sources will be described in the methodology section of this thesis.

#### 3.1 The Cultural Centre of Charleroi

The Eden of Charleroi is a Belgian cultural centre, in the form of a non-profit organisation, situated in the French-speaking part of the country. The Wallonia-Brussels Federation is the authority that determines the missions, and with the municipalities, provinces, it finances the cultural centres it supports. It currently counts around 30 employees, some interns and it calls volunteers in very often. The 2017 revenues amounted to €236,176, the financial result to €90,280 and the balance sheets amounted to €723,121.

A cultural centre, under the 2013 decree on cultural centres, is an organisation which works with and for the citizens, ensures the enjoyment of cultural rights by all, individually and collectively<sup>2</sup> (Astract & ACC, 2017).

So concretely, according to the 2013 decree, the cultural rights that cultural centres have to foster are (Astract & ACC, 2017, p.8):

- artistic freedom;
- the preservation and promotion of heritage and culture;
- access to culture;
- participation in culture;
- freedom of choice in cultural matters;
- the right to participate in decision-making on cultural policy or programming<sup>3</sup>.

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<sup>2</sup> Personal translation

<sup>3</sup> Personal translation

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In this context, the Cultural Centre of Charleroi (CCC later in the text) has specified his missions to make them closer from its environment reality. To do so, it performed a shared analysis of its territory, supported by a citizen forum, citizen and politician meetings (Charleroi Academy), and a psychanalysis<sup>4</sup> of the territory. It helped and still does to highlight key societal concerns and propose an adapted cultural offer.

From this analysis, they came up with a vision of “make city together”<sup>5</sup>. Charleroi has a tumultuous history and is currently experiencing great transformation. This vision translates the need for more cohesion and pride of the citizens. As a cultural centre, the CCC defends the idea that culture is the new paradigm of the city. The CCC affirms that this vision will be achieved by creating a new collective imagination. This objective is declined into three branches (eden-charleroi, n.d.):

- support urban cultures;
- energize heritage and popular expressions;
- encourage new utopias and positive transformations<sup>6</sup>.

In the context of this work, the focus is put on the third branch, as explained in the following section.

It is in the DNA of a cultural centre to be attentive to its environment and be responsive to it. This fact is taken as a strong contextual factor that facilitated some steps of this work. This is further explained in the methodology section.

In the practice, the CCC organises and receives concerts, plays, dance shows or battles, creative activities for every age, game afternoons, etc. It is working on expanding the building, as well as the offer. The grand opening of this extension is planned in 2022.

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<sup>4</sup> An urban psychanalysis consists in lying cities on the couch, detecting urban neuroses and proposing appropriate therapeutic solutions (ANPU, n.d.). Personal translation.

<sup>5</sup> Personal and literal translation of “Faire ville ensemble”.

<sup>6</sup> Personal translation

## 3.2 The Catering Division

### 3.2.1 Presentation

The CCC has already a brasserie – a small restaurant – which is open every midday. They own the space, but the restaurant is currently run by an independent firm in autonomous management (the current business model is available in Appendix 1). In the perspective of the extension, they are considering the creation of a new catering space. Ideally, the director would like the CCC to manage all the catering areas. The vision behind the Catering Division (CD) is the same as for the CCC: make city together. The mission of the CD is also to promote the cultural rights, but through the food, in an enlarged sense of the culture. This participates to the ‘encouragement of new utopias and positive transformation’ that was previously mentioned. They want to be exemplary in the valorisation of locally produced goods and want their vision to be incorporated in all the activities organised, catering included.

The source of our collaboration is this situation: they wanted to have a perspective on how their CD would look like, but they don’t have the required managerial tools and competencies; whereas I have the educational background needed and was looking for an organisation to work with.

### 3.2.2 Main idea

In a nutshell, their motivation behind the catering division is threefold:

- With the new catering space in the extension, they want to rethink the reception of the Cultural Centre. The rise of technological support makes obsolete the presence of human resources just for the selling of tickets.
- But the main motivation of the CCC is the coherency between the stakes of their cultural action and the daily reality. They propose a lot of activities to foster reflection on a broad variety of societal subjects, put some of these into practice, and want to go a step further with their food offering.
- This is also a good opportunity for them to offer a catering space for their employees, would they buy their food there or not.

### 3.2.3 SBMs

With the director, the financial manager and the communication manager, we applied the three different SBM development tools that were presented in the literature review. The organisation of the data collection is explained in the methodology section. Here is a brief presentation of the outcomes: the SBMs. The analysis of their content and main differences among them is performed in the Analysis & Findings section of this paper.

#### Sustainable Business Canvas

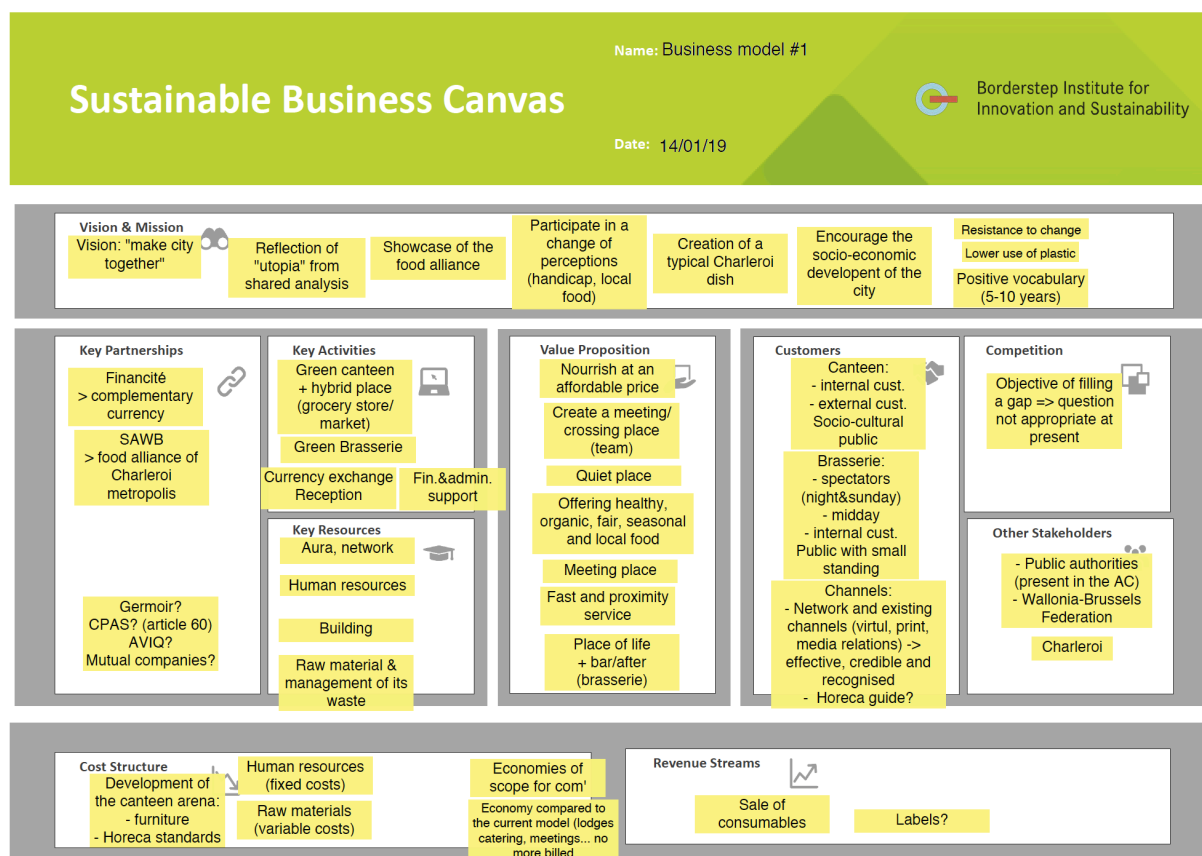


Figure 8. BM#1 - developed with the SBC

# Flourishing Business Canvas

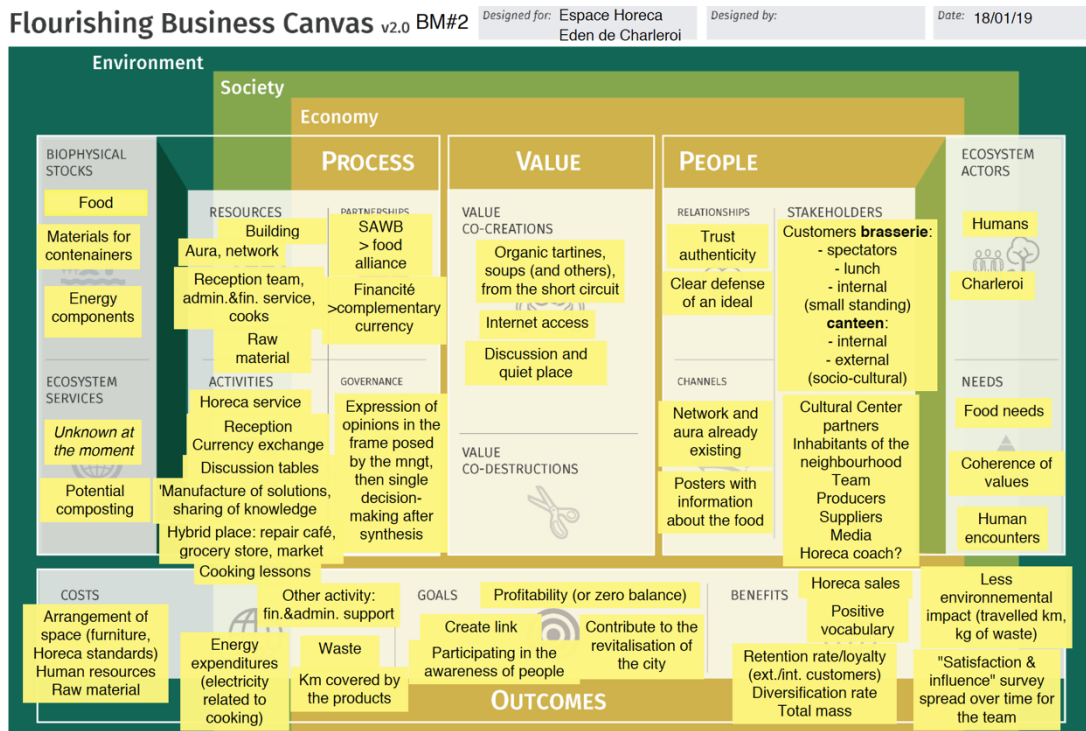


Figure 9. BM#2 - developed with the FBC

## Value Mapping Tool

Here is the final business model resulting from the reflection with the value mapping tool. You can find the original completed canvas in Appendix 2. The text in bold is the code used to represent the items already present in the current business model.

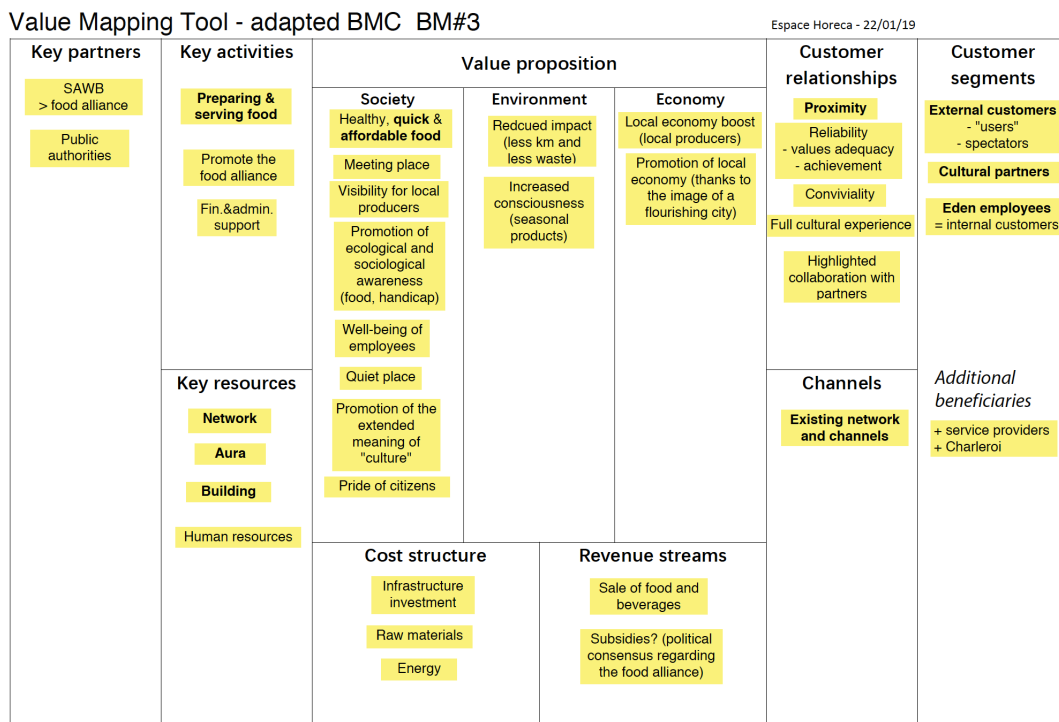


Figure 10. BM#3 - developed with the VMT

## 4. Methodology

This section specifies the methodology used to answer the research questions addressed in this thesis. Firstly, the research design is presented, followed by the data collection process. The analysis method is then detailed. The strengths and weaknesses of this research are finally discussed in the quality rubric.

### 4.1 Research design

The research design gives the plan for how the research question will be answered and how the study will be structured (Saunders, Lewin, & Thornhill, 2016). Because the sustainable business model field is relatively new, and little, if any, research has been done about concurrent generation tools, this thesis uses a qualitative evaluative design to obtain new insights into these processes.

This thesis uses a case study to obtain completed business models of the same unit in order to perform a comparison of their generation tool at the application stage. Case studies investigate new phenomena within specific contexts. They are useful for analysing questions of ‘what’, ‘why’, or ‘how’, corresponding with the research questions examined here (Saunders et al., 2016).

#### 4.1.1 Research Approach

Even though there is not an extended literature available about this very specific topic, this study uses a deductive approach to theory: deduction tests and develops existing theories (Saunders et al., 2016). The research setting was determined by a common interest, shared with the management of the cultural centre. The simplicity of the case was appropriate to gain first insights into this topic and the use of a relatively new assessment framework. In this research setting, the advantage was also the availability of the interviewees, as the data collection was constraining; it required a great time investment of the same persons. Even if quite simple, the research setting was adequate to address the research question which asks: *how do tools for sustainable business model generation differ in practice?* This question is informed thanks to the use of an assessment framework. This framework led to a research sub-question: *how to ease the use of the SUST-BMA?*

The use of the evaluative research design and the deductive approach focuses the analysis of this study on the questioned tools through the use of real data, to provide answers to the research question, but also permits the new discovered insights to improve the frameworks being used and tested.

#### **4.1.2 Research Objective and Strategy**

The objective that is sought in this study is to help both practitioners and researchers with insights into the practical difference of tools for generation of sustainability-oriented business, and tips on how the SUST-BMA can be put into practice.

This is a qualitative study: the data used is non-numerical and in the form of group interviews, public documents and information; the qualitative method is appropriate for this type of study where the objective is to develop knowledge in a relatively new field (Saunders et al., 2016).

In this research, the choice was made to work with three SBM development tools. These tools were selected from a panel of six SBM development tools defined by Breuer et al. (2018) in their article *Sustainability-Oriented Business Model Development: Principles, Criteria, and Tools*. Firstly, The Business Innovation Kit was not selected due to availability and language constraints. The whole kit was not freely available online, and it would have required a lot of time to translate all the items in French. Secondly, the CCC was not the target group for the use of the BMC Extended for Infrastructure, which focuses on infrastructure investments. Finally, the Triple Layered BMC was not selected because there was no concrete user guideline to follow and I did not want to influence the completion of the BM by asking my own questions. The last three tools, the Sustainable Business Canvas, the Flourishing Business Canvas and the Value Mapping Tool, were appropriate to my case. Furthermore, the analysis and comparison of three tools was easier to handle and more manageable regarding the amount of data to acquire and the availability of my respondents.

In order to obtain relevant information about the practical differences between the three SBM development tools, these are applied to the same case and their outcomes are analysed and compared thanks to an SBM assessment framework. The assumption is done here that a difference noted between the outcomes should be linked to the tools thanks to which they were generated.

As mentioned previously, this research examines the outcomes generated about a specific case. The case is simply instrumental regarding the purpose of the research. Yet, this case was selected because of its simplicity which would help for this novel approach and the novelty of the tools being investigated. Another reason related to the common interests met in the collaboration and the availability of the respondents.

## 4.2 Data collection

This section of the thesis presents the types of data that were used, how it was collected and further processed.

### 4.2.1 Data sources

Both primary and secondary data were used in this thesis. The primary data informed the business models, while the secondary data was necessary for the analysis part of the work.

Primary data was collected with focus group interviews. This format is appropriate as it fits the workshop technique needed for the application of the tools. In focus groups, attention is put on one particular element, here the tool, and the sharing of perceptions and interaction are encouraged (Saunders et al., 2016). Nevertheless, the purpose behind the focus group was not to raise social behaviours but well to end up with completed business models. These are the material in the spotlight.

Secondary data is comprised of public information: organisation websites, annual reports, activity reports. The CCC also provided me with the actual contracts and specifications regarding the brasserie.

### 4.2.2 Sample

In this research, the sampling technique for the focus group was a non-probability purposive sampling. This technique is more adequate in case studies. With the purposive sampling, the researcher selects the most informative cases to meet his/her objectives (Saunders et al. 2016). In order to obtain thoroughly completed business models, I needed to gather well-informed participants to my workshops. The sample also needed to be as stable as possible to avoid big changes in responses due to new people in the sample. As a recall, the assumption is done that differences in the business models come from their generation tool.

All the informants selected had a deep understanding of the organisation and had participated to the reflection meetings about the catering division. The first informant was Fabrice Laurent, the director of the CCC; the second informant was Silvano d'Angelo, the financial manager; the third informant was Carmela Morici, the communication and cultural action chief. This panel offered various and complementary points of view.

### **4.2.3 Focus group**

For each of the tools that were used in this research, their authors had prepared and left available user guides. I did not prepare any questionnaire but translated the guides for my respondents. All the tools suggest the use of workshops during which a moderator asks the proposed questions to the group. The group reflects about it and writes answers on post-its. These are then attached to a big printed version of the canvas that were previously presented.

I took the moderator role and did my best to stick to the questions and examples given by the tool's authors and not give any extra advice.

We organised a session for each of the tools, resulting in three meetings. Each meeting lasted for two hours.

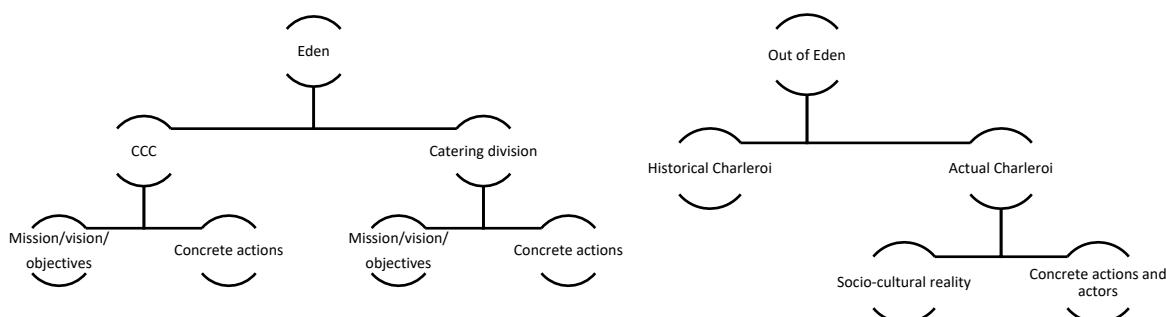
A fourth session took place one month later to have a general feedback on their feeling regarding the use of the three tools and to complete and revise the balanced scorecard of the catering division.

## **4.3 Data analysis**

In order to perform the analysis of the business models with the SUST-BMA, the authors of the framework suggest a few steps to follow (Lüdeke-Freund et al., 2017). The first one is to define the units of analysis, which are the business models, and to reorganise them in accordance with the five business model logics. The second is to identify the relevant sustainability aspects that have to be included into the SBSC. Finally, the third step is to assess the performance. This last step refers more to a practical evaluation of the business models regarding the SBSC, but as the authors say it is possible, the focus is put on a conceptual evaluation of the business models.

### 4.3.1 Business models reorganisation

The first step after collecting the data was the transcription of the focus group interviews. I performed a thematic analysis of the text and reorganised everything according to the unit that was discussed. My analysis had 3 levels of detail:



I then reorganised the three completed business models according to the five logics presentation used in the SUST-BMA. To do so, I just followed the logics' description of the SUST-BMA given by the authors. This is the first step suggested in the SUST-BMA process (Lüdeke-Freund et al., 2017). Even though there might be some different opinions for the 'contextual logic' and what should be put inside, this has not a great impact on the rest of the analysis. Where needed, meaning where the information had not been written on a post-it, I completed the business models thanks to the thematic analysis. You can find each reformatted business model in Appendix 3.

### 4.3.2 Sustainability balanced scorecard

The SBSC gathers the objectives that are specific to the catering division but also the aspects that are important to the CCC's stakeholders.

#### *Materiality matrix*

The next step suggested by Lüdeke-Freund et al. (2017) is to identify the relevant sustainability aspects. The recommended method is to build a materiality matrix and to use the G4 sustainability aspects (GRI, 2013). Due to time constraints, and because the CCC has plenty of stakeholders, I performed the exercise on my own.

The main groups of stakeholders are their cultural partners, the media, the citizens and the public partners. The media were not considered in this work as they have no direct influence on the catering division project, nor are they influenced by this project.

Many secondary sources were at my disposal. Every partner is referenced on the CCC website (eden-charleroi, n.d.b). Furthermore, many activity reports relating citizens' concerns are available online, on the CCC website (eden-charleroi, n.d.c) and the Charleroi Academy website (charleroi-academy, n.d.). Finally, the public authorities' concerns were gathered in a debate debriefing (charleroi-academy, 2018).

For every partner, I translated their main focus into one (or more) of the G4 sustainability aspects. For the citizens, I read some documents<sup>7</sup> and translated each concern that was raised into one (or more) of the G4 sustainability aspects. I did the same for the public authorities with the debate debriefing.

I used a code to make the process as objective as possible. If the aspect was not raised for a specific stakeholder, I wrote '0' in the corresponding case. If the aspect was raised or some information was written about it, I wrote '1' in the corresponding case. If the aspect was recurring, I wrote '2'. Finally, if the aspect was clearly raised as an important topic, I wrote '3'.

I ended up with a big table gathering all the weights for each G4 aspect. I used a mean to have the general weight of each G4 aspect for all the stakeholders. I did the same exercise for the CCC thanks to the thematic analysis. I plotted the results, the CCC on the abscissa, and the stakeholders on the ordinate. The four most important aspects are: the local communities, the overall environmental impact, the indirect economic impact and the employment. The CCC already echoes its stakeholders' concerns. So, I was confident that the material aspects would have been more or less the same if the materiality matrix had been completed according to the rules. These aspects have to appear in the SBSC of the catering division.

### *Construction of the SBSC*

The content of the SBSC is composed of:

- the previously cited aspect;
- a translation of the catering division' vision and mission into the five SBSC perspectives.

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<sup>7</sup> ANPU, 2018; eden-charleroi, n.d.a; eden-charleroi, n.d.c; eden-charleroi, n.d.d; eden-charleroi, n.d.e; eden-charleroi, n.d.f; charleroi-academy, 2018.

Thanks to the thematic analysis, I prepared a draft version of the SBSC and reviewed it with Mr. Laurent and Ms. Morici during the fourth meeting. The indicators were inspired by the G4, the ideas that were raised during the workshop and specialised websites. The final SBSC is available in Appendix 4.

### 4.3.3 SUST-BMA analysis

My analysis started when the 3 BMs and the SBSC of the Catering Division were correctly formatted. The SBSC is of course the same all the time.

Because the BM relates to more practical information and actions, and the SBSC to more abstract objectives, I couldn't directly answer the question: "are the performed activities of the BM in line with the organisation' strategic goals?". I decided to insert one step in between the two. I took each BM logic and reflected about the results or general activities they would lead to, once put in practice. This step is quite objective as it is only a reformulation and combination of the different ideas in a BM logic. I called this step 'expected result'.

#### Example:

<i>BM logic</i>	<i>Category from the tool</i>	<i>Content for the CD</i>	<i>Expected result</i>
<i>Production</i>	<b>Key activities</b>	Preparing & serving of food	<ul style="list-style-type: none"> <li>- Responsible food coming from the Food Alliance (dishes)</li> <li>- Use of alternative currency</li> <li>- Pollution accountability (transport &amp; waste)</li> </ul>
		Promotion of the food alliance	
		Financial & administrative support	
	<b>Key partners</b>	Financité -> complementary currency	
		SAWB -> Food alliance of Charleroi metropolis	
	<b>Value proposition (environment)</b>	Reduced impact (less km for food transportation and less food waste)	

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The presentation of the BM logic under ‘expected result’ seemed more manageable and closer from potential objectives.

Then, I went through every objective determined in the SBSC and reviewed the corresponding ‘expected result’ (recall: the BM logics and SBSC perspectives are counterparts). The question was also adapted to the situation of unrealised BMs: “do the intended activities of the BM drive the organisation toward the achievement of its goals?”.


To make the analysis as objective as possible, I took inspiration from the Likert scale. The idea was to define the range of possible answers and to classify the BM logic according to this newly developed scale:

- If there was an/several element(s) that fully participated in the fulfilment of the objective, I counted the BM as driving the organisation toward the achievement of this goal.
- If there was no element in the corresponding BM logic that fully participated in the fulfilment of the objective, but well in another BM logic, I counted the BM as driving the organisation toward the achievement of this goal. I also added a comment to keep track of the information.
- If there was an element in the BM that partially participated in the fulfilment of the objective, I counted the BM as not sufficiently driving the organisation toward the achievement of this goal. I also added a comment to keep track of the information.
- If there was no element at all in the BM that participated in the fulfilment of the objective, I counted the BM as not driving the organisation toward the achievement of this goal. I also added a comment to keep track of the information.

In the end, even if there seems to be four possible answers, the scale actually counts three levels:

*Do the intended activities of the BM drive the organisation toward the achievement of its goals?*

No Partially: need for a complement Yes



**Example:**

<i>SBSC perspective</i>	<b>Objective</b>	<b>Lagging indicator</b>	<b>Leading indicator</b>	<b>No missing element or contradiction</b>	<b>BM element is missing or insufficient</b>	<b>Comments / clue element is from another category</b>
<i>Internal processes</i>	<b>Partners management</b>	Secured key partnerships with suppliers	Ratio of Food Alliance suppliers/others Supplier coop' & com'	x		**
	<b>Focus on the purpose</b>		# organised activities in line with the extended definition of culture		x	No mention of activities besides cooking and serving.
	<b>Environmental responsibility</b>	Low environmental impact	#km travelled/food #kg of waste/month	x	x	Presence of a BM element regarding the distance travelled by the food (SAWB) but no element regarding the waste management. "Green canteen" and then?

\*\*Left empty: Because in the BM counterpart logic, it is written that the Food Alliance suppliers are key partners, I assume that the leading indicator can be measured and driven toward the achievement of the objective.

You can find the complete tables in Appendix 3. Nevertheless, this last analysis step, with the question: “do the intended activities of the BM drive the organisation toward the achievement of its goals?”, still seemed too subjective. The solution for this subjectivity is explained in the following section.

I finally went through the facilitator guides to spot the variations where the BMs had different content.

## 4.4 Research quality

In this section are discussed the quality aspects of this research. Any scientific research has to meet and respect several quality criteria. In a qualitative research, the criteria are the dependability, credibility and transferability (Saunders et al., 2016). Each of these are approached here.

### 4.4.1 Dependability

“Dependability [...] means recording all of the changes to produce a reliable/dependable account of the emerging research focus that may be understood and evaluated by others” (Saunders et al., 2016, p.206). It is the parallel criterion to reliability in quantitative research. The focus is put on the replication of the research and the achievement of the same results.

All the steps of the research are documented in this thesis. The research setting has been thoroughly described, as well as the analysis methods.

A dependability limit has to be acknowledged: I determined the order in which the tools were applied. The SBC was selected first because it resembles the Business Model Canvas the most and simply adds sustainable questions to the original ones. The FBC was applied second because it seemed more complicated, even on the paper. The accumulated knowledge from the first tool would not be a problem regarding the complexity of this tool. The VMT was left for the end as its format was the furthest from the two first tools. Although this choice of order looked acceptable, a potential learning curve can't be totally omitted, as well as a replication of ideas over the tools. The resulting BMs could have been completed differently if the tool order had been different. To partially solve this problem, as a recall, assumption is done that differences in the results come from differences in the tools.

### 4.4.2 Credibility

This parallel criterion to internal validity in quantitative research refers to the plausibility and trustworthiness of the findings. To ensure the fulfilling of this criterion, I firstly showed a video presenting the Business Model Canvas to make sure my respondents were more familiar with the concept. This limited the interpretations in the following tool applications. Also, a clear presentation of the tool was given before the beginning of each workshop. Then the BMs

and the SBSC were reviewed by the respondents during the fourth meeting to confirm the data. I proceeded to the analysis after this member validation.

The issue with the last step to complete the analysis was discussed with my supervisor and different approaches were considered. Finally, a new phase in the analysis framework was created. As already mentioned, the last analysis step might have been subject to different interpretations and subjectivity. To strengthen the analysis, it was presented to a panel of reviewers. This panel was composed of two academics and three practitioners. Each of them agreed with the analysis, or at least, did not find anything inaccurate. This repetition of positive statements decreases the subjectivity of this step and gives confidence that the three-level scale helps the answer to be more objective.

### **4.4.3 Transferability**

This last criterion, called external validity in quantitative research, refers to the degree to which the findings can be generalised to other contexts. This study, even if deductive, was mainly to gain information about new material. A specific case was chosen to explore a new field and to elaborate on an analysis framework. This study was not intended to be transferable and representative but rather to acquire new insights.

In a qualitative case study, findings and interpretations are inevitably tied to their context. The Research Setting section of this thesis describes the context of this research and should help other researchers to determine in which other comparable contexts the results are transferable.

### **Section summary**

The purpose of this chapter was to give a detailed presentation of the research methodology and give confidence that it was well thought out. Actions were taken to coherently answer both research questions: a focus group was organised to gather and check relevant data for the SBMs; secondary data was constructively articulated to develop the SBSC; a strong reasoning was elaborated to engage the analysis; and quality issues were addressed with theoretical tools and expert reviews.

## 5. Findings

In this section, I present the main findings and pieces of evidence that help me to answer the research questions. It starts with a brief appreciation of the respondents. Secondly, the in-depth analysis of the BMs is detailed. Finally, recommendations are given regarding the use of the SUST-BMA.

### 5.1 How do tools for sustainable business model generation differ in practice?

#### 5.1.1 Living the application of the tools

As a recall, my case study takes place in a non-profit organisation. The tools as well as the vocabulary my respondents use are less business-oriented than in profit organisations, and they were quite novice regarding the business model approach.

I gathered their feedback during a closing interview. The first tool was the best received. The two other tools, the FBC and the VMT, were put under the same umbrella and sometimes not differentiated enough to separate the sayings. Here are the main points of interest:

SBC	FBC	VMT
<b>Format</b>		
<p>“I have a very positive perception of this tool because I found it more understandable and clearer for the beginners that we are.” (Carmela Morici)</p> <p>The layout of the canvas and the questions seemed more appropriate and easier in regard to the way they think at the CCC.</p> <p>“I was definitely more at ease with the first tool.” (Carmela Morici)</p>	<p>“These tools seem to require an expertise which we don’t possess.” (Carmela Morici)</p>	
	<p>“I experienced a lot of difficulties with the FBC” (Fabrice Laurent)</p> <p>They sometimes had difficulties to understand the questions asked from the facilitator guide.</p>	<p>“Circles are better than cases, they leave more room to reflection.” (Fabrice Laurent)</p> <p>“It’s interesting to put things in tension with different actors.” (Fabrice Laurent)</p>
	<p>“The questions were more precise.” (Silvano d’Angelo)</p>	

Content		
“I think we cited more partners in the first tool.” (Fabrice Laurent)	From the second tool application, the FBC, they added that the tool did not seem to be adapted to their non-profit specificity in the cultural sector.	“The value destroyed is very complicated to understand.” (Fabrice Laurent)
“In the Sustainable Business Canvas, we talked about the vision of the catering division, but not in the two others.” (Fabrice Laurent)	“It was off-putting to clearly define everything for the environment and the society. It might be more precise, but I prefer a more global approach.” (Carmela Morici)	

On the overall, they clearly preferred the SBC for the ease they had to apply and use it. Furthermore, except for the ‘activities’ which were more defined in the FBC, they judged the SBC to satisfy their needs.

### 5.1.2 SUST-BMA analysis of the BMs

As explained in the methodology section, I summarised every BM logic into an ‘expected result’ to ease the analysis and answer the question “*Do the intended activities of the BM drive the organisation toward the achievement of its goals?*”. Practically, the ‘expected result’ was put in perspective with the SBSC objectives. The crosses were just a visual element referring to the indicators and helping to have a general overview of the BM performance against the SBSC. The most relevant information lies in the last column, where details are recorded. You can find the complete versions of the tables in Appendix 3. Here is the detailed analysis and findings for each SBM generation tool.

#### SBC

As it is shown in the following table (*Figure 11*), the BM that was generated thanks to the SBC doesn't fully participate in the achievement of the SBSC objectives. More precisely:

- No 'other activities' are mentioned to ensure that the focus on the purpose always exceeds the search of profitability. As a recall, the purpose is the defence of the cultural rights through the food. No ‘other activities’ means that the “change of perceptions” objective also lacks BM elements to be achieved.
- Nothing is arranged to showcase the local suppliers.
- Beside the consumption part, nothing is arranged to involve the employees.

EXPECTED RESULT	SBSC Objectives	No missing element or contradiction	BM element is missing or insufficient	Comments / clue element is from another BM logic
Costs and revenues => profitability is measurable	Financial viability	x		
2 places, 2 ambiances: brasserie, canteen (quiet place) for a diverse public Responsible food served quickly and at an affordable price External communication through existing channels	Living space of the cultural centre	x		
	Coherency in the plate	x		
Responsible food coming from the Food Alliance (used in the dishes and sold in the grocery store) Use of alternative currency Reception of the Cultural Centre	Partners management	x		No mention of activities besides cooking and serving.  Presence of a BM element regarding the distance travelled by the food (SAWB) and waste management in the resources.
	Focus on the purpose		x	
	Environmental responsibility	x		
Use of: Human Resources, building and network	Be coherent and motivating for the staff	x		Feedback from employees can be gathered as they are mentioned in the customers sections, but no mention of ideas sharing process nor decisional process
		x		
			x	
Influence on or by: Public authorities, Wallonia-Brussels Federation, Charleroi	Participate to a change of perceptions	x	x	No mention of activities besides cooking and serving. Yet the impact of the offer of responsible food can be grasped.
		x		"Diverse public"
	Encourage the socio-economic development of the city	x	x	The partnerships and value proposition (responsible food) allow us to say that this indicator can be measured. No mention of communication about partners inside the catering space.
		x		"Complementary currency" Offer of responsible food from the Food Alliance

Figure 11. Condensed version of the BM#1 analysis table

## FBC

On the overall, the second BM, developed with the FBC, seems to fully participate in the achievement of the objectives (*Figure 12*). In the BM logics, no real contradiction or absence of factor was to be noted.

EXPECTED RESULT	SBSC Objectives	No missing element or contradiction	BM element is missing or insufficient	Comments / clue element is from another BM logic
Costs and revenues => profitability is measurable	Financial viability	x		
2 places, 2 ambiances: brasserie, canteen (quiet place) for a diverse public Responsible food Communication about the suppliers inside the catering space External communication through existing channels Internet connection provided	Living space of the cultural centre	x		
	Coherency in the plate	x		
Responsible food coming from the Food Alliance (used in the dishes and sold in the grocery store) Use of alternative currency Pollution accountability (transport & waste) Reception of the Cultural Centre Other activities organised	Partners management	x		
	Focus on the purpose	x		
	Environmental responsibility	x		
Use of: Human Resources, building and network Ideas sharing process and decisional process	Be coherent and motivating for the staff	x		
Influence on or by: Charleroi, the Environment	Participate to a change of perceptions	x		
		x		"Diverse public"
	Encourage the socio-economic development of the city	x		Use of responsible food (from the Food Alliance) for the catering Communication about suppliers inside the catering space
		x		"Complementary currency" Offer of responsible food from the Food Alliance

Figure 12. Condensed version of the BM#2 analysis table

## VMT

As shown in the following table (*Figure 13*), the third BM, generated from the application of the VMT, doesn't fully participate in the achievement of the objectives.

EXPECTED RESULT	SBSC Objectives	No missing element or contradiction	BM element is missing or insufficient	Comments / clue element is from another category
Costs and revenues => profitability is measurable	Financial viability	x		
2 places, 2 ambiances: brasserie, canteen (quiet place) for a diverse public Responsible food served quickly and at an affordable price Communication about the suppliers inside the catering space External communication through existing channels Internet connection provided "Full cultural experience"	Living space of the cultural centre	x		
	Coherency in the plate	x		
Responsible food coming from the Food Alliance (dishes) Use of alternative currency Pollution accountability (transport & waste)	Partners management	x		No mention of activities besides cooking and serving. "Full cultural experience" is not translated into activities.
	Focus on the purpose		x	
	Environmental responsibility	x		
Use of: Human Resources, building and network Ideas sharing process and decisional process Development of employees' well-being	Be coherent and motivating for the staff	x x	x	Feedback from employees can be gathered as they are mentioned in the customers sections, but no mention of ideas sharing process nor decisional process
Influence on or by: local producers, inhabitants, local economy, Charleroi	Participate to a change of perceptions	x	x	Mention of 'promotion of ecological and sociological awareness' but no activity relates to this. "Diverse public"
	Encourage the socio-economic development of the city	x x		Use of responsible food (from the Food Alliance) for the catering 'Promotion of the Food Alliance' + 'visibility for local producers', but no clear action proposed "Complementary currency" Offer of responsible food from the Food Alliance

*Figure 13. Condensed version of the BM#3 analysis table*

- 
- Even if there is an expression of the intention, no 'other activities' are mentioned to ensure that the focus on the purpose always exceeds the search of profitability. Furthermore, the absence of activities makes difficult the fulfilling of the “change of perceptions” objective.
  - Beside the consumption part, nothing is arranged to involve the employees.
  - Even if there is an expression of the intention, nothing is arranged in the activities to showcase the local suppliers (“Visibility for local producers” in green, “No mention of activities besides cooking and serving”, in red).

### *Comparison*

Out of the three BMs resulting from the application of the three tools, the BM#2, generated with the FBC, is the one proving the best performance against the SBSC. Nothing was obviously missing regarding the objectives.

The VMT has brought some intuitions of ideas but no concrete actions have been suggested.

Finally, the SBC gives the most deficient BM with respect to the SBSC.

The source of the differences comes from the tools themselves. Weaknesses are located in the following topics: activities, partners showcase, employee involvement. And actually, in the facilitator guides, the different tools ask questions differently for these topics. Each focus finishes with a conclusion to keep in mind in order to have a more complete BM.

#### **a. Activities**

In the SBC, the question is the following: “Which key activities are necessary in order to implement your **value proposition**?”.

In the FBC: “What value adding work, organized into business processes, is required to achieve this **business’s Goals**?”. And the question regarding the goals is: “What are the Goals for this business environmentally, socially and economically?”

And in the VMT, there is no dedicated question for the activities. The combined questions that could lead to specific activities are the following: (1) “What is the primary reason(s) for the existence of your business?”, (2) “What positive tangible and intangible value is created for each of your stakeholders?”.

The questions don't have the same unit at their centre. While the SBC focuses on the value proposition of the project, the FBC broadens the scope by encompassing all the goals the project should reach. Finally, the VMT doesn't raise any specific question about activities, so unless the respondents voluntarily discuss these, they are not captured in the BM.

*The scope of the matter at the heart of the activities-related question(s) determines the scope of the answer.*

#### **b. Partners showcase**

The same reasoning as for 'activities' can be applied to the 'partners showcase' difference, as the issue is related to the specific actions set up to promote them. Again, the FBC leads to a more complete answer of the respondents by broadening the scope to the organisational goals.

#### **c. Employee involvement**

In the SBC, we can find the following questions: "Who are additional stakeholders (besides customers and key partners) relevant to the success of your business model? What is their power to impact the company?". Then there is a list of potential stakeholders among whom we find the employees, but also the investors, the government, the municipalities, etc. During the workshop, the employees were briefly cited, but the respondents mainly focused on the municipality and the Wallonia-Brussels Federation because of their great influence due to the financing process.

In the VMT, the question is always the same: "What positive tangible and intangible value is created for each of your stakeholders?"; and it is simply applied to the different stakeholders around the circle. So, regarding the employees, the question was still to think about the value created *for* the employees through the project. Nothing questions in what way the employees can create value for the project.

Finally, the FBC has dedicated questions for the governance: "What are the Governance arrangements for this business?", "Which Stakeholders have the information and power to make which decisions about [list of examples]?". This is where the respondents had to think about how the employees are actually going to take an active part in the project decisions.

*At some point, the reflection has to be oriented directly and only toward the staff and its role in the project.*

## 5.2 How to ease the use of the SUST-BMA?

The application of the SUST-BMA framework was an arduous task. The guidelines from the authors are not always straightforward, the order of the task is sometimes implicit depending from where one starts, and as already mentioned, the final analysis step is very complex. A framework has better chances to be used if its application is clearer.

From my own practical application, and on the basis of the original framework guidelines (in *italic* in the subsequent text), I can draw user-friendly instructions for use of the SUST-BMA, in the context of BMs comparison.

### *I. Defining the unit of analysis*

The first step is to build a new BM or describe an existing one for the organisation or sub-branch under consideration.

Because the BM can be generated thanks to a specific tool, as it was the case for this research, it might need a reorganisation to align with the five BM logics conceptualisation of the SUST-BMA framework. Here is a classification of the original 9 building blocks of the BMC in the five BM logics.

Goes in:

- The Marketing logic: *what is offered, how it is offered, how the firm interacts with the customers* → value proposition, customers, relationships, channels.
- The Financial logic: *costs and revenues*.
- The Capabilities and Resources logic: *requirements in terms of infrastructure, people, knowledge, capabilities* → key resources.
- The Production logic: *activities (including those performed by partners)* → key activities, key partners.
- The Contextual logic: *“aspects that are crucial for the functioning of the business model but are situated outside the other four business model logics and maybe even outside the market”* (Lüdeke-Freund et al., 2017, p.186).

Nonetheless, this classification cannot be definitive. For examples, the key partners could also lie in the Capabilities and Resources logic if one of them doesn't produce anything but act as a guarantor for the customers. Furthermore, this

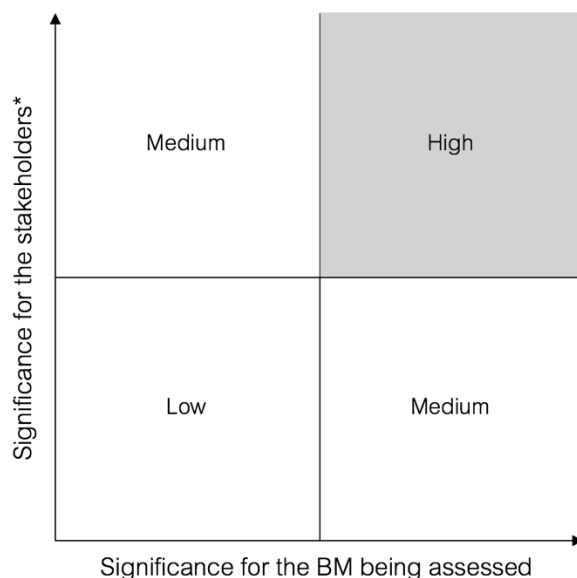
classification becomes even trickier when it comes to reorganising BMs generated with tools as the ones used in this work. Some building blocks are gathered, and others added. In case of doubt, the simplest course of action is to go through all the logics with the unclear element. Furthermore, in the framework as it is, and with the following analysis, this reorganisation should not be a hassle.

## II. Identifying relevant sustainability aspects and building of the SBSC

### a. Materiality matrix

The second step starts with the identification of the material sustainability dimensions regarding the organisation or sub-branch under consideration. These dimensions are the ones reflecting the economic, environmental and social hot spots of the organisation/sub-branch; because it has a significant impact on these or because they are important to its stakeholders. The *materiality matrix* is a useful prioritisation tool that is useful in this process. Without going too deep into the details, the organisation has to rank sustainability aspects, according to their view and their stakeholders' view. The G4 edition of the GRI covers a comprehensive list of sustainability aspects. Once the aspects are plotted, the organisation should focus and prioritise its interest on the hot spot ones:

The aspects located in the upper right part of the matrix are *the hot spots that have to be taken into account in the BM and used to find sustainability-oriented indicators in the respective SBSC perspective*. In my research, those aspects also informed the non-market perspective of the SBSC. Maybe this should not be taken as a generality but as a case-specificity since the CCC is attentive to and includes their stakeholders' concerns.



\* In regard to the BM being assessed

Figure 14. Materiality matrix

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b. SBSC

Once the hot spots are identified, I suggest the next step to be the elaboration of the organisation/sub-branch's SBSC. Concretely, the strategy is broken down into goals allocated in the different perspectives. In this research, the hot spots were also added in the objectives. Indicators have to be determined for each of the objectives. These can be determined by the organisation or derived from the G4. These goals will be the reference point for the following analysis. They have to be set regardless of the BMs.

*III. Assessing the performance*

This last step was practically derived from the two following statements:

“[The SBSC] goals and measures ensure that the value creation process, based on the five logics, is performed in line with an organisation's strategic aims, which in turn should reflect its overarching vision and mission” (Lüdeke-Freund et al., 2017, p.191).

“Depending on the logic that an indicator is mapped to, conclusions can be drawn about necessary changes to improve a business model's performance with regard to that indicator” (Lüdeke-Freund et al., 2017, p.197).

a. Additional division

I suggest the addition of a division in between the BM logics and the SBSC objectives. In this research, I called it 'expected result' of the intended activities of the BM. This step should give the BM a more long-term perspective, closer from the SBSC objectives. This division consists in summarising each BM logic in what it gives once put in practice.

b. Practical question

In the context of unrealised BMs comparison, this last statement was adapted and transformed into a question in order to facilitate the reflection: “do the intended activities of the BM drive the organisation toward the achievement of its goals?”. This question has to be answered for every SBSC objective. A three-level scale should help the answer to be more objective:

- There is an/several element(s) – in the counterpart logic or not – that fully participates in the fulfilment of the objective, the BM is counted as driving the organisation toward the achievement of this goal.
- There is an element in the BM that partially participates in the fulfilment of the objective, the BM is counted as not sufficiently driving the organisation toward the achievement of this goal.
- There is no element at all in the BM that participates in the fulfilment of the objective, the BM is counted as not driving the organisation toward the achievement of this goal.

c. Following actions

In the context of BMs comparison, the analysis results in an appreciation of each BM, and probably a ranking of the BMs in regard of their performance against the SBSC objectives. The most performant BM can then be chosen for the application stage.

These final steps were not tackled in this work but are worth mentioning. One can go a step further and improve the performance of a BM in relation to the SBSC by changing/correcting/adding/deleting elements to the BM logics. The authors also talk about a dynamic approach to the SUST-BMA: as unit of innovation, the BM can be adapted over time depending on its performance against the SBSC.

Those steps refer to the decision-making dimension of the SUST-BMA framework.

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## 6. Discussion and conclusion

This section presents the discussion and interpretation of the research results in relation to the literature review. This chapter also discusses the managerial and theoretical contribution of the findings. Avenues for future research are finally suggested.

### 6.1 Final summary and interpretation

This thesis evaluates three tools for sustainable business model development through the analysis and comparison of their outcomes, thanks to the use of an analysis framework, the SUST-BMA. Throughout the project, it appeared interesting to reflect upon the practicality of this framework, and a sub-question regarding a clarification process was added to the research. The focus was put on the application stage of the tools, and several findings regarding the research questions are worth highlighting.

Acting as hints for the Discussion, the focus conclusions in the comparison section indicate the main points that distinguish the three SBM generation tools. As a recall, the focus conclusions are the following:

- *The scope of the matter at the heart of the activities-related question(s) determines the scope of the answer.*
- *At some point, the reflection has to be oriented directly and only toward the staff and its role in the project.*

With the same case, the tools generated three BMs, which at first sight, might have looked similar. The FBC helped to generate the most performant BM with respect to the SBSC objectives. The two conclusions were logically derived from the comparison between the three BMs. Thereby, in this context, we can assume the FBC is a better performing tool because it satisfies these specificities. The triple application emphasised the dissimilarities.

Firstly, the tools' building blocks chosen by their authors are crucial in the sense that they define topics about which the participants will reflect – or not. This is why the staff consideration varies between the BMs.

This finding goes hand in hand with the multi-stakeholder management included in the definition of a sustainable business model. As it is such a central element of an SBM, designing

a dedicated block for the power repartition and the decision-making process, as Governance in the FBC, is coherent and sound.

Secondly, even the specific questions inside the building blocks are significant in the construction of a performant BM. Even more precisely, the central unit of each question has to be thought carefully. This explains the differences in the activities building block.

This is in line with the deliberate and voluntary dimension of the creation of business cases for sustainability. As a matter of fact, the activities should also be included in this reflection. This is why questioning the activities in terms of goals is more powerful than in terms of value proposition: it forces the organisation to broaden the scope of its intended actions and to reflect on the practical operations to achieve these goals.

The SUST-BMA has proven to be a successful BM comparison tool. This dimension of the framework was just quickly mentioned by its authors. Once all the elements ready to be aligned, the analysis shows directly the problematic elements of the BM.

The respondents simply noted differences at the activities level and the cited partners. Nevertheless, they found the first tool to be sufficient regarding their needs. Furthermore, according to them, the SBC was easy to use and apply. The SUST-BMA analysis showed that the second BM was actually more performant in regard to their vision, mission and strategic goals.

Combining the simple layout and approach of the SBC and the completeness of the FBC could lead to a more practical tool for novice users.

In my research, I had to add a division to the framework. In retrospect, this step might have been thought by the authors under the “created value” title. However, they never explain how to perform this step.

## 6.2 Limitations

Some limitations to this research have to be discussed. Firstly, the CCC is a non-profit organisation, so it limits the generalisability of the findings, mainly regarding the application ease of the SBC. Moreover, the vocabulary and practices used for this research may be very different from what they know and decrease the richness of the findings. Secondly, as already

mentioned, the filling of the BMs might have been influenced by some knowledge accumulation over the tools' applications. Though, we could see that the BM#3 has some flaws, while the BM#2 is complete. Thirdly, even if chances are slight due to the existing stakeholders' management of the CCC, the materiality matrix might have looked differently if constructed thanks to primary data.

## 6.3 Contributions

### 6.3.1 Managerial contributions

This research has shed light on a sustainable business model analysis framework: the SUST-BMA. It is the only framework developed for this purpose. And as it is composed of an extended version of the BSC, not only can it assess the performance of the BM against sustainable goals, but also against more classical types of goals.

Furthermore, a practical guide has been elaborated to increase its accessibility. In this way, managers can more easily benefit from the SUST-BMA advantages and the improvement possibilities it stresses.

Finally, one of the research findings refers to one SBM generation tool defining the best outcome. When managers decide to transition toward a more sustainable BM, they know the Flourishing Business Canvas demonstrated a more complete outcome in this research.

### 6.3.2 Theoretical contributions

This research builds and adds on the conceptual foundation of the SUST-BMA. This is the second paper referring to this framework, and the reflection has been put on its practical application. More insight has been developed with a strong study about its components.

In this uncommon analysis process, this framework has been really useful to reorganise and map the different BM and SBSC components and objectify the final analysis. I suggest it can be used for further researches about BMs as a new dedicated analysis tool.

Lastly, this research emphasised some strengths and weaknesses of the SBM generation tools being developed and used. Those feedbacks, derived from the tools' comparison, can be taken into account by the tools' authors in order to improve these.

## 6.4 Avenues for future research

During this research, a new approach to data analysis was used, and these findings should not be seen as an end in itself. Further research could incorporate the comparison of the other tools that were left aside.

Regarding the ambiguity of the reorganisation of a BM into the five logics, one could adapt one of the SBM generation tools. Modifying it to fit the five business logics could lead to a more direct application of the framework and decrease the risk of losing information in the transformation process. Furthermore, it may strengthen the links between the counterparts in the SUST-BMA.

The continuous application of the SUST-BMA and its long-term benefits were not discussed here. In addition, the research and application of the SUST-BMA are based on the comparison of unrealised BMs. Further research could inform those unquestioned matters.

Finally, the SUST-BMA assesses the performance of a BM against the SBSC; the feasibility and success of this BM are never enquired. The improvement of the SUST-BMA in this direction would make it a very powerful tool for entrepreneurs and managers.

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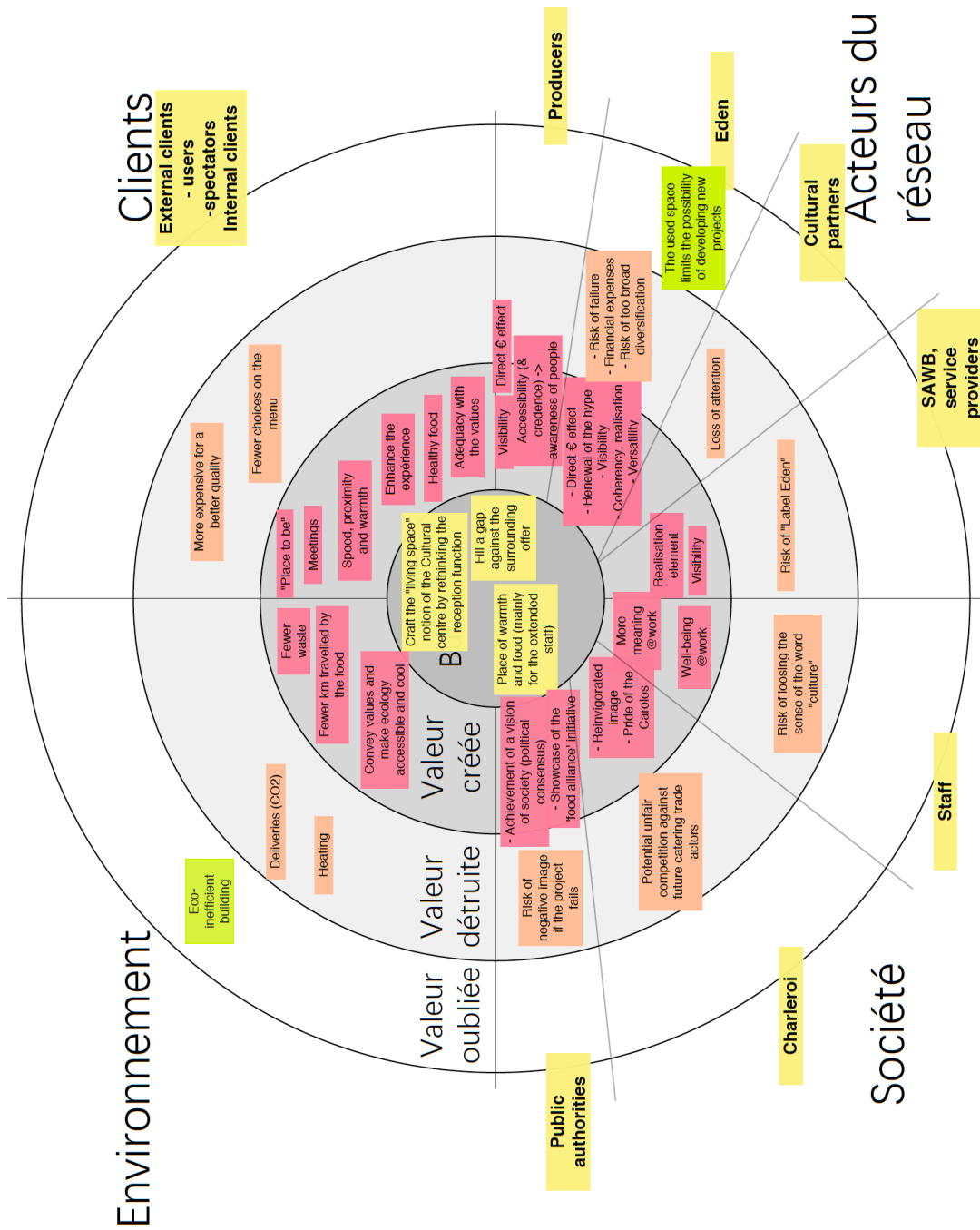
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## Appendices

### Appendix 1: current business model

<p>Key partners </p> <p><i>Subcontractors</i></p>	<p>Key activities </p> <p><i>Serving, cooking</i></p> <hr/> <p>Key resources </p> <p><i>Building, reputation</i></p>	<p>Value proposition </p> <p><i>Affordable meals, fast serving, afters at the bar</i></p>	<p>Relationships </p> <p><i>Proximity</i></p> <hr/> <p>Channels </p> <p><i>Network of contacts, direct service</i></p>	<p>Customer segments </p> <p><i>Magistrates, employees of public service, Eden employees, cultural partners, teachers</i></p>
<p>Cost structure </p> <p><i>HR (cleaning), utilities</i></p>		<p>Revenue streams </p> <p><i>Building rental</i></p>		

## Appendix 2: the completed VMT



## Appendix 3: the complete analysis of the business models

### Business model #1, completed with the SBC

BUSINESS MODEL #1	Categories from the tool	Content	EXPECTED RESULT
Financial	Costs	Development of the canteen area: Furniture, Horeca standards	Costs and revenues => profitability is measurable
		Human resources	
		Raw material	
	Revenues	Sales of consumables	
		Labels?	
Marketing	Value proposition	Nourish at an affordable price	2 places, 2 ambiances: brasserie, canteen (quiet place) for a diverse public Responsible food served quickly and at an affordable price External communication through existing channels
		Offer a meeting/crossing place for the team	
		Healthy, organic, fair, seasonal and local food	
		Place of life: bar/after (brasserie)	
		Fast and proximity service	
	Quiet meeting place		
	Customers	Canteen: Internal & external customers (socio-cult. public)	
Brasserie: spectators, midday (small standing) & internal customers			
Channels: existing network & channels (virtual, print, media relations) -> effective, credible & recognised			
Competition	Objective of filling a gap -> <i>Question about competition not appropriate at present</i>		
Production	Key activities	Green canteen & brasserie	Responsible food coming from the Food Alliance (used in the dishes and sold in the grocery store) Use of alternative currency Reception of the Cultural Centre
		Hybrid place: grocery store/market	
		Reception	
		Financial & administrative support	
	Currency exchange		
Key partnerships	Financité -> complementary currency SAWB -> Food alliance of Charleroi metropolis		
Capabilities & resources	Key resources	Human resources	Use of: Human Resources, building and network
		Building	
		Raw material & management of its waste	
		Aura, network	
Contextual	Other stakeholders	Public authorities (present in the Administrative Council)	Influence on or by: Public authorities, Wallonia-Brussels Federation, Charleroi
		Wallonia-Brussels Federation	
		Charleroi	

## BM#1 (continued)

No missing element or contradiction	BM element is missing or insufficient	Comments / clue element is from another category
x		
x		
x		
x		
	x	No mention of activities besides cooking and serving.
x		Presence of a BM element regarding the distance travelled by the food (SAWB) and waste management in the resources.
x		
x		Feedback from employees can be gathered as they are mentioned in the customers sections, but no mention of ideas sharing process nor decisional process
x		
	x	
x x x	x	No mention of activities besides cooking and serving. Yet the impact of the offer of responsible food can be grasped.
x		"Diverse public"
x	x	The partnerships and value proposition (responsible food) allow us to say that this indicator can be measured. No mention of communication about partners inside the catering space.
x		"Complementary currency" Offer of responsible food from the Food Alliance

## Business model #2, completed with the FBC

BUSINESS MODEL #2	Categories from the tool	Content	EXPECTED RESULT
Financial	Costs	Arrangement of space (furniture, Horeca standards)	Costs and revenues => profitability is measurable
		Human resources	
		Financial and administrative support	
		Energy expenditures (electricity related to cooking)	
	Raw materials		
Benefits	Horeca sales		
Marketing	Value co-creations	Organic toasts, soups (and others) from the short circuit	2 places, 2 ambiances: brasserie, canteen (quiet place) for a diverse public Responsible food Communication about the suppliers inside the catering space External communication through existing channels Internet connection provided
		Internet access	
		Discussion & quiet place	
	Stakeholders	Canteen: Internal & external customers (socio-cult. public)	
		Brasserie: spectators, midday (small standing) & internal customers	
	Relationships	Trust, authenticity	
		Clear defence of an ideal	
	Channels	Network & aura already existing	
Posters with information about the food			
Needs	Food needs		
	Coherence with values		
	Human encounters		
Production	Activities	Catering service	Responsible food coming from the Food Alliance (used in the dishes and sold in the grocery store) Use of alternative currency Pollution accountability (transport & waste) Reception of the Cultural Centre Other activities organised
		Reception + currency exchange	
		'Manufacture of solutions', sharing of knowledge, cooking lessons	
		Hybrid place: repair café/market/grocery store	
		Discussion tables	
	Stakeholders	Cultural Centre partners	
		Producers + suppliers	
		Inhabitants of the neighbourhood	
	Partnerships	Media	
		Financité -> complementary currency	
Costs	SAWB -> Food alliance of Charleroi metropolis		
	Food waste		
Benefits	Pollution from product transportation		
Capabilities & resources	Resources	(Relative positive environmental impact regarding current situation)	Use of: Human Resources, building and network Ideas sharing process and decisional process
		Building	
		Reception team + cooks	
		Raw materials	
		Administrative & financial service	
	Aura, network		
	Governance	Expression of opinions in the frame posed by the management, then single decision-making after synthesis	
Stakeholders	Cultural Centre team		
Contextual	Ecosystem actors	Humans Chaleroi	Influence on or by: Charleroi, the Environment
	Biophysical stocks	Food Materials for containers Energy components	
	Ecosystem services	Composting <i>Quite unknown at the moment</i>	

## BM#2 (continued)

No missing element or contradiction	BM element is missing or insufficient	Comments / clue element is from another category
x		
x		
x		
x		
x		
x		
x		
x		
x		"Diverse public"
x		Use of responsible food (from the Food Alliance) for the catering Communication about suppliers inside the catering space
x		"Complementary currency" Offer of responsible food from the Food Alliance

### Business model #3, completed with the VMT

BUSINESS MODEL #3	Categories from the tool	Content	EXPECTED RESULT
Financial	Cost structure	Infrastructure investment	Costs and revenues => profitability is measurable
		Raw materials	
		Energy	
	Revenue streams	Sale of food and beverages	
		Subsidies? (political consensus regarding the food alliance)	
Marketing	Value proposition (society)	Healthy, quick & affordable food Meeting place Quiet place	2 places, 2 ambiances: brasserie, canteen (quiet place) for a diverse public Responsible food served quickly and at an affordable price Communication about the suppliers inside the catering space External communication through existing channels Internet connection provided "Full cultural experience"
	Customer segment	External customers (users/spectators)	
		Internal customers (Eden employees)	
		Cultural partners Service providers (additional beneficiaries)	
	Customer relationship	Proximity, conviviality	
Reliability (values adequacy, achievement)			
Full cultural experience Highlighted collaboration with partners			
Channels	Existing network & channels		
Production	Key activities	Preparing & serving of food	Responsible food coming from the Food Alliance (dishes) Use of alternative currency Pollution accountability (transport & waste)
		Promotion of the food alliance	
		Financial & administrative support	
	Key partners	Financité -> complementary currency	
SAWB -> Food alliance of Charleroi metropolis			
Value proposition (environment)	Reduced impact (less km for food transportation and less food waste)		
Capabilities & resources	Key resources	Network, aura	Use of: Human Resources, building and network Ideas sharing process and decisional process Development of employees' well-being
		Building	
		Human resources	
Value proposition (society)	Well-being of employees		
Contextual	Value proposition (society)	Visibility for local producers	Influence on or by: local producers, inhabitants, local economy, Charleroi
		Promotion of the extended meaning of 'culture'	
		Promotion of ecological and sociological awareness (food, handicap)	
	Value proposition (environment)	Increased consciousness (seasonal products)	
	Value proposition (economy)	Local economy boost (local producers)	
Promotion of local economy (thanks to the image of a flourishing city)			
Customer segment	Charleroi (additional beneficiary)		

## BM#3 (continued)

No missing element or contradiction	BM element is missing or insufficient	Comments / clue element is from another category
x		
x		
x		
x		
	x	No mention of activities besides cooking and serving. "Full cultural experience" is not translated into activities.
x		
x x	x	Feedback from employees can be gathered as they are mentioned in the customers sections, but no mention of ideas sharing process nor decisional process
	x	Mention of 'promotion of ecological and sociological awareness' but no activity relates to this.
x		"Diverse public"
x		Use of responsible food (from the Food Alliance) for the catering 'Promotion of the Food Alliance' + 'visibility for local producers', but no clear action proposed
x		"Complementary currency" Offer of responsible food from the Food Alliance

## Appendix 4: detailed SBSC

(to be inserted between each BM and the results in the tables of Appendix 1)

SUSTAINABILITY BALANCED SCORECARD: explanation of the objectives and indicators						
Perspective	Objectives	Explanation	Lagging indicators	Explanation	Leading indicators	Explanation
Financial	Financial viability	The balance between the costs and revenues is a necessary condition to achieve the <i>purpose</i> of this project.	Zero balance	At least: costs = revenues.		
Customers	Living space of the cultural centre	In the end, the catering division should lead to more activity and flow in the cultural centre.	High customer 'flow'	Many people come and stay in the catering division.	Customer retention Customer diversification Total mass Presence time (survey)	Many people come back. The public is socially diverse. Many people come. Once in the catering division, people enjoy staying. This would be measured thanks to a qualitative survey.
	Coherency in the plate	For those looking for coherency between the values and actions, the food offering of the catering area should be adequate.	Customer appreciation Employee appreciation	External customers appreciate the effort behind the food offering. Internal customers appreciate the effort behind the food offering.	Customer feedback Employee participation Employee feedback (long term survey)	This would be measured thanks to a qualitative survey. Employees choose to come to the catering division rather to eat outside of the CCC. Deep qualitative survey with the employees.

Internal processes	Partners management	Have a sound administration of the suppliers, favour local partners	Secured key partnerships with suppliers	Ensure long term and healthy partnerships with preferred suppliers.	Ratio of Food Alliance suppliers/others Supplier cooperation & communication	The chosen suppliers preferably local. The relationship ensures a good understanding of all the parties.
	Focus on the purpose	See the 3 intentions in <i>Guidelines.pdf</i> p.4. This purpose should always be more important than financial gains (if zero balance is secured).			# organised activities in line with the extended definition of culture	The catering division hosts diverse activities (related to food or not)
	Environmental responsibility	Ecological values are translated in actions.	Low environmental impact	In the limits of the CCC possibilities, decisions are taken to reduce the environmental impact of the catering division	#km travelled/food #kg of waste/month	Measure of the amount of km travelled by the food (for each supplier). Measure of the amount of kg of food waste per month (= what didn't find a new utility).
Learning and growth	Be coherent and motivating for the staff	The values of the CCC are translated and applied to the catering division. The employees can attest the engagement and participate in the project.	Employee motivation and happiness	The employees find a new purpose in the development of the catering division, namely with the diverse activities that can be organised. They also enjoy this new meeting/lunchroom place.	Employee satisfaction Employee participation Employee idea sharing (implication)	Employees enjoy the catering division and the overall project. Employees choose to come to the catering division rather to eat outside of the CCC. Employees share ideas about activities and improvements for the catering division. <sup>8</sup>

<sup>8</sup> The last two indicators are complementary: some employees may prefer to not eat in the CD but still be motivated by this project.

Non-market	Participate to a change of perceptions	Foster a change of perception regarding 'responsible food' which can be tasty and affordable, even for a less privileged public. Further topics: handicap, professional reintegration	Be considered as a place where reflection is fostered	Communication about the dishes and their ingredients + Organisation of activities fostering exchange of ideas.	Attendance level to activities	People come and participate to the activities. Employees enjoy the catering division and the overall project. Employees are the reference group to assess the impact of the project on their own eating patterns. Qualitative survey with customers to examine the impact of the catering division project on the "make city together".	
			Be accessible to all publics		Everyone feels welcome, whatever his/her 'social status'.		Employee satisfaction about the project
			Participation in the success of the food alliance		The CCC actively promotes the Food Alliance.		Employee impact survey
	Encourage the socio-economic development of the city	The development of the catering division has beneficial economic repercussions (directly or indirectly) on the city's socio-economic development.	Promotion of local economy	The CCC favours the 'local'.	Positive vocab' survey	The public is socially diverse.  The catering division is an important customer of the local suppliers The catering division communicates about its suppliers (boosts their reputation).	
							Customer diversification
							Share of the catering division in the activity of the Food Alliance Number of distributed flyers
				Ratio use €/Carol'Or (over time)	The use of the local currency promotes a local economic activity. Share of the food supply actually provided by local suppliers. <sup>9</sup>		
				Reinvestment in the local economy (Ratio of Food Alliance suppliers/others, over time)			

<sup>9</sup> This measure completes the one in Partners Management: not only do they promote a great number of local providers, but also a great financial participation.

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