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MANAGEMENT OF THE ENVIRONMENTAL IMPACT OF SUSTAINABLE SMALL AND MEDIUM ENTERPRISES IN A B IMPACT ASSESSMENT CONTEXT

Sustainable Entrepreneurship Project, M.Sc. Sustainable Entrepreneurship
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ABSTRACT

This study addresses the debate in the recent sustainable entrepreneurship literature concerning how sustainable SMEs identify barriers in their environmental impact management in the B Impact assessment process. The analysis shows that the specific characteristics of the capitalist system in which the BIA and most of contemporary sustainability SMEs are ingrained in are the main sources of barriers. The connection between SMEs, sustainability and the capitalist economic system powerfully constrains the capacity of implementation of sustainable impact management strategies. These barriers overflow over environmental impact management strategies and are strengthened by the unique nature of environmental impact. This study highlights also that the economic system influences the organizational structure of the BIA which creates new barriers for sustainable SMEs. But the resilient and flexible nature of sustainable SMEs as well as BIA tools might alleviate the previously exposed barriers. Sustainable SMEs can also choose to use external tools to improve their environmental impact and to overcome the barriers rooted in the BIA. This study highlights that CEOs, managers of sustainable SMEs and the B Corp certification have in common the willingness to change the system by communicating about sustainability and normalize sustainable practices.

INTRODUCTION

Violent conflicts, epidemics, water scarcity, air pollution, and natural disaster are only a few of the many new and complex challenges currently threatening contemporary societies' survival (Lang et al., 2012). However, these global issues might represent opportunities for sustainable entrepreneurs able to sell valuable solutions to those problems (Kuckertz, Berger, & Gaudig, 2019). In fact, the significance of shifting from a traditional model of entrepreneurship to one that is more sustainable has been highlighted in the past few years (Argade, Salignac, Barkemeyer, 2021).

Due to this recent interest in sustainable entrepreneurship, third-party certifications emerged, normalizing and codifying the triple bottom line of companies. These third parties also assist sustainable-focused customers in making responsible purchases and investors in determining the risk of their investment (Liute, De Giacomo, 2022) giving legitimacy to the certified company in this growing market.

The B Corp Certification which was created and is attributed by the non-profit organization B Lab, is one of these third-party certifications. It was designed to be a holistic tool that assesses through the B Impact Assessment (BIA) a company's sustainability performance in its entirety as well as its accountability and transparency (B corporation. n.d.). It then aims to guarantee that all B Corps behave ethically and perform well environmentally and socially (Honeyman, Jana, 2019). As B Corp businesses need to undergo the BIA process every three years to recertify, the B certification encourages a continual improvement of their positive sustainable impacts (B corporation. n.d.; Sharma, et al., 2018). But despite its advantages, it has been reported that only a limited understanding of the exact mechanisms that help organizations modify their practices during the BIA has been provided in the academic literature (Sharma, et al., 2018).

By using different frameworks of evaluation depending on the size of the company, the BIA highlights that large and small, medium enterprises (SMEs) might have different structure, dynamic capabilities, and access to different resources (Eikelenboom, de Jong, 2019; B corporation. n.d.). These differences have for consequences that they may encounter different kinds of barriers when it comes to reducing their sustainable impact in a BIA context.

Studying SMEs' barriers in the BIA process might bring interesting knowledge for practitioners and academic writers. A vast academic literature including conflicted experts' opinions has been developed on SMEs' role regarding sustainability. Documents have been published on how reaching social responsibility goals for SMEs is going to stay for the most part intuitive and informal (European Commission. n.d.; Graafland, Smid, 2016), but also on their strength due to their large presence across the globe (Parker, 2017) and on how they can generate a positive economic, social, and environmental impact due to their innovativeness, flexibility, and idealism (Eikelenboom, de Jong, 2019).

In recent years, only few authors attempted to analyze the relationship between the B Corp certification and SMEs with some, for example, focusing on the power of B Corp certification in anchoring sustainability in small and medium enterprises (SMEs) (Carvalho, Wiek, Ness, 2022). Due to the previously mentioned advantages of B Corp certification regarding sustainability and the specific SMEs' nature and presence in the world, analyzing this specific relationship can provide a deeper understanding on mechanisms of sustainable change in SMEs and on the functioning of the BIA.

Furthermore, lack of technical capacity, Research & Development (R&D), and budgets was reported as being obstacles for numerous businesses in managing their environmental impact within a BIA context (Liute, De Giacomo, 2022). Even though some articles have already studied B Corps' behaviors towards the management of their environmental impact during the BIA process

(Liute, De Giacomo, 2022), a deeper attention should be given to barriers in managing SMEs' environmental impact during the assessment. This kind of analysis might help practitioners and academics by increasing their understanding on the source of these barriers, the mechanisms of these obstacles and possible actions to implement to overcome them in this certification context.

This research is aiming at answering the research question *How do sustainable SMEs identify barriers preventing them from managing their environmental impact and implementing actions to overcome them in a BIA context?* This study will contribute to create a practice-driven knowledge to help sustainable experts in managing environmental impact. To do that, an analysis of the already existing literature on this topic will be done and organized in three different level of analysis: SMEs and sustainability, SMEs and BIA, SMEs and environmental impact management in SMEs everyday activities and BIA context. An exploratory research will be designed to collect data using seven qualitative semi-structured interviews conducted among sustainable experts including sustainable entrepreneurs, university professors, consultants, B Corp managers.

THEORY

Three level of analysis have been found in the academic literature when it comes to answer the research question: SMEs and sustainability, SMEs' sustainable impact management and BIA, SMEs' environmental impact management and BIA. These three level of analysis have been chosen to help situate where the barriers linked to SMEs environmental impact management during the BIA are rooted: whether there are ingrained in the relationship between the international economic system, the concept of sustainability and SMEs' structure; or a result of the association between SMEs, sustainable impact management and BIA; or are they solely linked to the connection between environmental impact management and this specific assessment process. These levels also

permit to study if the characteristics found in each of these three levels of analysis have an influence on the other level features.

A review of the already existing literature on the specific themes of sustainable performance, environmental impact management, SMEs and B Corp Certification will be done in the following parts to give to this research a sound and up-dated theoretical basis.

SMEs and sustainability

For a long time, the relevance of SMEs as a driving force in the development of a sustainable society has been questioned in the academic literature (Eikelenboom, de Jong, 2019; Graafland, Smid, 2016). Industrial policies have also reserved their attention to big corporations because they tended to perceive this kind of venture as the main source of growth when evolving in a liberal capitalist society (Parker, 2017). But recent Environmental and social problematics, such as increasing water scarcity and the need for more community involvement, might have an impact on the situation. SMEs might recognize new and significant opportunities and attract more attention from policy makers and academics in this new context (Eikelenboom, de Jong, 2019).

SMEs can also be considered as a force to be reckoned with when trying to create a more sustainable society due to its power of employability worldwide. Even though a high number of SMEs fail within a few years after their creation or remain on a modest scale of operation, this type of businesses brings a large contribution to their country's economy and social development (Das, Rangarajan, 2020). SMEs represent 90 per cent of global companies are responsible for up to 60 per cent of the total employment in the world (Das, Rangarajan, 2020). As a result, it is crucial to investigate the sustainability factors of these structures which have significant development potential (Das, Rangarajan, 2020).

Furthermore, Eikelenboom and de Jong (2019) explain that SMEs can generate positive economic, social, and environmental impacts due to their innovativeness, flexibility, and idealism. The flexibility and innovativeness characterising SMEs has been the focus of several academic analysis. Martin Parker (2017) uses the term of resilience in his work to define the capacity of any system to withstand shocks. The author argue that an economy could be more resilient if it is composed of numerous small businesses with activities diversified in several sectors whether than having one big company which receive all the investments (Parker, 2017). This lessens the risk of losing all resources in case of any kind of shocks happen. By dividing the resources in several small and very specialized economic actors, economies increase their ability to have access to nuance and flexible solution offers to cope with the complex problem at hand (Parker, 2017). This concept of resilience which is extremely link with sustainability is particularly relevant in contemporary societies which stabilities are constantly threaten. The flexible characteristic of SMEs might also be well adapted to the unpredictable and always changing nature of sustainability and can then facilitate the implementation of sustainable practices in companies' business models.

SMEs' sustainable impact management and the BIA

As a result of sustainability's always changing nature and its antagonistic relationship with capitalism, sustainable impact management requires continuous adjustments from the owner or manager of the company (Eikelenboom, de Jong, 2019). But due to their characteristics, SMEs might face different circumstances when it comes to monitor and improve their sustainable impact (Eikelenboom, de Jong, 2019). For example, SMEs might encounter a lack of resource base (human, financial and technical resources), the limited presence of systems of communication, lesser consumer and government demand for sustainability, lower formalization, and more local embedment (Eikelenboom, de Jong, 2019; Molecke, Pinkse, 2017). These specific circumstances

might generate the formation of barriers to an efficient sustainable impact monitoring. The use of more traditional impact management tools coupled with the intrinsic duty that comes with sustainability to be accountable to numerous stakeholders on the base of a materiality matrix make the monitoring of a SME very challenging (Molecke, Pinkse, 2017; Nicholls, 2018). Therefore, all these difficulties might push the entrepreneurs to resort to a certain bricolage (Molecke, Pinkse, 2017). This means the owners and managers of sustainable companies make do with the resources that they have at their disposal to create new technic of measurements and end up using imperfect data (Molecke, Pinkse, 2017).

Concerning the objective of driving sustainability and reducing negative impact, the development and use of dynamic capabilities have been discussed by some academic authors as being an appropriate solution (Eikelenboom, de Jong, 2019). These capabilities are defined as organizational processes which enable the adaptation capacity of a firm's resource base. It might give to sustainable SMEs the ability to respond to stakeholders' ever-changing expectations by actively modifying functional capabilities to pursue economic, environmental, and social impacts at the same time (Eikelenboom, de Jong, 2019). Owners and managers can facilitate the development of dynamic capabilities by implementing strategies and by nurturing their positive perception on sustainability. These strategies can facilitate the consideration of stakeholders' expectations into their decision-making process and open their minds to new possibilities (collaborations, radical innovations) (Eikelenboom, de Jong, 2019). Eikelenboom and de Jong (2019) have specifically shown in their academic article that external integrative dynamic capabilities which are the capability of integrating skills and resources of actors outside of the business, are positively related to the drive of sustainability in SMEs.

The previously exposed sustainability drivers and limitations rooted in SMEs' nature seem to be facilitated or strengthened when confronted to the BIA own characteristics. Some academics

explain in their work that the B Corp certification process aids the company's commitment to sustainability by developing its dynamic capabilities regarding sustainable practices and by strengthening its commitment to pursue its sustainable development (Carvalho et al., 2022). But on the other hand, the fact that the BIA fails to adapt to socio-political and geographical contexts despite its international reputation can have as a consequence that the locally embedded SME is not provided with a precise assessment of its sustainable performance and create additional challenges to reach the certification (Carvalho et al., 2022). Other sustainable impact management barriers connected to the nature of the SME nature such as their lack of human and financial resources as well as their uniqueness are strengthened when it comes to fit the rigid format of the BIA (Sharmaa et al., 2018). Furthermore, even though B Corp certification recognizes a large range of corporate forms, the organization should increase and improve its communication on it to help increase SMEs' technical expertise and facilitate their transition (Carvalho et al., 2022).

Furthermore, certain strategies implemented by SMEs in the BIA context to overcome the previously mentioned obstacles are emphasized in the literature. SMEs tend to resort to the 'low hanging fruit' strategy which is changing practices that did not necessitate significant resources such as time or money or putting into writing what the businesses were already doing (Sharmaa et al., 2018). SMEs might also use their latitude for interpretation and decide to interpret BIA requirements in a way that suits them (Sharmaa et al., 2018). The sharing of knowledge among B Corp companies, facilitated by the online B Corp community, seems also to help SMEs in improving their sustainable impact management (Liute, De Giacomo, 2022). After having exposed barriers present in the SMEs sustainable impact management and the BIA relationship, it might be interesting to study if SMEs' environmental impact management and BIA connection is confronted with the same barriers or develop some of its own.

SMEs' environmental impact management and the BIA

The specific nature of environmental impact management seems to strengthen or alleviate barriers present in the SMEs sustainable impact management and the BIA relationship. SMEs' lack of resources and strong local embedment might push them to source their suppliers in their local environment and, in doing so, reducing their carbon emission which is good for the environment (Parker, 2017). But the resource limitation of these kind of venture, and more specifically the limitation concerning their budget and technical expertise, might constitute a barrier to efficiently managing their environmental impact. In fact, Liute and De Giacomo (2022) explain that the scientific nature of environmental impact requires technical resources, R&D, and a significant budget to be performed. So, for companies which did not possess these kinds of resources environmental performance might be more difficult to achieve by nature than social and economic performances (Liute, De Giacomo, 2022).

This idea is also observable in the BIA itself with businesses which focus their impact business model on environment but score lower on their impact business model part than companies which have a social impact business model (Liute, De Giacomo, 2022). Besides, the fact that companies do not have to reach a certain score in each part to be certified gives to SMEs the possibility to score very poorly in the environmental part and focus essentially on their strength (Liute, De Giacomo, 2022). The urgent need for a more sustainable society, the complex challenge that the connection between SME' environmental impact management and the BIA constitute, the different levels of barriers present in this relationship and the lack of academic literature on this topic make this present research all the more relevant.

METHODOLOGY

Research design:

I chose to use a cross-sectional exploratory qualitative approach as research design. The design of the research was inspired by transdisciplinary research approach because this design seems to be appropriate to create practice-driven knowledge, to answer a holistic sustainable issue and to uncover an ill-defined management transition problem experienced by SMEs (Scholz et al., 2006; Lang et al., 2012). Indeed, Transdisciplinary research approach is frequently proposed as an effective way to fulfill both the demands of real-world problems and the aspirations of sustainability science (Lang et al., 2012). Complex sustainable issues, such as SMEs' environmental impact management in the BIA context, require the input of several stakeholders' knowledge to ensure that all major actors' perspectives are incorporated in the solution. Moreover, a collaboration between actors from different disciplines can increase the legitimacy of the sustainable issue and of its solution (Lang et al., 2012). Secondly, due to limited information on the analyzed subject and because barriers and actions need to be discovered, an explanatory approach has been chosen (Long, Blok, Coninx, 2016). The three levels structuring the theoretical framework (SMEs and sustainability, SMEs' sustainable impact management and BIA, SMEs' environmental management and BIA) and chosen to analyze the barriers developed in the second part of this thesis will structure and guide this study (Long et al., 2016). The use of qualitative research methods such as interview seems also more appropriate when it comes to investigate fields of study that are still unexplored which is the case in this research (Edmondson, McManus, 2007).

Participants:

Seven participants were interviewed with the aim to collect relevant data. It is important to note that new participants had been added during the research process to try to reach the saturation point. I chose to use a purposive selection where my interviewees need to meet some requirements such as being a sustainable expert in a particular field and having a good base of knowledge on the BIA. As Eisenhardt explains in his work, random selection might have a negative impact on qualitative research data (Eisenhardt, 1989). And so, by ensuring that the participants detain the capacity and knowledge to answer my questions, this specific selection choice might help me in gathering data of quality. I also decided to interview expert from different fields to collect different perspectives on barriers that SMEs encounter when it comes to monitor and reduce their environmental impact and on the actions that they need to implement to overcome them in BIA. Most of the interviewees were from and worked in the Netherlands. Only a sustainable entrepreneur whose company is B Corp certified and a project manager working in consultancy were not Dutch being respectively from and working in Italy and from France. The socio-political context seems to have an impact on the monitoring and reducing of the environmental impact even though the BIA, an international sustainable impact evaluation framework does not seem to take this factor in consideration in its measurement (Carvalho et al., 2022). It might be interesting to study this aspect. A table containing the list of the seven interviewees and details about their specific characteristics can be found under APPENDIX A.

Materials:

The qualitative method that I decided to use to investigate my research question was the semi structured interview. The semi structured interview method appeared to be the most suited

since it allowed me to gain a thorough understanding of the respondents' realities and beliefs in a particular setting (P. Gill et. al., 2008). Semi structured interviews, in contrast to quantitative methods, are seen as an interesting and scientific way to collect precise and in-depth data on social issues (P. Gill et. al., 2008).

Conducting semi-structured interviews over structured interviews was preferred since it allowed me more freedom and gave me the opportunity to gather data through an interactive interview (P. Gill et. al., 2008).

The use of semi-structured interview also permitted to adapt the question guides to the interviewees and so to keep the transdisciplinary approach influence while ensuring a degree of comparability between the interviews (Bell, Bryman, Harley, 2019).

Data collection procedure:

The interviews were conducted between April and May 2022 through online meetings.

The interview questions were based on the literature review and on the three levels structuring the conceptual framework (APPENDIX D). The question guide of each semi structured interviews conducted was adapted beforehand to the interviewee and his organizational culture to grasp a deep understanding of his perception (Bell et al., 2019).

When designing the question guide, special attention was paid to create neutral, sensitive, open-ended, and understandable questions (P. Gill et. al., 2008). Simple questions are asked at the beginning of the interview to ease the participant into this exercise (P. Gill et. al., 2008). I tried to be sure to keep in mind the aims of my study during the whole interview to make sure that the questions asked, and the data collected answer my research question (Bell et al., 2019). All interviews were conducted in English. The interviews were recorded with the participant's consent and then analyzed.

Data analysis:

To reach the saturation point and due to the lack of availability of sustainable experts, I used information gathered through B Corp and B Corp companies' webinars to back up the data gathered during the different interviewees.

To analyze the data collected, the recordings were then transcribed. I then applied a thematic analysis to extract insights from the data, using well-defined and well-distinct themes. To uncover the right themes, I looked for similarities in concepts throughout interviews, as well as differences in how respondents approach these concepts (King, Horrocks, Brooks, 2019). Furthermore, I conducted a first coding cycle to review the data and identify the primary descriptive themes, followed by a second cycle to identify interpretative themes by grouping descriptive themes that have the same meaning of interpretation (King et al., 2019). A third coding tour was completed to produce overarching themes that emphasize the major theoretical concepts of our investigation by identifying common meaning among the interpretative themes and developing a theory (King et al., 2019). Even though the interviews' structure inspired by the theoretical framework might have had an influence on the overarching themes, no themes was predefined before the analysis. No software was used to determine the coding.

Quality of the research

To produce a research of quality, four criteria will be respected: credibility, dependability, confirmability, and transferability (Bell et al., 2019). I will follow academic canons of good practice in doing my research and submit the research findings to the participants that I will have interviewed for validation that I have correctly understood their social reality (credibility) (Bell et al., 2019). The difference of context in which the different participants are rooted has been

considered in the interviewees choice and will be highlighted in the result if it has any impact on the findings to ensure that the findings might be transferable in another context (transferability) (Bell et al., 2019). I will be reflexive during each step of the research process to ensure that no theoretical inclinations or personal values will interfere in this research (confirmability) (Bell et al., 2019). And finally, I will keep track of each stage of the process on a document to be able to return to it during the process or at the end of the research process to be assured of the ethical and scientific quality of the work done (dependability) (Bell et al., 2019).

Ethical consideration:

Ethical considerations are taken into considerations during the entire research process. A consent form was sent to all participants prior the interviews (APPENDIX B). This document informed the future interviewees about the purpose of the research, the data confidentiality and reassure them on their different rights. In fact, participants' right to preserve their anonymity are respected and their permission to record the interviews was also required. They also had the right to refuse to answer questions at any moment during the interview without having to justify their choice. Any interviewee had the right to retract himself as well from the research process at any time. Finally, I made sure to inform them that I was at their disposal to answer any question that they might had.

RESULTS

After conducting a thematic analysis on the seven interviews, eight overarching themes were found:

A lack of resources restraining SMEs capacities

The seven sustainable experts who have been interviewed explained that the lack of resources is the main barrier restraining the improvement of SMEs sustainable and environmental impact.

More specifically a lack of financial resources, lack of power to change the system, lack of employees to efficiently manage the sustainable and environmental impacts were emphasized. Interviewees 3, 5, and 7 explain for example that the lack of financial resources can play a deterrent role in implementing actions that would help monitoring efficiently the environmental impact. When asked if requesting the help of an external businesses auditing for monitoring SMEs' environmental impact might be a difficult decision to make considering their small financial resources, the interviewee 5 answered 'It can be because it's not cheap'. The lack of employees was also regularly brought up as being an obstacle for the efficient management of the companies' environmental impact. In fact, by lacking human capacity, SMEs do not have the time or sometimes the expertise to put in the insane amount of work that is necessary to gather the right amount of data. Interviewee 3 highlighted 'the amount of data that you have to collect in order to even fill out these measurements is insane for smaller companies; this is an insane amount of work'.

These different lacks of resources seem to be disadvantages when it comes to sustainable SMEs trying to participate or to create an environmental transition in an economic system based on profit. Their capacity of surviving and creating a positive environmental impact within their companies and the economic system is dependent on how much they weight in the system. Whereas Interviewees 1 and 3 noted that the global lack of resources characterizing sustainable SMEs do

not give them enough power to create a positive environmental impact on their suppliers and the system as a whole, Interviewees 6 and 7 emphasized that the lack of financial resources can create a huge vulnerability by itself and might even jeopardize the survival of the company. Interviewee 7 stated ‘SMEs don't have the same kind of margin of error that big corporations can have’. Finally, the lack of resources and the fact that they do not really fit within the contemporary system based on profit might be the reason as Interviewee 2 explained ‘most of them failed’.

The flexible structure of SMEs enabling rapid and creative transition

Several interviewees answered that the biggest advantages of SMEs when it comes to develop a more sustainable society is their flexibility. By being a small economic actor, they are relieved from the weight of a rigid hierarchy and bureaucracy that might create inertia in big firms. Interviewee 7 explained that ‘even though they do have some barriers at least they don't have the whole hierarchy that is refraining from taking concrete and immediate action’. Indeed, in most of the meetings, the participants linked this agility that seems specific to SMEs with power of action and creativity. While interviewee 1 stated that thanks to this flexibility SMEs ‘can then quickly change, they can quickly introduce some new ways of working, policies and that kind of stuff’, Interviewee 5 added ‘they can switch easily to a circular sustainable production system, and they can contribute into like small activities to a better, in our case, fashion environment’. The implementation of sustainable innovations is then facilitated by the size of these specific structure. But this particular trait (flexibility) might also give to SMEs the ability to, as Interviewee 2 explained, ‘adjust’ more easily to organization or systemic change. Their structure enables their resilience.

A need for rooting sustainability within SMEs' business model

In most of the interviews that have been conducted, the applicant expresses a need to have sustainability mechanisms and values rooted within SMEs business models to manage at best their sustainable and environmental impacts. In fact, Interviewees 1, 2 and 3 made the distinction between traditional SMEs which are trying to implement sustainable actions and SMEs that are sustainable at their core. A SME that is sustainable at its core seems to be facilitated in its impact management thanks to the deep reflexion entrepreneurs had engaged with when creating their business and is still engaging with to keep it successful. In this context, Interviewee 2 explained that the problematic of environmental impact measurement is directly taken into account and directly linked to the choice of the business model : ‘so back towards their previous advantages from the very get go you can say how do we design our company to be sustainable? What does that mean? [...] what are we producing? [...] So not economic costs, only we say what are the environmental, social and economic costs we have?’. Interviewee 5 highlighted as well that in sustainable SME with a strong focus on the environmental aspect the management of the environmental impact is integrated in the design of the business model. When asked how he managed his environmental impact at first, the CEO answered: ‘For us, at the beginning, the main target was to use as much as possible recycled fibres and to produce as much as possible locally. This were our main targets and our main activities’.

Rooting sustainability at the core of a business seems to also facilitate the diffusion of specific values within the whole company, federate and finally facilitate the implementation of sustainable actions. Interviewee 4 claimed that the fact that sustainability has been a core value of the medium size company in which she works for decades explain why everybody is ‘on board’ with it and the importance that the board give to this aspect of the business.

Finally, the BIA also emphasized the importance of having sustainability rooted in the business core by attributing more weight to questions related to the sustainability of the business model.

A need for sustainable SMEs to aim slowly toward their company's appropriate environmental target

The participants who have been interviewed for this study seemed to share the idea that sustainable entrepreneurs should set appropriate target for their company and aiming toward them slowly. As previously stated, lacks of financial and time resources let a small margin of error for SMEs to quickly implement new sustainable management strategy. While Interviewee 5 said 'they can maybe not work really into the long term, they have to work in the short term. [...] Yes, to have projects that can bring benefits within one year or two years not to research for like to launch a solution or innovation that can be effective in five years, they cannot afford that', Interviewee 2 completed this idea by explaining 'Real advice I give is just to start somewhere, don't try to do it all at first. Because you just you don't have resources and time to get used to it'.

Sustainable companies' diversity and the lack of a general guidance to help the sustainable SMEs navigating the implementation of an environmental impact strategy make it also difficult to design appropriate target and then an appropriate strategy of monitoring. Interviewee 7 explained 'there's no one roadmap or one strategy to engage your suppliers or to make sure that you reduce your impact is very much tailored to the SME itself and all the features that defines it, defines its business, its sector, its activity, implementation, whatever'.

In order to set appropriate target adapted to their stakeholders' expectations and to not lose time and money in designing an inadequate impact management strategy, entrepreneurs need to make their decisions based on their materiality matrix. This way CEOs can sort, isolate and focus

on the most relevant sustainability issues to tackle for the company. This concept of materiality matrix was brought up by Interviewee 4 and Interviewee 7: ‘Our approach is very much of identifying all the sustainability factors and sustainability topics that are close to their own activity and also close to the heart of their stakeholders [...] So, having this kind of review of all these topics in this practice of materiality matrix’(Interviewee 7). Related to the materiality matrix, Interviewee 3 proposed the idea that sustainable SMEs make the conscious choice to focus whether on the social or environmental particular issues at the condition that they are not creating any new negative impacts: ‘I will choose a social problem that I want to focus on. [...] If I limit my environmental harm, or try to be like, carbon neutral or whatever, then I am allowed to focus on my social goal, right. So, I think it's a lot to ask for companies, especially small companies to do both of these things really well’.

The B impact assessment questions being not always adapted to the specific structure of SMEs

Most of the participants interviewed for this study noted that the BIA questions were not always adapted to SMEs. Interviewee 1 stated that the lack of resources such as lack of employees, lack of expertise, lack of financial resources might be a barrier to answer some of the environmental part questions: ‘It requires you to monitor everything to track everything. So, for that you also need to have capacities, you need to have people, you need to have maybe software or whatever to do that. Expertise, as I said, is also a problem because if you want to do some special assessments or like lifecycle assessment’.

For their part, Interviewees 2, 5, 7 highlighted that the BIA environmental part questions were not adapted to most of SMEs’ circumstances.

Interviewees 2 and 7 noted that some required information were out of reach, out of the control of CEOs of small sustainable companies. Interviewee 2 remembered having been confronted to this

issue when he was taking the BIA for his startup. When talking about being confronted to questions on measuring and monitoring his electricity bills and decreasing his impact, he stated ‘They have questions around that. Hum, you are in a rented facility. [...] You can ask them for it, but you're just one person in a building of dozens of people. You can influence these electricity uses in any way’.

On the other hand, he also remembered questions requiring a lot of information concerning employees: ‘On the other hand, you have a whole policy document for like two employees who maybe are even your friends and it gets a little ridiculous. [...] As a Start-up you don't really have time for doing all these policies in one time’. Interviewee 5 also emphasized this questions’ inadequacy by pointing out that the BIA has been conceived for big companies: ‘Sometimes it wasn’t easy to understand the questions, but I think they are really available to support and help. [...] It’s sometimes that, maybe, the evaluation has been created to measure like big companies so there are questions to small and medium enterprises that are not structured to do that’. Interviewee 7 mentioned both that the lack of resources and the out of reach information as barriers for sustainable SMEs when taking the BIA especially when these barriers have not been considered from the start, from the design of the company.

However, some of the participants explained that these issues might be alleviated by the personal background, knowledge of the managers (Interviewee 5) or by the fact that small sustainable companies do not generally have an extreme negative environmental impact and do not have to reach a very good score in the environmental part to get the certification (B Corp webinar). This last idea had not been shared by all participants with most of them claiming the importance of doing their best to improve their environmental impact.

B Corp being a source of resources for managing SMEs' sustainable and environmental impact

Most of the participants of this study considered in their answers that passing the B Impact Assessment was more than a acquiring a sustainable certification that will give them a legitimacy in their sector of activity.

Some Interviewees, such as interviewee 5, attested of having learned something throughout the process. When talking about the difficulties they encountered during the BIA, Interviewee 5 said: 'Sometimes it wasn't easy to understand the questions, but I think they are really available to support and help.' Interviewee 2 also emphasized the helpfulness of the B Corp managers when talking about his personal experience with the BIA: 'They're super friendly and helpful. [...] They just seem like a very welcoming community'. Interviewee 5 also highlighted what he actually learned from the process: 'I think maybe when we do, like a sustainable business, we mainly focus in our case, rather on the suppliers. But it's also important to focus on ..., not the suppliers, like the employees, on the corporate side. And for us, it was really helpful. [...] Yes, because they give you insights or like ideas to improve'.

While Interviewee 2 talked about the B Corp handbook as a useful tool, the B Corp manager during the webinar also pointed out that the BIA could be used as an everyday managing tool in the company with functionalities such as the one where managers can plan the company's goal directly on the BIA platform.

Interviewees 2 and 7 also noted the opportunity to be part of the online community which offer the possibility to members to talk and help each other.

Participants 1, 2, 6 and 7 expressed that the BIA is a useful guideline toward a more sustainable society and more sustainable companies.

The existence of complementary tools and strategies for managing SMEs' sustainable and environmental impacts

Interviewees have in common the fact that they identified several tools and strategies to complement the tools already given through the BIA and to improve their sustainable and more specially their environmental impact management.

As previously said, having an overview of your stakeholders' expectations and needs to create a materiality matrix was highlighted by Interviewees 4 and 7 as a good guideline to know on which issue managers should focus on, design appropriate set of goals and ways to monitor them. Also conducting a risk assessment and life cycle analysis (which is facilitated by the tracking of resources) were also considered by the participants as helpful complementary tools to the BIA to get a good overview of the companies' position regarding their environmental impact, a good overview of the environmental impact of the products and services they sell and give new ideas to entrepreneurs on what part need to be improved.

Most of the participants stated the importance of tracking their resources to be aware of the materials' level of sustainability used in the production and to be able to work on it in the future. Interviewee 4 explained the importance of having sourced material with eco-certificate regarding their environmental impact monitoring: 'So if you look at for example, the materials we use, we tried to measure the number of more sustainable materials that we use, see which materials we have with which certificates. So we try to make an overview of that so that we can monitor how the progress is in terms of the total volume that we buy in materials for a year, which part of that is more sustainable and how can we grow towards the goals that we set on that part?'

Regarding monitoring practical advice, Interviewee 1 proposed to integrate the environmental impact monitoring in the company everyday task to make it part of the company's routine.

Use of software, external audit through membership network, institutional organization or free science-based Framework such as Future Fit were also perceived as complementary tools filling in the BIA's deficiencies. It seems important to notice that not every participant agreed in using outside tools in the assessment process.

The importance of communication for managing SMEs' sustainable and environmental impacts

Several of the interviewees noted the importance of communicating about and the sustainability narrative and being transparent about their sustainability practices for managing SMEs' sustainable and environmental impacts. Interviewee 3 explained that, despite their small size, SMEs can contribute to sustainability by collaborating with each other: 'According to sustainability principles, that of course you create more from aggregate effects local, regional or national economy'.

In fact, collaborations and sharing practices seem to be a way for SMEs to overcome several of the barriers preventing them from managing efficiently their impacts. In this same line of reasoning, Interviewee 7 put forward 'network building of green deals of, yeah, membership organizations, that they can go to and participate to webinars and exchange actually with similar structures that face the same challenges' as an answer for environmental impact management for very small SMEs. When talking about recycling opportunities, Interviewee 4 stated 'You need the proper volumes in order to be able to have a proper recycle opportunity. So, I think for smaller companies, it is very good to let's say lean on the slightly bigger ones or even the much bigger ones'. The interviewee then followed by saying 'I think that in order to have a successful journey towards a more or textile industry we need to open up, to be much more transparent and share our experiences with each other because, no, not everybody has the capacity or the funding to invest in certain things'.

But communicating about the sustainability narrative was also perceived by the interviewees as good way to inspire and motivate stakeholders to be part of a societal transition that will facilitate sustainable and environmental impacts management. Interviewee 3 indeed claimed: ‘So it's about bringing that narrative out there and informing and inspiring others to do similar things’. Interviewee 6 also explained how in her consultancy company they are pushing their clients to go outside and meet with economic and social actors from different sectors of activity to inspire and get inspired. But creating inspiration and storytelling within a sustainable SME are also useful strategies for improving the management of sustainable and environmental impact. Interviewees 4, 6, 7 mentioned that creating awareness among the entire company is important to inform the employees of the company’s sustainable objectives, to make them want and feel part of a common project and to create motivation, inspiration and mobilization among them. This is also a way of sharing ‘the weight of sustainability implementation’ and to not let ‘only one person that has to pull out the group’ (Interviewee 7) which is very often the case in very small SMEs.

DISCUSSION

SMEs’ environmental impact management barriers and facilitators in the BIA context

This study adds to the sustainable entrepreneurship and impact assessment frameworks -in this specific case the B Impact Assessment framework- literatures by analyzing several sources of SMEs’ environmental management barriers. The data collected shows that the specific characteristics of the capitalist system in which the BIA and most of contemporary SMEs are rooted are the main sources of barriers. The fact that SMES has been considered for a long time in academic literature of lesser importance than big corporations regarding their role in the

development of a sustainable society (Eikelenboom, de Jong, 2019) illustrates that only economic actors creating considerable profit are considered as drivers of change and worthy of attention in this system (Parker, 2017). On the other hand, sustainable SMEs are defined partly by their lack of resources but also by their willingness to create positive economic, social and environmental impacts. And the present analysis seems to show that the contact between antagonist aspects of capitalism and of sustainability and SME engenders a strong constraint of action regarding the implementation of SMEs' sustainable impact management strategies. This difficulty to implement strategies is in some part reinforced when it comes to improving SMEs' environmental impact management. According to academic articles and the data collected for this study, this might be due to environmental impact' specific nature which requires budget and expertise to be monitored and improved (Liute, De Giacomo, 2022).

But the BIA, by evolving in it, may also be influenced by this system in its organizational structure. The failure to adapt to specific socio-political and geographical contexts and the inadequacy of some questions asked to SMEs during the BIA - both of these aspects highlighted in the theory part as well as in the interviews – shows the permeability of the BIA framework to external economic force (Sharma et al., 2018). The results of this influence can create added obstacles for SMEs to improve the efficiency of their environmental management and their score in the BIA.

But this study provides also valuable information on how the BIA can provide useful resources and guidance to alleviate these barriers. In fact, the different tools provided by this impact assessment framework may facilitate the increase of the dynamic capabilities of SMEs which decide to go through the process. Resources such as the online community (which encourage the collaboration and exchange of practices among B Corps SMEs), the target setting tool, the handbook and the contact with B Corp managers might greatly help SMEs in the modification of

their capabilities by gaining in expertise. This newly acquire expertise can help to pursue more effectively the production of positive environmental impact (Eikelenboom, de Jong, 2019). This integration of the BIAs' tools which then lead to an increase in dynamic capabilities seem to be facilitated by the flexible and resilient nature of SMEs as attested by the participants and the literature (Parker, 2017; Eikelenboom, de Jong, 2019) .

However, BIA's resources are not always enough to overcome the systemic barriers which influence the BIA organizational structure and constrain the power of implementation of SMEs regarding environmental impact management strategies. The interviews indicate that CEOs or managers might resort to some sort of bricolage (Molecke, Pinkse, 2017). By using external tools, sustainable SMEs try to make do with what they have at their disposal to answer the BIA requirement but also try to have a better idea of their weaknesses, on what they should focus on and in what direction they should go.

Even though the improvement of SMEs environmental impact management seems to be a laborious process due to the numerous barriers, this study highlights that CEOs, managers of sustainable SMEs and the B Corp certification have in common the willingness to change the system by communicating about sustainability and normalize sustainable practices. The constant mention during the interview of the need to communicate about sustainability practices outside and inside of the company as a way of inspiring, engaging and learning from stakeholders coupled with the strength in number that beneficiate SMEs (Das, Rangarajan, 2020); All these factors might give hope for a more sustainable future.

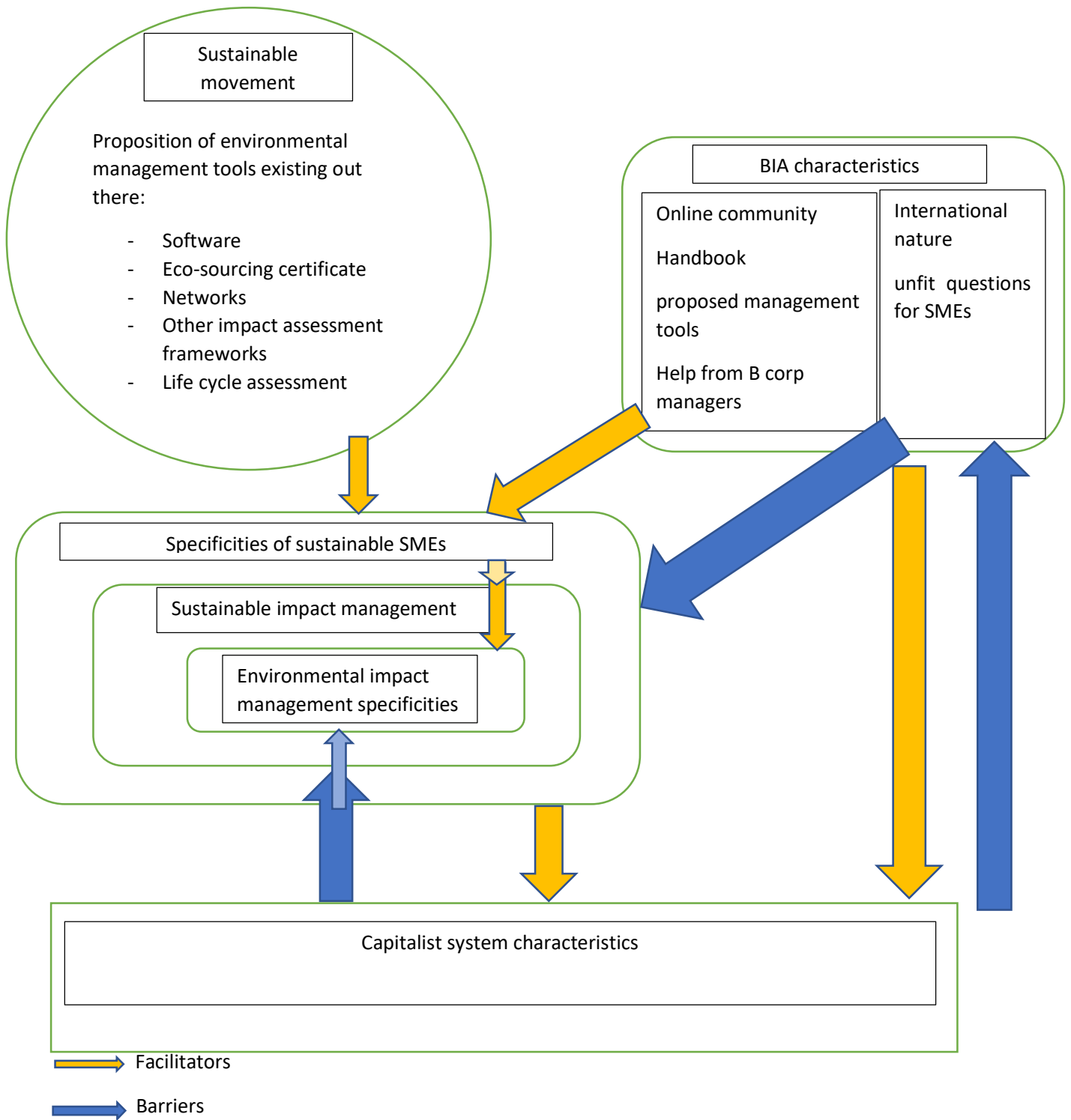


Figure 1. Barriers and facilitators of sustainable impact figure

Limitation and Further research

Several limitations might have emerged during the conduction of this study.

First, the small number of academic papers on this topic made it difficult to build a strong theoretical framework and theory basis for this study. This might be explained by the fact that the relevance of this thesis' subject emerged recently. It is also the reason why an exploratory research design was chosen.

The fact that the interviewer and most of the participants were not English native speaker might have an impact on the data collected. Indeed, this might have caused a lack of precision in the questions asked, in the participants' answers and some misunderstanding between interviewees and the interviewer.

The small number of participants might also be perceived as a limitation of this study. The difficulty to reach available experts in sustainability with knowledge on the B Corp certification made it difficult to reach a certain saturation point.

This research tried to provide a general overview of the different levels of barriers that prevent sustainable SMEs' efficient environmental impact management in a BIA context and of the different facilitators present to overcome these obstacles. As it appeared that institutional context plays a role in this problematic, it might be interesting to focus on one to deeply understand the role of this factor.

Furthermore, analyzing sustainable SMEs' environmental impact management barriers in another impact assessment framework context such as the free and science based Future Fit could has the potential to deepen our knowledge on these dynamics and on the sources of these barriers.

CONCLUSION

This study addressed the debate in the recent sustainable entrepreneurship literature concerning how sustainable SMEs identify barriers in their environmental impact management in the B Impact assessment process. The analysis showed that the specific characteristics of the capitalist system in which the BIA and most of contemporary sustainability SMEs are ingrained in are the main sources of barriers. The connection between SMEs and sustainability main features with an economic system which the only objective is the creation of profit powerfully constrain the capacity of implementation of sustainable impact management strategies. These barriers overflow over environmental impact management strategies and are strengthened by the unique nature of environmental impact which required budget et expertise to be monitored and improved. This study highlighted also that the economic system influences the organizational structure of the BIA which creates new barriers for sustainable SMEs. But the resilient and flexible nature of sustainable SMEs as well as BIA tools which improve their dynamic capabilities might alleviate the previously exposed barriers. Sustainable SMEs can also choose to use external tools to improve their environmental impact and to overcome the barriers rooted in the BIA. Even though the improvement of SMEs environmental impact management seems to be a laborious process due to the numerous barriers, this study highlights that CEOs, managers of sustainable SMEs and the B Corp certification have in common the willingness to change the system by communicating about sustainability and normalize sustainable practices.

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APPENDIX A: Table interviewees characteristics

Interviewees	Characteristics
Interviewee 1	Phd student specialized in the field of sustainability. Interview 1 is teaching performance labs in a Dutch leading university Sustainable Entrepreneurship master's degree. Interview 1 is in contact every year with the BIA and with companies which use the BIA to improve their sustainable impact.
Interviewee 2	Phd student specialized in the field of sustainability. Interview 2 is teaching performance labs in a Dutch leading university Sustainable Entrepreneurship master's degree. Interview 2 is in contact every year with the BIA and with companies which use the BIA to improve their sustainable impact. Interviewee 2 had the opportunity to take the BIA in the past with the startup that he created.
Interviewee 3	Interview is an academic specialized in the field of sustainability. Interviewees 3 is the

	director of this master program but also professor of the organization and performance courses.
Interviewee 4	Interviewees 4 is working in a sustainable Dutch SME. Interviewees 4 is the sustainable manager of a medium Dutch company specialized in workwear.
Interviewee 5	Interviewee 5 is the CEO of a B Corp small Italian company specialized in sustainable clothing.
Interviewee 6	Interviewee 6 is working in a consultancy specialized in the creation of change in companies as project manager.
Interviewee 7	Interviewee 7 is France but is working in a sustainable consultancy company based in Brussels as project manager and consultant.

APPENDIX B: Consent form



Consent Form for Sustainable Entrepreneurship Master's Thesis

Description and aim of the study

This present research aims at analysing how sustainable Small and Medium Enterprises (SMEs) identify barriers preventing them from managing their environmental impact in a B Impact Assessment context. The second goal of the research is to acquire information about how sustainable SMEs implement actions to overcome these barriers in a B Impact Assessment context. The data collected during the interview aims at generating academic and practice-driven knowledge to help SMEs improving their environmental impact management and providing them key knowledge to better understand the B Impact Assessment.

Please tick the appropriate boxes

	Yes	No
• I have read and understood the above study information dated [21/04/2022], or it has been read to me. I have been able to ask questions about the study and my questions have been answered to my satisfaction.	<input type="checkbox"/>	<input type="checkbox"/>
• I consent voluntarily to be a participant in this study and understand that I can refuse to answer questions, without having to give a reason.	<input type="checkbox"/>	<input type="checkbox"/>
• I understand that taking part in the study involves that the interview will be audio recorded, transcribed, and analysed by the researcher (namely: Anne-Laurine Ly), only she and her professors have access to the data provided during the interviews. The recordings will be then transcribed. The use of the recordings will be limited to academic purposes, and they will be destroyed after the submission of the project.	<input type="checkbox"/>	<input type="checkbox"/>
• I give my permission to be quoted verbatim in the final report	<input type="checkbox"/>	<input type="checkbox"/>
• I request my name to be anonymized in the transcript and the final report	<input type="checkbox"/>	<input type="checkbox"/>

I have read and understood the explanations given to me. By signing this form, I agree to the terms listed above.

The participant

Name of participant

Signature

Date



The researchers

Anne-Laurine Ly



Signature

21/04/2022
Date

APPENDIX C : Interviews transcription

Shared google drive document

APPENDIX D : Question Guides

Shared google drive document