
Master thesis:

***THE ROLE OF STARTUP ACCELERATORS
IN THE DEVELOPMENT OF
SUSTAINABILITY-ORIENTED STARTUPS***

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Preface

I hereby declare that the text and work presented in this master thesis is original and that no sources other than those mentioned in the text and its references has been used. The copyright of the master thesis rests with the author. The author is responsible for its contents. The Rotterdam School of Management (RSM) is only responsible for the educational coaching and cannot be held liable for the content.

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Executive summary

Sustainable entrepreneurship holds great potential and is increasingly becoming a major tool to create a positive sustainable change through sustainability-oriented innovation (Gruber and Henkel, 2006; Cohen & Winn, 2007; Haemmerle, Shekar, & Walker, 2012). However, sustainability-oriented startups face numerous unique challenges not only related to the emergence of a new venture, but also sustainability-related difficulties that create the need for additional support for such ventures. Startup accelerators are considered to be among the most important support structures for new, innovative ventures, including sustainability-oriented startups. While research on the effectiveness and role of conventional, non-impact accelerators is still at a very early stage, there is almost no knowledge dedicated to the role that startup accelerators have in the development of sustainability-oriented startups and whether they are able to accelerate the new sustainable ventures to begin with. Therefore, this thesis is focused on understanding this relationship between the startup accelerators and sustainability-oriented startups.

As this is an exploratory study, multiple case study research design was employed. Four startup accelerators and twelve sustainability-oriented startups that graduated from those accelerator programmes are analysed, creating four extensive case studies. Startup accelerators include two conventional and two impact accelerators while the sustainability-oriented startups analysed are very different organisations, having a sustainable impact creation in common. Case studies were built by interviewing the representatives from these organisations as well as gathering data from publicly accessible sources. In order to gain insights, the data was analysed in two parts: individual case analysis and cross-case analysis. As a result, the roles of each accelerator in the development of each analysed sustainability-oriented startup have been identified. The context of these cases and the cross-case analysis enabled deeper insights into differences between these roles as well as potential determinants of the significance of the roles

the accelerators had. All steps of analysis were performed having the main themes found in the literature in mind: sustainability and sustainability-oriented innovation. These themes allowed for a more thorough comparison and identification of trends.

Finally, the findings are confronted and compared with the literature introduced in this thesis and the framework based on the findings is introduced. The findings expand the existing literature regarding the challenges for hybrid organisations, the diversity of sustainability-oriented startups, process of sustainability-oriented innovation in the startup accelerators, differences between the impact and conventional startup accelerators and, mostly, the role these different types of accelerators have on the very diverse sustainability-oriented ventures.

Having analysed the data, the insight on the match between the sustainability-oriented startups and startup accelerators is noted: depending on the type of focus and the entry stage of the sustainability-oriented startup, the startup should prioritise different accelerator programmes, e.g. highly sustainability-oriented startups should prioritise the match in focus rather than the match in stage with the startup accelerator. Based on these insights, the framework is introduced. The framework can be utilised as a guideline for sustainability-oriented startups to make the choice for startup accelerator more effective. However, further research is needed to prove the insights the framework is based on.

This research concludes that both impact and conventional startup accelerators have the potential to have a significant role in the development of sustainability-oriented startups, however, as the definition of sustainability-oriented startups is very broad and their features highly different, the startup teams have to identify a few key metrics before choosing an accelerator as a mismatch of those might lead to a setback or stagnation in the development rather than a positive impact for the sustainability-oriented startups.

Table of Contents

Preface.....	1
Acknowledgements.....	2
Executive summary.....	3
List of Tables	8
List of Figures	8
1. Introduction.....	10
1.1. Relevance of the thesis.....	10
1.2. Problem definition	12
2. Literature Review.....	14
2.1. Startup ecosystems and sustainable entrepreneurship	14
2.2. Sustainability-oriented startups.....	16
2.3. Startup accelerators	18
2.3.1. Impact accelerators.	21
2.4. SOI and the startup ecosystems	23
2.4.1. SOI in startup ecosystems.....	23
2.4.2. SOI process.	25
2.5. Conclusion to the literature review	26
3. Methodology	28
3.1. Case study approach	28
3.2. Case selection.....	29
3.3. Data collection	30
3.3.1. Execution of data collection.....	30
3.3.2. Interview protocol.....	31
3.4. Data analysis	31
3.4.1. Case study analysis.	31
3.4.2. Data coding.	32
3.5. Validity and reliability	33
3.5.1. Validity.....	33
3.5.2. Reliability.....	34
3.6. Conclusion to the methodology section	34
4. Within-case analysis	35
4.1. Within-case analysis A: EF and the startups.....	35
4.1.1. EF accelerator programme.....	35

4.1.2. EF and the graduated startups	36
4.1.3. Startups and innovation at EF.	37
4.1.4. Startups and the approach to sustainability.....	39
4.1.5. Startup challenges and the development at EF	40
4.1.6. Conclusion on EF's role in the development of startups.	42
4.2. Within-case analysis B: Big Venture Challenge and the startups.....	43
4.2.1. BVC accelerator programme.	43
4.2.2. BVC and the graduated startups.....	44
4.2.3. Startups and the innovation at BVC.....	45
4.2.4. Startups and the approach to sustainability.....	46
4.2.5. Startup challenges and the development at BVC.....	47
4.2.6. Conclusion on Big Venture Challenge's role in the development of startups.	49
4.3. Within-case analysis C: The Young Academy and the startups	50
4.3.1. The Young Academy accelerator programme.	50
4.3.2. The Young Academy and the graduated startups	50
4.3.3. Startups and innovation at TYA.	52
4.3.4. Startups and the approach to sustainability.....	52
4.3.5. Startup challenges and the development at TYA.....	53
4.3.6. Conclusion on The Young Academy's role in the development of startups.	55
4.4. Within-case analysis D: Wayra and the startups.....	55
4.4.1. Wayra accelerator programme.	55
4.4.2. Wayra and the graduated startups.	56
4.4.3. Startups and the innovation at Wayra.	57
4.4.4. Startups and the approach to sustainability at Wayra	58
4.4.5. Startup challenges and the development at Wayra.	59
4.4.6. Conclusion on Wayra's role in the development of startups.	62
4.5. Conclusion to within-case analysis	62
5. Cross-case analysis	64
5.1. Startup accelerators and innovation	65
5.2. Startup accelerators and sustainability.....	69
5.3. Startup accelerators and their role in the development of the SO startups	72
5.4. Startup accelerator and startup matches and their satisfaction	78
5.5. Conclusion of the cross-case analysis.....	80
6. Discussion.....	84
6.1. SO startups as hybrid organisations.....	84

6.2. Social impact: pros and cons.....	85
6.3. Distinction between impact and conventional accelerators	85
6.4. SOI acceleration in SO startups	87
6.5. The role of startup accelerators in the development of SO startups	88
6.6. Framework: choosing between impact and commercial accelerators.....	90
6.7. Application and addition to the resource-based view theory.....	91
7. Conclusion	93
7.1. Conclusion of the results.....	93
7.2. Theoretical contribution.....	94
7.3. Managerial contribution.....	95
7.4. Limitations	95
7.5. Recommendations.....	96
7.5.1. Practical recommendations for accelerators and startups	96
7.5.2. Recommendations for future research.	97
8. Reference List.	99
9. Appendices.....	110
Appendix A. Literature Review	110
Appendix A.1. Impact startup accelerators worldwide (Monitor Deloitte, 2015).....	110
Appendix A.2. SOI dimensions (Adams et al., 2015)	110
Appendix B. Methodology.....	111
Appendix B.1. Case Selection. Sampling structure.	111
Appendix B.2. Data Collection. Information about the interviewees.....	111
Appendix B.3. Interview protocol.	113
Appendix C. Data Analysis.....	115
Appendix C.1. Evaluation of the EF accelerator programme	115
Appendix C.2. Evaluation of the Wayra accelerator programme	130
Appendix C.3. Evaluation of The Young Academy accelerator programme	146
Appendix C.4. Evaluation of The Big Venture Challenge accelerator programme	165
Appendix D. Cross-case Analysis.....	184
Appendix D.1. Startup accelerators and startups: approach to innovation and its type.	184
Appendix D.2. Matching the startups with stage and focus fit of the accelerator	185

List of Tables

Table 1. Main differences between impact and commercially-oriented startup accelerators..22
 Table 2. Differences between the researched startup accelerators64
 Table 3. Pattern matching: focus and stage of the startup accelerators and startups80
 Table 4. Revised differences between impact and conventional startup accelerators86

List of Figures

Figure 1. The Four Lenses Strategic Framework (Virtue Ventures LLC, 2010)..... 18
 Figure 2. Key elements of the accelerator programmes (Pauwels et al., 2016)..... 19
 Figure 3. Process of SOI development (Keskin et al., 2013).....25
 Figure 4. The role of EF in the development of ThinkSono, evaluated by ThinkSono.
 Compiled by author.....40
 Figure 5. The role of EF in the development of SpeakSet, evaluated by SpeakSet. Compiled
 by author.40
 Figure 6. The role of EF in the development of Hydroleap, evaluated by Hydroleap.
 Compiled by author.....42
 Figure 7. An overall assessment of EF role in the development of ThinkSono, Hydroleap and
 SpeakSet. Compiled by author.....43
 Figure 8. The role of BVC in the development of Oomph!, evaluated by Oomph!. Compiled
 by author.48
 Figure 9. The role of BVC in the development of the Goldfinger Factory, evaluated by the
 Goldfinger Factory. Compiled by author.....48
 Figure 10. The role of BVC in the development of Andiamo, evaluated by Andiamo.
 Compiled by author.....49
 Figure 11. An overall assessment of BVC role in the development of Oomph!, Goldfinger's
 Factory and Andiamo. Compiled by author.....50
 Figure 12. The role of TYA in the development of The Happy Teacher Project, evaluated by
 The Happy Teacher Project. Compiled by author.54
 Figure 13. The role of TYA in the development of Sisterhood, evaluated by Sisterhood.
 Compiled by author.....54

Figure 14. The role of TYA in the development of Revolution Hive, evaluated by Revolution Hive. Compiled by author.....55

Figure 15. An overall assessment of TYA role in the development of Revolution Hive, The Happy Teacher Project and Sisterhood. Compiled by author.....55

Figure 16. The role of Wayra in the development of Give Vision, evaluated by Give Vision. Compiled by author.....60

Figure 17. The role of Wayra in the development of Restored Hearing, evaluated by Restored Hearing. Compiled by author.....61

Figure 18. The role of Wayra in the development of Aparito, evaluated by Aparito. Compiled by author.62

Figure 19. An overall assessment of Wayra role in the development of Give Vision, Aparito and Restored Hearing. Compiled by author.....62

Figure 20. Comparison of startup accelerator programmes and their role in startup development in terms of focus and startup stage on the scale from -2 to 2. Compiled by author.79

Figure 21. Framework to determine a startup accelerator with the highest potential role on the development of the SO startup. Compiled by author.....90

1. Introduction

1.1. Relevance of the thesis

Both the scale and scope of human activity have accelerated dramatically over the past few decades (Hart, 1995). Depletion of natural resources and climate change have already affected numerous parts of the world irreversibly and caused many sustainability-related problems. Together with the social issues such as gender inequality, wide discrepancy in wealth, power and opportunity worldwide, challenges to the global sustainable development are greater than ever before. As a result, the debate over the financial viability of sustainability have now been replaced by the challenge of finding the most effective way to innovate and maximise the value of meeting sustainability demands (Wagner, 2007).

Authors claim that the significant sustainability-related change might be reached through nurturing the innovative potential of entrepreneurs and their ability to use innovative business solutions to resolve the sustainability-related challenges (Gruber & Henkel, 2006; Cohen & Winn, 2007; Haemmerle, Shekar, & Walker, 2012). Being a key market driver for radical sustainable innovation, sustainability-oriented startup teams are driven by the opportunity and the potential impact of their innovation, however, having the liabilities of being small and new to the market (Gruber & Henkel, 2006). Sustainability-oriented startups not only face a number of issues related to their size, but also related to both sustainability and radicality. These issues include high complexity, uncertainty and a lack of financial returns (Geels et al., 2008; Hall & Wagner, 2012).

Great numbers of early-stage sustainability-oriented innovators launch startups worldwide, however, very few are able to build the teams, find the customer base, or raise the capital necessary to scale. This is called the “Pioneer gap” (Koh, Karamchandani & Katz, 2012). This term refers to the difficulties faced by the sustainability-oriented enterprises that are pioneering new business models for sustainable change (Koh, Karamchandani & Katz,

2012). This usually occurs during the early startup stage when it is not yet considered to be investable by many impact investors (Lall, Bowles & Baird, 2013). For all these reasons, sustainability-oriented startups are also seen as a less attractive investment when compared to the conventional startups (Kennedy, Whiteman & van den Ende, 2016).

In order to overcome the various challenges, startups worldwide collaborate with other entities that can act as facilitators. Startup accelerators are commonly accepted to be the key actors in facilitating the development and increasing the success rate of startups (Bank & Kanda, 2016). By delivering the expertise, infrastructure, initial investment, as well as the investor and partner networks, startup accelerators hold an important role to the small new startup teams on their way to turning the ideas and plans to products and services (Miller & Bound, 2011; Bank & Kanda, 2016; Schwartz & Hornyk, 2008). However, as already mentioned, sustainability-oriented innovation and startups have a more complicated environment to negotiate than conventional entities (OECD, 2013). To begin with, the skillset and motivation of sustainability-oriented startup teams are typically different from conventional ones (Bocken, 2015). In contrast with conventional entrepreneurs, sustainability-driven entrepreneurs commonly follow the principles of maximising human and natural resources, synergies and stacking benefits rather than economic profit maximisation, satisfying multiple stakeholders rather than seeking for shareholder value only, and allocation of benefits across those who contributed to the enterprise, not only those who hold the most power (Parrish, 2010). These features create the demand for different support than it is currently provided for the conventional startup enterprises. Sustainability-oriented startup incubators and accelerators have, thus, emerged as specialised organisations to enhance economic development of such entities. Investors claim that sustainability-oriented accelerators (also called “impact accelerators”) can also bridge the previously mentioned “pioneer gap” (Lall, Bowles & Baird, 2013). The investors state that the main barriers for increasing the rates of

funding for impact enterprises are the lack of appropriate capital across spectrum and the lack of investable enterprises. This suggests that there are too few quality startups in the early stage and too little effective support to reinforce the later-stage startups (Lall, Bowles & Baird, 2013).

It can be concluded that sustainability-oriented startups hold huge potential and importance in terms of development and implementation of global sustainability. Sustainability-oriented startups should also be a major concern in the international policy for innovation and entrepreneurship (Bank & Kanda, 2016). In order to support these entities, customised support systems for sustainable entrepreneurship have to be introduced (Fichter et al., 2016). Currently, this role is partially covered by the impact accelerators. They are designed to hold the expertise specifically accommodated to the needs of sustainability-oriented startups – their teams, goals and challenges- all being different from conventional startups. However, the research of the startup accelerators and their support for precisely sustainability-oriented startups is at its infancy. Thus, the impact and operations of startup accelerators that are supposed to boost the development of sustainability-oriented startups are not determined by the available literature.

This thesis analyses how the startup accelerators impact the development of the sustainability-oriented startups. Some conventional startup accelerators claim that they have a sustainability approach to their activities both in terms of recruitment of new tenants as well as in the support of those startups already in the business development stage (Bank & Kanda, 2016). Therefore, in order to provide more representative research results, impact and conventional startup accelerators together with sustainability-oriented startups that graduated from those accelerators are researched.

1.2. Problem definition

After having established the importance of sustainability-oriented innovation, and, thus, sustainability-oriented startups and accelerators, it is crucial to note that the research of

these entities is in its infancy (Bank & Kanda, 2016; Lall, Bowles & Baird, 2013). Impact accelerators are considered to be the key actors in stimulating sustainable innovation by supporting sustainability-oriented startups, however, even though the number of impact accelerators has been growing rapidly in the last decade, it is still a relatively new phenomenon in startup ecosystems and only very limited research and data-driven analysis of the accelerator's role for startups is available (Lall, Bowles & Baird, 2013). Some more extensive research could be found analysing the impact and operations of conventional startup accelerators, providing a benchmark for some assumptions that might arise during the research. However, because of the different support needed for sustainability-oriented startups discussed previously, the existing literature does not convey that much value. Sustainability-oriented startups face higher regulatory, financial and organisational obstacles that are much different from the traditional obstacles encountered by their conventional counterparts (OECD, 2013). Therefore, they are in need of a different support structure.

The objectives of this thesis are directly related to filling the existing research gap and answering the following research question: **what is the role of startup accelerators in the development of sustainability-oriented startups?**

2. Literature Review

In order to establish the guidelines for researching the ways how the startup accelerators impact the development of sustainability-oriented startups, it is necessary to review the literature that could propose valuable insights to the topic. Firstly, the descriptions and relevant information for startup ecosystems, including sustainability-oriented startups and startup accelerators, are determined. Secondly, the sustainability-oriented innovation and its process are discussed, providing themes for further research.

2.1. Startup ecosystems and sustainable entrepreneurship

Geography has great importance for knowledge generation and innovation processes (Keeble & Wilkinson, 2000). Thus, it is not surprising that this has been noticed to be true for entrepreneurship as well. Entrepreneurship ecosystems are currently emerging in various parts of the world. Entrepreneurship ecosystems combine cultural outlooks, social networks, investment capital, universities, and active economic policies in one location which provides environment and support for innovation-based ventures (Spigel, 2015). However, when startup enterprises are discussed, the term startup ecosystem is used. Startup ecosystem is considered to be a part of entrepreneurship ecosystem as it essentially have highly similar actors, but only considers the environment and support for early-stage startup ventures and not the developed businesses (Motoyama & Knowlton, 2014).

Startup ecosystems are usually defined as network of interactions among people, organisations and their environment. Startup ecosystems are also usually described to be cities (Startup Commons, n.d.), the most well-known being Silicon Valley. Startup ecosystems might have similar environments and still operate in very different manners and focus on different industries, solely because they are influenced by entrepreneurial culture which differs all around the world (ibid).

SO startup ecosystems. When talking about sustainability-oriented startup ecosystems, it seems that SO startups might need different startup ecosystems than just discussed. In order to scale the impact, SO startups might require ecosystems that not only entail many different actors but also understand the purpose and goals of sustainable entrepreneurship (Zahra, Newey & Li, 2014). However, stakeholders of startup ecosystems entail various barriers and might be stuck in paradigms of understanding SO startups, which results in a barrier for impact creation and scaling (ibid). Therefore, SO startups need to entail the capabilities of social change to help persuade, create incentives and guide the stakeholders of the startup ecosystem towards the change (Zahra, Newey & Li, 2014). The same argument regarding the adaptation of institutions to enable social change is argued by Dees (2007). An even stronger view is stated by Martin and Osberg (2007) where social entrepreneurship is mentioned to have the need to create the whole separate ecosystem to begin with as well as enable mass-market adoption and significant level of imitation.

While it is not difficult to determine whether the company or country is using sustainable practices in its operations, it is very difficult to measure what people consider being sustainable. Different cultural backgrounds and different mindsets can provide a bias to a person's evaluation of sustainability in terms of products and business operations. However, in a country where sustainability has been highly interconnected with the governmental and business strategies, it is more likely that other organizations would also have sustainability-oriented strategies even if not diversifying as such. Therefore, it is assumed in this research that in order to determine what role the startup accelerators have in the development of sustainability-oriented startups, it is necessary to evaluate both impact accelerators and commercially-oriented startup accelerators.

2.2. Sustainability-oriented startups.

As established companies tend to create mostly incremental innovation, startups are key market actors in the development and commercialisation of radical sustainable innovation (Fichter & Weiß, 2013). Sustainability-oriented startups, however, differ from conventional startups in their pronounced value-based approach and intention to initiate sustainability-related change in the society (Hockerts & Wüstenhagen, 2010). Depending on the context, these startups are called social enterprises, sustainable enterprises, green startups, eco-enterprises or sustainability-oriented startups. When choosing for the right definition to use in this research, it is important that the entity definition includes both economic as well as social and/or environmental value aspects without prioritising either one as different organisations with possibly different priorities are going to be analysed. The most fitting definition is adapted from the Schaltegger and Wagner (2011) definition of sustainable entrepreneurship – “innovative, market-oriented and personality driven form of creating economic and societal value by means of break-through environmentally or socially beneficial market or institutional innovations”. As this definition describes a form of entrepreneurship, in order to describe the startups that operate through sustainable entrepreneurship, the term “sustainability-oriented startup” (SO startup) is used. Therefore, this definition includes social enterprises as well as other businesses that generate sustainable impact.

SO startups as hybrid organisations. When discussing SO startups it is important to understand the core logics of such entity. Essentially, SO startups are hybrid organisations where social and commercial sectors are merged from completely separate fields to a common space (Battilana et al., 2012). These confronting logics create a base for many challenges to arise. According to Santos (2012), the main challenge for such ventures, including SO startups, is balancing the value creation (sustainable aspect) with value capture (financial aspect) as maximising both is extremely difficult. Thus, very often, the ventures have to make trade-offs

between the two, which can result in mission drift, negative effect on the organisational culture, sustainable impact and financial value which was supposed to be created (Santos, 2012; Battilana et al., 2012). The trade-off between value creation and value capture could be defining when analysing SO startups. Social entrepreneurs are most likely to firstly try to achieve sustainable solution (value creation) to the problems that are being addressed while SO startups with a more commercial focus might choose sustainable advantage (value creation) over sustainable solution (Santos, 2012). Sustainable advantage would mean that the entrepreneurs would first establish a market position which would give them an advantage as they would not want to have a spill over effect of their created value to the other organisations (Santos & Eisenhardt, 2009). Other challenges for the SO startups as hybrid organisations are the absence of appropriate legal structures to ensure the long-term activities, maintaining the organisational culture and employees, distinguishing and serving customers and beneficiaries as well as determining sources of funding as ethical dilemmas might appear (Battilana et al., 2012).

The contrasting approach to hybrid organisations is presented by Marmer (2012). Marmer (2012) argues that even as social enterprises seem to be promising, their impact is very limited, rarely scalable and usually not economically sustainable. Marmer (2012) proposes a new kind of enterprise that is a mixture of social and commercial entrepreneurship which is based on a principle of scalability and effectiveness – transformational entrepreneurship. Transformational startups are the ones that are able to create innovative solutions to the world's biggest problems that are scalable, sustainable and systematic (ibid). Building upon the idea of transformational entrepreneurship and the creation of transformational startup, the Four Lenses Framework (Virtue Ventures, 2010) can be explored (see Figure 1). In the framework, it is seen how different types of businesses align with sustainability and economic dimensions.



Figure 1. The Four Lenses Strategic Framework (Virtue Ventures LLC, 2010).

While social enterprise and socially responsible businesses are the closest to the sustainability equilibrium, both entities have the preference towards the economic or sustainable value, the tendency which is also argued by Santos (2012). If proposed idea of transformational startup enterprise would be incorporated, this entity would actually be in the middle and align with the sustainability equilibrium as the economic and sustainability-related results are equally important. While establishing such entity seems to be very difficult because of the many challenges already discussed, research reveals that there are some organisations that manage to combine the social and commercial approaches sustainably (Battilana et al., 2012). Even if the mission drift is avoided in such enterprises, these hybrid organisations might still find it hard to find a suitable place between the for-profit and non-profit sectors, especially when talking about legal recognition, fundraising, markets and hiring (ibid).

2.3. Startup accelerators

Startup accelerators are among the key actors in the startup ecosystems. It is known that around 75% of startups are failing (Blank, 2013) with many struggling to find the resources and connections they need during the development of the idea and its commercialization. For these reasons, startup accelerators are there to provide assistance. Within the startup

community, acceleration is a very broad term and is not easily conceptualized, however there are few features that set startup accelerators apart from business incubators, investors and other actors of the ecosystem. According to Miller and Bound (2011), a startup accelerator is a specific wave of programs that have the following five characteristics:

- 1) Application process to the programme is open to all, however is very competitive.
- 2) Provision of pre-seed investment (usually 10 000€ -50 000€) in exchange of equity.
- 3) Focus on small teams, not founders individually.
- 4) Time-limited support, which includes intensive mentoring and events.
- 5) Cohorts or “classes” of startups rather than individual companies.

For the key elements of the accelerator programme analysed and presented by Pauwels et al. (2016), see Figure 2. These elements include the description of a usual programme package, strategic focus, selection process, funding structure and alumni relations.

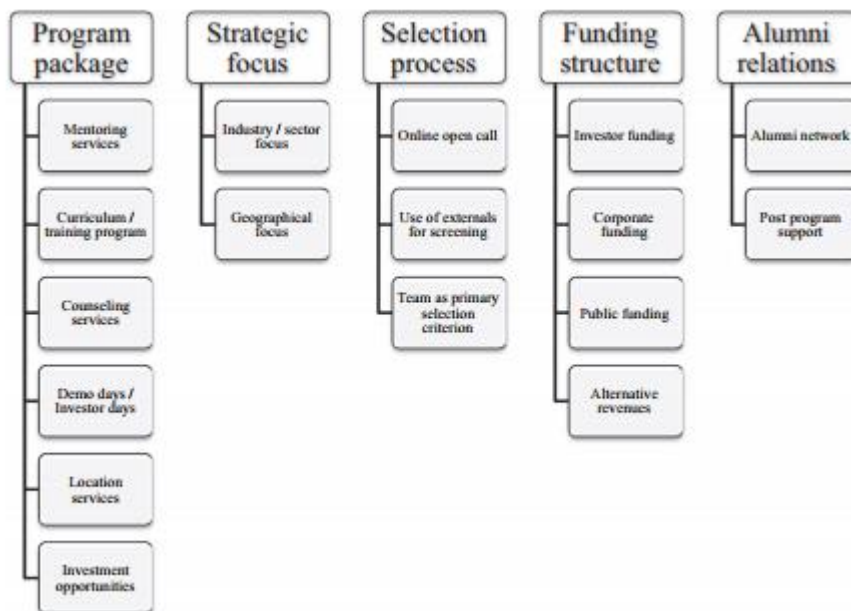


Figure 2. Key elements of the accelerator programmes (Pauwels et al., 2016).

Startup accelerators should not be confused with such entities like business incubators, co-working spaces, angel networks, entrepreneurship courses, business competitions,

hackathons, maker spaces, seed funds, mentoring schemes or social venture academies (Miller & Bound, 2011). Accelerator programs are typically lean organizations, with small staffs and little organized data collection (Cohen & Hochberg, 2014). Generally, teams gain access to funding, business and product advice, connections to future investors, validation, peer support group, pressure and discipline (Bart, Wright & Van Hove, 2015). They do not only provide services to startups but to investors as well. During the process of acceleration programmes, startup accelerators scout new talent, filter down to only the highest quality teams and provide a concentration of well-developed ideas for advisors and investors to save their time and resources. Startup accelerator's role as a certifier for the graduated startups is also suggested in the Radojevich-Kelley and Hoffman's (2012) research. However, the research is conceptual, lacking empirics, therefore, non-conclusive and mostly based on case studies.

Researchers do not agree on the actual acceleration programme's impact on accelerated startups success. Hallen, Bingham and Cohen (2014) state that top acceleration programs do indeed accelerate the development of startups and help raise capital, exit by acquisition and achieve customer traction faster. Winston, Smith and Hannigan (2013) claims to have found similar results when analysing two top accelerators: Y Combinator and TechStars. However, there are also findings that many accelerator programs do not have a significant effect on the graduates (Hallen, Bingham & Cohen, 2014). Having this in mind, it is important to note that the entity of startup acceleration is still quite young. The average seed accelerator has an experience of only three years in the running (Seed Rankings, 2013). Therefore, the results of research discussed might not be reflective of the real picture. Cohen (2013) provides some statistics for accelerator programs evaluated is the Seed Accelerator Rankings. The mean percentage of program graduates that receive subsequent financing of \$350 000 or more within one year of graduation is 41%, which compared to the 75% failure rate is well above the average. However, these results are limited to the sample of the Seed Rankings, therefore, non-

conclusive as well. According to Isabelle (2013), when choosing an accelerator, startup may consider five factors that may determine the success of the collaboration with an accelerator: stage of venture, mission fit, policies on selection and graduation, accelerator's services and partner networks.

2.3.1. Impact accelerators. There are a number of initiatives that support sustainability-oriented startups. Social venture networks and social entrepreneurship schools help develop the business models, but do not help with acquiring funds to accelerate the business idea. Impact investment firms, grant-making organisations and crowd funding platforms address financial needs but do not generally support the new ventures in developing their business models (Monitor Deloitte, 2015). At the same time, while it is already known that SO startups are crucial in delivering SOI, impact investors typically invest in already established ventures with proven business models, which makes it difficult for early-stage startups to get funding (Miller & Stacey, 2014). Many SO startups are already successful on a small scale. The obstacles appear when they try to scale, reach more customers, attract new talent, obtain funding and technical support (Monitor Deloitte, 2015). While it may seem that conventional startup accelerators should be able to address these issues, it is only partially true.

Conventional startup accelerators might have expertise in some of the issue areas, however, sustainability-oriented startups face a number of issues that conventional startup accelerators are not familiar with. Therefore, impact accelerators are gaining importance in closing this gap and supporting the development of sustainability-oriented startups. Find the main differences between the roles of impact and conventional startup accelerators in Table 1.

Table 1. Main differences between impact and commercially-oriented startup accelerators

Characteristics	Impact accelerator	Commercially-oriented startup accelerator
Focus	Maximising the potential of human and natural resources, synergies and stacking benefits	Economic profit maximisation
Accountability	Satisfying multiple stakeholders	Satisfying shareholders
Allocation of benefits	Across those who contributed	Across those who have the most power
Knowledge	Knowledge on sustainability-related regulations and international policies	Knowledge on ordinary business-related regulations
Funding and expertise	Funding and expertise mostly generated from governments, international organisations, impact investors	Funding and expertise mostly generated from corporates, businesses, venture capitalists

Note. Adapted from Parrish (2010) and expanded by the author.

First impact accelerators started operating in 2010 and the acceleration model has witnessed huge growth. Currently, there are more than 160 impact accelerators in the world (Miller & Stacey, 2014). As of 2015, Africa and USA leads in the number of impact accelerators, however the numbers in European impact acceleration ecosystem has grown significantly since 2014 (Monitor Deloitte, 2015), therefore, this data can only be taken into account as an approximation.

In comparison to conventional accelerators, impact accelerators are quite rare and are even called “experimental” by some scholars (Dempwolf, Auer & D’Ipulito, 2014). Depending on the objectives of key stakeholders, startup accelerators evolved presenting three different ways of structuring and running their programmes, accelerators being differentiated into “investor-led” (privately funded), “matchmakers” (corporate funded) and “ecosystem builders” (publicly funded). Impact accelerators fall under the “ecosystem builders”. Ecosystem builders stimulate new ecosystems, which, in the case of impact accelerators, is the social entrepreneurship ecosystem. Conventional startup accelerators might be both “investor-led” or “match-makers” depending on their stakeholders (Clarysse et al., 2015).

2.4. SOI and the startup ecosystems

In this part of the thesis, the core of SO startups – sustainability-oriented innovation (SOI) – is discussed.

2.4.1. SOI in startup ecosystems. As sustainability has been increasingly seen as a market of opportunity (Berchicci, 2005), entrepreneurs have been trying to cope with the challenge of balancing the sustainability-oriented business goals with personal goals for profit and economic efficiency. When discussing the SO startups, the core of their business activity and unique selling proposition lies in the sustainability-oriented innovation (SOI). Therefore, SOI and its implications for startup ecosystems are discussed.

Conceptualising SOI. The concept of SOI has been gaining popularity recently, but the concept is far from new. In 1934, Joseph Schumpeter has already claimed sustainable innovation being “fundamental force for change in business and society“. According to Hansen and Grosse-Dunker (2013) sustainability-oriented innovation is a “commercial introduction of a new or improved product or service, which – based on a traceable comparative analysis – leads to environmental and / or social benefits over the prior version’s physical life-cycle (“from cradle to grave”). SOI promotes the efficiency of resources, the creation of improved products and services, and the formation of new business models: all of which are aligned to the core of traditional business principles (Nidumolu et al., 2009). Examples of existing SOI include organic and fair food production, electric and shared mobility, sustainable fashion, renewable energy technology, energy-efficient “smart homes” and eco-tourism.

Dimensions of SOI. In its core, sustainability-oriented innovation might not seem very different from the conventional innovation. However, Adams et al. (2015) identify three dimensions particular to SOI: focus is placed on people rather than technology; SOI brings a systematic effect on society as well as SOI is integral to the organisation: strategic solutions, culture and operations (see Appendix A.2.). This model could be used to determine the extent

of SOI integration in the startup entity or even startup accelerator. In that case, the focus would go towards the tendency of what the accelerator supports startups to develop. Having the SOI dimensions in mind, the distinction between the conventional and the impact startup accelerators can also be seen as conventional startup accelerators place their focus on technology-centric innovation rather than on people-centric innovation.

If the SO startups do indeed entail these three dimensions, in contrast to conventional startup accelerators, impact accelerators should have the knowledge to push the SO startups through these dimensions to create a truly systematically sustainable enterprise, however, there is no supporting research to claim that.

Challenges with SOI. When talking about the role of SOI for the startup ecosystems, it is important to note that entrepreneurs engaging in SOI face some extra challenges when in comparison to the conventional innovation. According to Charter and Clark (2007), it is harder to introduce SOI to the market as SOI produces less direct benefits to the consumer. This is based on the assumption that the basis of SOI is collective good – environmentally, socially and financially better for the society instead of the private good. Moreover, research shows that consumers who claim that they would pay premium for sustainable products and service tend to not to go through with the comparatively higher priced purchases after all, therefore, the positive attitudes towards the sustainable product might not translate to a purchase (Dangelico & Pujari, 2010). Another barrier for the successful introduction to the market is the radicality of SOI. It has already been mentioned that for SOI to have high impact, the innovation has to be radical as incremental innovations have the potential to make existing products only slightly better in terms of sustainability. Having in mind the complexity of radical innovations, this is considered to be another issue that entrepreneurs face with SOI. Sustainability-related issues that entrepreneurs strive to solve are mostly very complex, “wicked” problems, involving great amount of stakeholders. Thus, they

usually lack expertise and resources to come up with an actionable idea. As a result, entrepreneurs need to collaborate with external parties to receive guidance and expertise in the area (Christensen, Olesen, & Kjær, 2005). Together with the need for funding and larger network, the lack of expertise in the field are the main reasons for collaboration.

2.4.2. SOI process. The purpose of this thesis is to determine the role of startup accelerators in the development of SO startups. Therefore, it is important to analyse the process of innovation that the startups, especially SO startups, go through. Having done that, it would be easier to evaluate the added value of startup accelerators in support of this process. In order to understand the development of SOI and what the process of such innovation is, Keskin et al. (2013) present a SOI process model for small sustainability-driven enterprises (see Figure 3).

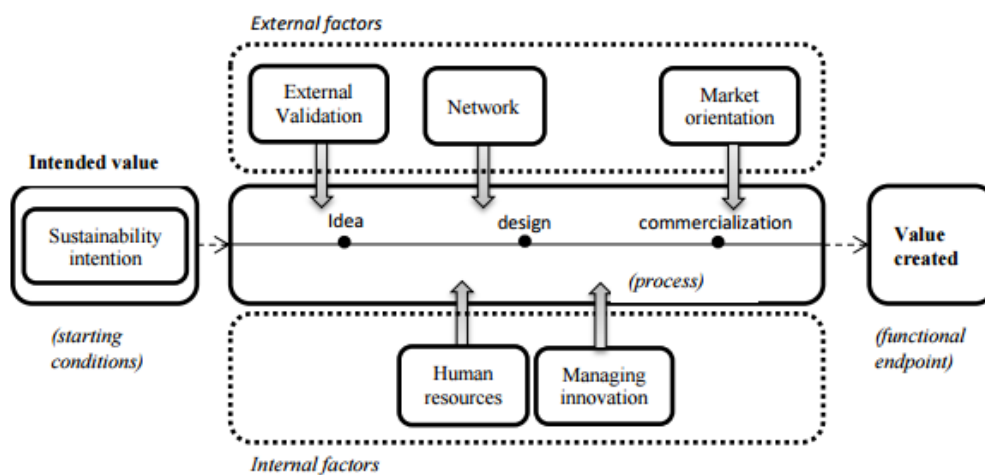


Figure 3. Process of SOI development (Keskin et al., 2013).

Keskin et al. (2013) build upon the basic innovation model that goes through the phases of intention, idea generation, design, commercialisation and, finally, creating value by adding external factors. The factors identified are external validation, network, market orientation, human resources and managing innovation. The SOI process as described by Keskin et al. (2013) might be considered similar to the conventional innovation process, however, the weights of these internal and external factors are different when talking about

SOI. It is possible for the conventional startup to be successful by targeting a niche market and having little external validation. Contrary to that, the core of SOI is to be externally validated and spread the impact as much as possible. Moreover, limited knowledge on one market segment is not enough when talking about SOI. As sustainable issues are intertwined to each other and entail complexity in their sources and solutions, in depth knowledge is needed, which could only be obtained through extensive network connections. As the startup ecosystems are highly based on high-tech, the importance of the multi-dimensional team is also concerning for sustainability-oriented startup teams (Keskin et al., 2013). If correctly introduced to the market, however, sustainability-oriented products could gain a loyal following of the users that are internally-motivated to buy sustainable products and services. However, a successful market orientation is needed for this to become true. As a result, while seem similar, the steps of the innovation process of SOI hold different importance than when in comparison to the process of conventional innovation, making it more multi-layered, complex and vulnerable to failure.

2.5. Conclusion to the literature review

SO startups are increasingly gaining support and acknowledgement for their potential impact to the global sustainability issues. Bringing the agility and high internal motivation to the table, sustainability-oriented startups are in need for guidance, expertise, funding support and extended partner networks in order to address the multi-layered challenges of sustainable development. SO startups not only solve complex sustainability-related issues but also face difficulties with the potential mission drift, legal structure, organisational culture, customer and beneficiary development as well as fund-raising as the ventures have to balance both value creation and value capture.

While the support systems and infrastructure for conventional startups is highly developed, SO startups face more challenges when trying to scale their innovative solutions. Hence, impact accelerators have emerged in order to provide the support aligned with the needs

of SO startups. The actual impact of startup accelerators is not agreed upon by the researchers, however, it is proven that established startup accelerators hold great value for the graduated startups and the success rates are indeed significantly higher. As the need for sustainable change is increasingly alarming, impact accelerators are emerging globally with the aim to accelerate the development and improve success rates for sustainability-oriented startups. The real effect of these impact accelerators is, however, unknown, as the study in the area is very limited and contains only a few reports and articles.

SO startups bring the value through SOI. While SOI process is similar to the process of conventional innovation development, the external and internal factors, such as external validation, human resource and innovation management, networks and market orientation, hold higher importance than in conventional innovation. As most of the startup teams do not have access to all of these factors, a crucial role of startup accelerators could, thus, be considered. Guidance of SO startups not only through the process of product development but also the management of these external and internal factors should be key to startup accelerators. Moreover, not only it is more difficult to create SOI, it is also harder to introduce SOI to the market. As it is usually positioned and, therefore, perceived to be a collective good, SOI seems to provide less direct benefits to the consumer. At the same time, radical innovations are also less attractive to the customers and can appear applicable and attractive to niche markets only.

However, as the research in the area is still in its infancy, it is not clear whether startup accelerators actually provide guidance through such difficulties to the startups and how do they do that if that is a possibility. The following chapter of this paper describes the research process that is performed in order to determine the role of startup accelerators in the development of sustainability-oriented startups.

3. Methodology

This chapter is aimed at describing the methodology of this research. It includes the rationale for choosing the case study approach, elaborates on the process of case selection, data collection and analysis. The validity and reliability of the research is discussed at the end of this chapter.

3.1. Case study approach

The aim of this research is to gather insights into what role do the startup accelerators have in the development of the SO startups. In order to understand this phenomena, exploratory multiple case study research design is chosen. Case study research method is appropriate in several settings. Case study research is used when questions of “what“, “why” and “how” are explored and the emphasis of new insight and theory generation is placed (Benbasat, Goldstein & Mead, 1987; Yin, 2013). It is also a preferred method when the center of the research is a complex contemporary phenomenon in a real-life context and the researcher has little control over it, behaviours can't be manipulated with (Yin, 2013). Having in mind that the role of startup accelerators in the development of SO startups is determined by numerous variables, such as the elements of the accelerator programme, SO startup development stage, founders' needs and other variables, it is a complex social context. The cases are built on retrospective knowledge or current data from official sources, thus, no manipulation or control is possible. It is clear that the conditions of the explored phenomenon match the reasoning to use a multiple case study research method. Thus, multiple case study approach is chosen for this research.

While the case study research can deal with variety of sources in the data collection stage (Yin, 2013), this research uses interviews from startup accelerator and SO startups as well as relevant website data in order to build the case descriptions. The selection of sources is

limited because of the time constraints of this research, however, it opens up the potential for further, more in depth research in the area.

3.2. Case selection

Case study research has to represent the dynamics in one single setting (Eisenhardt, 1989). Therefore, there are four case studies, each containing one startup accelerator and three SO startups that graduated that accelerator's programme (see Appendix B.1.).

In order to determine the startup accelerators that would be relevant to this research, a big startup ecosystem was needed, so there would be enough potential interviewees for the research purposes. Hence, UK is chosen as a target country for this research. The UK also hosts numerous impact and conventional startup accelerators which is critical for this research as SO startups are hosted by both types of startup accelerators.

This approach allows for an examination of one setting (startup accelerator) from three different perspectives (SO startups), allowing for a higher diversity of information and potential insights as well as triangulation among the aspects that are present in all three startup interviews about the startup accelerator. As the scope of this research is limited, case selection method that would maximise the utility of information from small sample was needed. Based on Flyvbjerg (2006), such case selection is represented by the maximum variation cases sampling method. The cases are selected with regards to the information that they could provide, hoping that the selected cases would allow for a variety of insights.

Based on this case selection method, startup accelerators were selected using various criteria, main of which being two: 1) accelerator focus – impact or commercial - and 2) the startup stage at which they are accepted to the accelerator. One non-negotiable criteria for an accelerator is the establishment of the organisation. All the accelerators in this research are well-known, established organisations with long track-record of supporting startups.

SO startups were selected to create the most diverse sample for their represented startup accelerator. This is done to potentially reveal a variety of experiences with an accelerator, which would determine the role that accelerator had on the development of the selected startups. These decisions were based on startup operation time, product development stage, commercial success, identity (social impact-oriented or commercially-oriented) and other features that would allow to make an informed decision. With regards to hard criteria, the only hard criteria to selecting startups was that they must have graduated from that accelerator programme and still be operating.

3.3. Data collection

In this multiple case study research, interviews are in the core of data analysis. While various websites and their data is considered, that data is mostly used for the thorough case description rather than for the analysis of the research question.

As keywords of this thesis research question include such terms as “role“ and “development“, it is noticed that these keywords are very multi-layered and subjective to different perceptions, thus, it is necessary to gather in-depth responses to pre-determined questions. It is also crucial to leave the possibility to incorporate new themes as the role discussed in the reviewed literature might be different than the actual role that is seen in practice by the interviewees (Qu & Dumay, 2011). Therefore, the semi-structured interview is chosen, allowing for flexibility and covering the pre-determined themes from the literature. Semi-structured interview includes a prepared interview protocol for the interviewees but it can still be interposed with probes designed to provide more elaborate responses (ibid).

3.3.1. Execution of data collection. In order to conduct the interviews, startup accelerators and SO startups which graduated from those programmes were contacted via e-mail. While not all of the people who were contacted responded, a previously discussed sample was gathered. 5 interviews (out of which 2 interviews were with startup accelerators and 3 with

SO startups) were carried out face to face in their offices in London, while 11 interviews were carried out via Skype, of which all but two were conducted with a video. The average interview lasted for 43 minutes. Each interview was recorded with a sound recorder and transcribed in order to facilitate the coding analysis of the data. Nine out of sixteen interviews were transcribed by the author of this thesis while other seven interviews were transcribed by another transcriber and eventually checked by the author of the thesis in order to make sure that the transcriptions are of the best quality. The positions of the interviewees of startups are all CEOs and founders or co-founders of the companies. As for the startup accelerators, each accelerator's team was examined and the person who would be directly involved with the startups and could bring the most value was contacted. For more information on the conducted interviews, see Appendix B.2.

3.3.2. Interview protocol. Semi-structured interview was selected as an instrument of the research. Before the interview, the respondents received only a simple outline of the interview containing the background of the research. The interview questions covered the themes that were generated after the literature analysis, which included the role of the accelerator for the startup development, accelerator processes, innovation and its development while in the accelerator programme as well as approach to sustainability. The interview protocol can be found in the Appendix B.3.

3.4. Data analysis

3.4.1. Case study analysis. Case study research method has many advantages for the purpose of this research, however, there is a lack of clarity with regards to actually analysing and building theories from case study analysis (Eisenhardt, 1989). Therefore, the case study analysis method proposed by Eisenhardt (1989) is used. The two main aspects of such analysis is the within-case analysis and the cross-case analysis. Within-case analysis consists of a detailed case study description which is gets researcher familiar with each case. As there is no

pre-determined strategy to do so, for the purpose of this thesis, not only each case is going to be described, but the role of that particular startup accelerator is going to be determined for each of the SO startups discussed in the case description.

The second part of the case analysis is based on doing a cross-case analysis (Eisenhardt, 1989). As previously, there is no one agreed tactic to do the analysis and the core of it is looking at data in various divergent ways. However, one of the most common strategies is by selecting one or few dimensions and looking for within-group similarities coupled with inter-group differences. (ibid). In this research, cross-case analysis is done based on dimensions gathered from the literature: innovation, sustainability and the development of the startups as well as including reasons for joining the accelerator and challenges faced by the SO startup in order to get acquainted with the context of the cases. The match of both the focus and the stage of the startups and the accelerator as well as the significance of the accelerator role for selected startups is going to be analysed.

3.4.2. Data coding. The gathered data was analysed using the Atlas.ti 8.0 software. Three types of data coding was used: process coding, dramaturgical coding and evaluation coding (Miles & Huberman, 1994). According to Miles and Huberman (1994), process coding uses solely gerunds to connote observable and conceptual action in the data. This type of coding was used to determine the processes that happened in the accelerator programmes, e.g.: “Process at EF: fundraising during the months 6-12”. Dramaturgical coding was used to explore the intrapersonal and interpersonal participant experiences and actions in case studies, power relationships and the processes of human motives and agency (Miles and Huberman, 1994). This type of coding was particularly useful to understand the motivations and challenges of interviewees, e.g.: “About Goldfinger Factory: CON: helping vulnerable people is challenging”. The third type of coding - evaluation coding - was used by assigning non-quantitative evaluations to make judgements on merit, worth and significance of the

programme, e.g.: “TYF acc role (from RH): + demo day: “good introduction that just made things easier”” (Miles and Huberman, 1994). This type of coding was extremely important as it was the main source of evaluating the role of the startup accelerators in the development of the SO startups. In total, 1458 codes were created while analysing 16 transcriptions of the interviews.

3.5. Validity and reliability

While doing any research, it is important to make sure that the data is collected and analysed correctly. Thus, the validity and reliability of the research is discussed in this part.

3.5.1. Validity. According to Yin (2013), there are three types of validity which is relevant to the case study research: construct validity, internal validity and external validity.

Construct validity. When discussing construct validity of the case study research, it is important to adhere to two conditions. Firstly, the topic of the research has to be described and supported by the existing concepts (Yin, 2013). This research fulfils this condition as the concepts which created the base for this research, are described and discussed in the literature review chapter of this paper. Secondly, measures, standards as well as the scope the discussed concepts have to be classified with the connections linking to the existing literature and research (Yin, 2013). The literature review of this paper links back to a number of models, theories and research that create the bases to the second condition of the construct validity.

Internal validity. It is not possible to ensure the internal validity entirely (Yin, 2013). Having that in mind, the measures to increase the internal validity of this research were taken by using pattern-matching over different case studies. At the same time, the researcher is only taking upon the exploratory while doing data analysis and the explanatory role is adopted only in the discussion section to take advantage of potential findings for further research.

External validity. External validity is meant to determine the degree at which the findings of this research are generalizable (Yin, 2013). In order to enhance the external validity, multiple case study research was done and each case analysis consist of one main subject (startup accelerator) and three supporting subjects (SO startups) that enhances the external validity of overall case study analysis, especially when the case studies deliver similar results or the results that fit to the same pattern.

3.5.2. Reliability. Reliability of the research determines whether another researcher would be able to replicate the study and discover the same findings (Yin, 2013). In the case of this research, the whole process is described in detail and all the additional information about data could be made available upon request. Therefore, this research could be stated to have high reliability.

3.6. Conclusion to the methodology section

Having discussed the reasoning and process of the research approach, data selection, collection and analysis as well as validity and reliability of this research, this research has been shown to adhere to all the research requirements introduced by other scholars and can be concluded being valid and reliable.

4. Within-case analysis

In this part, the case studies all four startup accelerators: Entrepreneurship First, Wayra, Big Venture Challenge and the Young Foundation as well as 12 startups that graduated from these accelerators are described and analysed. This analysis will reveal the context of the organisations and what role the startup accelerators have on these startups.

4.1. Within-case analysis A: EF and the startups

4.1.1. EF accelerator programme. Entrepreneurship First (EF) is an accelerator programme that selects individuals to participate in the accelerator and build their startups from scratch. EF is a commercial startup which business model is based on taking equity from the startups with an intention that the startups are going to scale and bring high returns on EF's investment. Thus, EF focuses on attracting extremely talented individuals to create products that could not be created by anyone else, anywhere else and be disruptive:

E.L., EF: "What is the unique knowledge or skill or network that you have - the leverage to build a company that nobody else could build?"

Innovation and innovative ideas created by the startups are the key in EF. EF emphasised the importance of innovative ideas as these are the ones that will disrupt the market or even create new ones:

E.L., EF: „They want to build a new food delivery app. It's like A) there is no innovation there <...> There is a huge market for it, but in what way is it technologically defensible?"

EF is not an impact accelerator and the chosen ideas do not need to be socially or environmentally impactful. However, financial sustainability is key for EF as the accelerator's business model depends on the ability of the startups to become financially successful:

E.L., EF: „Financial sustainability means something which we aim for in all of our companies. There's this saying "revenue heals all wounds". And that's very much true.”

If the created company is a SO startup, EF does not have specific practices to adjust their programme to serve the SO startup. According to Elspeth Lawson from EF, they do try to make sure that they can still support those startups with their network in various industries.

The programme lasts 24 months and takes the selected applicants through the whole process of company building: finding a co-founder from the pool of EF selected applicants, developing an idea, building a product, raising investment and scaling. EF also offers alumni support and services by not only providing access to the mentors after completing the programme but also doing events and connecting the community of alumni. During the programme, EF offers a support of an experienced venture, contains workshops, funding, office space, access to science partner network to aid product development and innovation, hiring support, legal advice and an access to a broad network of investors, partners and other professionals to aid other needs that startups might have.

4.1.2. EF and the graduated startups. In this case study, three startups are analysed as research subjects:

- 1. ThinkSono.** ThinkSono is a startup that created the world's first software to diagnose a deadly disease – deep vein thrombosis (DVT). ThinkSono allows to diagnose the disease in an easy and fast way, available through an app on any smartphone. Currently, ThinkSono has graduated the accelerator EF, received investment to scale and is a pre-revenue enterprise.
- 2. Hydroleap.** Hydroleap is a startup providing innovative sustainable solutions to the water industry. The main product of Hydroleap is a water treatment technology which allows to treat wastewater using electricity rather than chemicals. Currently,

Hydroleap has graduated the accelerator EF, received investment to scale and is growing.

3. **SpeakSet.** SpeakSet is a SO startup that provides a video connection from a health professional to a patient's TV at home. Currently, SpeakSet has graduated the programme having successfully built the product and is now selling, growing rapidly and was recently successfully acquired by another company.

Reasons for joining EF. Before joining EF, all of the founders of the three startups knew that they wanted start their own companies. EF actually approached the founders of ThinkSono and SpeakSet on its own and the founders were drawn to the programme after realising the scope of the support that the EF is proposing – team forming, funding, network and mentorship of highly experienced people, which, according to Adi Kasliwal from SpeakSet, gave “unfair advantage”:

M.S., Hydroleap: “What I'm saying support is not just money! Money is way... Like a little portion of that. <...> It's just the beginning. You should see if that incubator or accelerator can support for all this way.”

F.A.N., ThinkSono: “But then to be fair, when you look at the people around, there are some extremely talented people who have already built and sold other companies.”

A.K., SpeakSet: “Loads of people that seemed pretty smart. <...> Then it was like- these guys are very connected <...>. It's going to give me a great head-start. It was like giving me an unfair advantage in startups.”

In addition to that, EF was already considered to be a very good accelerator programme with nice reputation and being difficult to get in, so the credibility of it was another factor.

4.1.3. Startups and innovation at EF. Innovation is extremely important for all the discussed startups. The founders mention innovation as being in the core of their startups, vital

for the existence of any company. While ThinkSono and Hydroleap are innovating on a product level and creating the technology that has not existed before and is quite revolutionary, SpeakSet is innovating in terms of the process of adopting already existing technology:

A.K., SpeakSet: "It's very simple stuff, but to change the way it was happening for 50-60 years is quite difficult stuff. So that's where innovation is."

Even though the startups are innovating on different levels, innovating is definitely a challenge. However, in order for the companies to make the change which they are striving for and survive in the market, innovation is crucial:

F.A.N., ThinkSono: "My point about innovation is about the outcome. If the outcome is big enough, if it's worth it, if it has an impact, then it doesn't matter how difficult that it is."

M.S., Hydroleap: "I will say that innovation is the core of it. <...> Basically, if you're going to live, if you're going to want a deep tech startup, you should bring innovation."

While the startups claim that the innovation has to come from the startup teams themselves and the accelerator is not able to aid the process much, the EF accelerator was still able to accelerate the process of innovation for ThinkSono and SpeakSet through its networks and mentoring. Hydroleap did not assign a clear role for EF in innovating:

A.K., SpeakSet: "No, probably not. The program is really good on getting the clear on - this is the problem, this how we are going to do it, and having the right contacts to keep going."

F.A.N., ThinkSono: "Constant monitoring! <...> They're really just breaking down your assumptions every time and you come up with new ideas."

M.S., Hydroleap: "They don't help you for the innovation. <...> Your team is making the innovation. But in terms of the proofreading or proofs for helping [there's EF]."

4.1.4. Startups and the approach to sustainability. When considering the sustainability in the startups, ThinkSono and SpeakSet is creating a social change while Hydroleap is creating an environmental change in the sector. All of the companies intentionally wanted to create an impact globally and considers sustainable impact being integral, pre-determined for their business:

F.A.N., ThinkSono: "Huge amount of social impact. I take that for granted."

M.S., Hydroleap: "It's how [business] works, it's how I advertise and how I sell Hydroleap."

A.K., SpeakSet: "Social impact is completely built in <...> If our product is delivering social impact, then all we need is building the business and selling more of our product."

However, it is clear from the attitudes of the founders of these startups that they are very financially motivated as well and financial aspect is not separate from create the impact the founders are striving for:

F.A.N., ThinkSono: "You have a more charitable impact if you're not a charity. <...> A charity <...> it's just a drain of money instead of generating money and employing people."

A.K., SpeakSet: "I think if you want to build a social business, it has to be a good business as well. It has to work financially anyway, they go hand to hand in my mind."

By the founder of Hydroleap, sustainability is also seen as a smart strategy in terms of the legal and regulatory environment that's changing worldwide:

M.S., Hydroleap: "Every government is basically putting new regulations for fewer chemicals <...> what we're doing is using electricity which is available and every day it is going to be more available to the world, so this is the sustainable way."

In general, startups use sustainability as a mission, marketing strategy and core belief, but the sustainability is not built into the legal structure of these enterprises, these startups are not social enterprises.

4.1.5. Startup challenges and the development at EF. During the accelerator, all three startups found co-founders, developed an idea, built and tested prototypes, raised investment and started scaling. However, it was not without challenges. ThinkSono and SpeakSet founders had difficulties with developing their products. EF has, thus, played a role in the product validation for ThinkSono and SpeakSet as is seen in the Figures 4 and 5.

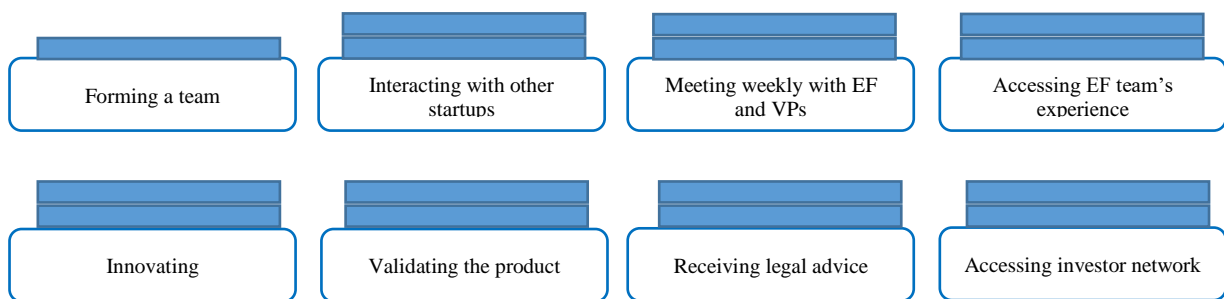


Figure 4. The role of EF in the development of ThinkSono, evaluated by ThinkSono. Compiled by author.

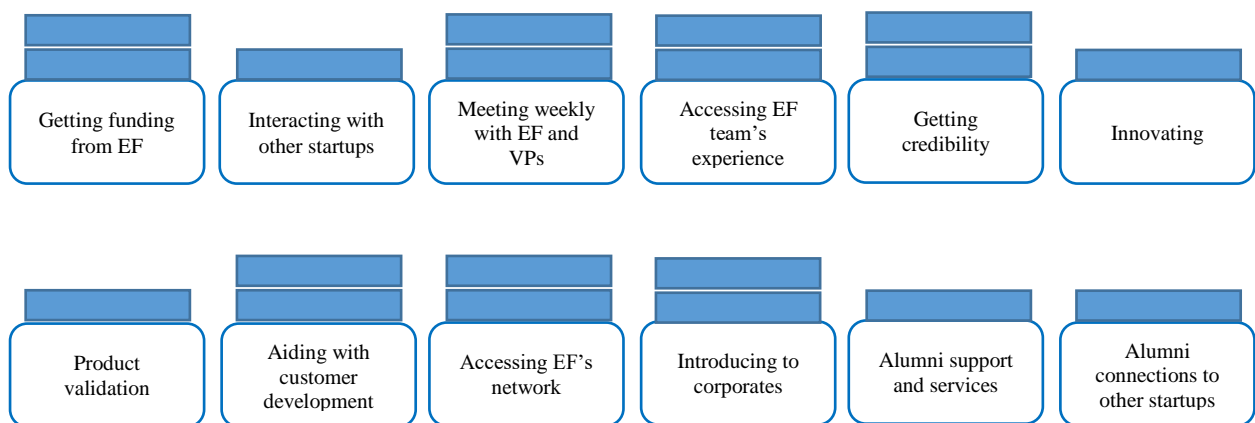


Figure 5. The role of EF in the development of SpeakSet, evaluated by SpeakSet. Compiled by author.

Startups have also mentioned the difficulties that occur because of their focus on creating impact. For ThinkSono, the main challenge is the health sector, for SpeakSet – it's

both the target audience and the stigmas related to social impact sector while Hydroleap faces difficulties with scaling:

F.A.N., ThinkSono: “The challenge with <...> help tech company is how can you get it adopted and used by various healthcare systems with all the different stakeholders.”

M.S., Hydroleap: “Even if you're developing a brilliant idea <...> and it works perfectly in the lab, <...> basically, huge barrier is a challenge to make it happen on a bigger scale.”

These and other struggles, however, have been facilitated by the EF startup accelerator as all the founders have evaluated EF's role as being very positive in the development of the startups. A lot of emphasis was placed on the importance of the continuous, personalised support of EF's team and venture managers (VPs) which was directly influenced by the expertise of the EF team and the effort the accelerator has made in order to find good VPs:

F.A.N., ThinkSono: „Ability to just not be nice to you and tell you the rude facts whether your idea is good or what you have to do to make it into business.“

M.S., Hydroleap: “At any point that you're struggling with product development or something, they help you with that. <...> With their advice, you get back to the role.”

A.K., SpeakSet: “These insights and that mentoring help really helps, really accelerates it.”

Another major factor was accessing EF's network and credibility of being an EF graduate:

A.K., SpeakSet: “I would rate it 10 out of 10 <...> the main thing is you get put into this amazing network”, “EF gives us that badge of honour <...> get credibility in that network.”

Both SpeakSet and Hydroleap has placed high importance on the alumni support network which would most likely be valuable to ThinkSono as well, however, the topic was probably not covered as ThinkSono is still located in the office of EF even after graduating the programme and it could be assumed that they do not feel much distance from the accelerator

to begin with. Finally, access to EF team’s expertise was one of the highest rated roles on the development of the startups:

F.A.N, ThinkSono: “And when you speak to them, and they are very experienced, they are very intelligent, you start realising you solve your own problem.”

A.K., SpeakSet: “There were like very good people to bounce your thought off. And then come up with the next plan. And they always help.”

Other major development factors brought up by the startups were interaction with other startups in the cohort, legal advice, accessing EF team’s experience and doing product validation. Hydroleap’s evaluation can be find in Figure 6. Full evaluation of the EF accelerator’s role that the startups identified can be found in the Appendix C.1.5.

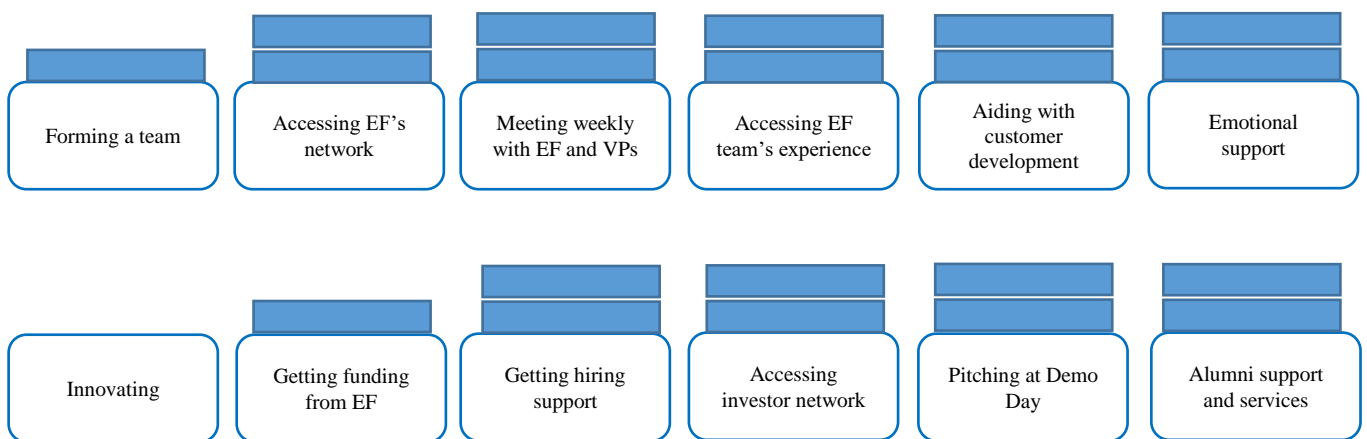


Figure 6. The role of EF in the development of Hydroleap, evaluated by Hydroleap. Compiled by author.

4.1.6. Conclusion on EF’s role in the development of startups. In this case analysis, the experience of three SO startups – ThinkSono, Hydroleap and SpeakSet – was analysed in the context of being in an EF startup accelerator. The accelerator was given great evaluations from all three startups and the founders mentioned many elements of the programme that had a significant effect on their development. Figure 7 represents an overall role of EF accelerator in the development of the startups discussed.

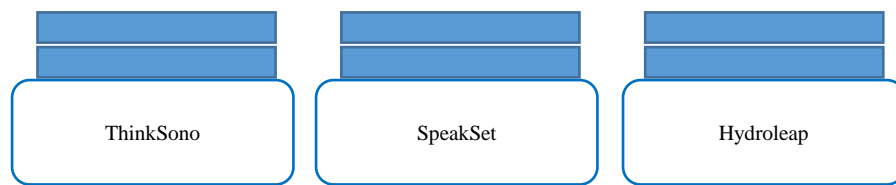


Figure 7. An overall assessment of EF role in the development of ThinkSono, Hydroleap and SpeakSet. Compiled by author.

4.2. Within-case analysis B: Big Venture Challenge and the startups

4.2.1. BVC accelerator programme. Big Venture Challenge (BVC) is an accelerator programme hosted by the UnLtd – a charitable organisation that was set up to promote social entrepreneurship and enable social entrepreneurs to scale their work:

D.B., BVC: “So this is the core of what UnLtd does. Its charitable purpose is to grow these ideas but also to develop social leaders.”

While Big Venture Challenge is the accelerator for scaling social enterprises in UnLtd, UnLtd hosts other programmes to help social entrepreneurs in the earlier stages. With regards to BVC, the programme has been funded by the Big Lottery Fund and running since 2011. BVC supported 120 social enterprises throughout the four years, of which around 75-80% are still operating after graduating from the programme. BVC tries to close the gap of funding for the social ventures that can’t access the funding needed for their growth. BVC team has identified several barriers in the market that create a difficult environment for SO startups, thus, BVC is designed to accelerate the startups despite these barriers:

D.B., BVC: “There are these huge limitations in the market <...>. So we designed an accelerator programme around the need of those entrepreneurs.”

BVC accelerator programme runs for 12 months and is currently accepting enterprises of various stages, however, most of the enterprises BVC team works with have the operations for 2-3 years already and are entering the programme to scale and raise investment. Many

startups enter the accelerator from the earlier stage programmes hosted by UnLtd. BVC is a mentor-led accelerator where mentors have to see the startups at least twice a month:

DB, BVC: "It's the consultant led approach. <...> Our whole set is built on the ability of that venture manager to deliver that work."

In the BVC accelerator programme, innovation is important as the social change cannot happen without it:

D.B., BVC: "Social innovation is fundamental to what we want to achieve here. These organisations <...>innovate around it and design sustainable business models. It's crucial."

In order to enable the BVC to accelerate the development of the startups better, BVC is currently starting to focus on only two key areas for the SO startups: ageing society and employment. This shift in strategy should help create purposeful partnership and networks that would help connect the SO startups with the right people and increase their chances of both financial and social sustainability.

DB, BVC: "I think it's around our expertise, the partnerships and knowing almost what this journey is for social businesses, I think it gives us a better chance to achieve that."

4.2.2. BVC and the graduated startups. In this case study, three startups are analysed as research subjects:

- 1. Oomph!.** Oomph! is a social enterprise which aims to enhance the mental, physical and emotional wellbeing of elderly in care homes. Currently Oomph! has presence all around the UK in more than 1000 locations. While operating, Oomph! has had 20 billion GBP of revenue and 2-3 million GBP in profit, thus, is successfully growing as a social enterprise, balancing financial and social goals.
- 2. Goldfinger Factory.** The Goldfinger Factory is a social enterprise which supports the artisans to become self-sustaining through crafts, using the medium of waste

materials. Currently, Goldfinger Factory is operating successfully in London, getting a lot of press and creating new partnerships to expand its impact.

3. **Andiamo.** Andiamo is a social enterprise which aims to find the most advanced, the most effective bio-mechanical supports in the world and to make them available globally. Currently, after graduating the BVC programme, Andiamo got first customers, generated revenue, treated first patients and raised investment.

Reasons to enter BVC. All three enterprises have gone through earlier stage acceleration programmes before joining the BVC. Oomph! and the Goldfinger Factory have went through the earlier stage BVC programme Fast Growth in UnLtd while Andiamo graduated from other impact accelerator. The main purpose for all the ventures was similar – ventures wanted to scale and prepare their enterprises for growth:

B.A., Oomph!: “They were proven to me. <...> And I wanted to go from something to something bigger and that's what I wanted to use BVC for and that's what we did.”

O.W.B., Goldfinger Factory: “We needed to narrow it down and be better organised, like narrowing down and prepare for growth.”, “Structure, clarity and focus.”

N.P., Andiamo: “People who've been through Bethnal Green Ventures as a first stage, often then look at UnLtd as a second stage.”

As ventures wanted to scale, match funding and BVC connections were mentioned to be very important and significant in terms of potential opportunities.

4.2.3. Startups and the innovation at BVC. Approach to innovation is different among the startups interviewed. Oomph! claims that coming up with an innovative idea is easy in comparison to actually delivering on it. Goldfinger Factory believes that innovation is nothing much than a USP while Andiamo is the only SO startup dealing with product

innovation and dealing with innovation very differently. However, the importance of it is present in all of the startups as well as the challenge that it brings:

N.P., Andiamo: “We are an outlier in the innovation space because we are a world's first. The problem is - when you are a world's first, who do you ask for help?”

O.W.B., Goldfinger Factory: “It's figuring out a way <...> and scaling. <...> There are lots of small re-users out there, but we've managed to work out the way to do that in big.”

B.A., Oomph!: “It's actually guided by the client. <...> But in between, it's hard work.”

According to Andiamo and Goldfinger Factory, startup accelerators are also not in a position to help much at this stage while Oomph! has reported the aid was presented by employing the team from BVC to join Oomph!:

N.P., Andiamo: “Unless you are a specific accelerator for that specific area, it's very difficult to bring their technical skills to there. So that's something we had to do.”

B.A., Oomph!: “They were employed by me, but it was technically through the programme.”

4.2.4. Startups and the approach to sustainability. All of the startups from BVC are SO startups with impact at the core of their business models. All the startups report impact being one of the biggest motives and successes of the business:

B.A., Oomph!: “Being a social enterprise isn't a hindering, it's more of a help. <...> Parita analyses our social impact and shares it <...>. She's probably the best sales person.”

O.W.B., Goldfinger Factory: “We have an amazing client list <...>, an awful lot of press”

N.P., Andiamo: “Social impact gives us an edge, <...> changes our mindset and approach to problem-solving that puts us at a massive advantage to <...> traditional companies.”

With regards to the triple bottom line, environmental sustainability is only present in Goldfinger Factory while financial sustainability is something that all the startups strive for. It is, however, very difficult in the social enterprise sector:

B.A., Oomph!: “At some point, the shareholders, including myself, will look for the return. I want that return to be as big as possible. But it only will get huge if I can create huge value.”

N.P., Andiamo: “Making profit is very difficult, making a profit and social impact is triple difficult.”

This difficulty transfers when looking for funding as well. Therefore, Andiamo is not even presenting the company as a social enterprise anymore:

N.P., Andiamo: “Social impact actually damages you when you are looking for money. <...> We were a missionary, a full purpose company, but being a social enterprise was negative.”

4.2.5. Startup challenges and the development at BVC. Adding up to the previously discussed challenge of reporting the triple bottom line and fundraising, the startups have faced other challenges with serving vulnerable people:

B.A., Oomph!: “You have got more risks looking at you and very vulnerable people and they don't innovate at all. <...> Selling into that environment is very very difficult.”

O.W.B., Goldfinger Factory: “Helping people that can't help themselves, that's challenging.”

Another challenge that the startups had to deal with was becoming legally binding and creating a structure for their operations, which was also one of the main reasons for joining the BVC for Goldfinger Factory. Big support network and contact from BVC was one of the most important motivations and resulting impact on the startups as well:

O.W.B., Goldfinger Factory: “Lawyer or an HR specialist <...> to make sure what you think you could do is actually what could happen and <...> having a way to figure out that issue.”

N.P., Andiamo: “There was access to finance people, access to investors to make our business more robust, but also to help access the investors that we needed to access too.”

B.A., Oomph!: “Through BVC I was able to build the relationship with somebody who I really trusted and <...> it wouldn’t have been without UnLtd.”

Talking about Oomph!, during the programme the startup gathered its first team, which was half-composed from the members of BVC team. Oomph! had also raised investment, received match-funding and secured the first contracts. The founder gives great role in the development of Oomph! for the expertise of venture managers and BVC team. The overall evaluation of the BVC accelerator is represented in Figure 8.

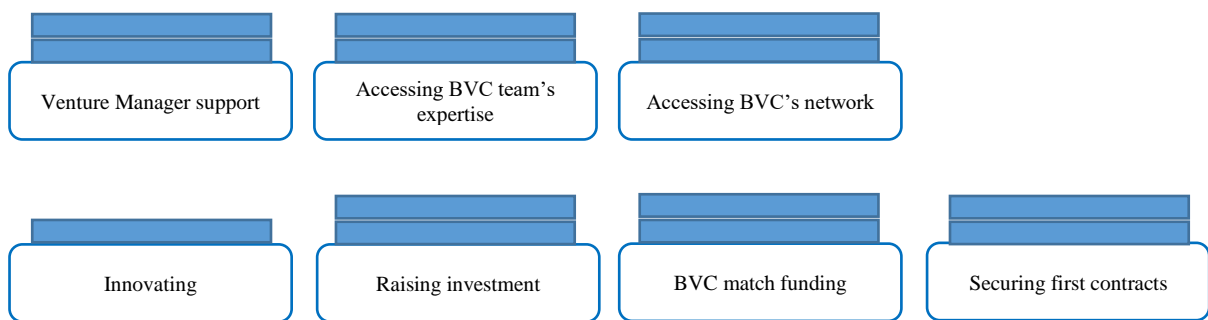


Figure 8. The role of BVC in the development of Oomph!, evaluated by Oomph!. Compiled by author.

Goldfinger Factory brings another major note on the development facilitated by the BVC - credibility received from participating in a well-known and respected accelerator:

O.W.B., Goldfinger Factory: “Very helpful <...> to have a third-party validation. Winning a place in a highly competitive business accelerator programme <...> sends the message.”

All the parts of the BVC accelerator role in the Goldfinger Factory development are visualised in the Figure 9.

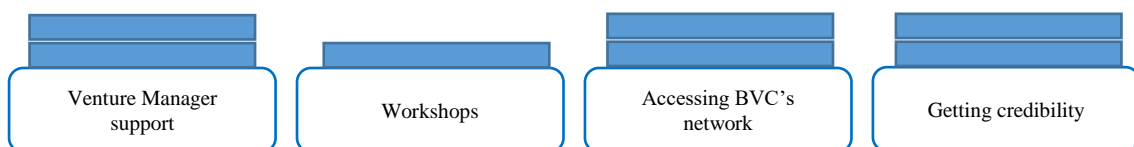


Figure 9. The role of BVC in the development of the Goldfinger Factory, evaluated by the Goldfinger Factory. Compiled by author.

One of the main reasons of Andiamo joining the BVC was the offering of a match funding. Andiamo ended up evaluating the match-funding very negatively. Upon joining the programme, the team realised that the regulations to receive the match funding had changed and were not acceptable for Andiamo anymore, thus, this opportunity not only was not available, but also set back the company as they had to rethink their action plan:

N.P., Andiamo: “Now the plan doesn't apply at all. We then were in a situation, now the usefulness of this is much less.”, “How do we change so this is still a positive for us.”

While that was a setback in the programme and disappointing for the startup, there were quite a few elements of the programme that were useful when coping to other challenges of being SO startup. Andiamo had great impact made by their venture manager:

N.P., Andiamo: “She really went above and beyond a normal mentor role.”

The visualisation of other elements provided by the BVC and having a role in the development of Andiamo is represented in the Figure 10. Full evaluation of the BVC role identified by Naveed Parvez and other founders can be found in the Appendix C.4.5.

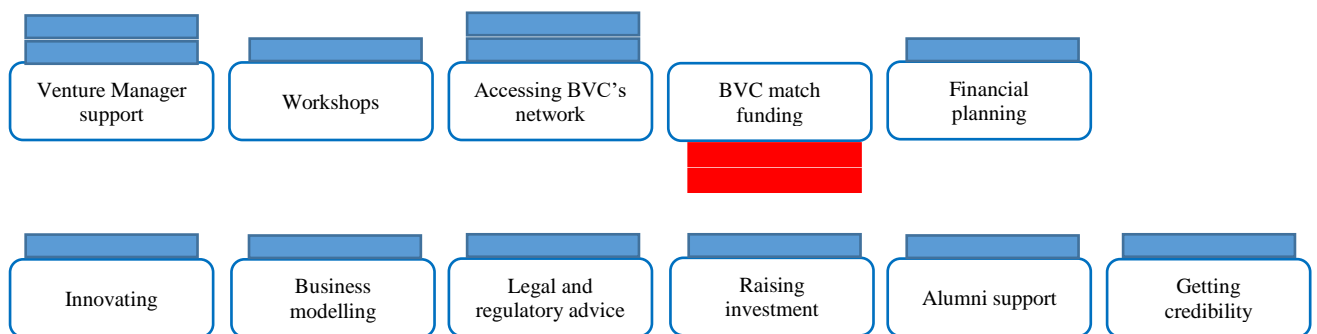


Figure 10. The role of BVC in the development of Andiamo, evaluated by Andiamo. Compiled by author.

4.2.6. Conclusion on Big Venture Challenge’s role in the development of startups.

All three startups expressed difficulties of being in the sustainability area and social or environmental impact sectors and the elements that BVC programme had which alleviated the

struggles to some extent. Overall assessment of the startup evaluations towards the development during the BVC accelerator programme can be found in the Figure 11.



Figure 11. An overall assessment of BVC role in the development of Oomph!, Goldfinger's Factory and Andiamo. Compiled by author.

4.3. Within-case analysis C: The Young Academy and the startups

4.3.1. The Young Academy accelerator programme. The Young Academy (TYA) is an impact accelerator run by the non-profit think-tank Young Foundation. TYA is an accelerator for the social enterprises that deal with educational inequality. The Young Foundation financially supports TYA accelerator to run the programme, so the accelerator is not taking equity from the accelerated startups as is common among many accelerators. The programme does not require enterprises to necessarily scale or raise investment:

J.T., The Young Academy: "It's not necessarily an investment readiness programme, <...> but it's helping them understand what investment readiness would look like."

J.T., The Young Academy: "I think we help them explore their options for growth and we always encourage them to think about growth, but <...> we don't kind of force them to."

In TYA startups get selected according to the criteria of newness of ideas and innovation; reducing the inequality in education and the potential for scaling. Currently, the programme reports that 96% of their enterprises are still operating, however, it is not known whether the ventures are growing.

4.3.2. The Young Academy and the graduated startups. In this case study, three startups are analysed as research subjects:

1. **Sisterhood.** Sisterhood is a social enterprise focusing on doing creative, design workshops for teenage girls to build their self-confidence and teach the skill of design bring that to the school environments. Currently, Sisterhood has graduated the accelerator and is delivering workshops while planning their next step to scale.
2. **The Happy Teacher Project.** The Happy Teacher Project (HTP) is a social initiative focused on solving the issue of high turnover rates among teachers in schools and making their work experience better. Currently, HTP is running trials with schools.
3. **Revolution Hive.** Revolution Hive is a social enterprise which prepares young people for the life beyond the classroom by teaching them in a holistic way the topics that they are going to face not just as a young persons but also as a future leaders. Currently, Revolution Hive is operating and delivering knowledge through workshops and online presence.

Reasons for joining an accelerator. Sisterhood, Revolution Hive and the Happy Teacher Project all joined the accelerator at different startup stages: HTP had no exact idea of how the enterprise could tackle the problem and joined at the ideation stage, Sisterhood already had an idea, however, didn't have a business model to support it while the Revolution Hive had been running the enterprises for 2-3 years already and the main objective was scaling and improving the operations of the enterprise:

K.B., Revolution Hive: "Combination of <...> access to experts and finance, credibility, products and services and just improving as an organisation and as individuals."

E.F, HTP: "I didn't know what was I doing, I have never set up an organisation, I have never thought about the profitability or whether something would be investment worthy. <...> so to a degree - yes, expertise, but also company I suppose."

R.S., Sisterhood: “In the UK, there aren't many accelerators that take on startups, that are such early stage, and the Young Foundation was one of them.”

4.3.3. Startups and innovation at TYA. All three startups are tackling the social problem of inequality in education through process innovation. There is no deep tech but the innovation is still important for these enterprises as social change needs different approaches:

K.B., Revolution Hive: “Innovation is absolutely key. If you're going to not only meet the needs of the people but also create the kind of change you want as a social entrepreneur.”

R.S., Sisterhood: “You have to innovate the way that business is done right now. <...> It's very important and it plays a very important role, especially for us.”

While the startups don't need deep tech scientists to aid them with their innovation, there are different types of needs to be addressed if innovation is to be successful – aiding testing, prototyping and mentoring:

E.F., HTP: “Pulling together insights that are outside the education sector but also innovation in terms of recruitment and retention from a human-centered point of view.”

R.S., Sisterhood: “Elements that helped us innovate <...> for example, <...> theory of change is very important and that really helped us innovate.”

Having that in mind, the accelerator was in a position to facilitate some of the innovation processes, which was reported by Sisterhood and Revolution Hive, however, HTP had a different experience as the founder felt responsible of tackling the task on her own:

E.F., HTP: “No, because I feel that that's on me.”

4.3.4. Startups and the approach to sustainability. As all three SO startups are actually social enterprises, the sustainability and the social impact is at the very core of each of

them. Nevertheless, the difference is observed when talking about the triple bottom line. Sisterhood and Revolution Hive are intending to be financially sustainable:

K.B., Revolution Hive: "A challenge is balancing. Because sometimes, something is very high impact and rubbish profit, sometimes <...> amazing profit and kind of dead impact"

R.S., Sisterhood: "I am waiting for the day when we will be financially sustainable <...> making sure that anything we do financially doesn't compromise what we are doing socially <...>. Yeah, one can't work without the other."

However, the founder of HTP is much less fixated on financial sustainability:

E.F., HTP: "Railroaded by the idea of investment rather than pursuing grant funding from some sort of trust or foundations <...>, shape this idea of being more commercial."

4.3.5. Startup challenges and the development at TYA. The enterprises from TYA accelerator are being challenged by the difficulties which are very specific, related to the social impact, such as already discussed trade-off between social and financial sustainability and funding. This is especially true for the Revolution Hive and Sisterhood as these enterprises are more advanced than the HTP:

K.B., Revolution Hive: "Myself and the team we've sacrificed a lot to be able to do this. So I earn minimum wage or less, or not paying ourselves and that means, you know, financial struggles."

R.S., Sisterhood: "Because it was all very new to understand the world of social enterprise, <...> every funder looks for different things. So it's being able to adapt and make these adjustments, but yeah, I think that funding is the biggest challenge."

In the case of HTP, the founder have faced a lot of emotional struggles with working alone and not having a team to discuss the ideas. Even after finishing the accelerator, HTP

remained at the ideation stage and the feedback with regards to the programme was mixed. However, it seems that the founder applied too early for the startup to begin with:

E.F., HTP: “There was a lot of expertise <...> in terms of marketing and things like that, but I think when the idea is a very early stage.”, “continue working at a very early stage”.

The full HTP evaluation of the TYA programme is represented in the Figure 12.

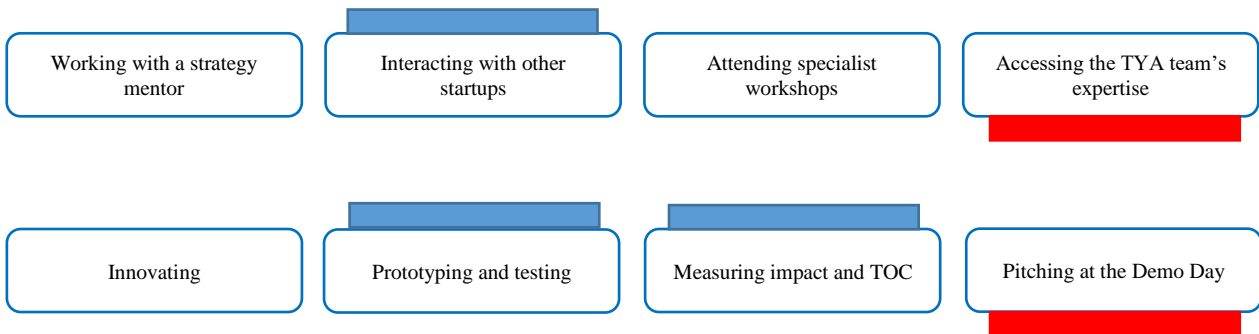


Figure 12. The role of TYA in the development of The Happy Teacher Project, evaluated by The Happy Teacher Project. Compiled by author.

Being a later stage startup, Sisterhood saw the TYA accelerator having a nice role in the development of the startup. Sisterhood benefited from specialist workshops, mentorship, emotional support and some other elements, including one very important – setting up as an organisation. For the full Sisterhood evaluation of the TYA programme, see the Figure 13.

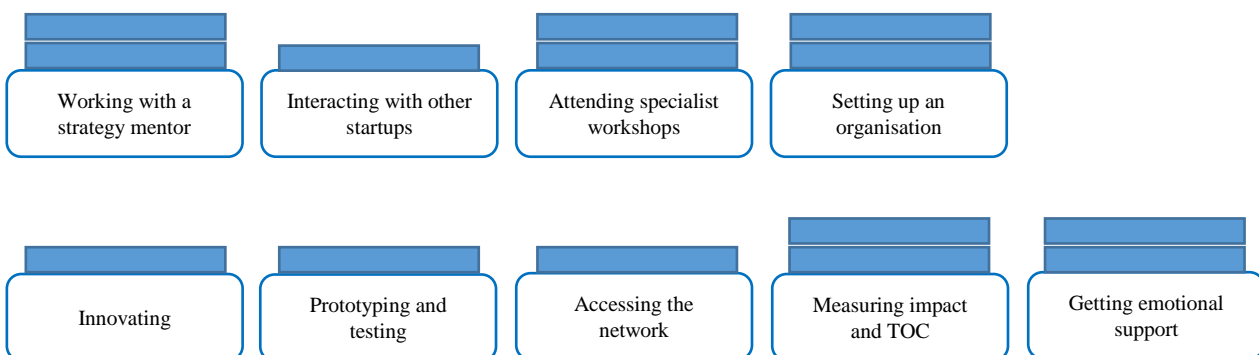


Figure 13. The role of TYA in the development of Sisterhood, evaluated by Sisterhood. Compiled by author.

Revolution Hive evaluated the accelerator having the biggest role in their development. Having this in mind, it can be noted that the startup had the most experienced in the market as

it was operating already as a social enterprise for a few years as well as the fact that the founder was extremely proactive at working with the programme:

K.B., Revolution Hive: “I’d say yeah, definitely, TYA had a huge defining effect on us to grow and I also think that we had a defining effect so it’s kind of... You know, hand in hand.”

The full Revolution Hive evaluation of the TYA programme is represented in the Figure 14.

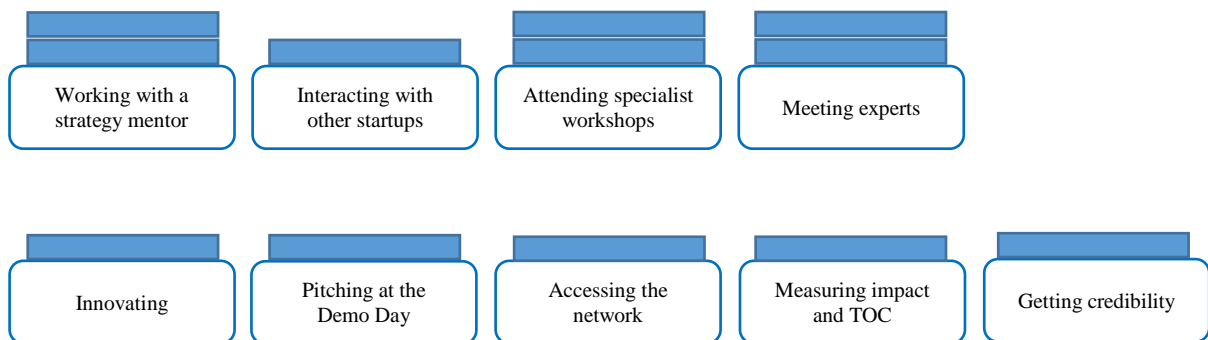


Figure 14. The role of TYA in the development of Revolution Hive, evaluated by Revolution Hive. Compiled by author.

4.3.6. Conclusion on The Young Academy’s role in the development of startups. TYA had a positive role for two out of three startups and did not affect one startup significantly which was probably due to the mismatch of the stage at which it was appropriate to join the accelerator programme. After analysing each case, Figure 15 is representing the overall assessment of TYA programme. For more details, see Appendix C.3.5.

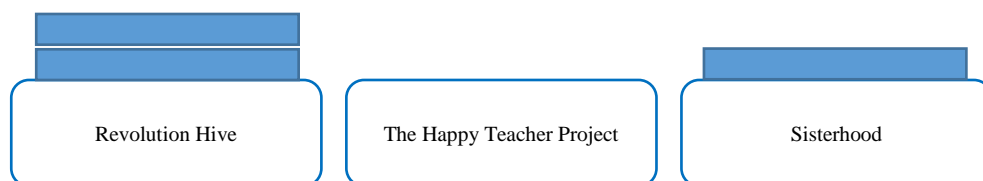


Figure 15. An overall assessment of TYA role in the development of Revolution Hive, The Happy Teacher Project and Sisterhood. Compiled by author.

4.4. Within-case analysis D: Wayra and the startups

4.4.1. Wayra accelerator programme. Wayra is a commercially-oriented startup accelerator meant to accelerate innovative, promising, scalable startups. Wayra is owned by

Telefonica, global telecommunications company and is one of the ways Telefonica is bringing the innovation in its corporation. However, Wayra has an autonomous decision-making and is not limited by the need to accept enterprises that would fit Telefonica's profile. Wayra is a commercially-oriented startup and while getting the funding from Telefonica, Wayra also takes an equity share from the startups as a funding stream, thus, is motivated to scale the companies and make them profitable:

H.R.D.: "Ultimately all of them <...> focus on long-term financial sustainability."

While Wayra is not an impact startup, the accelerator has been showing interest into the areas of social impact:

H.R.D., Wayra: "We have got healthcare one with MERCH <...> and we are launching one, which you might be especially interested in this, on poverty premium."

Wayra is a 10-month long accelerator and helps the accepted startups in the areas of funding, raising investment, customer development, sales support, and growth hacking as well as helping them work with Telefonica. Wayra has several criteria for the startups:

H.R.D., Wayra: "They all embedded tech and digital, <...> they are scalable, can be globally scalable", "is it different enough from what is now out there for people who want it?"

Innovativeness is also one of the main criteria for the startups entering Wayra:

H.R.D., Wayra: "those are sort of things we look for, things that can change the industry."

According to the head of ventures in Wayra, SO startups can match that criteria very well, thus, the accelerator makes sure that Wayra has a network to support such enterprises.

4.4.2. Wayra and the graduated startups. In this case study, three startups are analysed as research subjects:

1. **Give Vision.** Give vision is a SO startup which is developing glasses that allow blind people to see by projecting the light into the working parts of the eye. Currently, the startup has graduated the programme, raised investment and is scaling.
2. **Aparito.** Aparito is the only social enterprise among the SO startup in Wayra's case, Aparito is delivering a tech-enabled solution to improve quality of life of patients and data collection from them. Currently, Aparito has graduated the accelerator, raised investment and is scaling.
3. **Restored Hearing.** Restored Hearing is a SO startup offering a sound therapy which uses low-frequency sounds to achieve a therapeutic benefit for those who experience tinnitus. The startup has also introduced a material called Sound Bounce which absorbs sound, limiting levels of exposure to potentially harmful noise.

Reasons for joining Wayra. Acceleration of growth was the main reason for all three startups to join Wayra. Give Vision and Aparito also placed importance on getting funding, however, Restored Hearing had already raised their seed round, thus, the network and mentorship was the main reasons for them. Wayra's corporate network, including industry-specific companies was also one of the leading motivations:

E.H.D., Aparito: "Partnership with the pharmaceutical company <...> a great opportunity to grow our health focus, <...> build our understanding of pricing and stuff like that".

S.K., Give Vision: "We needed funding and they and they were pre-seeding. <...> being in London, being introduced to investors, it was a very very attractive proposition."

E.O., Restored Hearing: "To grow faster", "we already have done our seed round, <...> so the money wasn't as important for us", "the support network and getting access to advisors".

4.4.3. Startups and the innovation at Wayra. The discussed startups are all creating product innovations while Aparito is combining the process innovation in its offering as well.

All founders agreed on the importance of innovation and that an accelerator role is limited as innovating is in customer development and has to be led by a human-centric approach:

S.K., Give Vision: “Rarely I remember them [Wayra] coming up with a decent idea”, “The real innovation happens between interaction of users, customers and the product engineers”.

E.O., Restored Hearing: “Most of our innovation comes from a technical side so that wasn't really a factor.”

While Aparito supported the human-centric innovation approach, the team was very unsatisfied on how Wayra approached their technology as the team felt as if Wayra’s advisors do not understand their industry and their idea to begin with:

E.H.D., Aparito: “Feedback from your clients, that's far more meaningful than accelerator that doesn't understand healthcare left alone doesn't understand what we are trying to do.”

4.4.4. Startups and the approach to sustainability at Wayra. Among the three SO startups from Wayra, there is a lot difference in the way sustainability is approached. The CEO of Give Vision does not believe in social entrepreneurship as a concept and does not see the difference between generating social impact and creating useful products commercially:

S.K., Give Vision: “I would say I create as much social impact as any other startup, which is doing something useful. I wouldn't class myself more exceptional as any other startup.”

The founder also thinks that social enterprises are mostly financially unsustainable:

S.K., Give Vision: “In many cases, they are just companies that are bidding for grants and are unsustainable financially.”

In contrast to Give Vision, Aparito takes an absolutely opposite stand on sustainability and the founder did not feel supported and understood by Wayra’s team in terms of that:

E.H.D., Aparito: “Sustainability shouldn't be driven by financials and all they wanted to know was your growth in terms of money making, how quickly it scaled. That's the only thing.”

Restored Hearing was the least controversial and embraced the combination of the different focuses by taking the financially-oriented mentoring and caring for sustainability themselves:

E.O., Restored Hearing: “Yeah, I don't think we were treated differently with regards to sustainability, but we had a different attitude to sustainability than they did.”

Even though all startups have approached sustainability very differently, it has brought positive factors into each of them:

E.O., Restored Hearing: “A lot of what drives our relentless work and our relentless product building, and all the rest is the social impact of the product.”

S.K., Give Vision: “The fact that we are doing good has been very helpful for us and <...> gives us a lot of free press, <...> open the doors that couldn't have been opened before.”

E.H.D., Aparito: “If you are offering value to the patient or the healthcare system then you will make money as supposed to you build something that's mediocre.”

4.4.5. Startup challenges and the development at Wayra. The startups which were more focused towards social impact – Restored Hearing and Aparito – have faced some challenges with regards to such focus of their enterprise:

E.O., Restored Hearing:” It could be more expensive to make something more sustainable, and <...> as a startup, it could be hard to choose the more expensive option.”

E.H.D., Aparito: “The biggest challenge <...> was deciding whether we want to grow organically or to go for investments? Who would be investors that would work for us?”

These startups have also faced more common problems such as not being able to do the pricing as there are no competitors for such innovative solutions, customer development and simply facing criticism from the public. While Give Vision did not express any sustainability-oriented challenges, many of the other challenges were similar:

S.K., Give Vision: “Finding investors, a niche market, building something people really would want to buy, finding testers <...>, trying to find press to write, everything.”

Knowing that, Give Vision evaluates accelerator role as huge in coping with the challenges:

S.K., Give Vision: “We thought it would be just free space and cash, but <...> They would bring investors, <...>, very talented startups around us helping us to work on the problems.”

Among other factors, such as events in Wayra, credibility received and Wayra’s network, mentors and other startups in the cohort played a crucial role for Give Vision:

S.K., Give Vision: “It is essential for someone to believe in you and trust you and who's better to trust you than your mentors”, “Other startups would rise sooner and they would teach us all the tricks how to raise, we would observe and learn a lot from them.”

The Give Vision’s evaluation of Wayra’s role is presented in Figure 16.

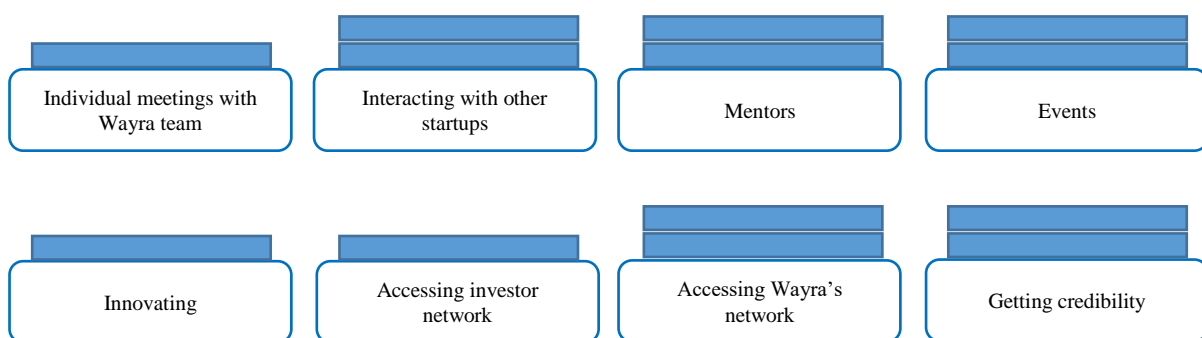


Figure 16. The role of Wayra in the development of Give Vision, evaluated by Give Vision. Compiled by author.

Restored Hearing claimed that there were also many elements in the programme that accelerated the development of the startup, however, the main issue and struggle was the

timing. Restored Hearing had already raised investment and developed the product, thus the startup could not take the whole advantage that Wayra was proposing:

E.O., Restored Hearing: “I don't know if our timing was quite right <...>. Definitely valuable. Maybe we didn't get as much out of it as we were in a different part of our life”.

This mismatch in the entry stage to the accelerator is reflected in the much lower evaluations of Wayra’s role in the development of Restored Hearing when in comparison with Give Vision. See Figure 17 for the overall evaluations as reported by the CTO of Restored Hearing.

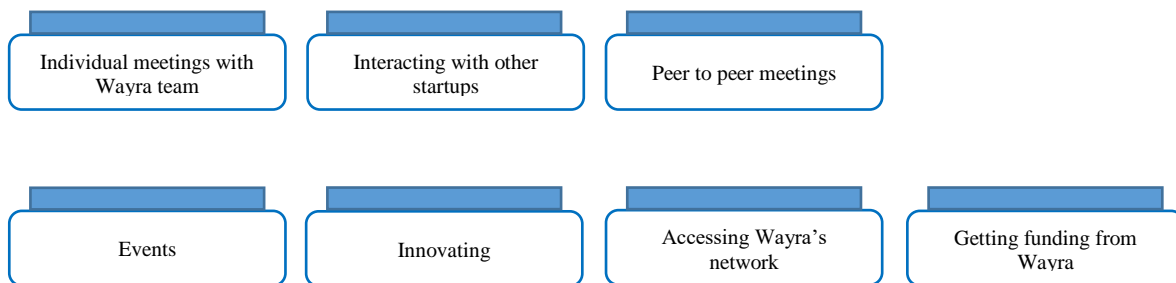


Figure 17. The role of Wayra in the development of Restored Hearing, evaluated by Restored Hearing. Compiled by author.

In contrast to every other startup, Aparito has reported a very bad experience with Wayra programme and mentioned funding being the only positive effect of the accelerator. Many other elements of the programme were claimed to have an even negative role on the development of the enterprise as Wayra’s programme had a different focus, the team had a different mindset and startup was not able to adapt to such divergent approach:

E.H.D., Aparito: “They were more damaging really <...> We wasted 9 months, waiting to be pushed to more effective ideas and plans, we could have used those months for much better ways if we would have been understood for what we are and supported”, “it ended up too exhausting having to explain the details to them all the time that they didn't know about.”

All the elements of the Wayra accelerator covered in the interview with Aparito and their evaluations are visualised in the Figure 18.

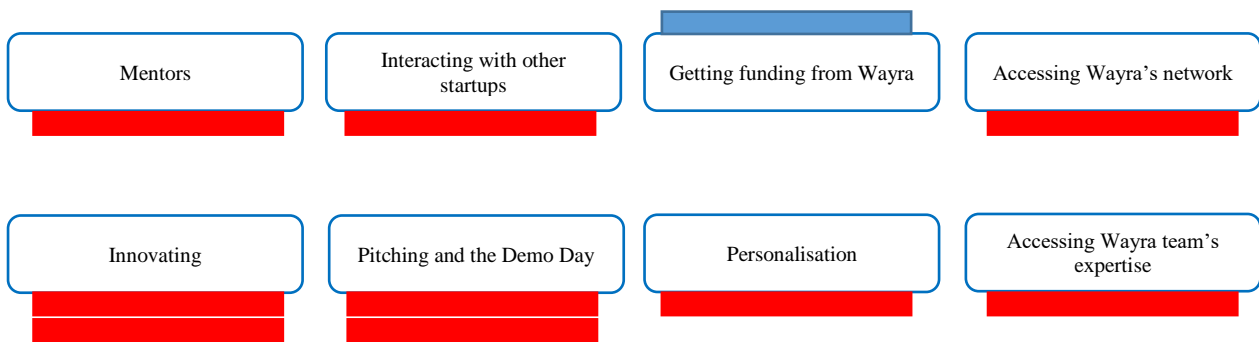


Figure 18. The role of Wayra in the development of Aparito, evaluated by Aparito. Compiled by author.

4.4.6. Conclusion on Wayra’s role in the development of startups. Wayra seems to be the most diverse case study with very different startups and, thus, different evaluations on the accelerator’s role in their development. Give Vision has reported that the accelerator had a great impact, Restored Hearing witnessed a mismatch of the timing at which it would have been best to join the accelerator, thus, the startup was not able to take advantage of all the offerings. A critical case was with Aparito where the startup felt as the whole organisation was a mismatch: Wayra did not understand their idea, the industry, it was “exhausting” to try to get them on board and the team felt as if the time was wasted and responded very negatively. The overview of startup evaluations is seen in the Figure 19. More detailed evaluations can be found in Appendix C.2.5.

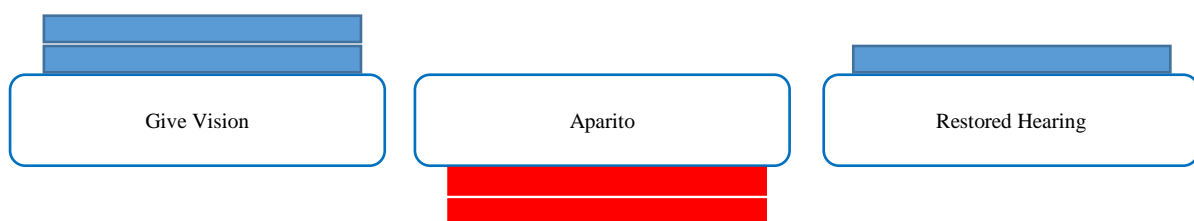


Figure 19. An overall assessment of Wayra role in the development of Give Vision, Aparito and Restored Hearing. Compiled by author.

4.5. Conclusion to within-case analysis

After doing a within case analysis, a few conclusions could be drawn. In terms of innovation, the startups and accelerators are placing a lot of importance on the innovation both in general and in the setting of social impact sectors. However, it seems as accelerators were

not able to significantly accelerate the innovation process as the expertise on the startup's offering is in the hands of the startup and, if able, accelerators could only connect them to customers, clients and other related parties that were able to aid the innovation.

Sustainability is approached very differently by the accelerators and startups. When sustainability was not part of the programme in the commercially-oriented accelerators, the startups brought the elements of sustainability themselves. Mostly, the focus on sustainable product offerings resulted on numerous challenges and positive aspects as well. While the successes were encouraging, sustainability-related challenges often were very complex and accelerators had a fluctuating role in alleviating those, determined by the complexity of the issues, industries of operation as well as networks and the programme of the accelerator.

All but two startups reported a positive role of the accelerators in their development. The Happy Teacher Project reported that there was no development as the entry stage and the stage at which the startup left was the same. The startup founder claimed that her idea was at a stage that was not fit for the accelerator yet. Similar claims were made by Restored Hearing and Andiamo too. Another critical case was with a startup Aparito which reported a highly negative experience with the accelerator as the focus of the two organisations were said to be too different: no understanding, no proper support, too many difficulties in trying to fit in. Aparito was very much focused on sustainability while the accelerator was very commercial.

In order to understand these cases better, in depth cross-case analysis is performed in the next section.

5. Cross-case analysis

The second stage of the analysis of this research is a cross-case analysis. In the previous part, each accelerator has been analysed in terms of the elements of each programme and startup interviews were used in order to determine the role that each accelerator had in each startup’s development. While that gives an interesting overview of activities needed to enhance startup development, the potential insights on the whole startup ecosystem cannot be accessed. In this part, all accelerators are analysed in order to gain new insights on how the role of startup accelerator is determined by approaches that different accelerators take.

To begin with, the differences of each of the researched accelerators have to be determined. Table 2 differentiates the startup accelerators by main criteria: focus, length of the programme, which startup stage is accelerated and the source of funding.

Table 2. *Differences between the researched startup accelerators*

Accelerator and features	Entrepreneurship First	Wayra	Big Challenge	Venture	The Academy	Young
Focus	Commercial	Commercial	Impact		Impact	
Length	18 months	12 months	12 months		14 weeks	
Startups Stage	Early stage (Team forming)	Later stage (Product and scaling)		Later stage (Scaling)		Early stage (Ideation)
Source of funding	Equity from startups	Corporate (Telefonica), Equity from startups	Grant		Grant	

Note. Compiled by author.

As it is seen from the table, there are a few major differences between the accelerators. Firstly, two of the startup accelerators, BVC and TYA, are impact accelerators, focusing on social enterprises. EF and Wayra are commercial accelerators, focusing on creating financially successful companies. In terms of length, all accelerators except for the TYA are lasting for a year or longer. TYA, thus, only encompasses an ideation and product building, prototyping stage which is ultimately determined by each participating startup. EF is the only startup

accelerator that takes startups through all the stages of startup growth: team forming, developing an idea, building a product, raising investment and scaling. Wayra and BVC is focusing on getting investment-ready and scaling. The impact accelerators are both funded with external funding and these impact accelerators are not using the accelerator activities to generate income as they are sustained by external funding. On contrary, the commercial accelerators take equity from each startup in their programmes and generate income from successful startup exits and acquisitions.

After doing an individual case analysis and having in mind the mentioned differences of these startup accelerators, it is evident that the approaches to the themes discussed in this thesis are all different among the startup accelerators. Therefore, the similarities and differences of the approach to sustainability and innovation are discussed. Moreover, as the match of the startup entry stage and focus seem to be important for the resulting role of the accelerator, these two criteria are analysed to establish a better understanding of their influence on the SO startups. Finally, the framework helping SO startups to determine the best approach for choosing an accelerator programme is presented.

5.1. Startup accelerators and innovation

Innovation is a key part of the startup industry. The analysis of approach to innovation expressed by startup accelerators and startups is shown in the Appendix D.1. All the accelerators and startups that have participated in this research expressed that innovation is essential in the startup industry, especially when trying to create a social change:

K.B., Revolution Hive: "So innovation is absolutely key. If you're going to not only meet the needs of the people that you're trying to work with but also create the kind of change that you want as a social entrepreneur."

All of the accelerators in this research have noted innovativeness as an important criteria for the ideas brought by the startups. However, there are some differences when looking at the type of innovation created in the startups of each accelerator. Commercial accelerators are dominated by startups with product innovation while the impact accelerators host predominantly startups with process or business model innovation. The startups from Wayra and EF are mostly focusing on health technology while the startups from BVC and The Young Academy are focusing on community-based social impact solutions to solve such as community-based issues as inequality in education, low youth empowerment, unemployment and others. Both commercial accelerators and impact accelerators have one exception in the sample, however, the trend is quite evident. It seems that this insight does not relate to the role that the accelerators have in the innovation processes. Out of 12 startups, 6 startups have noted accelerators having a slight positive impact on the innovation process with another 3 startups claiming the impact was quite high and the rest not mentioning innovation among the elements of the programme at all. Having analysed the interviews with the startups, innovation seems to be dependent mostly on the startups themselves, by doing customer development and applying a human-centred innovation approach rather than being affected by the accelerator:

S.K., Give Vision: "The real innovation happens between interaction of users, customers and the product engineers. It cannot happen, when you are sitting in the same box."

B.A., Oomph!: [Innovation] It's actually guided by the client.

Accelerators are mentioned to be able to facilitate the innovation, but mainly through their broad network of contacts and mentors who would break the assumptions and "ask the right questions":

F.A.N., ThinkSono: "They also ask you questions <...> So they constantly challenge you, the whole way through, which is extremely important for innovation."

K.B., Revolution Hive: "Taking them an idea <...> and talking to our mentors and then them asking us one question and then us having to go and check."

Finally, accelerators do have a potential to enlarge their role in aiding innovation for the startups, although, it would mean shifting the profiles towards niche markets, building niche networks of specialists and advisors:

Naveed Parvez, Andiamo: "Unless you are a specific accelerator for that specific area, it's very difficult to bring their technical skills to there. So that's something we had to do."

As a response, startup accelerators do mention these kind of transitions towards the niche markets, thus, promising the changes that could potentially increase the role of accelerators in aiding the innovation:

D.B., BVC: "We're moving UnLtd as a whole to focus on particular societal challenges - an ageing society and employment. So we're becoming much more building our own expertise and partnerships within the sectors".

H.R.D., Wayra: "We have British intelligence <...>, healthcare one <...>, another one that focus on fashion tech <...> and we are launching one on poverty premium."

While the mentioned problems are quite general to any startup, there are a few that relates to SO startups particularly. One of the challenges while innovating towards sustainable change is the length of such processes:

B.A., Oomph!: "So we innovated with the exercise, we've innovated with the activity and now we're innovating with the buses. But these are not quick processes."

F.A.N., ThinkSono: "Investors get really scared of what we're trying to do as well. They are like "so long". And for them long is like 2 years. <...> That's the case, be patient."

Another key factor that challenges successful social innovation is the industry in which the startups are innovating:

N.P., Andiamo: "The social impact market is like 0.001 percent of the money available to finance a business. They are not geared towards aggressive growth models. <...> They don't have that mentality for a company like us, which is based on innovation and disruption."

After doing a cross-case analysis of the startup accelerators, some insights can be stated. Startup accelerators take innovation seriously when choosing the startup companies to join their programmes, however, they do not have significant impact on the startups as the technology has to be brought by the startups and accelerators are usually not niche enough to facilitate the technological side of the innovation. Accelerators do have a role in connecting startups with the people that have right knowledge which is directly depended on the size of an accelerator's network. Good mentoring is also an advantage in order to accelerate innovation. However, not all of the startup accelerators need to have the connections to enable product innovation. The tendency shows that commercial startup accelerators are dominated by the SO startups with product innovation in their offering while impact accelerators usually host the SO startups with process or business model innovation with highly complex social problems rather than technology to alleviate those. SO startups in the impact accelerators are also mostly social enterprises rather than financially-oriented startups with sustainable impact. Together with many challenges that go around innovation processes, SO startups face more difficulties when trying to establish their innovative solutions in the slower and traditionally non-innovative social sectors and industries as well as trying certain demographics to adopt their innovative solutions, such as SpeakSet trying to teach elder people to use technologies to enable them for a better health care.

5.2. Startup accelerators and sustainability

For the purposes of this research, SO startups in both ordinary, commercially-oriented accelerators and impact startup accelerators were included as SO startups choose various accelerators for their development and acceleration. Out of four accelerators, two were impact accelerators, designed to accelerate SO startups and another two did not have any particular focus on sustainability. While EF is pretty traditional in terms of their focus and do not differentiate the startups in terms of the impact, Wayra accelerator has shown interest in the area of sustainability by introducing new programmes of acceleration focused on healthcare and poverty premium. Both representatives of the commercial accelerators have noted that generally, SO startups do not receive a different support than other startups as well as they do not receive any extra attention during the application process. However, promising SO startups often align with the accelerators' criteria and are taken into these programmes:

H.R.D., Wayra: "I think high proportion of what we necessarily think is a good startup – a lot of those would be sustainable startups in a sense they have good people, doing good things and they can deliver good return as a result."

E.L., EF: "So there is definitely a place for them, I think that on EF, there is a place for them, I think we will see, as we work with more and more companies. They seem to do very well."

When talking about the triple bottom line: environmental, social and financial sustainability, the ordinary, commercially-oriented accelerators put an emphasis on developing startups in terms of the financial sustainability and indirectly aiding the social or environmental aspect of sustainability by linking their network of connections to the startups to enable product or customer development. In the case of impact accelerators, the situation is the opposite. Impact accelerators place a lot of attention to social sustainability, but financial sustainability has been critiqued by startups to not be emphasised enough:

K.B., Revolution Hive: "If you want to be a social enterprise, you need to learn how to sell. We never had a session on sale, which surprises me, because that's a key element."

In contrast to that note, both BVC and The Young Academy representatives have noted that financial sustainability as being very important for the startups to grow and have activities in place to aid that:

D.B., BVC: "And if it's about working with investors, they are not going to invest if that's not a sustainable business. <....>. And that's what we're trying to do."

J.T., The Young Academy: "I think we try and talk about income diversification models <...> from which is more likely to help them become sustainable."

While having that in mind, the Young Academy has an opportunity that is different than the approach of the rest of the accelerators. According to James Teasdale from the Young Academy it is accepted if the startup does not want to scale:

J.T., The Young Academy: "Some of them are very ambitious, quite commercial, kind of growth approach. <...> There are others that <...> are happy operating on a small, local level. <...> If they're generating social impact in that particular area, which is where they live and where they're working, I think that's a good outcome."

Environmental sustainability, a third part of the triple bottom line, is not covered by impact accelerators, however, it is not neglected from the commercial startup accelerators. As they are not diversifying startups to begin with, if the startup is selected after the application process, the environmental impact startup can also be involved in the acceleration programme. Such example can be seen with a sustainable water treatment startup Hydroleap in EF startup accelerator.

After discussing the sustainability approach at the startup accelerators, few main notes can be established. SO startups with a good, scalable idea have access to both impact and commercial startup accelerators as sustainability aligns with the criteria of a potentially successful business – pressing issues, big market, scalability and an innovative product. However, as environmental sustainability is not considered in the impact accelerators, such SO startups might only have the opportunity to choose a commercial accelerator as impact acceleration is focused on social change.

Therefore, sustainability is not neglected in the commercially-oriented accelerators, however, their main focus is financial sustainability and the social impact is not precisely required which might create a higher threat for a mission drift as it is already have been noted as a challenge by number of interviewees. The proposition for that would be an impact lock-in in the product itself, which is done by a couple of the startups in the sample (e.g. ThinkSono, Hydroleap, Andiamo, the Goldfinger's Factory, etc). Going back to the tendency of product innovation in commercially-oriented startup accelerators, locking-in the impact in the product could be relatively easier than in the offerings that are based on process or business model innovation. However, during the individual case analysis part, it has been seen that a couple of SO startups do not really consider themselves to be very social or creating any kind of different social impact (e.g. Give Vision) rather than just being a good business case. Choosing an ordinary, commercially-oriented accelerator would, thus, be pre-determined for such enterprises.

With regards to impact accelerators, while the social impact aspect is well analysed and discussed, the financial sustainability might not have enough emphasis in order to position startups strongly in the market. However, the impact accelerators help determine the evaluation of your impact and can guide the previously mentioned impact lock-in.

5.3. Startup accelerators and their role in the development of the SO startups

At this part of the cross-case analysis, the different aspects that had the biggest role on the development of the SO startups are emphasised.

Funding. One of the most common reasons to join a startup acceleration program was in order to get funding:

S.K., Give Vision: “We needed funding and they and they were pre-seeding company.”

N.P., Andiamo: “Major reason was that they did matched funding.”

Throughout all the interviews, startups from both accelerators have claimed that funding was and still is a major challenge. SO startups from impact accelerators mostly reported needed funding to sustain themselves while SO startups from commercially-oriented accelerators have focused their financial challenges on the rapid, disruptive growth. While some of the startups are currently very successful financially (e.g. Oomph, SpeakSet), the financial aspect has still been reported as a significant one.

B.A., Oomph!: “It all goes around money. The difficulties are real, you got to create a business and at the same time you have to pay the bills, you have to create the team, you got to report to the board and all these things are brand new.”

Many of the interviewees from both startup accelerators and SO startups have discussed the stereotypes of the social investment industry which are harmful for impact enterprises as they are believed to be riskier, slower and not generating enough return:

H.R.D., Wayra: “When dealing with certain investors within the UK... <...> they tend to think small. They think small opportunity, less return – it is nice, but if it is going to be impactful?”

Another challenge for SO startup arises with their dedication to lock-in the impact in the enterprise so the risk of mission drift is mitigated:

N.P., Andiamo: "To protect the social impact of the company, you create a second company that owns what you call a golden share. <...> It's very challenging to go to an investor and say - I want 5 million of your pounds, but there is this independent company that could stop us from doing anything they wanted."

Stereotypes and challenges such as these make it very difficult for SO startups, especially social enterprises, to get funded and scale. Thus, funding remains an important part of the accelerator. With regards to the accelerators researched, The Young Academy is the only one where the funding is not pre-determined and needs to be applied for.

Network. While funding has definitely played a significant part in the development of the ventures, the highest impact seems to be brought by the size of the networks of each accelerator:

E.O., Restored Hearing: "It was mainly the support network and getting access to advisors."

B.A., Oomph: "The money is irrelevant unless you know how to spend it. <...> If you're getting involved, you should get involved properly, take the support you can get."

S.K., Give Vision: "When we went for the year program, we realised that the cash was a minor thing. <...> We had a name that would open a lot of doors for us, we had fantastic mentors that paid for us to be on TV."

Network has been mentioned to be the connector to all the solutions, all the needs that SO startups would have:

E.O., Restored Hearing: "So this team had a great network and were able to hook us up with great advisors and things like that and so that was really good."

B.A., Oomph!: "Our whole business is based on the fact that we've managed to build, to leverage the network that UnLtd had provided for us."

A.K., SpeakSet: “They would inevitably know someone that could help us with that problem. So you always get connected with the right people.”

It is clear that network related to other areas such as getting investors and specialised advice, but it is important to note that network is crucial for an element which was determined to be the main facilitator of innovation as well – customer development. Network which gives access to the potential customers is incredibly valuable, especially for SO startups as these startups are often working with the institutions and sectors that are not easily accessible, such as healthcare, education. Going back to the individual analysis of the startup accelerators, confirming the importance of this argument, BVC startup accelerator is narrowing down its focus to unemployment and ageing society, so they are able to serve the startups with a better network support:

D.B., BVC: “I think it's around our expertise, the partnerships and knowing almost what this journey is for social businesses, I think it gives us a better chance to achieve that.”

In total, 10 out of 12 startups have mentioned network as being positively impactful for their development and 7 out of those 10 enterprises have mentioned network having a very high impact on the organisation. Thus, accelerators with big networks have the potential to exponentially speed up the development of the startups.

Measuring the impact. Funding and networks are the elements that are not particular to SO startups as all the new entities face challenges that could be alleviated by these factors. However, most of the SO startups that were from impact accelerators were particularly interested in learning social enterprise industry-specific strategies and tools, which were not included in the agendas of conventional, commercially-oriented accelerators:

K.B., Revolution Hive: “The motivation to join was more around <...> better impact management, the theory of change, like all those models that are used by top social enterprises, particularly with the educational interventions.”

R.S., Sisterhood: “Theory of change is very important and that really helped us innovate, I think <...> that has been the most effective for us, <...> that helped us innovate the most.”

E.F., The Happy Teacher Project: “So that was very useful in terms of being able to have a map that shows your theory of change.”

As impact measurement is critical for social enterprises, The Young Academy had a partner – impact measurement company - NPC – that was noted to be very helpful and even continued working with some of the startups pro-bono after the acceleration programme:

R.S., Sisterhood: “we have a really good relationship with the employee from NPC who was assigned to us and she's more than happy to continue on helping us.”

SO startups in the conventional, commercially-oriented accelerators were not getting such support, however, the need for such support was not mentioned during the interviews.

Mentorship. Together with the network, mentorship is extremely important as a close-up business development support. Experts called venture managers, venture partners or simply mentors were present in all of the accelerator programmes in this research. All but 3 startups have discussed the role of mentors being crucial or very important for their development. The key in the success of mentorship seems to be twofold: the accountability to an expert to deliver results and a personalised advice from an experienced advisor:

F.A.N., ThinkSono: “This is an emotional thing because you have meetings every week, they know how to keep you on track, <...> which is probably why we passed because they can literally track how it's moving forward and how fast objectively.”

O.W.B., the Goldfinger Factory: "She was able to provide advice that was much more applied, so it's not just about the quality of advice."

B.A., Oomph!: "He brought a very strong business acumen to the business. He was a very corporate, not very social, he was a businessman, <...> an incredible rigour to the business."

The extremely high role of importance on mentors was given for the EF startup accelerator. Having analysed the individual EF's case, the difference in the way mentorship is organised can be seen. The mentors are hired by EF and paid a salary to consult the startups. At the same time, mentors have their financial success tied to the one of the startups: *E.L., EF: "All of our venture partners are the part of our company so essentially... When our companies make money, they make money. So their interests are very much aligned."*

While this cannot be generalised and seen as a reason why the evaluations of the role of the mentors were so high for EF, but this is certainly an aspect to be considered.

Other important factors. After having discussed the elements of accelerator programmes that played the biggest roles in the development of SO startups, there are a few other insights that are not as crucial, however, deliver significant increase in the impact of the accelerator if present: alumni network and continuous frequent personalised support.

Firstly, the alumni network was incorporated to some extent in two accelerators: EF and BVC. Both accelerators were praised for such initiatives:

M.S., Hydroleap: "We are raising to get the investors, and the first person that comes to my mind to talk to - EF. I'm talking to them to just get their opinion."

A.K., SpeakSet: "The network still stayed, the general elements were there, we never felt like if we weren't a part of EF, so we still go to the events we still speak to the alumni."

N.P., Andiamo: “The relationship is continued, and, in fact, just before this phone call, I was just talking to an investor that they introduced me to, 2 years after the accelerator.”

There were also mentions of the lack of the post-programme engagement:

K.B., Revolution Hive: “Entrepreneurship can be very lonely, especially when you're working in a social enterprise and education. <...> There needs to be more of a structured way to get us to knowledge – share.”

Another aspect that seemed to bring a lot of value for the development of the ventures was simply an accountability and continuous touch with other startups as well as accelerator teams. This was brought by providing an office space in Wayra and EF accelerators:

F.A.N., ThinkSono: “When you have people who are working productively around you, you work more productively. <...> They help you progress.”

S.K., Give Vision: “The majority of value came from <...> being surrounded by super smart people <...>, other startups basically, teaching you hacks and tricks.”

While both impact accelerators did not have such co-working space sharing, it is evident that the same collective pressure and development aspect would be fitting as well. During the weekly meeting, startups have also been reporting to have witnessed both positive impact from being together with other startups and the need for more of that:

R.S., Sisterhood: “During the workshops <...> a lot of peer to peer learning happened because of that and there is a real advantage because of that.”

E.F., the Happy Teacher Project: “I would have loved for the structure to be slightly different and give more pressure. <...>. To work in groups <...> Feel that sense of everybody...”

Thus, the startup accelerators might consider adding this element to the programmes in order to increase the value of the programmes.

5.4. Startup accelerator and startup matches and their satisfaction

After having done the individual case analysis and having analysed the startup accelerators comparing the different dimensions in the programmes, it seems as if the accelerator's role in startup development is hugely related to the stage at which startup entered the accelerator and the match with the focus of a startup accelerator. These conflicting cases can be seen from the case studies, for example, Wayra and Aparito (focus mismatch) or the Young Foundation and The Happy Teacher Project (stage mismatch). Therefore, focus, startup stage and the resulting role of the startup accelerator are going to be taken as dimensions for in-depth comparison between the startup accelerators and their graduates.

In order to compare the startup accelerators and their graduates in terms of their focus and stage match as well as the significance of accelerator role on these startups, four graphs have been created, visualising the matches in terms of these categories (see Figure 20). The data for significance of the accelerator roles, focus of the startup and the stage at which the startups entered the accelerator are taken from the previously performed individual case analysis. The significance of the role is expressed using the size and colour of each circle as well as putting the score of the valuation in the middle. The role was measured on the scale of -2 to 2, 2 being the role of the highest positive significance. At the bottom of the graphs, the startup development stages are listed. The blue highlighted stage marks the entry stage that the accelerator is best for which makes it easier to determine the match with a startup's stage.

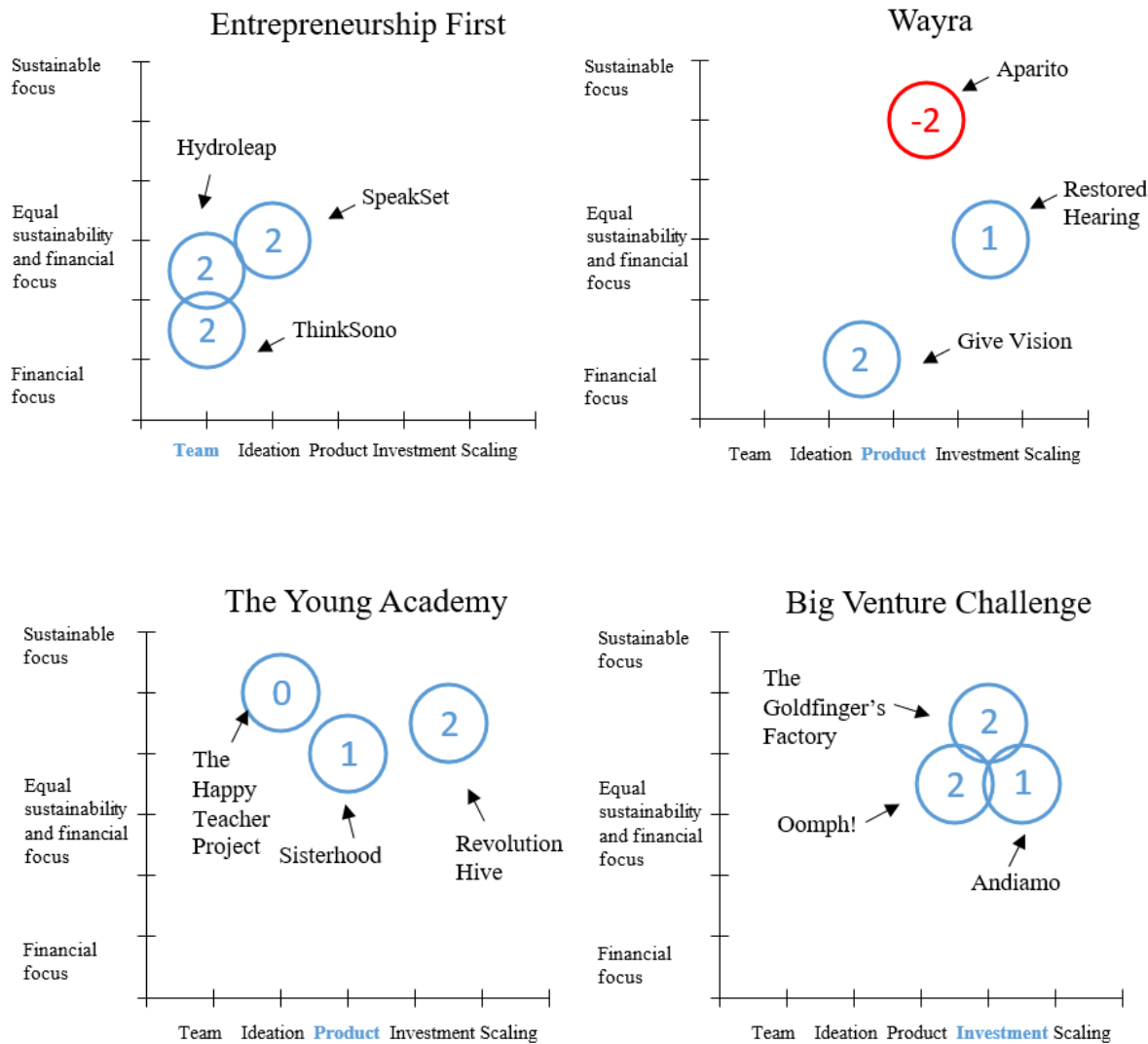


Figure 20. Comparison of startup accelerator programmes and their role in startup development in terms of focus and startup stage on the scale from -2 to 2. Compiled by author.

After having placed the startups accordingly to their evaluations and case descriptions, some pattern of stage and focus match could be observed. This observation is especially triggered by the critical case of Aparito in Wayra accelerator, being the only startup that have reported a negative accelerator role in their development. Thus, a Table 3 is composed to understand a possible pattern better.

Table 3. *Pattern matching: focus and stage of the startup accelerators and startups*

	Stage - Fit	Stage - No fit
Focus - Fit	Hydroleap, EF (2) ThinkSono, EF (2) SpeakSet, EF (2) Give Vision, Wayra (2) Sisterhood, TYA (1) Revolution Hive, TYA (2) Oomph!, BVC (2) The Goldfinger’s Factory, BVC (2)	Restored Hearing, Wayra (1) Happy Teacher Project, TYA (0) Andiamo, BVC (1)
Focus - No fit	Aparito, Wayra (-2)	N/A

Note. Compiled by author.

It seems that there is a tendency where the highest role evaluations are present where both accelerator and startup stage and focus fit. When the focus regarding financial and sustainable emphasis on the startup is matching, but the stage is not properly corresponding to the stage that the accelerator is designed to accelerate, startup still report a positive accelerator role in their development, however, significantly lower than when there is a full match. There is only one case where the focus of startup and the accelerator is not matching. Even though the stage of Aparito was right to enter Wayra’s accelerator, with the mismatch of focus, Aparito had reported a very bad experience with the startup accelerator.

While the patterns can’t be held generalisable at this point, the pattern is indeed present and the phenomena could be subject to further research.

5.5. Conclusion of the cross-case analysis

Cross-case analysis have brought many insights into the role of startup accelerators in the development of sustainability-oriented startups. It became evident that SO startups are very different and have different needs in terms of support.

When talking about innovation, which is highly important for all the startups and accelerators, it was observed that SO startups in the commercially-oriented startup accelerators

have a tendency of focusing on product innovation and, thus, need tech-oriented support. SO startups in the impact accelerators are more likely to innovate at the process or business model level and do not create any deep-tech innovations which are almost pre-determined for the commercially-oriented startup accelerators. In terms of the resulting role of the accelerator in the innovation process, the SO startups in both impact and conventional accelerator programmes, focus on human-centric approach and customer development as means to create innovative solutions. This is where startups reported that accelerators with extensive contact networks are helping through connecting the startups with their customer or stakeholder groups. In most cases, if accelerator was not delivering this, the startups mentioned such need as a potential improvement for an accelerator. Having that in mind, the SO startups from impact accelerators additionally place high importance on theory of change and impact measurement as it helps to determine the approach and the direction of sustainability-oriented innovation. These aspects are not even mentioned by the SO startups in the conventional, commercially-oriented startups. Other factors that exclude impact accelerators from the conventional accelerators are social impact sector specific networks and specific legal aid with the organisational structures that might safeguard the impact of the enterprise. The approach to commercialisation in the impact accelerators have been criticised by the startups as not having enough emphasis. In most cases, SO startups in impact accelerators wanted to grow and scale their impact, however, it was difficult without good guidance towards the commercialisation of the product, which was mentioned to be lacking.

At the same time, it appears that funding, which is highly important, is easier accessed by the startups in the commercially-oriented accelerators as these startups might not even consider themselves to be bringing more social impact than the rest of the non-sustainability oriented startup cohort and apply for traditional legal forms and traditional investors. The challenge of getting traditional investors to fund SO startups is also emphasised as the industry

believes that SO startups are usually growing slower and creating lower returns. It is even more evident when SO startup is a social enterprise as the term has strong stereotypes in the startup ecosystem in the UK. That is why, some social enterprises are avoiding this image as it might bring more damage. At this point, startup accelerators do play an important role with an aim to close this funding gap. All of the accelerators had funding opportunities to close this gap and grow the ventures to the point that they could scale on their own. It is also true that in this research, SO startups that reported not having gotten funding from the accelerators, rated the accelerators having less influence on their development as funding unlocks a lot of possibilities for product development, customer development, innovation, accessing expertise and more. However, it seems that in many cases, funding could be replaced by extensive accelerator network as a lot of the opportunities that funding creates could also be created through good networks and relationships with interest groups.

It was revealed that one impact accelerator is also accepting ventures striving for local impact as well as the ones trying to scale their impact, which creates new possibilities and challenges the scalability criteria which was noted to be important by both startup accelerators and startups. This approach is the opposite of what is claimed by the commercially-oriented startup accelerators.

There have been other elements of the acceleration programmes that were mentioned multiple times as enabling high acceleration in the development of the startups: personalised mentorship, the already discussed funding and network as well as impact measurement particular for social enterprises. The recommendations were also made for the introduction of alumni support and co-working spaces in the accelerators that do not currently have it as these were some of the most important parts mentioned by SO startups in terms of the perceived role and needs.

The cross-case analysis has also been done while comparing the startup and startup accelerator matches in terms of focus and stage. This comparison led to uncovering the pattern which shows that the match with the startup accelerator's focus is likely to be more important than the match with an entry stage. The framework on how to use this insight in practice is presented in the discussion chapter.

Going back to the research question on what is the role of startup accelerators in the development of sustainability-oriented startups, research analysis shows that the role could be both significant and even damaging. As the range of sustainability-oriented startups can be very diverse, no conclusions or recommendations can be made as a whole. In order to enable high acceleration, the accelerator's approach has to be applicable with the extent of sustainability in the venture. If that match is not right, the startups might face huge clashes with the organisational culture and the expected deliverables from both sides. Ventures which are highly focused on sustainability and prioritise impact over financial sustainability might not be able to scale in the highly competitive and commercial traditional accelerator environment. These accelerators have the mentors and the support network which is applied to the majority of the startups and sacrificing commercial value might not be well received from the accelerator side as well. However, the enterprises which strive for both financial and social sustainability and are trying to balance these two aspects, might be able to thrive in either environment as the enterprise allows for both logics to appear in the strategy. In this case, the enterprises from the research brought the other, missing side of the focus on their own and adapted to the environment in which they were at that time. Therefore, accelerators can have a really important and significant role in the development of sustainability-startups if, on the top of matching the needs of the startup with the elements of the programmes, these conditions are adhered for.

6. Discussion

The discussion chapter gets deeper into the findings of this research and compares them to the existing literature in order to uncover new insights in this research area.

Consequently, the framework resulting from the findings of this research is presented and the implications for resource based view (RBV) theory and network theory are elaborated on.

6.1. SO startups as hybrid organisations

Having analysed 12 SO startups, it is clear that these are very different organisations. Relating to the framework proposed by Four Lenses Strategic Framework, (Virtue Ventures, 2010), SO startups do indeed tend to prioritise social or financial value creation. Most of the SO startups from the impact accelerators were social enterprises and prioritised impact over financial sustainability while SO startups in the commercially-oriented startup accelerators were most likely to prioritise financial potential. This relates to the trade-off between sustainable advantage and sustainable solution proposed by Santos and Eisenhardt (2009). In most cases, SO startups from impact accelerators were trying to create a spill-over effect through their operations while the SO startups from conventional accelerators were trying to develop a unique proposition that could not be easily replicated. Going back to the hybridity of the organisations, Marmer (2012) discussed the concept of transformational entrepreneurship, where sustainable and financial aspects are equally important. In this research, few ventures from the sample showed signs of transformational entrepreneurship – SO startups SpeakSet and Restored Hearing – both graduated from the commercially-oriented accelerators but claimed that the aspect of sustainability was brought by the team. Thus, while very difficult, it seems that transformational entrepreneurship might actually be plausible and could be an interest of future research as a perfect hybrid structure.

When considering the diversity of SO startups as hybrid organisations, it is seen that different support structures are needed to successfully accelerate their development.

6.2. Social impact: pros and cons

As discussed by Battilana et al. (2012), SO startups mentioned the difficulties to balance value creation and value capture as well as legal form issues. However, these challenges were mostly reported from the ventures in the impact accelerators. Ventures from conventional accelerators were more likely to consider sustainability as an advantage, potential for marketing and sales. In contrast to Battilana et al. (2012), hiring and organisational culture was mentioned as one of the main successes of the SO startups as sustainable approach attracted talented and motivated people. While fund-raising was mentioned to be difficult by all SO startups, some of the startups referred to these difficulties precisely because of the social impact. Startups claimed that social impact is related to small return, slow growth and low scalability. Such approach can also be witnessed in the literature (Marmer, 2012). In order to cope with such stereotypes, some SO startups do not emphasise social impact when trying to raise funding and approaching traditional investors. On the other hand, SO startups run by the entrepreneurs who are highly focused on sustainability, seem to partially fulfil the mentioned stereotype as high importance is placed on venture's mission and no compromises are taken in order to balance the value capture approach as well. Ironically, if the ventures would consider the trade-off, a more commercial approach to scaling and growth would likely create more impact in contrast than if no trade-offs are made.

6.3. Distinction between impact and conventional accelerators

When discussing the startup accelerators in this research, the characteristics by Miller and Bound (2011) as well as most of the key elements and support dimensions of the accelerators (Pauwels et al., 2016; Bart, Wright & Van Hove, 2015) were present. Startup accelerator role as a certifier for the graduated startups was also supported by many startups in

the selection (Radojevich-Kelley & Hoffman, 2012). As mentioned in the literature, startup accelerators also had small teams and little organised data collection (Cohen & Hochberg, 2014). While all of these characteristics of startup accelerators were generally true for both impact and conventional startup accelerators in this research, the differences between the two were also significant. Among the discussed differences, new insights have emerged, thus, a revised version of the differences between the accelerators is presented in Table 4.

Table 4. *Revised differences between impact and conventional startup accelerators*

Characteristics	Impact accelerator	Commercially-oriented startup accelerator
Focus	Maximising the potential of human and natural resources, synergies and stacking benefits	Economic profit maximisation
Accountability	Satisfying multiple stakeholders	Satisfying shareholders
Allocation of benefits	Across those who contributed	Across those who have the most power
Knowledge	Knowledge on sustainability-related regulations and international policies	Knowledge on ordinary business-related regulations
Funding and expertise	Funding and expertise mostly generated from governments, international organisations, impact investors	Funding and expertise mostly generated from corporates, businesses, venture capitalists
<i>Progress measurement</i>	<i>Through impact-related KPIs</i>	<i>Through financial and growth KPIs</i>
<i>Network</i>	<i>Public and impact sector networks (access to vulnerable sectors for customer development)</i>	<i>Corporate networks (non-focused customer development support)</i>
<i>Value lock-in</i>	<i>Impact lock-in</i>	<i>Financial value lock-in</i>

Note: Adapted from Parrish (2010) and expanded by the author.

Three revised elements are progress measurement, network and value lock-in as they were considered important by the startups in this research and accelerators seem to have very different approaches towards delivering these elements.

Impact accelerators are also different from the conventional accelerators as they are “ecosystem builders” (Clarysse et al., 2015). The differences presented in the Table 4 show that the two types of startup accelerators actually seem to be serving different ecosystems.

Public sector is dominating in many aspects of impact acceleration while private sector is in the core of conventional accelerators. The accelerators are affected by dominating logics and shape their programmes to the benefit of particular logic, which results in programmes that seem to have the same elements but serve different ecosystems. The challenge here is for SO startups to choose the one that might bring the most benefits during the process.

6.4. SOI acceleration in SO startups

Sustainability-oriented innovation (SOI) is definitely an essential part of SO startups. This is both witnessed by this research and by the scholars (Gruber & Henkel, 2006; Cohen & Winn, 2007; Haemmerle, Shekar, & Walker, 2012). According to Nidumolu et al., (2009), SOI promotes the efficiency of resources, the creation of improved products and services, and the formation of new business models: all of which are aligned to the core of traditional business principles. All the SO startups discussed in this research fit into such description by creating product, process and/or business model innovations. The interesting finding was in distincting the type of SOI in impact and conventional accelerators. Impact accelerator startups were mainly focused on process and business model innovations while conventional accelerator startups were mostly creating product innovations, usually based on deep tech. However, this could be explained by the existing criteria to enter conventional startup accelerators as most of them are tech-oriented and technology has to be pre-determined for all of the accepted startups. Adams et al. (2015) identified three dimensions particular to SOI: people-centric focus, systematic effect on society and sustainability being integral into the organisation. These dimensions were reflected in the researched startup SOI despite the fact at which accelerator they were present. At the same time, it has to be noted that accelerators were not mentioned to have a big role in the development of innovation. Both types of accelerators had an influence on the innovation process mostly through enabling customer validation through their networks. However, the idea and its development was brought by the teams rather than facilitated by

accelerators. External validation is an important part of the SOI process as presented by Keskin et al. (2013). Together with external validation, network, human resources, market orientation and managing innovation are among the factors to enable innovation as well (ibid). In this research, accelerators were in touch with all these factors, however, it was not approached as innovation process. External validation through network rather than two separate factors were the most evident. As a result, SO startups evaluated the role of accelerators as present but not significant. There was no major difference in terms of the type of accelerator in the way the innovation process is approached. The only difference lies in the size and quality of network of the accelerator rather than the focus of it. However, impact accelerators tend to have networks that are more relevant to SO startups, which should be taken into consideration.

6.5. The role of startup accelerators in the development of SO startups

Out of 12 SO startups, 7 reported accelerator having a very big role in the development with 3 evaluating the role being positive and accelerating, leaving 1 startup that reported no acceleration and 1 that had an extremely bad experience which even set back the venture rather than accelerating it. This feeds into the discussion by Hallen, Bingham and Cohen (2014) who claim that top accelerators do indeed accelerate the startups. As the condition for top accelerators is fulfilled through purposive case selection in this research, the mentioned insight seems to be valid for SO startups as well. The main acceleration features that were mentioned by the SO startups were present in both impact and conventional accelerators. In the order from the most important: personalised mentoring, network access, innovation aid, synergy with other startups and receiving credibility from the well-known programme. These accelerating elements are reported by various scholars (Radojevich-Kelley & Hoffman's, 2012, Miller & Bound, 2011; Bank & Kanda, 2016; Schwartz & Hornyh, 2008, Bart, Wright & Van Hove, 2015). Interestingly, funding, which is mentioned in many cases ranks lower. Many cases

explicitly mention that funding was the first reason to go for acceleration, however, networks and personalised mentorship has proved to be much more impactful for the enterprises.

Another finding was the need for pressure. SO startups have evaluated pressure from the accelerator as a motivator and a tool for increased effectiveness. The absence of pressure was reported as a disadvantage of the programmes where there was no ongoing monitoring. Supporting such finding, Cohen (2013) states that time compression enhances learning as well. It seems that the time pressure was present when SO startups were given an office space together with the rest of the cohort rather than being in a remote acceleration programme with touch points every week rather than every day. While bringing synergy from other startups was also evaluated as being one of the main roles that accelerator can adopt, the importance of office space gains a much more multi-layered role than free work station. Thus, as a basis for synergy among the cohort and catalyst for time pressure effect, accelerators with the provided on-site office spaces might accelerate to the greater extent.

While 10 out of 12 SO startups reported positive accelerator role in the development of ventures, there were two critical cases where there was no development and even a setback in the development of the ventures. In the cross-case analysis these cases served as main means to uncover the factors behind such evaluations, however, the cases with positive impact also showed similar trends as further discussed. The insights emerge as the same elements of the same programme were evaluated differently by SO startups from that programme. The assumption here is that these evaluations are, thus, dependent on the features of the SO startup itself. Main differences between the startups were in their stage of entry to the accelerator and the focus towards the trade-off between the sustainability and financial value. Cross-case analysis creates the basis to believe that the match of the focus between the SO startup and accelerator is more important than the entry stage fit. Isabelle (2013) mentions the two factors among the considerations when choosing an accelerator, also including policies on selection

and graduation, accelerator’s services and partner networks. Isabelle (2013) does not diversify among the types of startups and does not prioritise these categories one over another. In this research, it seems that among the two considerations of accelerator focus and stage fit, focus should be prioritised for SO startups. This is translated into the framework for choosing between the impact and commercial accelerators in the next section.

6.6. Framework: choosing between impact and commercial accelerators

Some patterns present in the cases have presented an opportunity to understand what determines the potential significance of startup accelerator on the startup development. Therefore, the framework has been developed in order to enable startups to forecast which startup accelerator might be the best fit for their SO startup and maximise the potential for positive role that the accelerator could play in their development. The framework is based on the insights of the cross-case analysis where it is deliberated that the match between the focus and the stage could determine the accelerator’s resulting impact for the development of the startup. The framework is presented in Figure 21.

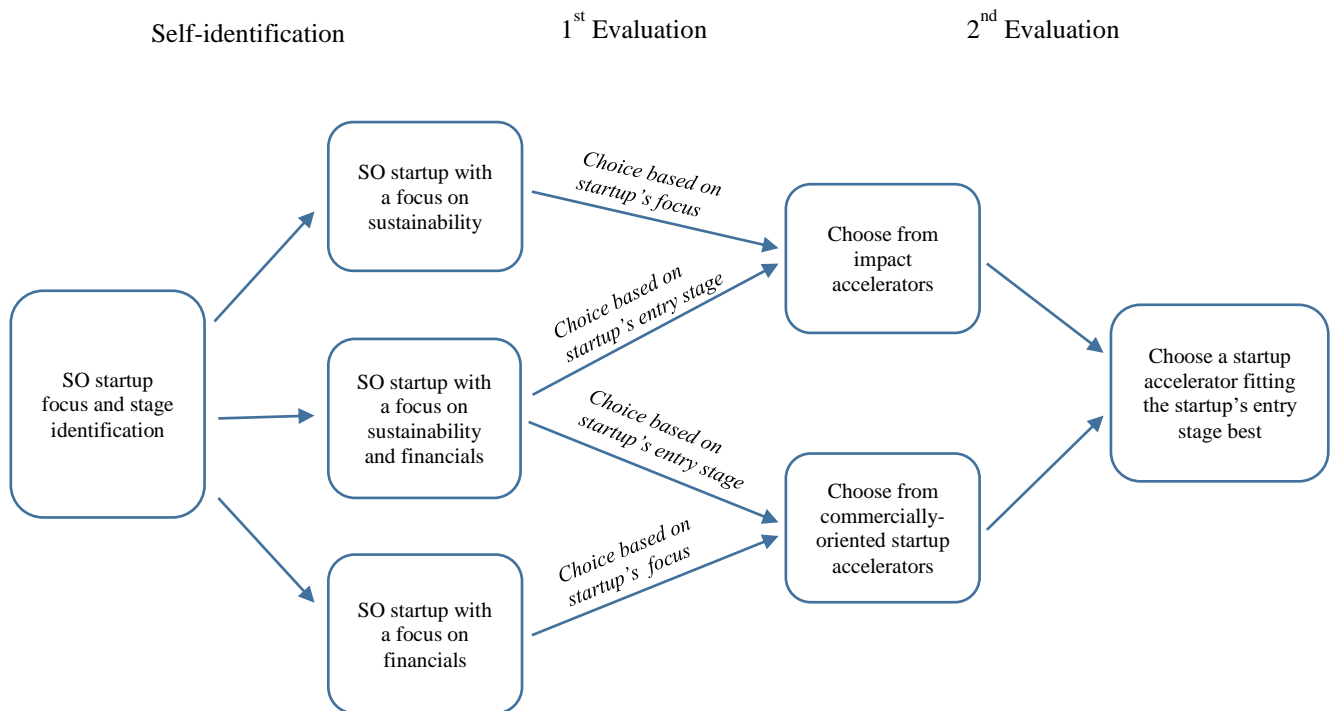


Figure 21. Framework to determine a startup accelerator with the highest potential role on the development of the SO startup. Compiled by author.

There are a few stages to the framework. Firstly, in order to use the framework, the startup needs to identify its focus (sustainable, sustainable/financial or financial) and the stage of development at which the startup is. As noted in this research, the entry stages into the startup accelerators are usually at team forming or ideation stage for the early stage startup accelerators and the investment raising and scaling stage for the later stage startup accelerators. After the stage and focus is determined, the SO startup can have several options.

Sustainability-oriented focus. If the startup focus is high in sustainability, it should be prioritised first when choosing an accelerator. Focus on entry stage should come later on, as conventional accelerator might result in a mismatch in organisational logics and goals.

Financially-oriented focus. If the SO startup has a financially-oriented focus, the same path has to be taken – firstly choosing among the conventional accelerators and trying to match the stage of the startup with the entry stage of the accelerator later on, when choosing from the sample of available accelerators.

Sustainable and financial focus. SO startups that identify their focus to be both sustainable and financial are not likely to be inflicted with the mismatch of focus in either type of startup accelerators, therefore, these SO startups have the possibility to choose solely based on the match towards their entry stage rather than the focus.

6.7. Application and addition to the resource-based view theory

In order to enhance the theoretical implications of this thesis and explain the insights revealed, particularly, the insight on matching the focus and stages between the SO startups and accelerators, resource-based view theory (RBV) is elaborated on. The RBV states that based on the resources of the organisation, it can gain a competitive advantage in the market (Barney, 1991). Barney (1991) also proposes a framework which suggest that long-term competitive advantage can result from resources that fulfil the criteria of being valuable, rare,

difficult to imitate and the organisation is organised to exploit it (Barney, 1991). In the context of SO startups and startup accelerators, when SO startups enter acceleration programmes, they gain the resources of the accelerator. In the startup ecosystem, if the accelerator has the main elements of broad network, funding as well as personal mentorship, it could be concluded as creating comparatively rare, difficult to imitate and definitely valuable resources for a SO startup. However, the last criteria is stating that the organisation has to be able to exploit such resources. If highly sustainability-oriented startup enters a commercially-oriented accelerator, the resources fail to fulfil the last condition. Because of the core differences in the sector of origin, highly SO startups would not be capable to exploit the very rare, valuable and difficult to imitate resources offered by the commercial accelerators as they simply would not be relevant in terms of company mission, vision and culture which are few of the main components of the organisation. The same would go for financially-oriented SO startup entering impact accelerators. All four conditions match the resources of either impact or conventional accelerators and SO startups that focus both on sustainability and financial aspects.

The results of this research can not only be explained with RBV theory, but also might provide a possibility to enhance the RBV theory. Four distinct features of resources that could result in the competitive advantage are provided in the RBV theory and the research performed in this thesis might enable the possibility for prioritisation of such features. Based on the results of this research, the assumption could be made that organisational fit should be prioritised over other features as all the other features could not be internalised if not for organisational fit (referred to in this thesis as focus fit). However, as the scope of this research is limited, the assumption is non-conclusive. This could be one of the possible further research areas resulting from this study.

7. Conclusion

7.1. Conclusion of the results

This study explores the role of the startup accelerators in the development of sustainability-oriented startups. Two types of startup accelerators were identified: impact and commercially-oriented accelerators as SO startups are accepted into both of these organisations. Three SO startups from each accelerator were interviewed and the reported roles of the accelerators in the development of these SO startups were identified. When analysing the results, it can be concluded that startup accelerators can have a great role in the development of such ventures. The key elements accelerating the development of startups are networks, personal mentorship, aid with innovation, synergy from other startups and the credibility received from graduating a well-known startup accelerator. It is important to note that while the element seems similar, the networks, mentors and other elements of the programme highly differ in impact and commercially-oriented accelerators. The accelerators serve different sectors, thus, the support of the SO startups is different, e.g. the impact accelerators have networks with government, public sector organisations while the commercially-oriented accelerators have networks with private investors and corporates. Therefore, in order to enhance the possibility for greater development while in the accelerator programme, SO startups should determine their focus and entry stage and match that to the most fitting startup accelerator in the ecosystem. The research has also shown patterns that the match between the focus should be prioritised over the match between the entry stage of the SO startup as the venture cannot adopt the resources given by the accelerator if the focus is not a match and the resources given, thus, remain obsolete. In order to make the recommendations actionable, the framework has been developed and presented in this thesis.

7.2. Theoretical contribution

This thesis is aimed to bridge the research gap in the sustainable entrepreneurship literature, precisely focusing on startup ecosystems. As the research in the area of startup accelerators, especially impact accelerators, is in its infancy, the academic contribution is rooted in analysing and researching the role of both conventional and impact accelerators in the development of SO startups. This research supports the main insights delivered by other scholars in terms of the elements that impact the startups in the accelerator programmes the most. However, this study adds an approach to these elements that possibly enables prioritisation and better decision-making for SO startups when choosing an accelerator. This approach is also implemented in the form of a framework proposed in this thesis. This research also is an addition to very little existing literature on impact accelerators and their differences between the conventional startup accelerators. This study proposes that these two types of startup accelerators are generally serving different ecosystems and supports the view of Clarysse et al. (2015) which claims that the two types of accelerators essentially have different roles in the entrepreneurship area as a whole.

Moreover, the existing literature rarely discusses different types of SO startups, usually focusing on social enterprises. In this thesis, the broader definition of SO startups is employed and findings note the differences among SO startups. These insights might provide basis for further research based not only on social enterprise venture but also more financially-oriented SO startups, possibly, transformational entrepreneurship entities as suggested by Marmer (2012).

As the importance of radical sustainable innovation is rising, SO startups need the support that would allow them to develop SOI to advance the solutions to many sustainability issues globally. Therefore, this thesis provides an insight towards how startup accelerators can foster SOI and how is it different in both impact and conventional startup accelerators.

Additionally, resource based view theory is used to support the main insights and increase the credibility of the findings while proposing a further addition to the RBV theory which can be further explored in future research.

7.3. Managerial contribution

Practical contribution of this thesis primarily lies in the implications for the startup accelerators and SO startups. Through analysing accelerator programmes, the elements that lead to high acceleration of SO startups are emphasised as well as notes on the differences of SO startups needs are made. These insights might help to adapt the programmes in order to increase the development of SO startups in the commercially-oriented accelerators. This study measures the role of conventional and impact startup accelerators in the development of SO startups, therefore, these entities can use the study as feedback and benchmark for improvement, further strategy development and implementation. In terms of practical contribution for SO startups, the study reveals a benchmark for expected support from startup accelerators and provides a framework which can be used in choosing the right accelerator. However, the framework should be used as a recommendation rather than a roadmap as more research has to be done in the area.

7.4. Limitations

This research is a subject to several limitations. Firstly, while the research design which was incorporated created numerous in-depth insights into the accelerator role in the development of SO startups, these answers cannot be held generalizable because only four extensive case studies were analysed. At the same time, in order to enhance the objectivity of the case studies, more sources of information are needed to triangulate the information proposed. As the scale and resources of this thesis were limited, there was no option to do so.

Secondly, there is a theoretical limitation in using a term sustainability-oriented startup as the term is broad, including various forms of sustainable entrepreneurship. Even though the

diversification is made in the cross-case analysis in the focus of the startups, which indirectly communicates the type of organisation, further research should explore the acceleration effects on SO startups based on the legal form. This could generate results that could be more practical for particular forms of startups and better explained theoretically.

The empirical limitation to this thesis might be a personal bias when coding and analysing the data, especially when evaluating the role of startup accelerators. The author of this thesis was aware of different language habits and expressions by the interviewees and possible confusion when evaluating separate parts of the accelerator. Therefore, the context, quantity and strength of referrals is included into consideration towards evaluating the data, trying to keep the evaluations as objective as possible. However, this implies that the findings need to be treated with care and validated through future research.

Finally, in order to validate the framework proposed, same study could be performed, however, entailing large sample of both accelerators and SO startups. The framework proposed at this point is based on insights and has a guiding role, however, could not be stated conclusive.

7.5. Recommendations

7.5.1. Practical recommendations for accelerators and startups. There are a few practical recommendations resulting from this research. In terms of startup accelerators, both impact and commercially-oriented accelerators should consider exploring the options of free office space and the alumni support if these elements are not present in the programme. Free office space was reported to create a lot of synergy and possibilities for learning as well as outsourcing as well as created relationships between the startups, which are highly valuable and important for the startups even after graduating from the accelerators. The alumni network was also very well regarded when presenting and noted missing when not an element of the programme. Alumni networks can not only enhance the development for the startups in the cohort but also be a source of mentors and expansion of network for the accelerator.

Practical recommendation for SO startups lies in the choice of the startup accelerator. Identifying the startup focus, stage and needs and making sure that the startup accelerator matches those can eliminate the negative experiences throughout the programmes when this criteria are not matching. Moreover, managing the expectations is very important. Startup accelerators do not work for the startups, meaning that, in order to take the most value and actually accelerate the startup, SO startup team has to be very proactive in all the activities and opportunities the accelerator is providing as well as explicit with accelerator's team about their needs. Participation and engagement is key for the startup teams.

7.5.2. Recommendations for future research. This study is one of the firsts to examine the role of startup accelerators in the development of sustainability-oriented startups. By providing a thorough individual and cross-case analysis, this research delivered some insights into the relationship of startup accelerators and the sustainability-oriented startups. While it gives an in-depth view into these cases, the research design does not allow for generalisation of the results and further research should be conducted in the area to check the generalisability of the uncovered insights. As this study proposes a framework for choosing a startup accelerator that would potentially have the most significant role in the development of SO startups, future research could focus on proving the assumptions the framework is based on. While the trend among these case studies is definitely noticed, the framework cannot be used as a conclusive tool until proven by further research.

Another interesting approach to this research area would be analysing the differences between SO startups and their needs as the definition is broad and allows for varied characteristics, especially in terms of enterprise trade-off between the sustainability and financial focus. Connected to the diversity of the SO startups definition, major factors on the development of SO startups could be analysed having in mind the differences of each organisation. In this research, the main elements were accelerator's network, personal

mentorship, aid with innovation, synergy from other startups and the credibility received from graduating a well-known organisation. All these elements could be subjects to further research in order to evaluate the importance of each for the development of the different SO startups (social enterprise vs commercial SO startup) which could guide startup accelerators in advancing their acceleration programmes.

Finally, the already discussed RBV theory application provides basis for further research on the prioritisation of VRIO framework factors, proposing that organisational fit might first be needed in order to internalise all the other factors of the VRIO framework. However, while this research would support the assumption, this should be the focus of further research in order to validate it.

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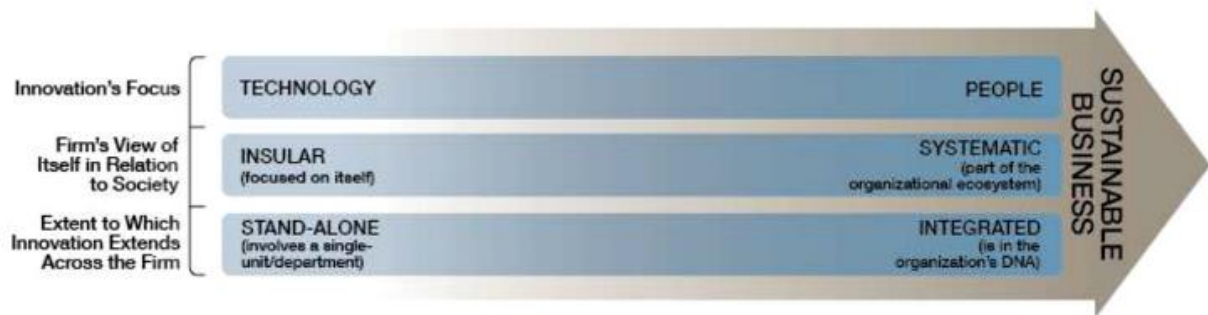
9. Appendices

Appendix A. Literature Review

Appendix A.1. Impact startup accelerators worldwide (Monitor Deloitte, 2015)

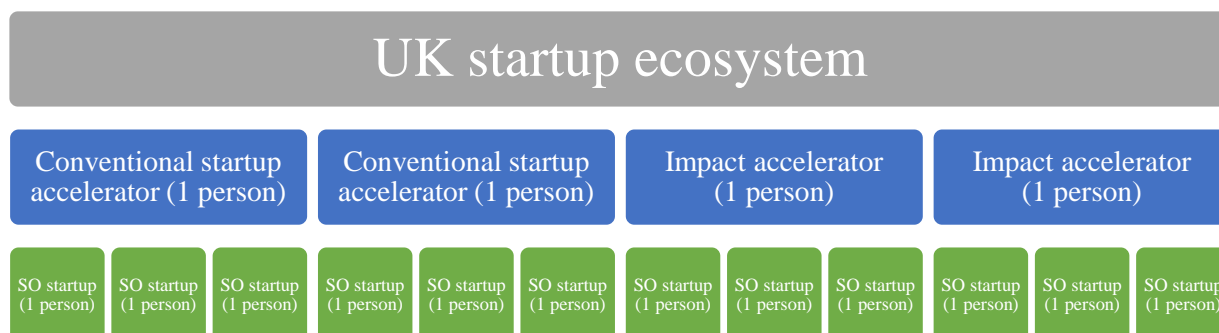
<i>Region</i>	Total Number of Accelerators	Average Years Active	Average Scale (per Year)	Average Length (Months)	Percent Tracking Impact
<i>Africa</i>	49	3.7	88.1	9.0	20%
<i>Asia</i>	36	5.8	31.4	8.3	17%
<i>Europe</i>	4	4.3	13.3	6.0	0%
<i>Global</i>	25	5.8	22.8	3.9	28%
<i>Latin America</i>	3	6.7	18.8	20.0	33%
<i>United States</i>	48	4.5	227.4	6.0	33%
Total	165	4.8	116.4	7.6	23%

Appendix A.2. SOI dimensions (Adams et al., 2015)



Appendix B. Methodology

Appendix B.1. Case Selection. Sampling structure.



Appendix B.2. Data Collection. Information about the interviewees

Interviewee and organisation	Position	Channel and interview time
David Bartram Big Venture Challenge	Head of ventures	Face-to-face 57 minutes
Ben Allen Oomph! (BVC)	CEO and founder	Face-to-face 62 minutes
Oliver Waddington-Ball The Goldfinger’s Factory (BVC)	Chairman and founder	Face-to-face 46 minutes
Naveed Parvez Andiamo (BVC)	CEO and founder	Skype 61 minutes
Elspeth Lawson Entrepreneurship First	Alumni manager	Face-to-Face 62 minutes
Fouad Al Noor ThinkSono (EF)	CEO and founder	Face-to-Face 58 minutes
Adi Kasliwal SpeakSet (EF)	Co-founder	Skype 32 minutes
Mohammad Sherafatmand Hydroleap (EF)	CEO and founder	Skype 52 minutes
James Teasdale The Young Academy	Head of venture development	Skype 32 minutes
Rachita Saraogi Sisterhood (TYA)	Co-founder	Skype 44 minutes
Ellen Ferguson The Happy Teacher Project (TYA)	Founder	Skype 55 minutes
Keshav Bhatt Revolution Hive (TYA)	CEO and founder	Skype 58 minutes
Harry Rhys Davies Wayra	Senior acceleration manager	Skype 55 minutes

Stan Karpenko Give Vision (Wayra)	CEO and founder	Skype 63 minutes
Elin Haf Davies Aparito (Wayra)	CEO and founder	Skype 29 minutes
Eimear O'Carroll Restored Hearing (Wayra)	CTO and co-founder	Skype 40 minutes

Appendix B.3. Interview protocol.

Theme	Questions for conventional startup accelerators	Questions for impact startup accelerators	Questions for startups
1 Accelerators and startups	1. How do you choose startups to join your programme? 2. What are the reasons for startups to join your acceleration programme? 3. What is your relationship with startup teams in the programme? 4. How do you accelerate the development of startups?	1. How do you choose startups to join your programme? 2. What are the reasons for startups to join your acceleration programme? 3. What is your relationship with startup teams in the programme? 4. How do you accelerate the development of sustainability-oriented startups? 5. What are the difficulties when addressing the sustainability-oriented startups needs? [merged because the questions would be repeated]	1. How did you choose a startup accelerator? 2. What were the reasons to join the acceleration programme? 3. What was your relationship with startup accelerator’s team while in the programme? 4. How did the accelerator impact the development of your sustainable idea? 5. What were the difficulties you faced when developing your business idea? 6. How was the accelerator equipped to help you with your difficulties?
2 Accelerators and sustainability-oriented startups	1. How do you approach the acceptance of sustainability-oriented startups to your programme? 2. How do you approach the needs of sustainability-oriented startups? What are the difficulties when addressing the sustainability-oriented startups needs? 3. What are the differences between mentoring the sustainability-oriented and ordinary startups? Are there any? 4. How is the accelerator equipped to facilitate the development process for startups?		
3 Innovation for startups and accelerators	1. What role does innovation play in the agenda of your hosted startups and the accelerator itself? How important it is? 2. How does the innovation process in your accelerator look like? 3. How can your programme impact the innovation process of startup teams?	1. What role does innovation play in the agenda of your hosted startups and the accelerator itself? How important it is? 2. How does the innovation process in your accelerator look like?	1. What role does innovation play for your sustainable business idea? How important it is? 2. How does the innovation process looked like while in the accelerator? 3. How did the accelerator impact your innovation process?

	<p>4. Innovation success is very unpredictable. How do you determine the right path for innovation in the startups?</p>	<p>3. How can your programme impact the innovation process of startup teams? 4. Innovation success is very unpredictable. How do you determine the right path for innovation in the startups?</p>	<p>4. How did the accelerator help you to determine the right path for innovation of your idea?</p>
<p>4 Sustainability for startups and accelerators</p>	<p>1. What is the role of sustainability in your accelerator? 2. What does it mean for an accelerator to accept sustainability-oriented startups? How do they fit your programme's agenda (as it's not created with sustainable approach)? 3. What does it mean for a startup to be focused on sustainability in terms of challenges and success? 4. How does the future development of the sustainable startup usually look like after graduating the programme?</p>	<p>1. What is the role of sustainability in your accelerator? 2. What does it mean for a startup to be focused on sustainability in terms of challenges and success? 3. How does the future development of the sustainable startup usually look like after graduating the programme?</p>	<p>1. What is the role of sustainability in the accelerator you participated in? 2. In your opinion, how did the accelerator performed while advising you with your sustainable idea? 4. What does it mean for a startup to be focused on sustainability in terms of challenges and success? 4. After graduating from the programme, what was your experience with the following development of your idea?</p>

Appendix C. Data Analysis

Appendix C.1. Evaluation of the EF accelerator programme

Appendix C.1.1. Evaluation of EF by Elspeth Lawson, EF

ELEMENTS OF THE PROGRAMME	-2	-1	0	1	2
Ongoing activities					
Checking-in weekly with EF team					
Checking-in weekly with a venture partner					"really helps, really accelerates", "incredible opportunity", "particularly good"
Workshops on relevant topics				"big one"	
Interacting with other startups in the cohort					
Accessing the EF team's expertise				"strong track record <...> in helping them build really successful companies"	
Accessing the VPs expertise					
Accessing EF's network of contacts					
Providing funds and investment for individuals and teams					"unique opportunity", "give companies [a freedom] to experiment with ideas and team building", "challenging, we help as much as possible", "big part of our programme"
Team Forming					
Finding your edge					

Team building		"unique", "smart individuals access to other really smart individuals", "liquid pool of cofounders", "insanely smart and talented people <...> want to build a company", "opportunity, which you can't get anywhere else", "really important", "making sure you get that right", "try to give as much of help as we can"
Develop an Idea		
Accessing science partners		
Ideation using edge-based innovation		
Innovating		
Build A Product		
Aiding with customer development		"one of the huge things we focus on", "huge part of the programme is focused"
Validation		
Raise Investment		
Accessing investor network		"incredibly useful ", "supports our companies", "really big"
Pitching at Demo Day		
Receiving legal advice	"very effective"	
Scale and Grow		
Getting hiring support and advice	"big one"	"awesome", "all of the expensive support we offer"

<p>Introducing startups to corporates</p>	<p>"opportunity that the companies not in the programme wouldn't have access to", "really early stage UK startup <...> but it's something we can do"</p>	
<p>Possibility to reach out to a VP weekly as an alumni</p>		
<p>Alumni network with other startups</p>		<p>"really awesome", "really really lovely", "really constructive feedback", "since they've done that before"</p>
<p>Alumni support in terms of services and knowledge</p>	<p>"some of the key elements remain", "obviously", "we support", "we provide solutions"</p>	
<p>General approach</p>		
<p>Personalisation</p>	<p>"it's important we have people that mentor them", "people to invest in them", "we have networks to invest in them"</p>	<p>"That's certain" "obviously" "amazing"</p>
<p>Credibility</p>		
<p>Emotional support</p>		
<p>Overall experience</p>		

Appendix C.1.2. Evaluation of the EF by Fouad Al Noor, ThinkSono

ELEMENTS OF THE PROGRAMME	-2	-1	0	1	2
Ongoing activities					
Checking-in weekly with EF team				"keep you on track"	"very very good", "such big experience", "why we passed", "tracking objectively, "she was right, of course!", "you start realising you solve your own problem, just by having one of them sitting there"
Checking-in weekly with a venture partner				"you are accountable"	"really check", "challenge you", "really good", "really liked that", "constant monitoring and checking!", "breaking down your assumptions every time and you come up with new ideas"
Workshops on relevant topics					
Interacting with other startups in the cohort				"if you're wondering <...> you can just go up to a PhD in that field", "move on quickly"	"This is just people that are really good" "they are really really smart", "ambitious", "really really smart", "really excited", "hundred smart people around you <...> talk about your idea", "creates an ecosystem", "rear", "doesn't exist anywhere", "help you progress", "motivation"

Accessing the EF team's expertise		"Amazing", "really really good", "very powerful and convincing", "extremely talented", "experience", "ability"
Accessing the VPs expertise		
Accessing EF's network of contacts		"very very good"
Providing funds and investment for individuals and teams		
Meet Your Cofounder		
Finding your edge		
Team building	"support", "help you", "much", "break down the team", "they check", "objectively", "guide you"	
Develop an Idea		
Accessing science partners		
Ideation using edge-based innovation	"they teach", "they help"	"basically built our company", "one of the main reasons we've been very successful"
Build A Product		
Aiding with customer development		
Validation		"They help", "objective metrics", "they break it down", "extremely important"
Raise Investment		

Accessing investor network and working with a funding team	"I can go to the investor meeting now completely unprepared and I know what I'm doing", "very good", "they know which investors are bad", "they protect you", "more and more useful"
Pitching at Demo Day	
Receiving legal advice	"important", "very very good"
Scale and Grow	
Getting hiring support and advice	
Introducing startups to corporates	
Possibility to reach out to a VP weekly as an alumni	
Alumni network with other startups	
Alumni support in terms of services and knowledge	
General approach	
Personalisation	
Credibility	
Emotional support	
Overall	"This place teaches you", "you've come a long way", "you understand business really well", "you understand what's possible!" "[Afterwards] you know what you're doing, what's

going on, the idea is
much much clearer,
there's less ambiguity”
“Very good”,
“tremendously”, “huge!”,
“shelter”, “rare”

Appendix C.1.3. Evaluation of the EF by Adi Kasliwal, SpeakSet

ELEMENTS OF THE PROGRAMME	-2	-1	0	1	2
Ongoing activities					
Checking-in weekly with EF team					"way more pressure on your goals", "way bigger productivity rate", "new goal each week", "you are always focused", "really good", "having the pressure on <...> growth we had <...> was insane"
Checking-in weekly with a venture partner				"particularly helpful"	"way more pressure on your goals", "way bigger productivity rate", "new goal each week", "you are always focused", "really good", "having the pressure on <...> growth we had <...> was insane"
Workshops on relevant topics					
Interacting with other startups in the cohort				"really hard talent", "someone knows the answer", "enough people to help", "main thing", "all the right people around you"	
Providing funds and investment for individuals and teams					
Accessing EF's network of contacts					"massive advantage", "people at the top of that game", "best person telling you to do this in the best way", "really good",

	"they would inevitably know someone that could help us", "always get connected", "this amazing network <...> the biggest takeaway for us"
Accessing the EF team's expertise	"I can speak very highly of them", "very good people to bounce your thoughts off", "always help"
Accessing the VPs expertise	
Meet Your Cofounder	
Finding your edge	
Team building	
Develop an Idea	
Accessing science partners	
Ideation using edge-based innovation	"really good"
Build A Product	
Aiding with customer development	"working prototype <...> 25 people <...> were using it every day" "really good stage"
Validation	"really good"
Raise Investment	
Accessing investor network	
Pitching at Demo Day	
Receiving legal advice	
Scale and Grow	
Getting hiring support and advice	

Introducing startups to corporates		“really easy to do crazy things”
Post-programme		
Possibility to reach out to a VP weekly as an alumni	"we catch up <...> whenever we need something big to do"	
Alumni network with other startups	"keep helping", "we speak with them and see them othen", "feels like we are part of EF"	
Alumni support in terms of services and knowledge	"network still stayed", "general elements were there", "decent amount"	
General approach		
Personalisation		
Credibility		"I feel like EF gives us that badge of honour", "that's a big thing", "get credibility in that crazy big network"
Emotional support		
Overall experience	"quickly embedded us into the scene, made it easy for us to be a part of it", "it feels <...> like we are on the right track", "mindset <...> and accepting the pace because of the way accelerator was working", "helped"	"it built our momentum", "keep pushing and pushing", "rate of progress was crazy during that time", "ridiculous things", "mindset really get into you", "I would rate it 10 out of 10"

Appendix C.1.4. Evaluation of the EF by Mohammad Sherafatmand, Hydroleap

ELEMENTS OF THE PROGRAMME	- 2	-1	0	1	2
Ongoing activities					
Checking-in weekly with EF team					"really good mentorship"
Checking-in weekly with a venture partner				"have experience and <...> help you do it"	"they really help you", "a great thing", "helping you", "I was personally down many times <...> but with their advice, you get back to the role", "they tell you how, they give guidance", "help you pivot", "really good mentorship"
Workshops on relevant topics					
Interacting with other startups in the cohort					
Providing funds and investment for individuals and teams				"one of the reasons <...> they made me convinced", "to be independent", "not to worry", "money is <...> little portion of that", "money of some kind", "it's really important", "it's good", "one of the most important things"	
Accessing EF's network of contacts					"really good connection to the market, to the customers", "really really try to connect you, "one of the most important things for the startups"

Accessing EF team's expertise			
Accessing the VP's expertise			"amazing people", "they really believe", "they are really doing what they know", "what convinced me", "on your side", "it's really important", "any problem <...> - they are the right people to talk to", "I don't have the experience <...> they are always sharing what you can do"
Meet Your Cofounder			
Finding your edge			
Team building			"that's where EF is really helpful", "people are important"
Develop an Idea			
Accessing science partners			
Ideation using edge-based innovation	"they don't help you with innovation", "your team is making innovation"	"they were helping", "accelerator is showing you as much as they can"	
Build A Product			
Aiding with customer development			"really good connection to the market, to the customers", "really really try to connect you, "one of the most important things for the startups"
Validation			
Raise Investment			
Accessing investor network			"if you have an amazing network, you still don't

	have that network EF has", "best experience", "250 investors on demo day", "this is really good", "really big investor, really big person"
Pitching at Demo Day	"how big that day was", "you get emails, you get interest from investors, <...> all around the world, they want to know more", "really big deal", "best experience that you can get!", "that's really a great thing!", "EF is doing that in a perfect way"
Receiving legal advice	
Scale and Grow	
Getting hiring support and advice	"that's where EF is really helpful", "people are important"
Introducing startups to corporates	
Post-programme	
Possibility to reach out to a VP weekly as an alumni	"the first person that comes to my mind to talk to - EF", "you know they are on your side"
Alumni network with other startups	
Alumni support in terms of services and knowledge	"still in touch", "feel like friends", "support for alumni"
General approach	
Personalisation	

Credibility	
Emotional support	"emotionally supportive", "really important", "if this wasn't there, so many startups <...> they would not be here"
Overall experience	"Helping people get the knowledge, get the training and <...> their own way".

Appendix C.1.5. Overall evaluation of the EF accelerator programme

ELEMENTS OF THE PROGRAMME	EF	Hydroleap	SpeakSet	ThinkSono
Ongoing activities				
Checking-in weekly with EF team		2	2	2
Checking-in weekly with a venture partner	2	2	2	2
Workshops on relevant topics	1			
Interacting with other startups in the cohort			1	2
Providing funds and investment for individuals and teams	2	1		
Accessing EF's network of contacts		2	2	
Accessing the EF team's expertise	1	2	2	2
Accessing the VP's expertise				2
Meet Your Cofounder				
Finding your edge				
Forming a team	2	1		1
Develop an Idea				
Accessing science partners				
Ideation using edge-based innovation		0	1	2
Build A Product				
Aiding with customer development	2	2	2	
Product validation			1	2
Raising Investment				
Accessing investor network	2	2		2
Pitching at Demo Day		2		
Receiving legal advice	1			2
Scale and Grow				
Getting hiring support and advice	2	2		
Introducing startups to corporates	1		2	
Post-programme				
Possibility to reach out to a VP weekly as an alumni		2	1	
Alumni network with other startups	2		1	
Alumni support in terms of services and knowledge	1	2	1	
General approach				
Personalisation	1			
Credibility			2	
Emotional support		2		
Overall experience		2	2	2

Appendix C.2. Evaluation of the Wayra accelerator programme

Appendix C.2.1. Evaluation of Wayra by Harry Rhys Davies, Wayra

ELEMENTS OF THE PROGRAMME	-2	-1	0	1	2
Ongoing activities					
Mentors					"Very personalised", "huge amount of knowledge", "saves so much time and so much effort, so much money", "one of the biggest things", "Certainly", "support particular startups", "helping us with startups as they grow and scale", "Helping them through understanding", "a lot of it is really supported by coaches", "to help them"
Masterclasses					
Individual meetings					
Interacting with other startups in the cohort				"This is important, because they can still learn from each other", "huge amounts they can learn"	"Really helps them with their development", "really pushes them to the next stage", "huge amount of knowledge", "saves so much time and so much effort, so much

		money", "one of the biggest things", "a lot of the time is each other to a large degree", "network of hundreds", "so much you can tap into", "how you use that network for your benefit is really important"
Accessing Wayra network		"Really helps them with their development", "really pushes them to the next stage"
Accessing Wayra team's expertise	"a huge part of it", "quite important", "helping them", "make sure that the growth and the journey and the direction is soundly going in the right way"	
Providing funds and investment for teams		"What really makes a difference", "really helps them", "really pushes them on the next stage", "accessing capital and access to investment, being able to scale what they do is really important"
Events		
Peer to peer meetings		
Meeting a Co-founder		
-		

Develop an Idea		
Innovating		
Build A Product		
Telefonica's business development		
Measuring progress through KPIs		"Actively try to support", "tracing metrics", "we want to progress"
Accessing investor network		"It is really good airflow", "a lot of them would tap into"
Pitching at Demo Day		
Scale and Grow		
Relationship with Telefonica		"Really helping the startups to work with their core business", "useful person to plug in and help frame <...> trying to set some certain direction", "We give them really targeted support", "a really big reason for quite a few"
Introducing startups to corporates		"A lot of them would tap into"
Post-programme		
-		
General approach		
Personalisation		"Bringing mentor that would be more grant focused", "very personalised", "bring investors that are more relevant to what they're doing"
Credibility		

Emotional support	"not going through that completely alone <...> is important", "being part of the larger network can support you in many different ways"
Overall experience	"it's really about letting the startup to figure out what is <...> and trying to help them <...> as we can", "how do we help you to speed up, to accelerate what you're doing", "it is about taking you from A to B faster than you would go otherwise and do it cheaper"

Appendix C.2.2. Evaluation of Wayra by Elin Haf Davies, Aparito

ELEMENTS OF THE PROGRAMME	- 2	- 1	0	1	2
Ongoing activities					
Mentors		"We didn't find a lot of them relevant", "they didn't understand healthcare", "too exhausting to explain the details all the time", "they didn't know"			
Masterclasses					
Individual meetings		"Obsessive about your elevator pitch"			
Interacting with other startups in the cohort		"Other were very different", "different target population" "different sale approach"			
Accessing Wayra's network of contacts		"I thought it would work, but it didn't happen"			
Accessing Wayra team's expertise		"The personality that was leading the programme, it was like - do it my way or just go away", "I'm too old for that"			
Providing funds and investment for teams				"Helpful"	
Events					
Peer to peer meetings					
Develop an Idea					
Innovating	"They never once looked at our technology or capabilities", "they didn't even assess the quality", "so annoyed with them", "we could have had a	"Innovation comes from entrepreneur, not an accelerator programme"			

	really shit idea or performance"	
Build A Product		
Telefonica's business development		
Measuring progress through KPIs		
Raise Investment		
Accessing investor network		
Pitching at Demo Day	"2-minute elevator pitch to the healthcare industry is really irrelevant, it really doesn't build the value of the company", "yet you are expected to spend every Friday working on it", "it just didn't fit"	
Scale and Grow		
Relationship with Telefonica		
Introducing startups to corporates		
Post-programme		
-		
General approach		
Personalisation		"Rather than nurturing what entrepreneur brings, command it forward to trying to force this formula that they have"
Credibility		
Emotional support		
Overall experience	"Really bad experience", "just didn't seem a fit in terms of culture or industry",	"I told them quite early on that I was struggling", "wasn't really getting it", "they had only one ala-cart menu, <...> you either

<p>"no help for understanding at all in terms of governance or regulation or business models", "I really struggled with that", "didn't understand healthcare and <...> governance and regulation and <...> tender business that you have to sell into healthcare", "more damaging really", "we could have used those months for much better ways", "quite bad experience with them",</p>	<p>bought into that or there was nothing else for you", "doesn't understand healthcare and <...> what we're trying to do"</p>
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Appendix C.2.3. Evaluation of Wayra by Stan Karpenko, Give Vision

ELEMENTS OF THE PROGRAMME	- 2	- 1	0	1	2
Ongoing activities					
Mentors				"They would give us hacks", "they thought us",	"Fantastic mentors that paid for us to be on TV", "those mentors have started to invest in us", "open doors", "they can vouch for you , they know people, they will help you get to the market, not by teaching, but by actually getting shit done", "it was a bit of a gamble but the process of mentoring - everything was amazing"
Masterclasses					
Individual meetings				"They know what needs to happen to reach the next stage, I think that's important", "having the wisdom to set the right KPIs is important"	
Interacting with other startups in the cohort				"Very talented startups around us helping us to work on problems"	"majority of value <...> being surrounded by super smart people, other startups teaching you hacks and tricks, watching how others make it", "we vote

		for each other", "it was amazing", "family of 20 startups, the individuals were phenomenal, it was super valuable to us", "it was because of the <...> space it brought us to"
Accessing Wayra's network of contacts	"A lot more benefit from introductions"	"majority of value came from connections, introductions, being a part of Wayra family", "it was because of the <...> relationships it brought us to"
Accessing Wayra team's expertise		
Providing funds and investment for teams		
Events		"Quality events", "they would be so wise. They would send us attendee lists", "would know who they need to meet", "it was phenomenal. It was really smart"
Peer to peer meetings		
Meeting a Co-founder		
-		
Develop an Idea		

Innovating	"Wayra pushed us to do trials...", "being around a lot of smart people <...> trigger innovative ideas <...> you could say they helped us innovate", "Wayra played a very positive role in that"	
Build A Product		
Telefonica's business development		
Measuring progress through KPIs		
Raise Investment		
Accessing investor network	"They would bring investors to say "hi" to us every day"	
Pitch and the Demo Day		
Scale and Grow		
Relationship with Telefonica		
Introducing startups to corporates		
Post-programme		
-		
General approach		
Personalisation		
Credibility	"We had a name that would open a lot of doors"	"If you're part of Wayra today, people know you are something special because today mediocrity doesn't get to Wayra", "majority of value <...> having their name next to us"

Emotional support	<p>"They have enough time to understand you, to understand your business, to understand your struggles and link you to the right people", "Wayra does really care", "many lessons learned, many relationships built, a lot of victories and losses in the process", "it was about accelerating us, spinning us faster"</p>	<p>"Phenomenal and we were just really lucky to be there", "they were so great and that was formative to what we are today", "they knew all the tricks", "they certainly did a very good job"</p>
Overall experience		

Appendix C.2.4. Evaluation of Wayra by Eimear O’Carroll, Restored Hearing

ELEMENTS OF THE PROGRAMME	- 2	-1	0	1	2
Ongoing activities					
Mentors			No mentors		
Masterclasses					
Individual meetings				<p>"In some ways, they were very well equipped", "experience in working with large corporate organisations, the kind of we sell into", "had insight", "had good insight", "It was a good relationship, we had a meeting every week, we could come for them for advice", "there wasn't enough expertise on licensing", "good advisors"</p>	
Interacting with other startups in the cohort				<p>"It can be easy to get distracted or discouraged by other people's progress or lack of progress", "that's not actually helpful", "We have a sense of community and the sense of comradery that I think accelerators and co-working foster", "Really important", "we actually meet each other, we still remain friends <...> peer to peer community is really important"</p>	

<p>Accessing Wayra’s network of contacts</p>	<p>"It did help us work through various different business models"</p>	<p>"Had a great network and were able to hook us up with great advisors", "that was really good", "we made connections", "big part", "we found some good advisors", "needed support network", "they helped us find people who had this kind of knowledge"</p>
<p>Accessing Wayra team’s expertise</p>		
<p>Providing funds and investment for teams</p>		<p>"Beneficial"</p>
<p>Events</p>		<p>"Wayra was a very heavily used events space <...> so we kind of had access to that network as well"</p>
<p>Peer to peer meetings</p>		<p>"Well-intentioned, <...> but there isn't much progress that you can make in a 2 week period, so <...> less useful"</p>
<p>Meeting a Co-founder</p>		
<p>-</p>		
<p>Develop an Idea</p>		
<p>Innovating</p>		<p>"They definitely helped us take through various different business models, which is an element of innovation", "in doing that customer research part of the accelerator <...> we saw that the licensing route was very well received"</p>

Build A Product	
Telefonica's business development	
Measuring progress through KPIs	
Raise Investment	
Accessing investor network	
Pitch and the Demo Day	
Scale and Grow	
Relationship with Telefonica	
Introducing startups to corporates	
Post-programme	
-	
General approach	
Personalisation	
Credibility	
Emotional support	
Overall experience	"I can see the ways they speeded us up and also ways in which it took us longer to get to things", "I think we learned as much about how we don't want to do things, as much as how we want to do things <...> could be very helpful, <...> as important as knowing what you do want", "helpful to understand different relationships, different dynamics, different patent structures, <...> a lot of different people in our team <...> interesting too",

"I still think they are very useful thing to do for a company, especially companies that don't have that network"

Appendix C.2.5. Overall evaluation of the Wayra accelerator programme

ELEMENTS OF THE PROGRAMME	Wayra	Aparito	Give Vision	Restored Hearing
Ongoing				
Mentors	2	-1	2	
Masterclasses				
Individual meetings			1	1
Interacting with other startups in the cohort	2	-1	2	1
Accessing Wayra network of contacts	2	-1	2	1
Accessing Wayra team's expertise	1	-1		
Providing funds and investment for teams	2	1		1
Events			2	1
Peer to peer meetings				1
Meeting a Co-founder				
-				
Develop an Idea				
Innovating		-2	1	1
Build A Product				
Telefonica's business development				
Measuring progress through KPIs	1			
Raise Investment				
Accessing investor network	1		1	
The Pitch and Demo Day		-2		
Scale and Grow				
Relationship with Telefonica	1			
Introducing startups to corporates	1			
Post-programme				
-				
General approach				
Personalisation	2	-1		
Credibility			2	
Emotional support	1			
Overall experience	1	-2	2	1

Appendix C.3. Evaluation of The Young Academy accelerator programme

Appendix C.3.1. Evaluation of TYA by James Teasdale, TYA

ELEMENTS OF THE PROGRAMME	- 2	- 1	0	1	2
Ongoing activities					
Accessing The Young Academy's network					
Interacting with other startups in the cohort					
Specialist workshops				"Obviously", "skills and approaches to things that we introduce to them help them to overcome that", "Expand your thinking and giving you ideas", "Really important"	
Working with the strategy mentor				"Steady influence all the way through the process and helping them with what they have", "Really important"	
Accessing the Young Academy's staff expertise					
Setting up an organisation					
Meet Your Cofounder					
Develop an Idea					
The Lean startup Approach				"The idea of the lean startups increases their opportunity to find a	

	sustainable model <...> more likely to succeed", "helps to make their case quickly", "definitely helps them understand what funders and investors are particularly looking for"
Theory of change and impact measurement (supported by New Philanthropy Capital)	"Helps them to make their case quickly", "definitely helps them understand", "to know we're making an impact"
Innovating	"That's important in particular"
Build A Product	
Prototyping and testing	"Entrepreneurs respond to challenges that teachers identify", "it gives them opportunity to check and test their ideas in schools", "All about testing basically", "supporting through that testing process", "how can they learn from pilots", "adapt in response to them", "really important"

Raise Investment	
The Young Academy funding	"Big impact", "obviously", "allows them to take on more staff and grow and scale the impact basically", "it can help them grow and realise their potential in ways so that can help them secure more income", "investment plays an important part as well"
Pitching at the Demo Day	
Meeting experts	
Scale and Grow	
-	
Post-programme	
-	
General approach	
Emotional support	
Credibility	
Overall experience	"Broadens their minds", "exposes to the wider range of tools and techniques", "minds tend to broaden in lots of different directions", "helps them focus", "they can pick the best that we've covered or the most useful", "Makes them much more aware of where they need to get to become investor ready",

"we help them explore
their options", "we
encourage them", "we
don't <...> force them"

Appendix C.3.2. Evaluation of TYA by Rachita Saraogi, Sisterhood

ELEMENTS OF THE PROGRAMME	- 2	-1	0	1	2
Ongoing activities					
Accessing The Young Academy's network				"They have links to people <...> that you can gain access too"	
Interacting with other startups in the cohort				"Real advantage", "peer to peer learning happened"	
Specialist workshops					"Most impact", "that back-end is what was provided", "that was the most impactful for us being on this accelerator", "It was really important for us", "The Young Foundation provided, did exactly that", "they really covered a long range of aspects", "it's special", "it was really down to the workshops", "they were thorough", "I can't say they were completely thorough in all aspects, but the majority of them", "advantage having external people come in", "gives you the real world perspective", "to learn things"

<p>Working with the strategy mentor</p>	<p>"One thing especially has been extremely good", "she continued being our mentor", "which is so good"</p>
<p>Accessing the Young Academy's staff expertise</p>	
<p>Setting up an organisation</p>	<p>"The most impactful", "Because of the legal expertise that came in, the firm <...> took us pro-bono, so we are able to set up", "really good"</p>
<p>Meet Your Cofounder</p>	
<p>-</p>	
<p>Develop an Idea</p>	
<p>The Lean startup Approach Theory of change and impact measurement (supported by New Philanthropy Capital)</p>	<p>"Very important", "that's the one that has been the most effective for us", "that's the one that helped us innovate the most", "We have a really good relationship with the employee from NPC <...> and she's more than happy to continue on helping us"</p>
<p>Innovating</p>	<p>"There were elements that helped us innovate, some things that we didn't know about at all", "but</p>

	the actual mindset of doing innovation is something we brought on ourselves"
Build A Product	
Prototyping and testing	"They have links to people <...> you can gain access too"
The Young Academy funding	
Pitching at the Demo Day	"It was great for us to do our final pitches to people and do that in from a live audience", "links that were made <...> were for further down the line", "it feels like... we have gone through all this <...> but we are still back to doing all the funding groundwork we were doing before anyway
Meeting experts	
Scale and Grow	
-	
Post-programme	
-	
General approach	
Emotional support	"Very encouraging, very supportive and you need that", "that level of support is very important and they were very good at

	giving us that", "they really believed and are still believing in what we're doing"
Credibility	
Overall experience	<p>"We have been given tools to create a business model and all these different things", "really good", "credit to them that they get a lot of external people", "because of the accelerator programme, we now have a better understanding of which funders to look for", "advantage", "you waste less time and applications take so long", "definitely an advantage", "gives us a head start anyway", "it has given us an advantage of now being able to speak the language of funders and things like that", "speak the language of people in business, even in commercial, and so they get it quicker, they understand better", "All theoretical stuff is great, but being able to do actual groundwork, I don't think any accelerator does that right now", "accelerator <...></p>

has helped us to
formulate how that has
changed"

Appendix C.3.3. Evaluation of TYA by the Ellen Ferguson, Happy Teacher Project

ELEMENTS OF THE PROGRAMME	- 2	-1	0	1	2
Ongoing activities					
Accessing The Young Academy's network					
Interacting with other startups in the cohort				"Maybe", "feel that sense of everybody... And we did some activities like that"	
Specialist workshops			"We were joining these activities <...> but what I probably needed a bit more of was regular talking and then sort of plotting it down", "I don't think my idea was sufficiently progressed to make the most of these sessions"		
Working with the strategy mentor			"There was maybe a bit of a mismatch there", "very capable at looking at the spreadsheets and very good at identifying problems, but I wasn't really at that stage", "I did feel that mentors <...> were people who work in banks, they were not trained to be mentors", "they're really busy people and I was always a bit worried to be in contact with them", "they were really good at [making		

		plans for next week], but then maybe I was a little reluctant to get back at them because I felt like I have not pushed the idea far along enough"
Accessing the Young Academy's staff expertise	"I would have liked more time with the Young Foundation team who have a better idea of specifically the education landscape"	
Setting up an organisation		
Meet Your Cofounder		
-		
Develop an Idea		
The Lean startup Approach		
Theory of change and impact measurement (supported by New Philanthropy Capital)		"Mentor who was helping us", "very useful", "feeds into the success of the project", "that was really helpful"
Innovating		"No, because I feel that's on me", "I wonder if the Young Foundation team had <...> level of expertise in that specific area beyond reading a few startup books. Although James has worked in the consultancy so I think he has been involved in that side of things"
Build A Product		
Prototyping and testing		"They did challenge me to go to the schools and I

		have a number of connections with schools but they are limited", "I'm running a pilot in the school at the moment"
The Young Academy funding		
Pitching at the Demo Day	"Ended up being a little bit an anti-climax", "you want to have some meaningful conversations with people <...> but there wasn't necessarily anybody who switched on my particular subject matter"	
Meeting experts		
Scale and Grow		
-		
Post-programme		
-		
General approach		
Emotional support		
Credibility		
Overall experience		"I would have loved for the structure to <...> give more pressure. I did feel some pressure <...> but not lots and lots and lots. It was quite a soft touch", "grateful <...>, but I think when you're in a very early stage, maybe I wasn't able to make the best of all the resources that were given to me", "there is a

problem", <...> but the idea did change in terms of being able to say "these seem to be key indicators for motivation and drive" and that's something that I find very interesting", "maybe 6 out of 10", "it provided me with the structure for a number of weeks, I met a nice group of people who went through similar emotions", "for early stage ventures it wasn't probably the best thing in the world", "they had lots of good stuff to provide, but I wasn't ready to make the most of it"

Appendix C.3.4. Evaluation of TYA by Keshav Bhatt, Revolution Hive

ELEMENTS OF THE PROGRAMME	- 2	-1	0	1	2
Ongoing activities					
Accessing The Young Academy's network				"We've partnered with them to deliver training, <...> which we now started to deliver", "that's cool", "We've had one of the corporate banks... we've had an initial meeting. <...> It doesn't mean that <...> we are going to do anything there, we'll see what happens"	
Interacting with other startups in the cohort			"	"Some of the great things I got from the programme, tools that other ventures were using... that needs to be more of a structured way	
Specialist workshops					"Lessons and things you need to learn in business. Particularly as social business in the education sector", "For every training day we had genuinely <...> go and spend a couple of days applying that stuff", "and then we already had a good idea what

	<p>we do <...> but I couldn't do that before or it was vague", "because every week we were speaking to different people, we had to keep refining refining and refining", "definitely useful, they were broad in scope", "generalised", "but they were really really useful in helping guide my thinking"</p>
<p>Working with the strategy mentor</p>	<p>"Extremely valuable and continues to be <...> as those people are now advisors on our board", "really really useful", "They were really really enthusiastic <...> that was all voluntarily", "they now joined our advisory board", "we were quite fortunate in that we had one from each organisation"</p>

Accessing the Young Academy's staff expertise	
Setting up as an organisation	
Meet Your Cofounder	
-	
Develop an Idea	
The Lean startup Approach	
Theory of change and impact measurement (supported by New Philanthropy Capital)	"Come and help... Go through to what we're doing, how to measure the impact and that kind of thing", "Really really useful"
Innovating	"Taking them an idea and then discussing it with James or George from NBC, and <...> talking to our mentors"
Build A Product	
Prototyping and testing	
The Young Academy funding	
Pitching at the Demo Day	"Good introduction that just made things easier", "it's not about funding on that day, it's more about the introductions that are far more valuable", "they could have been clearer about that"
Meeting experts	"Really really useful"

Scale and Grow		
-		
Raise Investment		
-		
General		
Emotional support		
Credibility	"An important thing in business", "The Young Foundation is very well regarded among respected organisations and so the Young Academy is also... To the work they are doing... Equally well respected"	
Overall experience		"Definitely", "huge defining effect on us to grow", "[accelerated] 100%! Without a question!", "I'd always do it again", "definitely, it's been very very useful", "will say with us", "many things that have changed our trajectory", "it's definitely given us a shift up", "Definitely", "accelerator was a catalyst", "definitely forces us to speed up the rate at which we were doing these things",

"you have to do it quicker", "7.5 out of 10", "I'm incredibly grateful", "really really good programme", "don't get me wrong - I'm very happy!"

Appendix C.3.5. Overall evaluation of The Young Academy

ELEMENTS OF THE PROGRAMME	The Young Academy	Sisterhood	The Happy Teacher Project	Revolution Hive
Ongoing activities				
Accessing The Young Academy's network		1		1
Interacting with other startups in the cohort		1	1	1
Specialist workshops	1	2	0	2
Working with the strategy mentor	1	2	0	2
Accessing the Young Academy's staff expertise			-1	
Setting up an organisation		2		
Meet Your Cofounder				
-				
Develop an Idea				
The Lean startup Approach	1			
Theory of change and impact measurement (supported by New Philanthropy Capital)	1	2	1	1
Innovating	1	1	0	1
Build A Product				
Prototyping and testing	2	1	1	
Raise Investment				
The Young Academy funding	1			
Pitching at the Demo Day			-1	1
Meeting experts				2
Scale and Grow				
-				
Post-programme				
-				
General approach				
Emotional support		2		
Credibility				1
Overall experience	1	1	0	2

Appendix C.4. Evaluation of The Big Venture Challenge accelerator programme

Appendix C.4.1. Evaluation of BVC by David Bartram, BVC

ELEMENTS OF THE PROGRAMME	- 2	-1	0	1	2
Ongoing activities					
Accessing BVC’s network (including experts)				"Could really help them rethink", "Big one", "that's going to get them to scale"	
Accessing BVC team’s expertise					
Mentor (Venture Manager support)				"The support that comes <...> is the real value for the growth of their business", "Could really help them rethink"	
BVC match funding				"Ventures aren't ready to access that capital, we call them missing middle of finance. We use this pot of matched finance to help those organisations", "they [are] probably attracted to the capital as well, the growth funding", "money is nice to have"	
Workshops				"Really valuable"	
Meet Your Cofounder					
-					
Develop an Idea					
Innovating					
Build A Product					

Accessing routes to market (including connections to commissioners, clients and channel partners)	
Aiding with customer development	"Absolute systemic transformative change", "that's going to get them to scale", "Big one"
Locking-in the impact into the business model	"A lot of our work"
Raising Investment	
Investment raising (both debt and equity)	"Flexible funding strategy", "we can bring a consultant to do that work", "supporting that generally together", "They really don't know what investment means for the... how do they access it, how do they get their business ready?", "Having someone who can hand hold with them through that process <...> I think that's the main reason"
Legal and regulatory advice	"Real challenge", "has always tried to help out with those legal forms", "we deal with CICs", "we are all the way through to profit for purpose business"
Financial planning	
Scale and Grow	

<p>Governance (including connections to potential board members)</p>	<p>“Big one”</p>	<p>"None of that makes any sense at all if the sustainable business model isn't right", "our whole focus is about the sustainability of the business, about economical sustainability"</p>
<p>Social impact measurement</p>		
<p>Operational planning and delivery</p>		
<p>Business modelling</p>		
<p>Securing first contracts</p>		<p>"Transformative change", "to take them to scale"</p>
<p>Post-programme</p>		
<p>Possibility to reach out to BVC as an alumni</p>	<p>"We do that support", "the support that we give can be really quite personal and can be from anything from the coaching relationship to just being there, our for a beer, throwing some ideas around, being a critical friend, planning their future steps of their business", "We don't do enough", "we try to, we do", "when we can, just on the side, we keep in touch with the organisations and</p>	

	we try to push them", "we try to help them as much as we can, but we don't do enough"	
General approach		
Personalisation	"It's what market needs", "right support"	"We identify the needs of entrepreneurs and <...> then we design the programme around them", "it's <...> the most effective way of delivering support", "it's very personalised!", "we bring in the external support on 1-on-1 basis or 2-on-1 basis as we can", "very intense support that's tailored to the need of that organisation", "so so important", "a really different approach to take", "something I think is working", "you need that really bespoke personalised support to them", "it's very difficult but it's very important"
Credibility		
Overall experience	"We are trying to help them to best set up their business model and to help them to scale", "Our role is to make sure startups have a team or advisors or a board to rely on them and sometimes it's us"	

Appendix C.4.2. Evaluation of BVC by Ben Allen, Oomph!

ELEMENTS OF THE PROGRAMME	- 2	-1	0	1	2
Ongoing activities					
Accessing BVC's network (including experts)				"The other 25% was brought through access, the network that UnLtd had"	"Networks were kind of critical", "through BVC I was able to build the relationship with somebody who I really trusted <...>, so that was an easy decision <...> that would not have happened without UnLtd", "our whole business is based on the fact that we've managed to build, to leverage the network that UnLtd had provided for us"
Accessing BVC team's expertise					"I was particularly lucky cause I recruited a lot of UnLtd staff", "head of ventures ended up working for me", "I had three internal staff members helping me grow", "the support that was brought through people I've already poached from UnLtd", "bringing another team member Dan from UnLtd <...> that was a really good thing"
Mentor (Venture Manager support)					"We had a good mentor", "Investor, Andy from"

	<p>UnLtd, <...> brought an incredible rigour to the business, telling it wasn't investment-ready, <...> telling that we have to get it right. <...> That was a really good thing", "he left UnLtd to invest in Oomph", "She helped us to guide our way through the investment process"</p>
BVC match funding	<p>"Then we raised the money, match-funded it with Nesta", "UnLtd has served its purpose"</p>
Workshops	
Meet Your Cofounder	
-	
Develop an Idea	
Innovating	<p>"Of course, when you raise investment or you bring a new board, there are times when things accelerate quicker, but it's all just part of the process", "I didn't know where are we going to pivot to", "that's when I poached Dan from UnLtd to become our COO", "they were employed by me, but it was technically though the programme that happened"</p>
Build A Product	

Accessing routes to market (including connections to commissioners, clients and channel partners)	
Aiding with customer development	
Locking-in the impact into the business model	
Raise Investment	
Investment raising (both debt and equity)	"We probably would have raised investment, but we would have probably raised 200 000 GBP rather than 300 000 GBP", "And the equity would have probably been more expensive", "It made the investment a whole lot easier and a lot quicker", "investor, Andy from UnLtd, <...> brought an incredible rigour to the business, telling it wasn't investment-ready, <...> telling that we have to get it right. <...> That was a really good thing"
Legal and regulatory advice	
Financial planning	
Scale and Grow	
Governance (including	

connections to potential board members)		
Social impact measurement		
Operational planning and delivery		
Business modelling		
Securing first contracts		"Then we raised the money, match-funded it with Nesta", "UnLtd has served its purpose"
Post-programme		
Possibility to reach out to BVC as an alumni		
General approach		
Personalisation		
Credibility		
Overall experience	"Business acumen which was brought to the business as well", "provide extremely good business skills, business modelling skills and support functions, but ultimately does not <...> get us in front of [health care] people that we need to meet"	"UnLtd was really there to get you investor ready and take you to the next step", "it was great that UnLtd supported you and they helped with the strategic direction of the business", "Oomph wouldn't have the stand where we are now if it wasn't for UnLtd, there's no way that Oomph would have left Scarborough", "it's much easier to face them [challenges] with other people. That support is significant. I moved to London because of it", "I

rate UnLtd very highly, I'd give them 9 out of 10", "UnLtd needed to provide rigorous support and quite probing questioning on was the model scalable, sustainable, creating impact, was creating a change <...> and they've done that very well", "I moved to London because of their support, so I would suggest to anybody that you take advantage of it", "take the support you can get"

Appendix C.4.3. Evaluation of BVC by Oliver Waddington-Ball, Goldfinger Factory

ELEMENTS OF THE PROGRAMME	- 2	-1	0	1	2
Ongoing activities					
Accessing BVC's network (including experts)				"More useful"	"Main area <...> ensuring that lofty ambitions meet reality", "Always useful to have someone with experience to check what your positions are. Putting you in front of a lawyer or an HR specialist <...> to make sure what you think you could do is actually what could happen", "having a way to figure out that issue"
Accessing BVC team's expertise					
Mentor (Venture Manager support)					"Has a huge impact on us", "she was able to provide advice that was much more applied", "the benefits of having somebody that's been there and have done it before and helping you make quick decisions is enormous", "main area <...> ensuring that lofty ambitions meet reality", "always useful to have someone with experience to check what your positions are", "Being able

		to work with experts that were seeing lots and lots of types of business models that were similar to us, <...> able to provide best-practice from experience", "that was great!", "it was more difficult when our business mentor was very busy <..> but then she was able to focus on us a bit more, we made very rapid strides that wouldn't have been possible without somebody with experience and it is a major difference if you're a young business"
BVC match funding		
Workshops		"As much as sitting in the workshop about marketing, in general, is useful, it does not necessarily help you solve your particular problem"
Meet Your Cofounder		
-		
Develop an Idea		
Innovating		
Build A Product		
Accessing routes to market (including connections to commissioners,		

clients and channel partners)
Aiding with customer development
Locking-in the impact into the business model
Raise Investment
Investment raising (both debt and equity)
Legal and regulatory advice
Financial planning
Scale and Grow
Governance (including connections to potential board members)
Social impact measurement
Operational planning and delivery
Business modelling
Securing first contracts
Post-programme
Possibility to reach out to BVC as an alumni
General approach
Personalisation

Credibility	<p>“It’s very helpful to have a third-party validation”, "winning a place in a highly competitive business accelerator programme in itself <...> sends the message"</p>
Overall experience	<p>"We're still here so I think they did a pretty good job", "I thought they were 8 out of 10"</p>
	<p>"It was a blend, the decision was made between the finance that was unlocked, the business mentor to get us ready for that finance and then the niche advisory services which we used based on the mentor's advice", "I think that's probably the top for an accelerator", "well, the impact was huge", "upgraded min and Marie's skills as entrepreneurs hugely", "process of trying to meet those requirements had a big impact that the organisation moved forwards"</p>

Appendix C.4.4. Evaluation of BVC by Naveed Parvez, Andiamo

ELEMENTS OF THE PROGRAMME	- 2	-1	0	1	2
Ongoing activities					
Accessing BVC's network (including experts)					"Did work really well", "multiple meetings with lots of people, they also made introductions to potential customers", "worked really really well", "network we got out of it was incredible", "Really good access to network", "<...> to make our business more robust", "help access the investors that we needed to", "very helpful"
Accessing BVC team's expertise					
Mentor (Venture Manager support)				"Very helpful"	"She really went above and beyond", "she would introduce us to investors, was a sounding board for our ideas", "she became an advisor to the company as well"
BVC match funding			"It just was a really bad move we felt from UnLtd", "fundamentally changed the reality, the usefulness of the accelerator was much lower", "Unfortunately", "threw us off", "we have a		

	<p>plan and how the plan doesn't apply at all", "the usefulness of this is much less", "we had to work out how to change so this is still a positive for us"</p>
Workshops	<p>"That was good, you could do what you needed", "you could sign up to what worked for you", "Co-founder <...> didn't come from a business background, so there was a huge amount of value", "learning things she never been exposed to", "huge advantage for accelerators when people <...> don't come from business background", "huge direct help"</p>
Meet Your Cofounder	
-	
Develop an Idea	
Innovating	<p>"They couldn't help us within the innovation process, what they could do <...> make introductions to people, <...> make sure there is a connection between innovation and market fit", "challenge you", "asking that kind of questions"</p>
Build A Product	

Accessing routes to market (including connections to commissioners, clients and channel partners)	
Aiding with customer development	
Locking-in the impact into the business model	
Raise Investment	
Investment raising (both debt and equity)	"Very helpful"
Legal and regulatory advice	"Really really useful"
Financial planning	"Really really useful", "Helping you", "that is a huge amount of value", "investors could understand"
Scale and Grow	
Governance (including connections to potential board members)	
Social impact measurement	
Operational planning and delivery	
Business modelling	"Really really useful", "big impact", "forced us to do that"

<p>Securing first contracts</p>	<p>"The relationship continued", "just before <...> I was talking to an investor that they introduced me 2 years after the accelerator", "still have a strong relationship with them", "definitely proven the case for UnLtd", "they learned some of their lessons", "relationship became a 7/10 and that may go higher. SO that's an interesting thing for us, I think it's the long term relationship"</p>
<p>Post-programme</p>	
<p>Possibility to reach out to BVC as an alumni</p>	
<p>General approach</p>	
<p>Personalisation</p>	
<p>Credibility</p>	<p>"Creates more confidence", "when you've been through certain accelerators that have a good reputation, they understand that you've been through a certain level of due diligence, someone has already given a look over you, <...> given you a tick"</p>
<p>Overall experience</p>	<p>"We engaged with people <...> very experienced, very knowledgeable in their area <...> made us</p>

look professional, <...>
you look less risky",
"fantastic knowledge, all
of that", "they feel safe
giving the money",
"accelerator gave us a lot
of good foundations and
then we took those
foundations to build the
next stage of the
business", "It was not as
we didn't get any value out
of it, but not as much as
we expected", "mixed
experience", "during the
accelerator, it was ok, like
a 5 out of 10"

Appendix C.4.5. Overall evaluation of The Big Venture Challenge

ELEMENTS OF THE PROGRAMME	BVC	Oomph	Goldfinger's Factory	Andiamo
Ongoing activities				
Accessing BVC's network (including experts)	1	2	2	2
Accessing BVC team's expertise		2		
Mentor (Venture Manager) support	1	2	2	2
BVC match funding	1	2		-2
Workshops	1		1	1
Meet Your Cofounder				
-				
Develop an Idea				
Innovating		1		1
Build A Product				
Aiding with customer development	2			
Locking-in the impact into the business model	1			
Raise Investment				
Investment raising (both debt and equity)	1	2		1
Legal and regulatory advice	1			1
Financial planning				1
Scale and Grow				
Social impact measurement	1			
Business modelling	2			1
Securing first contracts	2	2		
Post-programme				
Possibility to reach out to BVC as an alumni	1			1
General approach				
Personalisation	2			
Credibility			2	1
Overall experience	1	2	2	1

Appendix D. Cross-case Analysis

Appendix D.1. Startup accelerators and startups: approach to innovation and its type

Accelerator and the startups	Approach and type of innovation	
EF	Essential	<p>“Innovation is probably at the essence of everything that we do”</p> <p>“Every company that we've built is an innovative company”</p> <p>“We wouldn't be supporting a company <...> if they were doing something that someone else could do.”</p>
ThinkSono	Product innovation	“No one else has done it in the history and they probably can't!”
Hydroleap	Product innovation	“I will say that innovation is the core of it.”
SpeakSet	Process innovation	“So innovation for us is like getting people to get a grip on technology.”
Wayra	Essential	<p>“I suppose you could say it is almost fundamental to what they do”</p> <p>“Almost all what they are doing by default, by definition is innovation, but I guess they would not necessarily see it themselves as innovation”</p>
Give Vision	Product innovation	“I think it is too early for us to talk about the innovation in business models, because we haven't been shipping millions of those things, so I would say yeah, our innovation was around technology.”
Restored Hearing	Product innovation	“Our product is unique, and innovative, and certainly part of the process of creating new solutions. <...> It's a very fundamental and core part of our business.”
Aparito	Product and process innovation	“We are generating something they don't currently have.”
The Young Academy	Essential	“We're specifically looking for new ideas or the things that are innovative in a different way.”
The Happy Teacher Project	Process innovation	“I suppose it's pulling together insights that are outside the education sector but also innovation in terms of thinking of recruitment and retention from a very much human-cantered point of view.”
Sisterhood	Business model innovation	“It's absolutely essential, it's so essential, and it's not. People think of innovation, and they think product or service, you have to innovate the way that business is done right now”
Revolution Hive	Process innovation	<p>“So innovation is absolutely key. “</p> <p>“So there's constant innovation happening at a micro level but also macro level.”</p>

Big Venture Challenge	Essential	“The idea of social innovation is fundamental to what we want to achieve here and what's needed in society. So these organisations identify these social issues, innovate around it and design sustainable business models around them. It's crucial I'd say.”
Oomph!	Process and business model innovation	“I think we're quite innovative. You have got to innovate but you also got to execute on the innovation.”
The Goldfinger's Factory	Process and business model innovation	“I'd say no company can afford to not be innovative, because otherwise why would anybody buy your product?”
Andiamo	Product and process innovation	“We are an outlier in the innovation space because we are a world's first.”

Appendix D.2. Matching the startups with stage and focus fit of the accelerator

Accelerator	Startup	Stage Fit / No fit	Focus Fit / No fit	Role assessment
EF	Hydroleap	Fit	Fit	2
	SpeakSet	Fit	Fit	2
	ThinkSono	Fit	Fit	2
Wayra	Give Vision	Fit	Fit	2
	Restored Hearing	No fit	Fit	1
	Aparito	Fit	No Fit	-2
The Young Academy	The Happy Teacher Project	No fit	Fit	0
	Sisterhood	Fit	Fit	1
	Revolution Hive	Fit	Fit	2
Big Venture Challenge	Oomph!	Fit	Fit	2
	Goldfinger's Factory	Fit	Fit	2
	Andiamo	No fit	Fit	1