

The State of Nordic Impact Start-ups 2020

Impact start-ups are increasingly being acknowledged as powerful engines for change and sustainable growth. Yet a number of widely held beliefs prevail and threaten to hinder the progress of the Nordic impact start-up ecosystem. This report explores 10 of the most common myths, and assesses the status quo of impact start-ups in Denmark, Sweden, Norway and Finland.



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State of Nordic Impact Start-ups 2020

We are now only 10 years from 2030, the year 193 countries pledged to reach the UN Sustainable Development Goals. There is still a long way to go and many solutions need time to scale, which leaves us with a great deal of urgency.

In Danske Bank, we are a true believer in the power of business to find innovative solutions and new ways of doing things that will create new solutions to the challenges that our planet and societies face. In particular, we have high hopes that impact start-ups will be the role models for a new type of business, where the business idea itself creates sustainable values. They have no legacy that blurs their focus and delays their speed, and they are ready to take risks and bring innovation and new technologies to the table. Furthermore, they have an agile mindset through which they can react to market changes with high speed.

Insights are needed to mature the ecosystem

In Danske Bank, we are dedicated to help these start-ups scale their business and thus increase their positive impact. We have a large suite of activities, which support the impact start-up ecosystem. We have trained growth advisors to understand startups and established the +impact platform and our +impact accelerator.

An important element is documentation - like this report - through which we provide data-driven insights on the Nordic impact start-up scene in order to facilitate a more fact based dialogue and help put the spotlight on the needs and development of the start-up community.

Since we did the first report three years ago, impact start-ups have become the talk of the town, both in the Nordic countries and on a global scale. Today, the question is therefore not so much to create awareness, but to understand how we can accelerate the ecosystem and to create larger transparency especially for investors. This is also the reason why we this year have focused the report on breaking or confirming the myths that seem to be a hindrance for accelerating impact businesses.

Findings

There are some specific learnings in the report that we find extremely interesting and promising. For instance the fact that we have identified a record high 1018 impact start-ups this year, and that a lot of them have similar business models in comparison to 'normal' scalable tech start-ups.

We see that the majority of the impact start-ups are based on scalable business models that have the potential to work on normal early stage investor terms. These start-ups integrate impact in a way that goes hand-in-hand with profit, and almost half of the founders of the Nordic impact start-ups have prior entrepreneurial experience. Women CEOs and founders are well represented in impact start-ups, but we firmly believe that these numbers could and should improve - especially in deep tech - as diverse companies overall tend to generate better results for the business, as well as society.

The Nordic ecosystem has great prerequisites for being a well performing impact ecosystem, but we, in the ecosystem need to pick up the pace. If the Nordics are to become an epicentre for impact start-ups, we need to move beyond the converted few.

When we started this report, COVID-19 was not present, and we still don't know the full scale of the consequences. However, this does not change the conclusions, and in many ways, it has just made it even more pressing that we need to mainstream the impact agenda.

Klavs Hjort, Head of Growth & Impact at Danske Bank

Maria Simonson, Head of Societal Impact & Sustainability, Danske Bank



Summary

Since we published our first insights report on Nordic Impact start-ups in 2018, we have experienced an increasing interest in impact start-ups from a range of ecosystem players.

This enthusiasm for impact tech supports our belief that the Nordic region can become an epicenter for impact start-ups. However, when we talk to investors and start-up founders, we still find that there are several narratives that are holding back the space.

In *The State of Nordic Impact Start-ups 2020* we have therefore identified 10 of the most widely beliefs, that are preventing the Nordic impact ecosystem from being taken to the next level. This forms the foundation for the exploration of 10 myths, where we try to give clear answers to complex solutions through data driven insights.

A key overall finding is that the Nordics countries have a growing number of impact start-ups, maturing to a point where they are beginning to resemble regular growth stage start-ups. This can be interpreted from a number of sub-findings: a) many of the impact start-ups seem to have more in common with their conventional counterparts in the same vertical than with other impact start-ups; b) the majority of the start-ups' are based on potentially scalable business models that have the potential to work on regular early stage investment terms, c) 98% of the impact-start-ups integrate impact in their business model to enhance profit and d) 45% of the founders have significant entrepreneurial experience. We are seeing positive progress on many fronts amongst Nordic impact. However, there is still a way to go if we are to move the needle on the UN's 2030 agenda for sustainable development.

MYTH #1 *The Nordic countries are global leaders within impact start-ups.*
PARTLY FALSE The Nordic ecosystem has great prerequisites but the UK is the best performing impact ecosystem in Europe.

MYTH #2 *Nordic impact start-ups are solving the most pressing global challenges.*
PARTLY FALSE The majority of the Nordic impact start-ups are focusing on solving local problems in high-income markets, fewer focus on solutions which will move the needle on the underlying SDG indicators.

MYTH #3 *Impact start-ups are a special breed of start-ups.*
PARTLY FALSE The impact start-ups differ in type of impact and scalability - some with the same mindset as their conventional counterparts.

MYTH #4 *Impact requires a trade-off between purpose and profit.*
FALSE 98% of Nordic impact start-ups integrate impact to improve top and bottom-line.

MYTH #5 *Impact start-ups have fundamentally different business models than non-impact start-ups.*
FALSE Impact start-ups' business models are similar to regular start-ups.

MYTH #6 *Impact start-up founders lack business experience.*
FALSE Impact start-up founders have significant business experience.

MYTH #7 *There are more women founders in the impact start-up scene.*
TRUE 24% of impact start-ups founders are women.

MYTH #8 *Impact cannot be measured.*
PARTLY FALSE Impact measurement is still in its infancy, but 20% of Nordic impact start-ups quantify their impact performance indicators.

MYTH #9 *The majority of Nordic impact start-ups promote their SDGs.*
FALSE Only 10% of Nordic impact start-ups mention the SDGs.

MYTH #10 *Investors lack data on impact start-ups.*
PARTLY FALSE The data is just as imperfect as for non-impact start-ups.

1018

IMPACT START-UPS



Top 4 SDGs



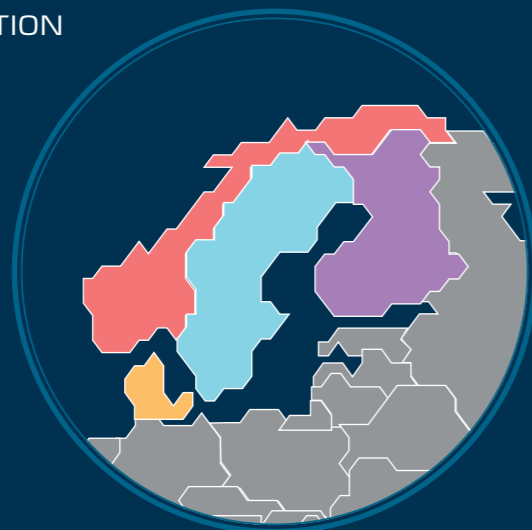
GEOGRAPHICAL DISTRIBUTION
IMPACT START-UPS

35%

DENMARK

21%

FINLAND



27%

SWEDEN

16%

NORWAY

Introduction

This is the third time we map Nordic start-ups addressing the United Nations Sustainable Development Goals.

The aim of this report

We believe that the Nordic countries hold the prerequisites and potential to become a global epicentre for impact start-ups. Our early adoption of the green agenda, balanced welfare societies and thriving start-up ecosystems stand us in good stead to take this pole position.

Though we have the necessary mindset and attributes, we cannot sit back and expect for this to happen without concerted strategies and interventions. In order to make this a reality and reach this goal, we must continue to actively support the scaling of impact start-ups, help build the right capabilities amongst founding teams, and connect impact start-ups with new investment and ecosystem partners.

Since 2018, there has been increasing support and excitement for this new breed of start-up and the mark they could make on the UN's 2030 agenda. Yet when we talk to investors and impact founders, we find that there are several myths getting in the way of progress.

For this year's report, we have decided to deep-dive into the 10 most common myths holding back the impact space in the Nordics - assessing to what extent they are valid or invalid - and outline what can be done to change these perceptions. We acknowledge that it is difficult - if not impossible - to give simple answers to the multifaceted

topics we explore. As the space develops further, so will our learning. As such, we hope this report will help to move the conversation in the right direction and ultimately accelerate progress in the Nordic impact start-up space.

Who would benefit from this report

This report is primarily intended for the investment community and aims to help early investors gain data-driven insights into this growing space. The report is also intended to benefit the broader ecosystem as it reveals data-driven insights that can ignite further discussion on how best to accelerate the Nordic impact start-up space.

It is furthermore our hope that this report will contribute to a shared societal understanding of the importance of the Nordic impact ecosystem - and why all relevant stakeholders should be investing in and contributing to its future.

Definition of an impact start-up:

We define an impact start-up as 'a start-up company that addresses one or more of the UN Sustainable Development Goals at the core of its business and have the potential to scale'.

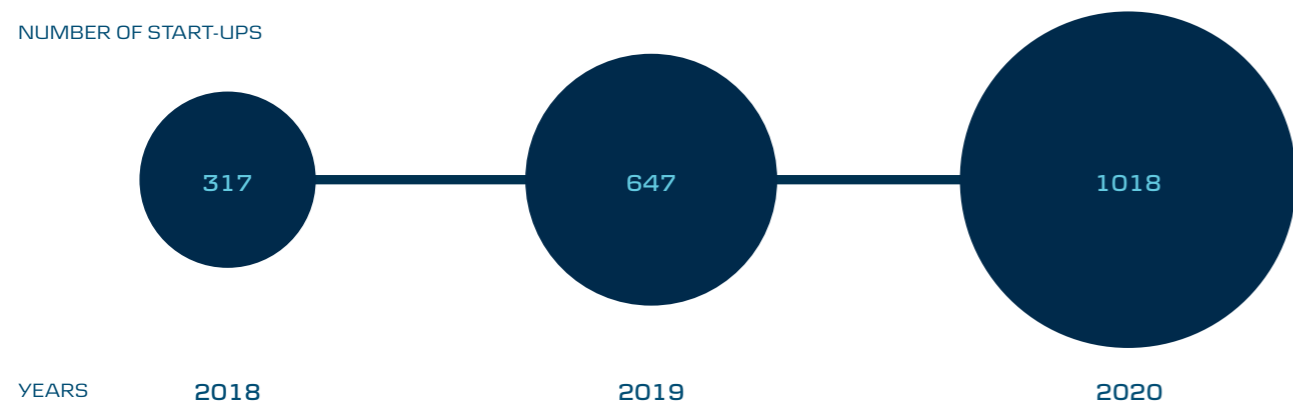
Our litmus test: If you remove the impact you also remove the business.



Figure 1

Sample size of impact start-ups in Danske Bank impact insights reports 2018, 2019 and 2020

NUMBER OF START-UPS



Who is included in the report

We are building on the data gathered in both the 2018 and 2019 reports, leveraging our existing learnings and contextualising these within the wider Nordic start-up ecosystem.

Number of start-ups at the Hub and impact start-ups from 2018-2020

We have analysed impact start-ups registered on either the Hub (thehub.io), on +impact (plusimpact.io) or at Green Innovation Group (greeninnovationgroup.com). To validate and strengthen the data quality further, we have collaborated with Dealroom (dealroom.co) by cross-comparing funding data.

- In 2018 Danske Bank conducted the first Nordic analysis of impact start-ups, which identified 317 impact start-ups across Sweden, Norway, Finland and Denmark.

- In 2019 we presented our second report 'The State of Nordic Impact Start-ups' which identified 647 impact start-ups across Sweden, Norway, Finland and Denmark.

- In 2020 we are presenting our third report, which has identified 1018 impact start-ups across Sweden, Norway, Finland and Denmark.

New dimension of this year's report

The previous reports have catalysed many fruitful dialogues and learnings. This is why we have decided to expand the State of Nordic impact start-ups report to include a digital data repository at +impact, plusimpact.io/impactreport-2020. While the content of this report will be available, you will also be able to download the data applied in the various charts.

10 myths about the Nordic impact space

A lot has happened since 2018 when we embarked upon our journey of providing data driven insights on Nordic impact start-ups. Impact start-ups have increasingly become the talk of the town, both in the Nordic countries and on a global scale.

Back then, we set out to understand what challenges the Nordic impact start-ups face. Our surveys revealed that 87% of these start-ups were challenged by the nature of the ecosystem - finding it fragmented and lacking in awareness from stakeholders and the general public.

As a result, we published the first impact insights report which presented an overview of the ecosystem.

To further support the impact start-up ecosystem, established the +impact platform, and started an impact accelerator.

We then went on to publish The State of Nordic Impact Start-ups 2019, which provided further insights into who these start-ups are, what their focus is and not least, how they perform from an economic standpoint. Our findings showed that impact start-ups follow similar financial trends as other start-ups: their growth is dependent on available risk capital; they focus on top-line growth but struggle to make a profit, with financial performance improving as they mature. This year's report stands on the shoulders of these previous learnings on the Nordic impact start-up ecosystem. With an inherent desire to enable Nordic impact start-ups to further mature and for the ecosystem

at large to accelerate, we have carefully identified the 10 most prevalent myths that are preventing the space from developing.

1. **The Nordic countries are global leaders within impact start-ups.**
2. **Nordic impact start-ups are solving the most pressing global challenges.**
3. **Impact start-ups are a special breed of start-up.**
4. **Impact requires a trade-off between purpose and profit.**
5. **Impact start-ups have fundamentally different business models than 'regular' start-ups.**
6. **Impact start-up founders lack business experience.**
7. **There are more founders that are women in the impact start-up scene.**
8. **The majority of Nordic impact start-ups promote their SDGs.**
9. **Impact cannot be measured.**
10. **Investors lack data on impact start-ups.**

These insights are a snapshot of the current situation, which during the making of this publication developed in an unforeseen direction as the second hand effects of COVID-19 froze the (capital) markets affecting many start-ups.

The exploration of the 10 myths should therefore be understood as an invitation for further dialogue on how we can leverage the Nordic impact start-up ecosystem's strengths, and how stakeholders can contribute to its improvement through collaboration whether that being under normal or abnormal circumstances.

MYTH #1

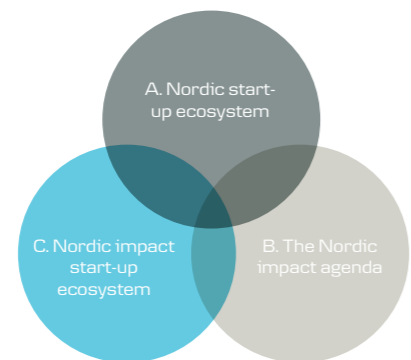
The Nordic countries are global leaders within impact start-ups

PARTLY FALSE The Nordic ecosystem has great prerequisites but the UK is the best performing impact ecosystem in Europe

In the Nordic countries, we are proud of the unique qualities that characterise our part of the world. We have low levels of inequality, balanced welfare provision and have been acknowledged as the most innovative region in Europe [European Commission, 2017]. Combined with our relatively early adoption of the sustainable growth agenda, the Nordic countries have been recognised as frontrunners in the green economy transformation.

But are we as far ahead as we would like to think? We have deep-dived into the Nordic impact start-up ecosystem to assess the status quo. The health of the Nordic impact ecosystem is inextricably linked to the overall start-up ecosystem and the general societal awareness of impact. So how are these three intersecting domains actually performing in the Nordics?

Figure 1.1
The intersection of the Nordic start-up ecosystem, the Nordic impact agenda and the Nordic impact start-up ecosystem



Source: State of Nordic Impact Start-ups

A. The Nordic Start-up Ecosystem
Based on international literature on start-up ecosystems, we have identified six defining factors of a thriving start-up ecosystem:

1. A vibrant start-up community: At a grassroots level, there is a need for a range of activities and events which can help the establishment and growth of start-ups.
2. Active established players: It is crucial that established players in the field are investing in innovation and leveraging its potential fully. Start-ups alone cannot build a thriving ecosystem.
3. Access to risk capital: Access to risk capital is critical in order to fuel the growth of these innovation frontrunners.
4. Political support and 'friendly' regulation: The business environment needs to be accessible and open, with centralised state bodies making public commitments to support these start-ups. A proactive and collaborative mindset across stakeholders is essential.
5. Access to talent: Knowledge intensive sectors are deeply dependent on access to a highly skilled and specialised labour force.
6. Brand as a hub: National and regional branding is essential to attract international talent, investors, businesses.

Taking a closer look at the performance of the Nordic start-up ecosystem based on these six parameters, we see that:



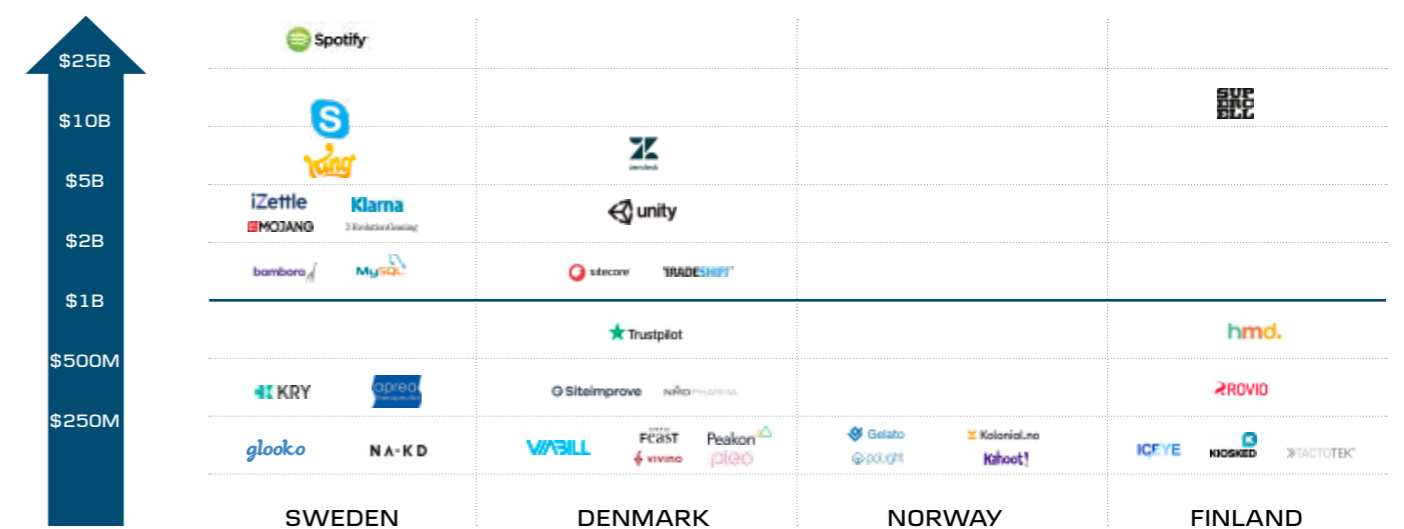
1. A vibrant start-up community
The entire ecosystem in the Nordics has matured significantly; Stockholm as well as Copenhagen host strong start-up communities (start-upgenome.com, blog.dealroom). Entrepreneurs have become more experienced, teams are more diverse and have stronger international connections from the start, and there has been solid growth in the number of start-ups and scale-ups (start-upgenome.com)

Internationally acknowledged start-ups have paved the way for others, creating more mature ecosystems which are filled with knowledge and expertise. (start-upguide.com) These conditions have fostered new promising tech start-ups such as KRY, Simple Feast, Kolonial.no and ICEYE. However, when we look at the number of potential future unicorns, we still see that the Nordic countries are far behind the UK, Germany and France (dealroom.com).

2. Active established players
The Nordic region has been recognised as the most innovative region in Europe with Sweden, Finland and Denmark being acknowledged as a regional innovation leader and Norway acknowledged as a strong regional innovator [EU Regional Innovation Development 2019]. Corporate involvement in the Nordic countries has been lagging behind its European peers, but it is catching up with the rest of Europe (blog.dealroom).

However, the corporate involvement in the Nordic countries has been lagging behind its European peers, but it is catching up with the rest of Europe (blog.dealroom).

Figure 1.2
The most valuable tech companies of the Nordic countries and their pipeline of promising start-ups

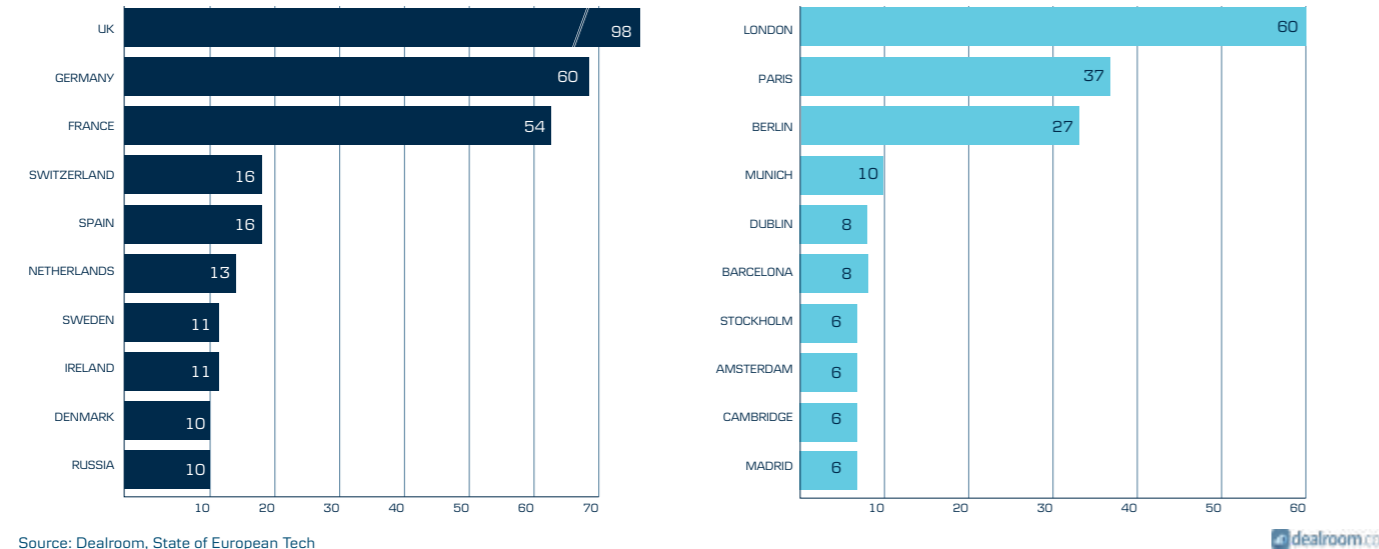


Source: Dealroom



Figure 1.3

Number of potential future unicorns: start-ups valued over €250 million but less than €1 billion, 2020



Source: Dealroom, State of European Tech

In recent years corporates have increasingly implemented open innovation initiatives and collaboration with start-ups, SMEs and knowledge institutions. Many of these players have even established their own accelerators.

3. Access to risk capital

The capital investments in the Nordic countries follow a positive trend - however, the Nordic countries are far behind the top three European countries; the UK, Germany and France. Only Sweden managed to decrease the gap in 2019.

Measured by the total number of unique companies that have raised funding since 2015, we once again see the UK, France and Germany be the European top performers. Sweden comes in again as the Nordic top performer at a global 4th place, while Finland is ranked 7th, Denmark is ranked 13th and Oslo is ranked 14th (Dealroom, State of European Tech 2019).

Taking a closer look at the variety of investors, we see that the UK has a wider variety of investors, where Sweden for example relies more on domestic and European funding.

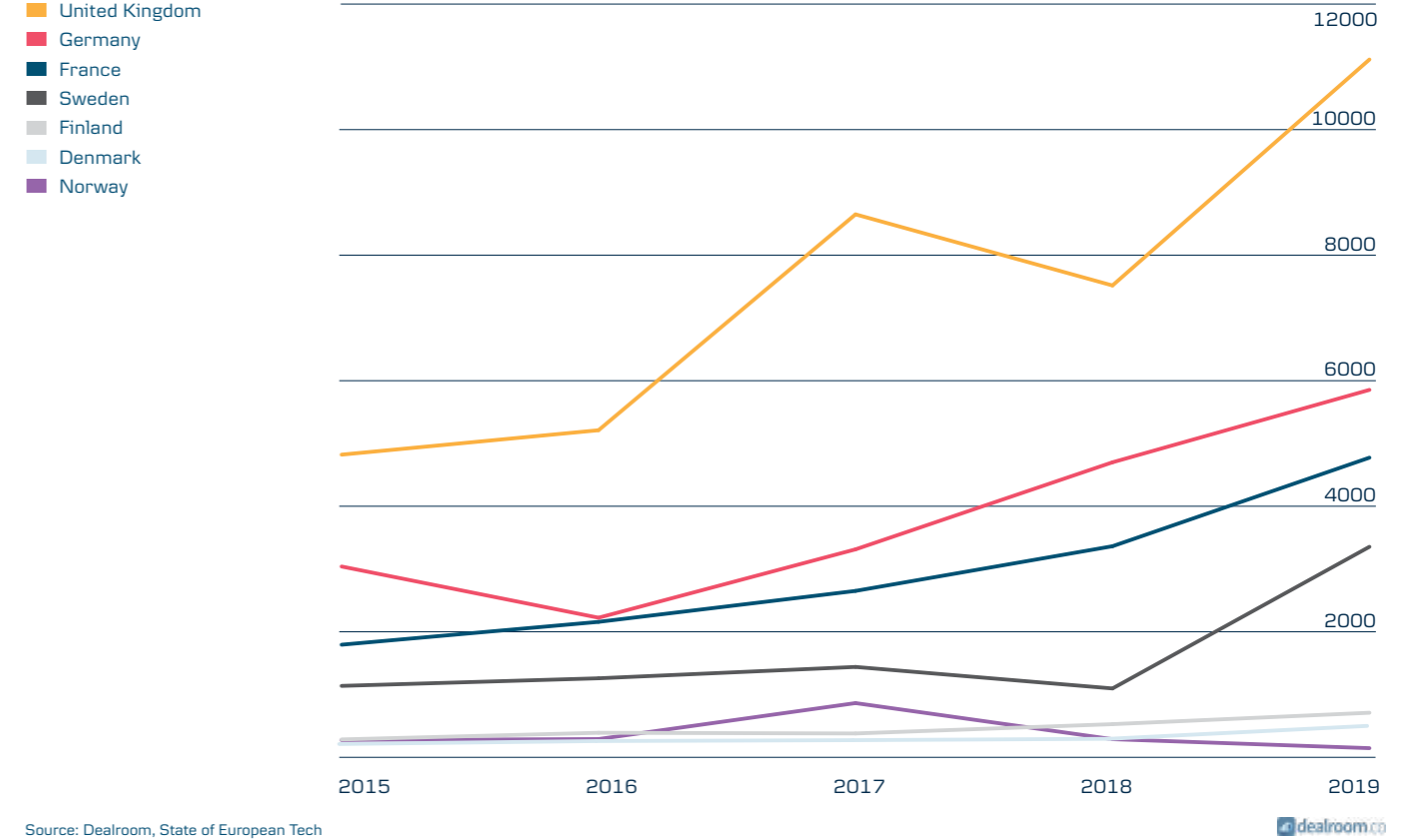
4. Political support and 'friendly' regulation

The Nordic countries are known for a stable macroeconomic environment, a widespread and strong digital infrastructure, and a high level of digitisation and e-readiness (World Economic Forum).

Furthermore, Denmark and Norway are ranked among the world's top 10 on ease of doing business in - as is the UK (worldbank.org). On top of that, the region holds state investment funds providing funding and networks as well as cross collaborating with other start-up ecosystems.

Figure 1.4

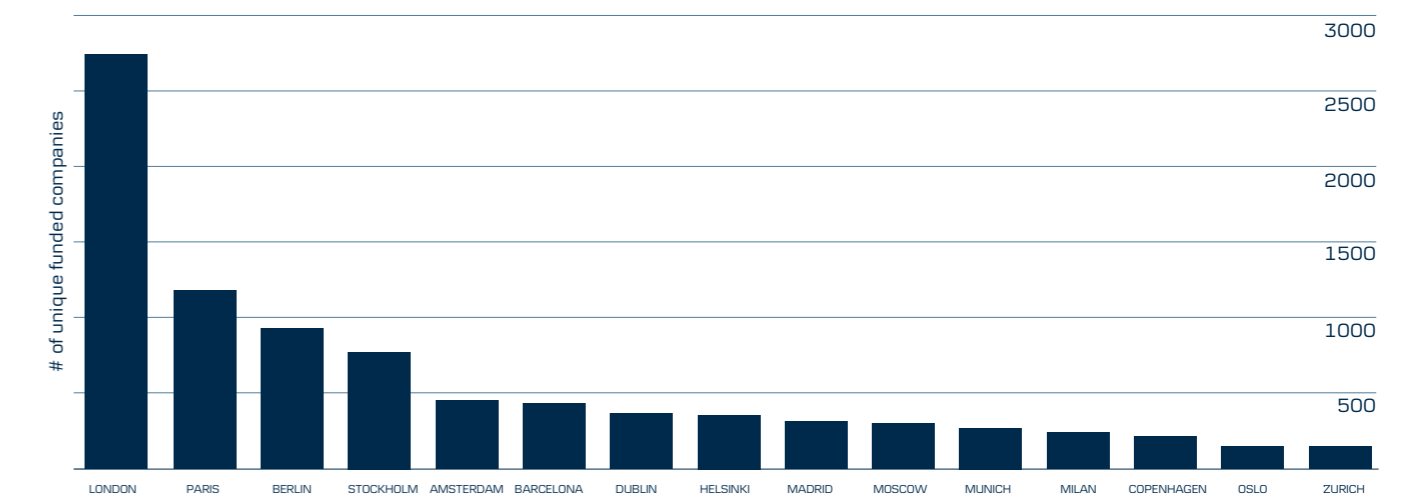
Cumulative capital investment 2015-2019 in Europe



Source: Dealroom, State of European Tech

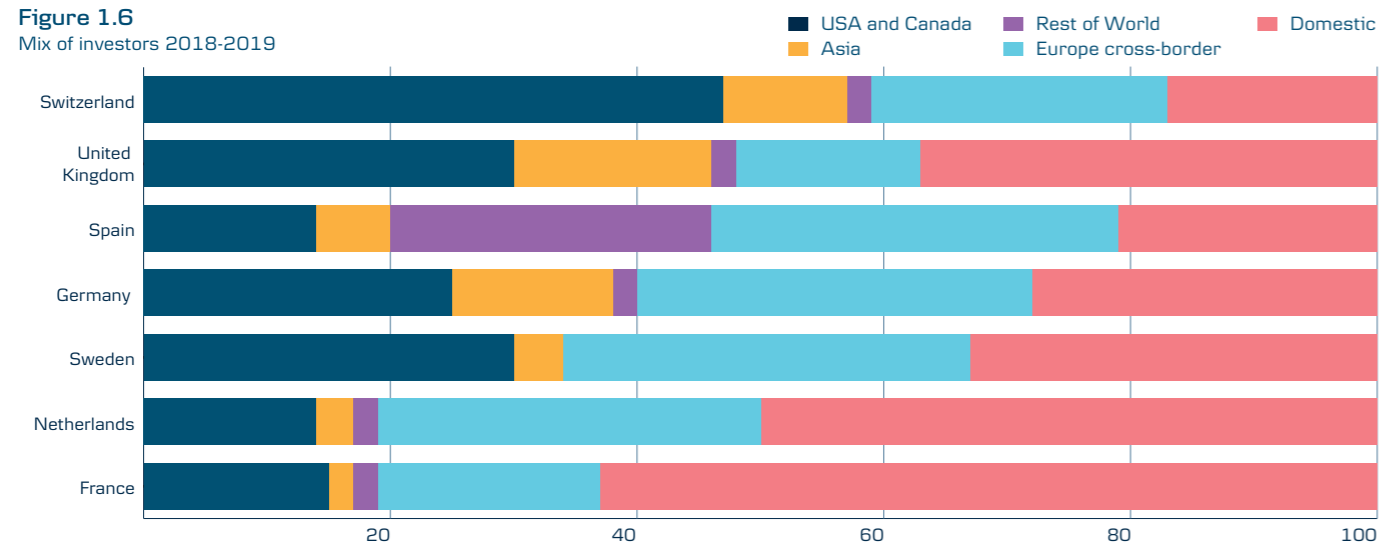
Figure 1.5

Top 15 hubs by number of unique funded companies 2015-2019



Source: Dealroom, State of European Tech

Figure 1.6
Mix of investors 2018-2019



Source: Dealroom

Figure 1.7
Ease of Doing Business Ranking 2019

Country	Rank
New Zealand	1
Singapore	2
Hong Kong SAR, China	3
Denmark	4
Korea, Rep.	5
United States	6
Georgia	7
United Kingdom	8
Norway	9

Source: The World Bank

5. Access to talent

The Nordic countries are known for having a highly educated workforce due to well-functioning and free educational systems. Supporting this notion, the World Economic Forum ranks the Nordic countries among the world top 10 in human capital based on level of formal education, formal education of the next generation, breadth and depth of specialised skills as well as skill application and accumulation.

Likewise, the 2020 Global Talent Competitiveness Index ranks the Nordic countries among the world top 10 in talent.

However, digital skills as well the more technically minded coders and developers are a scarce resource within the ecosystem - and Sweden in particular lacks these competencies in their labour force (World Economic Forum, daxx.com).

6. Brand as a hub

The growing number of internationally minded tech events are contributing to branding the Nordics as a thriving start-up scene: Slush, Oslo Innovation Week, Stockholm Tech Fest, TechBBQ, Techfestival, Katapult Future Fest as just some examples.

The Nordic ecosystem is further being promoted through the hashtag #nordicmade, a community-based movement for branding, marketing and outreach to promote both regional and international awareness of Nordic tech (nordicmade.org)

Figure 1.8
Global Human Capital Index 2017

Country	Score	Rank
Norway	77.12	1
Finland	77.07	2
Switzerland	76.48	3
United States	74.84	4
Denmark	74.40	5
Germany	74.30	6
New Zealand	74.14	7
Sweden	73.95	8
Slovenia	73.33	9
Austria	73.29	10

Source: World Economic Forum

Figure 1.9
Global Talent Competitiveness Index 2020 top 10

Country	Rank
Switzerland	1
United States	2
Singapore	3
Sweden	4
Denmark	5
Netherlands	6
Finland	7
Luxembourg	8
Norway	9
Australia	10

Source: GTCI

Figure 1.10
2019 Global start-up Ecosystem Ranking

Area	Rank
Silicon Valley	1
New York City	2
London	3-4
Beijing	3-4
Boston	5
Tel Aviv	6-7
Los Angeles	6-7
Shanghai	8
Paris	9
Berlin	10
Stockholm	11
Seattle	12
Toronto-Waterloo	13
Singapore	14
Amsterdam-Start-up Delta	15
Austin	16
Chicago	17
Bangalore	18
Washington D.C.	19
San Deigo	20

Source: Startup Genome

Figure 1.11
2019 Global start-up Ecosystem Ranking, Challenger Start-up Ecosystems

Country	City	Rank
Finland	Greater Helsinki	1
China	Hangzhou	2
Indonesia	Jakarta	3
Nigeria	Lagos	4
Australia	Melbourne	5
Canada	Montreal	6
Russia	Moscow	7
India	Mumbai	8
Brazil	Sao Paulo	9
Korea	Seoul	10

Source: Startup Genome

Figure 1.12
2019 Global start-up Ecosystem Ranking, High-Growth Ecosystems

Phase	Rank	Ecosystem
Activation	1	Western Denmark
	2	Belgrade and Novi Sad
	3	Taipei City
	4	Atlantic Canada
	5	Manila
Globalization	1	Paris
	2	Montreal
	3	Antwerp
	4	Sydney
	5	Copenhagen
Attraction	1	Amsterdam-Start-up Delta
	2	Bangalore
	3	Stockholm

*Based on growth in funding, exists & number of start-ups

Source: Startup Genome

In summary, the Nordic start-up ecosystem holds many strengths: a mature start-up scene, established players who are innovative and increasingly active, a strong (digital) infrastructure and friendly business environment, a highly educated labour force and a series of international acknowledged tech events.

B. The Nordic Impact Agenda

The Nordics are frequently referred to as the global leaders on impact. Supporting this notion, Denmark, Sweden, and Finland are among the world's top 10 with the highest scores on implementing the UN's Sustainable Development Goals (The Sustainable Development Report 2019).

The high ranking is rooted in the Nordic welfare society founded on social responsibility, collaboration and environmental awareness. Since the 1960's the Nordic countries have been amongst the most generous donors of development aid (oecd.org); Sweden is known for being an initiator of The United Nations Environment Programme in 1972; Norway's Gro Harlem Brundtland (Prime Minister 1981, 1986-89, 1990-96) established the Brundtland Commission, which firmly placed sustainable development on the political agenda in the 1980s.

Today, the Nordic Council of Ministers is collaborating across the region to fulfill the vision: "The Nordic region will become the most sustainable and integrated region in the world by 2030" closely aligned to the UN 2030 Agenda. Supported by the Nordic Council, the Nordic countries have

made considerable progress in the use of renewable sources of energy over the last two decades. On average, the Nordic countries generate electricity from renewable sources at four times the rate of other OECD countries (State of the Nordic Region 2020).

Though the Nordic region's reputation for prioritising impact on the political agenda is positive and well-deserved, it does not mean the Nordic countries should rest on their laurels. The Nordic countries obtain their lowest scores on SDG 2 Zero Hunger, SDG 12 Sustainable Consumption and Production, SDG 13 Climate Action and SDG 14 Life Below Water. These scores are related to the high GDP per capita that exists in the Nordics entailing high consumption patterns with significant environmental and socio-economic repercussions. The low score of SDG 2 Zero Hunger is driven by increasing adult obesity and high consumption of meat. Overall the scores show that further efforts are needed to protect biodiversity and support sustainable production and consumption (sdgindex.org).

In summary, the Nordic countries are perceived as impact leaders - a notion that is supported by the high rankings of the Nordic countries at the UN SDG index. This ranking is rooted in the Nordic welfare model being the hallmark of a well-functioning society within the international community. Yet the high consumption rates and associated environmental effects must be addressed if we are to achieve our goals for the UN 2030 Agenda.

Figure 1.13
Lowest scores of SDGs among the Nordic countries

Country/SDG	SDG 2 Zero Hunger	SDG 12 Sustainable Consumption and Production	SDG 13 Climate Action	SDG 14 Life Below Water
Denmark	68.3	49.8	90.2	49.9
Sweden	63.3	52.2	87.2	42.3
Finland	58.2	48.7	71.0	55.5
Norway	57.0	30.5	54.4	66.2

Source: sdgindex.org

Figure 1.14
The UN SDG Index

Rank	Country	Score
1	Denmark	85.20
2	Sweden	85.00
3	Finland	82.80
4	France	81.50
5	Austria	81.10
6	Germany	81.10
7	Czech Republic	80.70
8	Norway	80.70
9	Netherlands	80.40
10	Estonia	80.20

Source: sdgindex.org

C. The Nordic Impact Start-up ecosystem

The inception of the UN SDGs in 2015 sparked a new rise in impact led initiatives in the Nordic start-up communities.

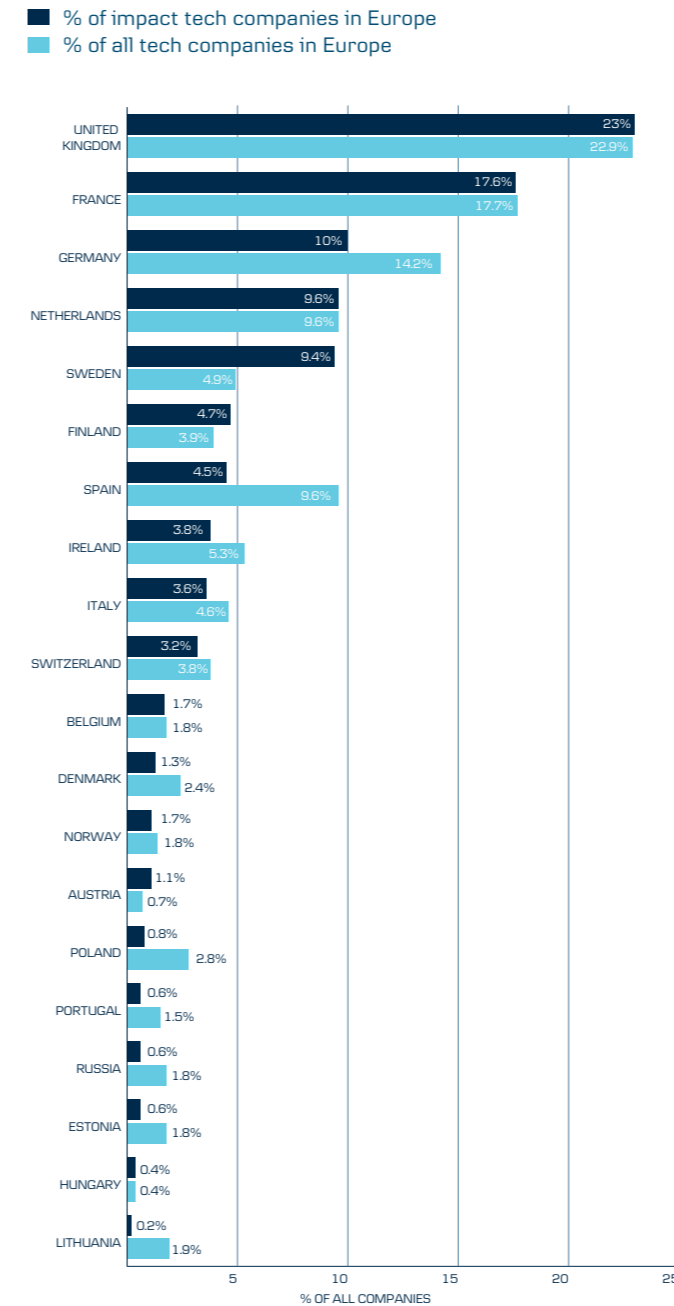
The start-up event Slush in Helsinki launched its Global Impact Accelerator in collaboration with the Ministry Of Foreign Affairs in Finland in 2015 and Green Innovation Group launched the Green Tech Challenge. The non-profit organisation Norrskan launched its coworking space and VC fund targeting impact tech in 2016. Katapult Future Fest was launched in Oslo in 2017. The non-profit organisation The One initiative connecting impact start-ups and investors was founded in 2018 alongside +impact aiming to support the Nordic impact start-ups and NIIN (Nordic Impact Investing Network) with the goal of “making impact investing mainstream” (start-upguide.com). But how is the Nordic impact start-up ecosystem actually performing?

As this evaluation of the Nordic - as well as the European and global - impact start-up ecosystem is fairly new territory, we stay humble to our few supportive data sources. To benchmark the Nordic impact start-up ecosystem against an European context we have studied the data provided by Dealroom for The State of European Tech 2019. According to the study, the UK, France and Germany are home to the highest number of venture backed European impact tech companies.

From a relative standpoint, Sweden is home to nearly 10% of all venture backed impact tech companies in Europe, but accounts for only 4.3% of all European tech companies. Similarly, Finland shows a small lead on the number of impact tech companies accounting for 4.7% of all European impact tech companies and 3.9% of all European tech companies. Conversely, Denmark and Norway are lagging when benchmarked being home to respectively 1.3% and 1.1% of impact tech companies vs. 2.4% and 1.4% of tech companies.

In absolute terms, London is the capital of impact driven start-ups within Europe; it is home to nearly 1 in 10 companies with an impact-driven mission. But on a relative basis, Stockholm is the number one city with the heaviest weighting towards impact tech companies compared to its European counterparts. It should be noted that the data sourced by Dealroom in this analysis are based on venture backed companies. As London holds huge amounts of capital, the city will have an advantage in this comparative analysis. The analysis does not provide input on the numbers of early start-ups emerging.

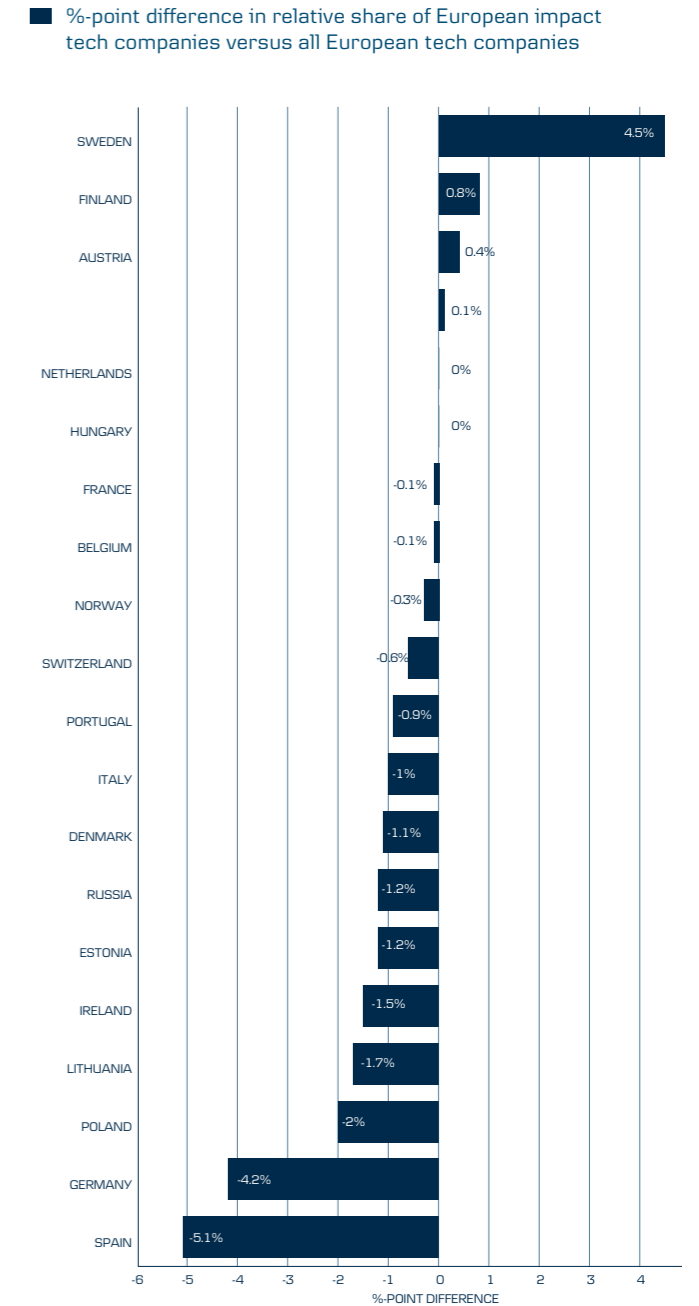
Figure 1.15
Top 20 countries by share of venture backed impact tech companies in Europe



Source: Dealroom, State of European Tech



Figure 1.16
Rank of countries by %-point difference in relative share of impact driven European tech companies versus all European tech companies

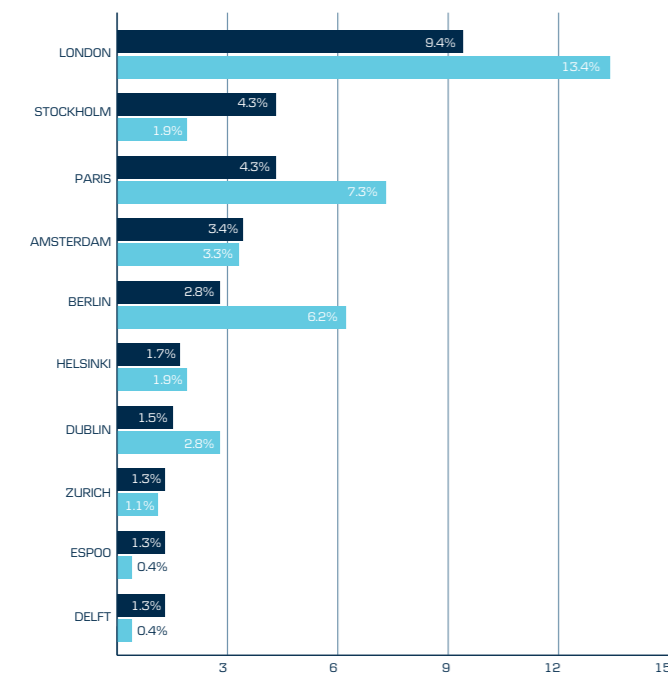


Source: Dealroom, State of European Tech



Figure 1.17
Top 10 European cities by share of impact driven European tech companies

■ % of purpose-driven tech companies in Europe
■ % of all European tech companies



Source: Dealroom, State of European Tech



To sum up, looking at how the Nordic impact ecosystem performs in terms of their share of European impact tech companies, it is clear that London outperforms in terms of absolute numbers. However, Stockholm stands out with a significant portion of impact tech companies. Paris houses an equal share of impact tech companies, but a higher share of tech companies. As the total numbers imply, there is still work to be done before the Nordics as a region can take pride in being an epicentre of European impact tech companies.

Conclusion

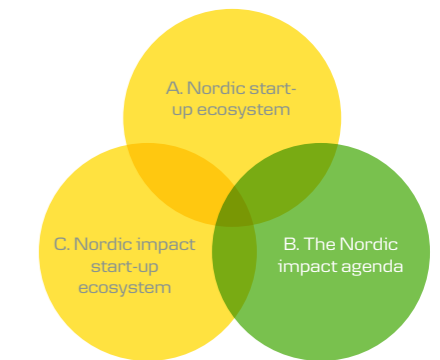
To assess the performance of the Nordic impact start-up ecosystem, we have taken a look at the intersection of the Nordic start-up ecosystem, the Nordic impact agenda and the Nordic impact start-up ecosystem.

The Nordic region holds many prerequisites of a thriving start-up ecosystem - but also some weaknesses that are holding the ecosystem back. However, once again Stockholm stands out - this time with the relatively biggest lead of impact start-ups in their ecosystem. In addition, Western Denmark and Copenhagen are perceived as high-growth start-up ecosystems and Helsinki as a challenger start-up ecosystem.

Conversely, the Nordic countries receive a high ranking on the SDG Index compared to their European peers. However, the high consumption patterns and associated environmental spillover effects need to be addressed if we want to achieve our goals for the UN 2030 Agenda.

When zooming in on the Nordic impact start-up ecosystem, the data from The State of European Tech 2019 indicates that London not only holds the highest share of tech companies in Europe but also the highest share of impact tech companies. However, once again Stockholm stands out - this time with the relatively biggest overweight of impact start-ups in their ecosystem.

Figure 1.18
The intersection of the Nordic start-up ecosystem, the Nordic impact agenda and the Nordic impact start-up ecosystem



Source: State of Nordic Impact Start-ups



Perspective: On the Nordic ecosystem
Rolf Kjærgaard, CEO, Vækstfonden

"We see a clear and positive development in the Nordics, where both entrepreneurs and investors have a strengthened focus on themes such as sustainability, green transition and social accountability. It is our belief that purpose and profit go hand in hand, and the strongest and most successful companies are the ones that integrate impact into their core business. The Nordics are at the forefront within sustainability, and with the ongoing crisis caused by the Covid-19 pandemic it has become even more important that we keep the momentum and drive that positive development forward."



MYTH #2

Nordic impact start-ups are solving the most pressing global challenges

PARTLY FALSE The majority of the Nordic impact start-ups are focusing on solving local problems in high-income markets, fewer focus on solutions which will move the needle on the underlying SDG indicators

Since the 2030 Agenda for Sustainable Development and the 17 Sustainable Development Goals (SDGs) were adopted by all United Nations Member States in 2015, the term 'impact' has developed from a niche to a norm.

In parallel, the Nordic start-up ecosystem has seen an increasing amount of budding impact start-ups aspiring to do good while doing business. But what does impact actually mean for Nordic impact start-ups?

In order to understand what kind of challenges the Nordic impact start-ups are addressing, we have examined their core business through the lens of the UN's 17 Sustainable Development Goals (SDGs).

Looking at Nordic impact start-ups through the overall lens of the SDGs, our study shows that the biggest share of the start-ups are centered around SDG 3 Good Health and Well-being (21%), SDG 12 Responsible Consumption and Production (21%) and SDG 7 Access to Clean and Affordable Energy (11%) as well as SDG 11 Sustainable Cities and Communities (10%), which together accounts for 63% of the start-ups. This distribution is almost identical to our findings last year (The state of Nordic Impact Start-ups 2019; Insight report: Impact start-ups 2018).

On a geographical level, the top four categories are the same for all four countries, Denmark, Sweden, Norway and Finland.

On a cluster level, we see that 37% of the start-ups relate to the cluster Prosperity (SDG 7-11); 32% of the start-ups relate to People (SDG 1-6) mainly driven by SDG 3; 27% of the start-ups relate to the cluster Planet (SDG 12-15) and 4% of the start-ups relates to Other (SDG 16-17).

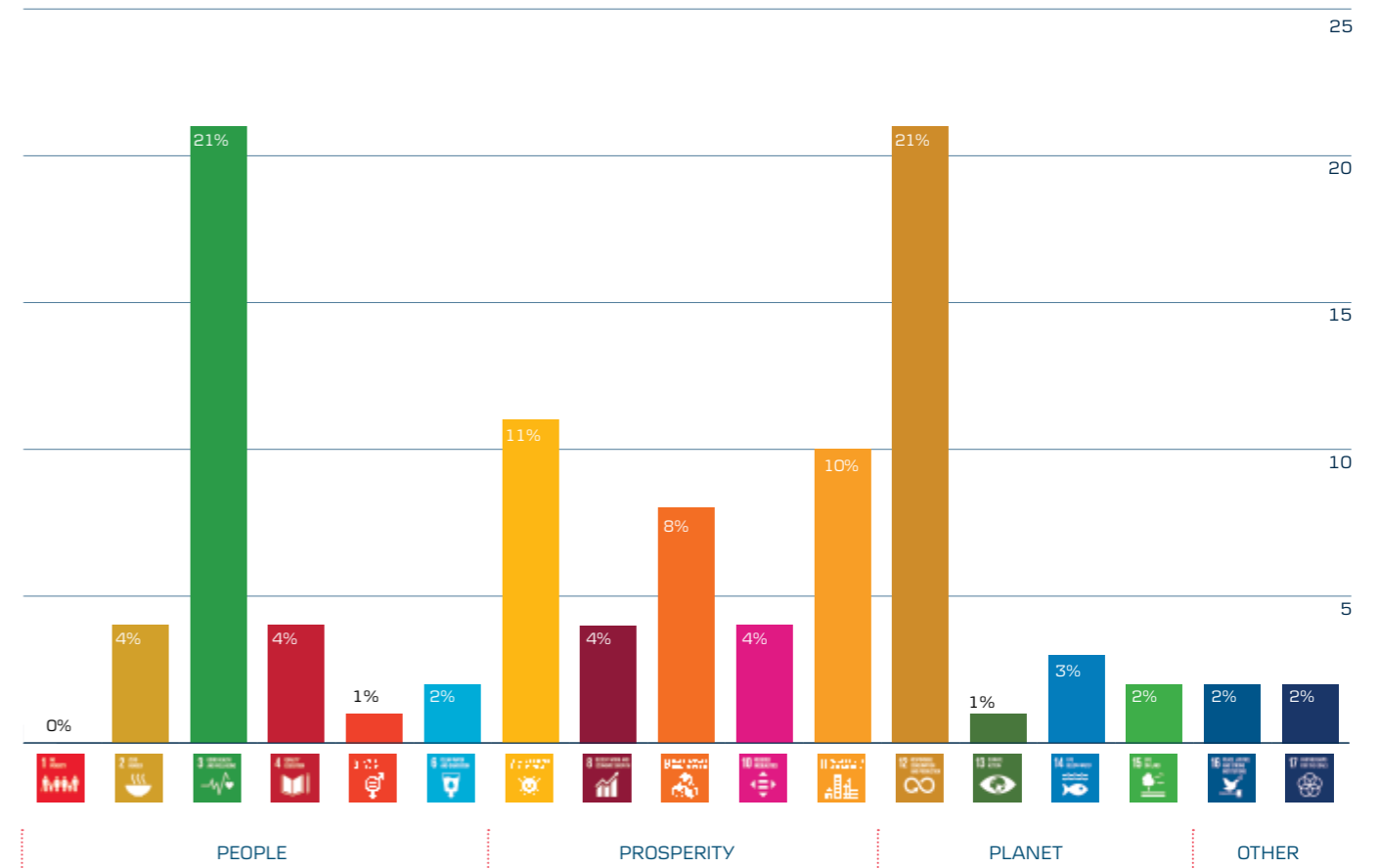
We reflect on whether the empirical distribution of the Nordic impact start-ups addressing the SDGs represents the normative distribution. Is it possible to prioritise the clusters according to the greatest needs and target our supportive efforts within this field?

According to the UN, the solutions should work in parallel: "[...] ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests" (un.org/sdgs).

In the following sections, we take a closer look at the value creation of the solutions in these three clusters, People, Prosperity and Planet to assess the alignment between the SDGs and actual impact.

Figure 2.1

Distribution of the Nordic impact start-ups' SDG focus area: % distribution of 1018 companies



Source: State of Nordic Impact Start-ups

People

Around 32% of the Nordic impact start-ups are addressing SDG 1-6 in the cluster People. We have analysed their solutions to explore the alignment between the SDGs and the solutions of the Nordic impact start-ups:

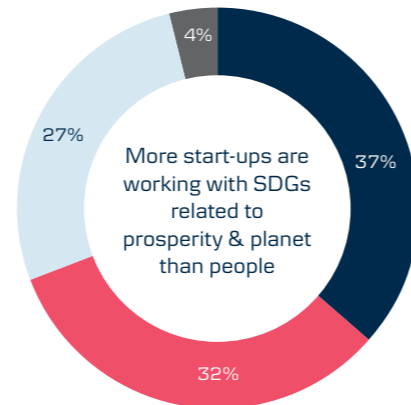
Looking at the solutions offered by the Nordic impact start-ups under the cluster of People, we see that SDG 3 Health and Wellbeing represents the biggest share of start-ups. The challenge with this goal is that it has become synonymous with an industry vertical. We must let go of the reductive thinking that an industry vertical equals impact. A start-up in the health sector providing supplements or medtech wearables for people with high quality of life, is not necessarily aligned with the intent of the SDGs.

While these solutions create great value and impact for their customers, the intent of the SDG is to increase life expectancy, reduce maternal and child mortality as well as fight against leading communicable diseases (un.org/sdg3). Similarly, while expensive educational apps for children in high-income countries serves a good purpose, it serves less the intent of the SDG which is characterized by improving learning outcomes for the full life cycle, especially for women, girls and marginalized people in vulnerable settings (un.org/sdg4). It is important to note that many start-ups categorised in this cluster are aligned with the intent of the SDGs - but they are underrepresented.

Figure 2.2

Distribution of Nordic impact start-ups related to the SDG categories Prosperity, Planet and People % distribution of 1018 companies

- No. of start-ups working with prosperity goals
- No. of start-ups working with people goals
- No. of start-ups working with planet goals
- No. of start-ups working with other goals (SDG 16 and 17)



Source: State of Nordic Impact Start-ups

Figure 2.3

Description and keyword breakdown of People SDG cluster

SDG	Description	Key words
SDG 1 No Poverty	End poverty in all its forms everywhere	Digital charity platforms; Insurtech and fintech in low-income countries
SDG 2 Zero Hunger	End hunger, achieve food security and improved nutrition, and promote sustainable agriculture	Reduced food waste; Plant rich diet; Local produce; Organic produce; Solar protein; Meat alternatives
SDG 3 Health and Wellbeing	Ensure healthy lives and promote well-being for all at all ages	Vitamin supplements; Elderly-care; Wearables; Weight trackers; Diagnostics; Digital care; MedTech
SDG 4 Quality Education	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	Educational gaming; Coding toys; Virtual Reality storytelling
SDG 5 Gender Equality	Achieve gender equality and empower all women and girls	AI measuring bias; Digital headhunting; Female Health; Female Urinal
SDG 6 Clean Water and Sanitation	Ensure availability and sustainable management of water and sanitation for all	Water saving; Water circulation; Water treatment; Drinking water from air

Source: State of Nordic Impact Start-ups

KubeEnergy - a Norwegian start-up bringing energy to rural African communities

Kube Energy supplies electricity from off-grid energy solutions so communities, government agencies, businesses and organizations can access clean energy, reduce energy costs, streamline operations and lower carbon emissions.

Kube Energy promotes access to low carbon energy and supports climate resilient development and growth in hard-to-reach and fragile areas across West, Central and East Africa. Their solutions are being implemented across rural communities in countries like Mali, Uganda, South Sudan and Somalia.



Prosperity

Around 37% of the start-ups in the sample, fall into the cluster of Prosperity (SDG 7-11). We have analysed their solutions to explore the alignment between the SDGs and what the start-ups are offering.

We acknowledge that the categorisation of the solutions listed for SDG 7 Access to Clean and Affordable Energy is ambiguous. While the cluster Prosperity is characterized by improving the quality of life, the renewable energy solutions also address the characteristics of the cluster Planet by contributing to the decarbonisation of the energy sector. Following the indicators of SDG 7, we have listed these solutions here as they contribute to increasing the global electrification rate as well as the renewable energy consumption (un. org/sdg7).

Looking at the solutions offered by the Nordic impact start-ups under the cluster Prosperity we find that SDG 7 Access to Clean and Affordable Energy and SDG 11 Sustainable Cities and Communities represent the biggest group within this cluster. As these two areas are strongholds in the Nordic region and are among some of flagships of the Nordic Council of Ministers vision, it is not surprising that start-ups within these SDGs are leading the way. We also see a significant share of start-ups developing electric bikes, electric vehicles, electric boats, and charging

stations to embed the infrastructure. These measures - if scaled - have the potential to decarbonize private transportation.

Yet in a similar way to the People cluster, we also see many solutions targeted at improving high quality lifestyles; e.g. employee satisfaction measurements, leadership development.

Figure 2.4

Description and keyword breakdown of Prosperity SDG cluster

SDG	Description	Key words
SDG 7 Access to Clean and Affordable Energy	Ensure access to affordable, reliable, sustainable and modern energy for all	Renewable energy; Rooftop solar; Biomass; Hydropower; Wind turbines; Geothermal
SDG 8 Decent Work and Economic Growth	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	Employees satisfaction; Connecting platforms; Impact leadership development; Employer rating
SDG 9 Industry, Innovation and Infrastructure	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	Electric Vehicles; Electrical Bicycles; Electrical Boats, Charging Stations; Robotics
SDG 10 Reduced Inequalities	Reduce inequality within and among countries	Blockchain for identity certificates; Immigrant integration
SDG 11 Sustainable Cities and Communities	Make cities and human settlements inclusive, safe, resilient and sustainable	Air quality monitoring; Waste management; IoT and sensors; Retrofitting; Automated buildings; Safety

Source: State of Nordic Impact Start-ups



Perspective: On the global challenges

Thorben Sander, Founder and Chairman of the Board, TechVelopment / Danish Impact Business Network

"There exists a great opportunity for Nordic innovative companies to assert themselves in emerging countries on the long run - both from a financial and an impact perspective. The presence of the Nordic companies in the developing countries is relatively small compared to the potentiality. The knowledge, competencies and capital of the Nordic countries is exactly what is in demand in the developing countries: renewable energy, health and infrastructure as well as the collaboration between private, public and civic entities.

The Nordic countries are well positioned to support the rapidly growing demand for innovative solutions that will improve lives in developing countries. Our tradition of long-term commitment in international development corporations and influential institutions with presence in the emerging countries, has enabled us to build strong relations, gain cultural know-how and credibility. Additionally, there is a great latent investment appetite for SDG/impact investments in emerging countries, but the investors do not have knowledge or safe structures to invest from. The challenge is that the Nordic countries have not organized partnerships and structures that can help start-ups and SMEs truly succeed in the emerging countries.

This is why we have initiated the TechVelopment Hub in Denmark. In the spirit of Sustainable Development Goal 17, the TechVelopment Hub Denmark will be an organisation and physical hub based in Copenhagen aiming to mobilize the significant development capacity across all relevant Danish actors to support the rapidly growing demand for scalable innovative solutions in developing countries and grow the number of successful TechVelopment entrepreneurs."

The Protein Directory - a Danish start-up dedicated to helping start-ups working with alternative proteins also known as meat substitutes.

The Protein Directory helps founders by telling their success stories and by connecting them with investors, experts and leading corporations. The community started in October 2019 and since became the largest publicly available database of alternative protein start-ups covering 300+ companies from all over the globe.



Planet

Around 27% of the start-ups in the sample are in the cluster Planet (SDG 12-15). We have analysed their solutions to explore the alignment between each start-up's impact and the SDGs:

Looking at the solutions offered by the Nordic impact start-ups under the cluster Planet we see that the biggest group of start-ups addresses SDG 12 Responsible Consumption & Production. According to the Bertelsmann Stiftung foundation, the Nordic countries score low on this particular SDG, so the start-ups here fulfill an important role in challenging the conventional companies and their current practices. With a focus on sustainable and local supply chains, zero waste, and circular production many start-ups are aspiring to close the current gap.

Figure 2.5

Description and keyword breakdown of Planet SDG cluster

SDG	Description	Key words
SDG 12 Responsible Consumption and Production	Ensure sustainable consumption and production patterns	Alternative consumer products; Second-hand; Sharing Economy; Fashion; Food; Production equipment
SDG 13 Climate Action	Take urgent action to combat climate change and its impacts	Educational games; educational apps; Flood Barriers; Carbon off-set
SDG 14 Life Below Water	Conserve and sustainably use the oceans, seas and marine resources for sustainable development	Wastewater treatment; Cleaning the oceans for plastics; Bioplastics; Algae; AI for fish farms
SDG 15 Life on Land	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	Apps for agroforestry; Soil mapping and fertilizer optimisation; Grain analyzer; Agriculture simulation software; Mobile game on nature

Source: State of Nordic Impact Start-ups

Among start-ups working under SDG 13, we see a range of climate related educational apps and games as well as digital platforms helping corporates and communities identify environmental measures.

While these solutions are important in tackling current challenges and contributing towards the green transition within the Nordics (which also have very high environmental footprints), there is an asymmetry in the distribution of SDG focus in the cluster Planet: On an overall level, there are few start-ups addressing goals such as SDG 14 Life Below Water, SDG 15 Life on Land and SDG 6 Clean Water and Sanitation.

Project Drawdown and Planet solutions

To further our perspective on the scale and intensity of impact amongst the Nordic impact start-ups with the cluster of Planet, we have further evaluated the start-ups focus through the lens of Project Drawdown. Project Drawdown is a research based framework which ranks the most substantive solutions needed to reverse global warming. There are many solutions for reducing and stopping the amount of greenhouse gases (GHG) emitted into the atmosphere, including decarbonizing the energy, food and agriculture, transport, construction, and manufacturing sectors.

On an overall level 23% of the Nordic impact start-ups address solutions mentioned in the Project Drawdown's Scenario 1 targeting to stop climate change close to 2°C of global warming (Scenario 2 target to stop climate change close to 1.5°C).

Figure 2.6

Distribution of start-ups within top 80 solutions ranking in Project Drawdown % distribution of 1018 companies

Project Drawdown Ranking	% distribution of Nordic impact start-ups
Top 1-10	8.9%
Top 11-20	1.1%
Top 21-50	7.1%
Top 51-80	6.0%
Total sum	23.1%

Source: State of Nordic Impact Start-ups

Figure 2.7

Distribution of Nordic impact start-ups addressing the top 10 solutions according to Project Drawdown 2020 Scenario 1 stopping climate change close to 2°C of global warming. % distribution of 1018 companies

Ranking	Project Drawdown Solutions	% of Nordic impact start-ups	Scenario 1 - Gigaton CO2 Equivalent reduced, 2020-2050
1	Reduced Food Waste	2.6%	87.45
2	Health and Education	0.9%	85.42
3	Plant-Rich Diets	2.2%	65.01
4	Refrigerant Management	0.3%	57.75
5	Tropical Forest Restoration	0.0%	54.45
6	Wind Turbines (Onshore/Off-shore)	0.2%	47.21+10.44
7	Alternative Refrigerants	0.3%	43.53
8	Utility-Scale Solar Photovoltaics	0.7%	42.32
9	Improved Clean Cookstoves	0.1%	31.34
10	Distributed Solar Photovoltaics	1.6%	27.98
Total 10	Total	8.9%	

Source: State of Nordic Impact Start-ups

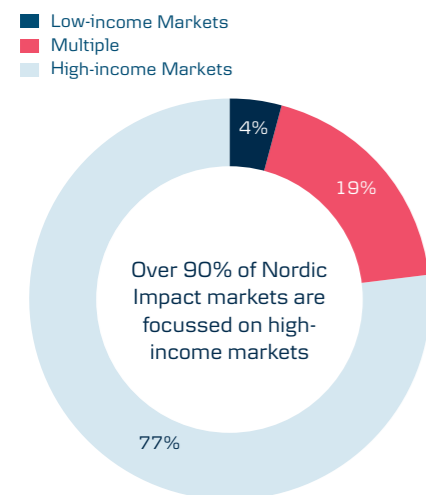
C-green - a Swedish start-up converting industrial biomass to biofuel energy

C-green have developed a new way to convert wastewater sludge, industrial sludge and wet biomass into fuel. Through advanced processing of hydrothermal carbonization (HTC), they are setting an environmental benchmark for industrial sludge disposal.



Figure 2.8

Distribution of target markets amongst Nordic impact start-ups. Sample size: 990



Source: State of Nordic Impact Start-ups

The distribution can be categorised in four sub-categories: Around 9% of the Nordic impact start-ups work with the top 10 solutions that Project Drawdown have defined as the most efficient in reversing global warming. These solutions include Reduced Food Waste and Plant Rich Diets as well as Rooftop Solar. Only 1% of the start-ups work with the top 11-20 solutions; around 7% work with top 21-50 and around 6% work with the top 51-80. Please see appendix for the full table of solutions and distribution of Nordic impact start-ups.

Target market

When we further identify the distribution of target markets amongst Nordic Impact start-ups, we see that only around 23% of the Nordic impact start-up target multiple or low-income markets, while 77% target high-income markets. This supports our finding that the Nordic impact start-ups primarily contribute to solve the challenges of their local and regional high-income markets. Though data transparency on target market(s) is lacking in the case of some start-ups, the distribution is still significantly weighted towards high-income countries. The distribution may not be that surprising given that many early-stage investors and founders find it more feasible to begin by solving the pains of their local market whilst being close to their customers. (Impact Report: Nordic Investors 2019). As later-stage investors tend to have more global focus, we expect that some of the Nordic impact start-ups will scale to other markets when at growth-stage.

Conclusion

With an intention to assess the type of challenges the Nordic impact start-ups are solving, we took a look at the Nordic impact start-ups through the lens of the Sustainable Development Goals. We found that the majority of start-ups focus on SDG 3 Good Health and Wellbeing (21%), SDG 12 Responsible Consumption and Production (21%) and SDG 7 Access to Clean and Affordable Energy (11%) as well as SDG 11 Sustainable Cities and Communities (10%), which together accounts for 63% of the start-ups.

We reflected upon how this distribution could reflect a potential norm. While we have not found a blueprint for the optimal distribution of start-ups addressing the SDGs, we have deep dived in order to analyse the alignment of the offered solutions and the intent of the SDGs.

While the focus of these SDGs contribute to solving relevant challenges in the local high-income market and off-setting the significant environmental footprints in our region, the focus on solving the most pressing challenges in low-income countries is underrepresented. Considering the operational structures of the funding market, the overrepresentation of Nordic start-ups' focus on local markets and relatively easily marketable solutions is to be expected. We need these structures to include more room for start-ups focusing on complex solutions in broader markets - currently this type of Nordic impact start-up most often emerges as R&D spinouts affiliated to universities.

The same picture appears when applying the lens of the Project Drawdown framework. Around 23% of the Nordic impact start-ups address solutions mentioned in Project Drawdown that can contribute significantly to reversing global warming.

While the study has shown that there are some very promising solutions and technologies amongst the Nordic impact start-ups with a great potential to scale, more collaborative efforts across stakeholders need to be initiated if we want to mitigate and reverse the effects of climate changes in accordance with the Paris Agreements and UN 2030 Agenda. Examples could be more public and private partnerships, more visible political support and supportive measures for impact entrepreneurs.



Perspective: On the global challenges

Ruth Brännvall, Co-founder and CEO, Impact Invest

"Very few Nordic start-ups today focus on challenges in the least developed countries. My feeling is that we saw more entrepreneurs targeting Africa and South-East Asia ten years ago.

At the same time, these regions have seen a massive rise in entrepreneurial activities and improved infrastructure. There is a higher chance to succeed today in partnering, in tech development and in reaching a very large population. I would really encourage impact-driven companies here to think of the global south from the start.

MYTH #3

Impact start-ups are a special breed of start-ups

PARTLY FALSE The impact start-ups differ in type of impact and scalability - some with the same mindset as their conventional counterparts

“Some venture capitalists have a bias against start-ups with an explicit positive social impact on the grounds that they have a smaller addressable market, and that the founders are not sufficiently focused on creating shareholder wealth”, Techcrunch, Dec. 2019.

Impact start-ups are often seen as one collective group and lumped into the same pot. Yet in reality impact start-ups differ just as much as 'conventional' start-ups. It is important to be able to make the relevant distinctions in order to firstly, identify good early stage investments in a straight-forward and consistent manner, and secondly to provide tailored and bespoke support to each start-up where it is most needed. A mobile coffee wagon which empowers social minorities through self-employment opportunities needs vastly different support and investment approaches than a highly scalable ed-tech start-up which raises awareness around environmental issues.

So how can we distinguish between the different types of impact start-ups in a practical and consistent manner?

We find that the biggest differentiators amongst impact start-ups can be narrowed to two essential dimensions: Scalability and Impact.

Scalability is the degree to which the start-up's solution can be scaled. If a start-up has a one-to-one model and can only grow by adding a proportionate amount of resources, we determine that it has a low degree of scalability. One example of this could be the use of recycled bricks in building construction. On the other hand, if a start-up has a one-to-many solution that can grow with few or no new resources, we determine that it has a high degree of scalability. An example could be a consumer mobile app for tracking CO2 footprint of all household purchases. In general, we see that start-ups built upon tech components are the more scalable start-ups.

While all types of start-ups can scale, we have used the growth expectations of an early stage investor as a marker to distinguish start-ups with high scalability; in other words start-ups, we see could be scalable with a factor of 3-10, which is the range we typically hear business angels and VCs expect as return over their funding cycle. By applying this to calibrate what is high scalability, we thereby indicate the start-ups have potential to operate on traditional investor terms.

Impactability is the degree of difference the start-up's solution contributes to on a unit level. If a start-up's solution does not affect the behaviour or life of the individual, we determine that the solution has a low degree of impact on the individual. One example of this could be applying biodegradable plastics instead of non-degradable plastic - however, while it may have a low degree of impact on the individual, a high number of individuals are impacted if scaled. Contrary, if the start-ups' solution affects the behaviour or life of the individual significantly, we determine that the solution has a high degree of impact on the individual. One example could be the improved quality of life from getting a marginalised person into the labour market; another example could be accessing lifesaving medicine or vaccines.

As such we have developed what we call the 'Impactability Matrix', with four distinct categories. It is important to notice that impactability is not preferring reach over depth. Both approaches can be equally impactable, but the means to succeed may differ:



1. High number of individuals impacted and high impact on the individual;

Characterised by: Making a life-changing impact on the individual, while still reaching many individuals due to their innate ability to scale.

The drivers: Saving or significantly improving people's lives.

The enabler: New technologies, or existing technologies applied in a new context and novel manner.

Examples: Drone delivery services for emergency care in rural and disaster zones. Blockchain solutions issuing skill-based identification for displaced people.

2. High number of individuals impacted and low impact on the individual;

Characterised by: Making an everyday impact on the individual, while still being able to reach many individuals due to their innate ability to scale.

The drivers: Regulation, mega-trends and changing societal norms..

The enabler: New technologies, or existing technologies applied in a new context.

Examples: Advanced recycling technology to close the production loop in fashion. Machine learning which enables users to automatically quantify their environmental impact and reduce their footprint.

3. Low numbers of individuals impacted and high impact on the individual;

Characterised by: Making a life-changing impact on the individual, and only reaching a limited number of individuals due to the innate limitations to scale.

The drivers: Saving and significantly improving people's lives.

The enabler: Existing (or improved) technologies applied in a new context.

Examples: Small fashion brands working with local supply chains. Solutions to improve workplace inclusion for social minorities.



Perspective: On the impact factor

Haakon Brunell, Managing Director and Co-founder, Katapult Accelerator

"I find that there are indeed some special traits that are characteristic across impact start-ups. A shared sense of purpose, for solving parts of a grand challenge which is of planetary importance, and of doing so in collaboration with others and in an ethical way. In my experience, this is a "superpower" that should be nurtured in order for impact start-ups to gain an edge and increase their chance of success - and also should get more start-ups to shift towards having an impact focus"

Figure 3.1
Impactability Matrix



Source: State of Nordic Impact Start-ups

4. Low numbers of individuals impacted and low impact on the individual;

Characterised by: Making an everyday impact on the individual and only reaching a limited number of individuals due to the innate limitations to scale.

The drivers: Increasing awareness, building communities or providing alternative consumer products.

The enablers: Existing (or improved) technologies applied in an existing context.

Examples: Community building activities around sustainability. Eco-friendly alternative products.

The impact scalers in the upper quadrants have the potential to scale lean and fast in order to address large scale challenges, either for the individual (e.g. providing medicine, matching donor blood) or for the collective (e.g. cleaning up the oceans, decarbonizing the energy sector) and thereby enhold the potentiality to transform industries.

These start-ups hold a possibility to scale with a factor in the range that mainstream business angels and VCs would typically expect. While we hope this will be the case, it relies on the success of many aspects and is not given. The scalability potential makes these startups eligible for business angel and venture capital investments.

The impact start-ups in the lower quadrants address challenges where it is difficult for them to scale at speed. They might be constrained by the physical limitations of supply chains, or other key assets that are unable to scale exponentially. While still eligible for growing into a sound business, the limited speed of scale will not qualify for venture capital investments. However, social investment funds will typically look for this category.

Though the impact scalers have a broader reach, the life changing start-ups in the lower right corner should not be underestimated: improved technology applied in novel context holds great potentiality to create significant changes.

While we need both impact scalers and life-changing impact start-ups, we need to accommodate for their differences and distinguish between them in order for them to thrive. The Impactability Matrix is intended as a tool to help assess the nature of a start-up, identify the drivers and facilitate measures to help them succeed.

To look at the nature of the Nordic impact start-ups, we have qualitatively assessed each of the impact start-ups in our sample and categorised them according to the framework.

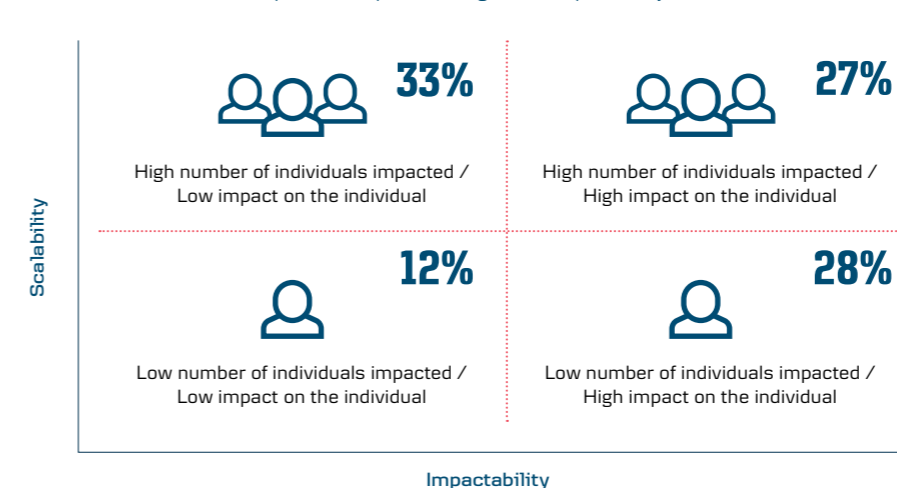
Our study shows that around 60% of the Nordic impact start-ups are based on scalable business models - the other 40%, by contrast, will encounter barriers to scaling.



Perspective: On the impact factor
Tove Rådelius, Investment Manager, Norrskén

"Entrepreneurship is all about solving problems and creating value. Social entrepreneurs have historically focused on solving social problems, but often without a focus on financial returns. Impact entrepreneurs are entrepreneurs running businesses where the core operations create a significant, measurable and intentional positive impact on either people or planet, whilst also focusing on value creation, and generating financial returns."

Figure 3.2
The distribution of Nordic impact start-ups according to the 'Impactability Matrix'



Source: State of Nordic Impact Start-ups

We also see that the majority, 45%, of impact start-ups fall into the low impact on the individual. This is not surprising given the difficulty of creating successful breakthrough innovations or truly life-changing offerings. It is also not necessarily concerning since many small changes will compound and grow. But there are still some challenges - global warming, world population growth, increasing demands to cities due to urbanization, waste and more, that are accelerating so rapidly that small changes might not be enough to reach the 2030 agenda for Sustainable Development. In this perspective, you could question if the 12% working with low impact on a low scale, could or should deploy their resources and capital to businesses with greater impact on the individual and/or with a greater scalability.

Conclusion

Impact start-ups are often seen as one collective group and lumped into the same pot. Yet in reality impact start-ups differ just as much as 'conventional' start-ups. In order to best accelerate the impact space in the Nordics, investors and the rest of the ecosystem needs to understand and appreciate the differences between impact start-ups.

To contribute to the debate on impact start-ups, we have created The Impactability Matrix with four categories that take into account two key dimensions: scalability and impact.

We need start-ups across these categories, both those that can deliver broad impact and those who can deliver deep impact and change lives in the process. We should distinguish between these different types of start-ups and accommodate for the differences in order for them to thrive. Understanding what drives and enables them and the nature of their reach is the first step.

To really move the needle on impact, we need to collectively identify the start-ups and appoint them with the resources they need to optimise their impact. We can then collaborate with a range of stakeholders to widen the reach of the most promising solutions, delivering impact where it is most needed.

MYTH #4

Impact requires a trade-off between purpose and profit

FALSE 98% of Nordic impact start-ups integrate impact to improve top and bottom-line

Since the inception of the UN Sustainable Development Goals in 2015, there has been increasing focus on the business opportunities related to solving the world's biggest challenges. In 2017, the flagship report Better Business, Better World was released by the Business and Sustainable Development Commission (BSDC) quantifying sustainable market opportunities of the US at \$12 trillion by 2030.

In April 2019, The Global Impact Investing Network (the GIIN) released a report Sizing the Impact Investing Market that estimated the current size of the global impact investing market to be \$502 billion – over 50 times bigger than its 2013 estimate of \$9 billion.

As impact investments are on the rise, so is the debate around impact and risk-adjusted financial returns. In other words, does impact investing equal a lower return on investment?

Investors new to impact investing might think there is a trade-off between impact and profit (and incur additional costs in screening companies). New impact entrepreneurs might think the opposite – that profit always follows purpose. Neither are true. Start-ups seeking to address impact can either be more or less profitable than the typical market competitor, due to their approach when balancing profit and purpose (Evans 2019).

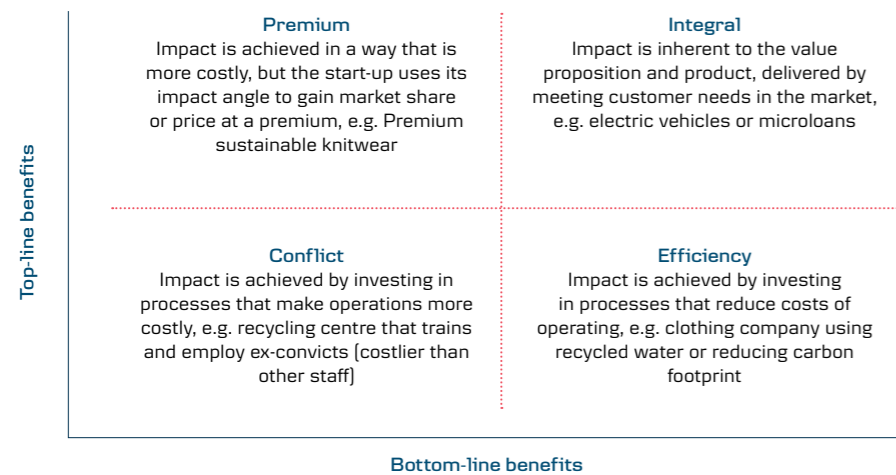
To understand this better, we have created up a two dimensional matrix of top-line versus bottom-line (see figure 4.1: Impact Integration Matrix) capturing how a start-up's impact strategy affects its relative profitability by the four categories Integral, Premium, Efficiency and Conflict.

Listed below are five questions entrepreneurs and investors should consider when assessing the impact of their business.

1. What is the start-up's impact strategy - how does it hope to achieve impact?
2. What is the effect of the start-up's impact strategy on how it creates and delivers value - in particular its cost structure? Does it make it more or less costly to produce/deliver similar amounts than if it did not include the impact dimension?
3. What is the effect of the start-up's impact strategy on its ability to capture value in the market - and generate revenue?
4. How do these decisions impact the profitability or market share potential of the start-up, vs. market competitors?
5. Where can the start-up innovate to turn Conflict into Premium, change processes to increase Efficiency, or take advantage of its sustainable business model and social impact to price at a premium (where appropriate) and gain greater market share?

Armed with these insights, entrepreneurs and investors can work actively on how to position impact in their business model.
Source: Adapted from Madeleine Evans 2019

Figure 4.1
Impact Integration Matrix



Source: State of Nordic Impact Start-ups



Perspective: On the impact factor

Pelle Pedersen, Chief Impact and Growth, Doland

"Risk is always in the eye of the beholder. An impact startup is still just a startup. They face the same kind of challenges as any other startup, it's just a different approach and service or product that they're trying to sell."

If you believe these companies are more risky and less business driven, then you'll look at them in that way. You'll ultimately think you're taking a bigger risk and then be slower to execute your investments.

We're still at the beginning here in the Nordics but I think in 3-5 years the perceived risk of investing in these companies will be drastically reduced."

Conclusion

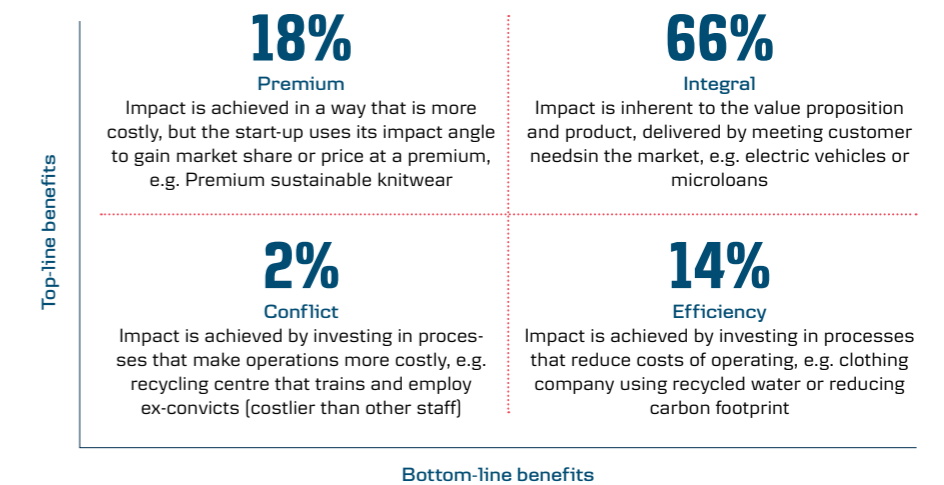
Impact start-ups can integrate impact in their business models in four different ways:

1. Integral
2. Premium
3. Efficiency
4. Conflict

Almost 98% of the Nordic impact start-ups integrate impact to enhance their profitability. Only around 2% integrate impact in a way that increases costs.

In conclusion, both the global trend of accelerating growth opportunities within impact investing and our assessment of Nordic impact start-ups, show that impact is not on the expense of profit.

Figure 4.2
Impact Integration Matrix and the distribution of Nordic impact start-ups % distribution of 1018 companies



Source: State of Nordic Impact Start-ups

MYTH #5

Impact start-ups have fundamentally different business models than regular start-ups

FALSE Impact start-ups' business models are similar to their conventional counterparts

A start-up's business model defines how it captures, creates, and delivers financial value. Impact start-ups' business models additionally define how they capture, create and deliver social or environmental value.

So how do the Nordic impact start-ups business models differ from non-impact start-ups in the real world?

We have mapped the income streams, value creation and target customers of the impact start-ups to explore potential differences.

Income streams of Nordic impact start-ups

The majority, around 50%, of the Nordic impact start-ups income streams are based on traditional Pay-per-product or Pay-per-service. This is in line with traditional Make-and-sell business models, as well as services/consultancies.

23% of the impact start-ups generate their income through Freemium, Subscription, License and Performance fee or Pay-per-use. Income streams that are typical income streams for tech companies.

Other income streams include the more niche models that we also see in conventional tech, e.g. Transaction fees on marketplaces.

Pay-per-product and Pay-per-service are tied to the quantity or quality of product or service that the customer receives, whereas Transaction fees recurs every time the service is processed.

Value creation of the Nordic impact start-ups

In addition to the revenue generation models, we were interested in understanding what level of technology the start-ups are using to generate value.

The value creation of the Nordic impact start-ups can be clustered around Low-tech solutions, High-tech solutions and Deep-tech solutions:

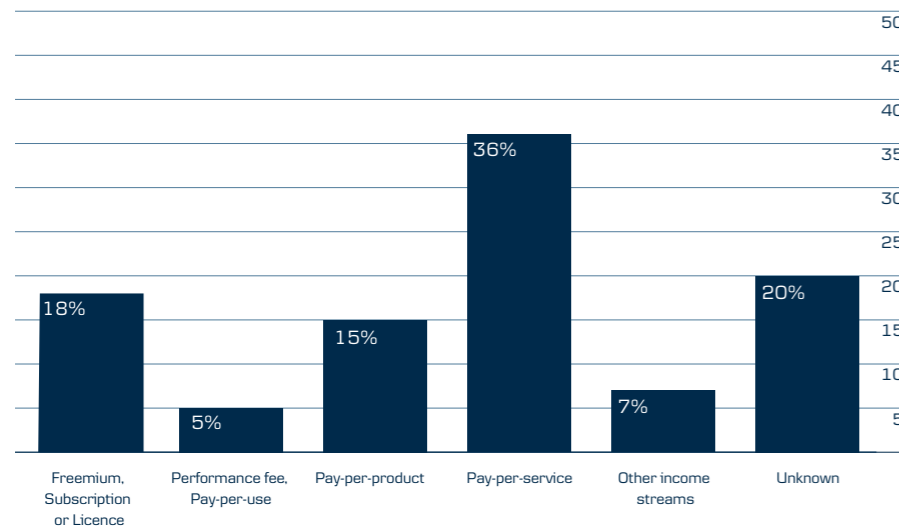
■ Around 20% of the impact start-ups are based on Low-tech or Non-tech solutions, where tech is not at the core of the business model. While Low-tech start-ups have a digital presence, they are predominantly working with 'offline' goods such as consultancy, programmes and events and alternative consumer goods.

■ Around 50% of the impact start-ups are based on High-tech solutions. High-tech start-ups work with market-ready solutions at the core of their business, e.g. applications and digital platforms, software, IoT and sensors.

■ Around 30% of the impact start-ups are based on Deep-tech solutions. Deep-tech, as described by BCG's 2019 report *The Dawn of Deep Tech*, 'novel technologies that offer significant advances over those currently in use'. Deep-tech start-ups work with a range of R&D related solutions such as advanced materials, AI & blockchain, robotics, biotech, photonics and quantum computing.

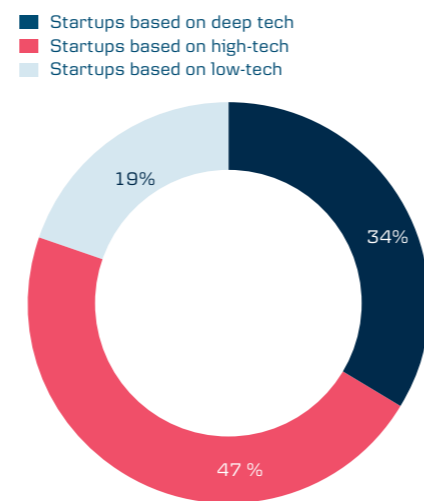
Taking a closer look at specific technologies, we observe three leading applied solutions within high-tech and low-tech. Firstly, we see that 30% of the Nordic impact start-ups are utilising Applications or/and digital platforms, e.g. educational gaming, second-hand marketplaces, health tracker etc. Secondly, we see that around 11% of the Nordic impact start-ups are offering Alternative consumer goods, e.g. sustainably and responsibly produced products, small scale urban farming products, meat-alternatives etc. Thirdly, we see that around 10% of the Nordic impact start-ups working with IoT or sensor solutions; e.g. smart thermostats, automated buildings or predictive maintenance etc. Categories that are fuelled by commoditization of apps, shift in consumer demands towards more sustainable consumer goods and rise in smart cities and smart home services and products.

Figure 5.1
Distribution of Nordic impact start-ups income stream
% distribution of 1018 companies



Source: State of Nordic Impact Start-ups

Figure 5.2
Distribution of Nordic impact start-ups' applied technology
% distribution of 1018 companies



Source: State of Nordic Impact Start-ups



Perspective: On impact business models

Espen H. Daae, Investment Chief, Ferd Social Entrepreneurs

"We have seen a growing number of impact start-ups mature to the point where they are beginning to resemble regular growth start-ups, delivering their products and services at scale and on commercial terms whilst maintaining an impact objective. At the same time, a number of tech startups are adding an impact ambition to their business agenda. It may be useful to think of impact start-ups in the context of those that operate "with impact, for profit" and those that are "for impact, with profit". The challenges in building a sustainable business are similar, although differing priorities may lead to different momentums in scaling. Investors are faced with a wide choice of investing opportunities across the impact continuum, ranging from local to global, environmental to social, broad to deep impact and from human-centric to tech focused. Against this backdrop, the ability to set clear impact objectives and priorities and to measure and manage the impact becomes important, not only for start-ups to succeed but also to find a good match with investors."



Perspective: On impact business models

Haakon Brunell, Managing Director and Co-founder, Katapult Accelerator

"Having a business model that is infused with purpose and doing good to others can give a different way of working, that will give a more motivated team, investors and customers to execute, support and receive the results of the business model."

Though Deep-tech start-ups represent a smaller amount within the sample, this pool shows positive signs for delivering breakthrough impact. As summarised in The Dawn of Deep Tech 'innovations based on Deep-tech can generate enormous economic value, but their ultimate impact extends far beyond the financial realm'. We see this potential from a number of Deep-tech start-ups, including those in the 'Deep Tech // Other' category who are working with innovations such as sustainable nuclear as seen at Seaborg or protein sourcing as seen at Solar Foods which hold a huge potential to drastically change environmental footprints if scaled.

Customer segments of Nordic impact start-ups

In line with the applied technologies, the target customers of the Nordic impact start-ups are also diverse. We have found that:

- Around 48% of the Nordic impact start-ups are in the B2B segment
- Around 15% of the Nordic impact start-ups are in the B2C segment
- Around 32% of the Nordic impact start-ups are in the both the B2B and B2C segment
- Around 5% of the Nordic impact start-ups are in the P2P segment

Though there has been much talk about the growing demand for sustainability amongst consumers, around 80% of the Nordic Impact start-ups target B2B segments.

Conclusion

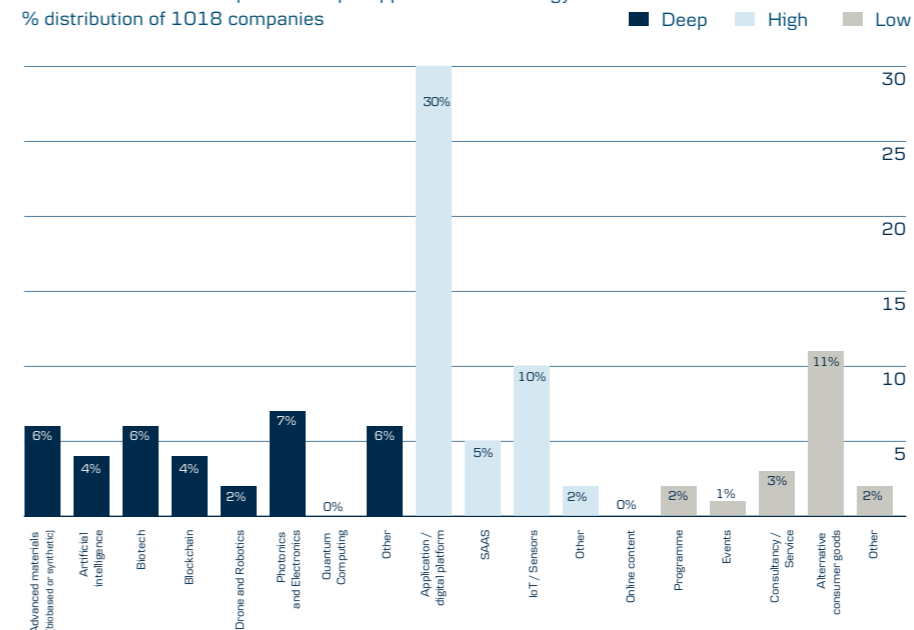
To conclude, the Nordic impact start-ups are just as diverse in terms of value generation, income streams, applied technologies and market focus as their 'conventional' counterparts.

Sustainable business models are not one-size-fits-all, but actually in fact contain several categories. Many of them may indeed have more in common with 'conventional' start-ups within the same vertical than to each other.

Nordic impact start-ups on the whole are far from technology being laggards, with around 80% integrating tech at the core of their business model and 30% of those working with the realms of deep-tech.

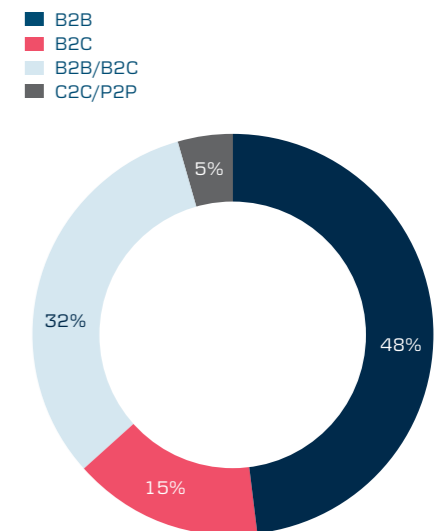
These numbers are furthermore promising when we consider this is in relation to 'The Impactability Matrix' and the need for impact at depth and scale.

Figure 5.3
Distribution of Nordic impact start-ups' applied sub-technology
% distribution of 1018 companies



Source: State of Nordic Impact Start-ups

Figure 5.4
Distribution of Nordic impact start-ups target customer group
% distribution of 1018 companies



Source: State of Nordic Impact Start-ups

Solar Foods - a Finnish food-tech using biotechnologies to create protein

Solar Foods produces an entirely new kind of nutrient-rich protein using only air and electricity as the main resources. Solar-food collects microbes from the Finnish nature and grows them in fermenters almost identical to the ones used in breweries and wineries. This means that the production does not require arable land or irrigation and is not limited by climate conditions. Instead of causing CO2 emissions, Solar Foods' bioprocess captures carbon dioxide and uses renewable electricity throughout its production process.



In 2018, Solar Foods started co-operation with the ESA Business Incubation Centre (ESABIC) in Finland by developing food production for a Mars mission.

Wheelys Cafe - a Swedish food-tech using low technologies to switch up the café game

Wheelys is a chain of organic solar-powered bicycle cafés that enables young people to start their own business. Since launch in 2015, Wheelys has sold over 900 cafés in 75 countries, which means it's growing faster than any fast food chain. Ever.

Wheelys' vision is to make it easier for passionate people without money to open their own organic cafés, shops, and restaurants.



MYTH #6

Impact start-up founders lack business experience

FALSE Impact start-up founders have significant business experience

The institutionalization of entrepreneurship has created a tendency to follow the recipe of successful start-ups and look for as many 'ingredients' as possible when investing in new ventures. Some of the most recognised proxies for success in entrepreneurial ventures are the founder(s)' educational backgrounds, business acumen and entrepreneurial experience.

While some investors believe that the impact start-up ecosystem may be objective for adverse selection, attracting entrepreneurs driven by ideals rather than business, we wanted to set the facts straight and explore: are the impact founders really lacking business acumen?

To answer this, we assessed each start-up's founder/CEO's experience in terms of educational background, business experience and entrepreneurial experience. The data were derived manually from LinkedIn and sorted into the aforementioned categories.

Figure 6.1 shows that in total, around 75% of the Nordic impact start-ups founders have a university degree (Bachelor degree or higher) compared to just 35% of the EU-20 population aged 25-54 according to Eurostat and State of European Tech 2019. We found that around 39% of the Nordic impact start-ups founders/CEOs have a university degree (Bachelor, Master, PhD or MBA) in a business domain, e.g. business, economics, innovation, business development, e-commerce or similar.

Another 36% of the pool hold a university degree (Bachelor, Master or PhD) in a technical domain, e.g. in engineering, electrical engineering, physics, or other technical domains.

Only 14% are educated in other domains such as education, hospitality, theatre, design or other creative domains.

It is also widely acknowledged that previous experience in business, especially building start-ups, greatly increases the chances of success (Crunchbase).

Perspective: Serial entrepreneur on impact

Henrik Isaksen: a Danish serial entrepreneur with a renewed focus on impact

"The move into impact was a business decision. We seized the opportunity to gain a competitive advantage by founding Clever and Greenmobility. We couldn't have done that without the prior experiences with Sixt."

Though the initial investment might be significant, companies which are addressing the green agenda will have a competitive advantage in the long run. You cannot make a good business out of it by 'just doing it on the side.'"

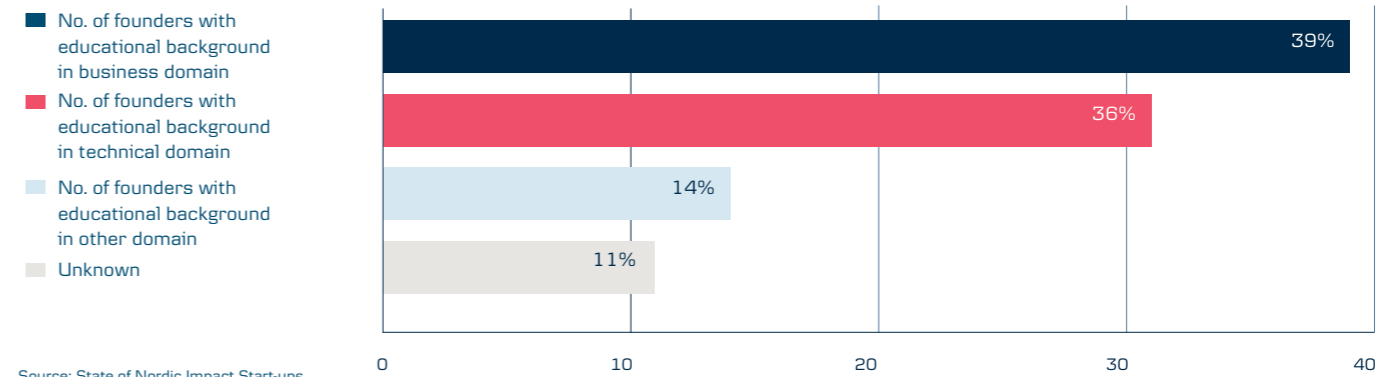
When we look at our data, we see that 46% of the Nordic impact start-ups founders/CEOs have a work background in a business domain, e.g. business development, sales, start-ups and scaleups, innovation or similar.

Another 23% of the population have a work background in a technical domain or industry, e.g., electrical engineering, physics or similar.

Looking more closely at each start-up, we see that many of the founders with technical/industry backgrounds have transitioned into a start-up within that same field where they can directly use their experience and networks.

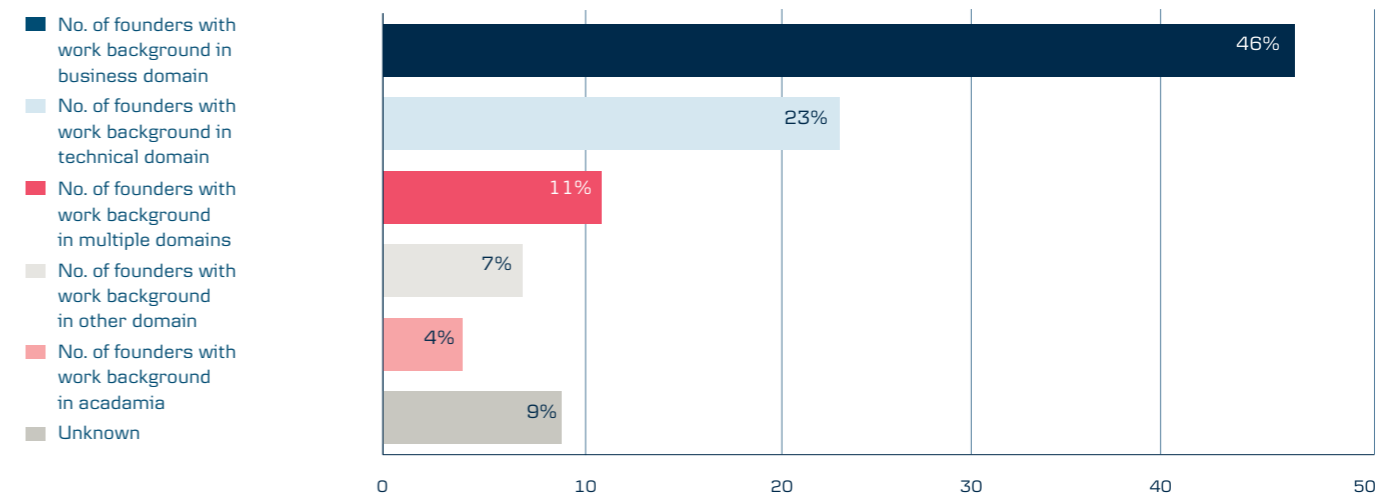
We believe that this entrepreneurial experience is a great asset to the Nordic impact ecosystem.

Figure 6.1
Distribution of Nordic impact start-ups founders university degree
% distribution of 1018 companies



Source: State of Nordic Impact Start-ups

Figure 6.2
Distribution of Nordic impact founders/CEO's work experience
% distribution of 1018 companies



Source: State of Nordic Impact Start-ups





Perspective: On impact entrepreneurs
Sofia Breitholtz, CEO, Reach for Change

"We see a huge surge in interest, especially amongst women and Gen Xers, in finding business opportunities while solving the world's most pressing issues. This means that more and more impact start-ups are being started by people with a more traditional business background. This is great for the sector, and for the potential of these ventures to scale and have a true impact. However, we also see a need that is more critical than ever, and that is to include the voice of the person who has lived experience of the problem, in the design phase and while adapting services and solutions that will affect them. We also see a lot of potential in people who come from non-business backgrounds to start their own social innovations. With the right capacity building, they too can succeed"

The analysis further shows that some founders have been impactful through and through, having studied social entrepreneurship, and/or initiated multiple impact projects and ventures. Others have been focussed on business-as-usual in their educational or work careers, and have later applied these learnings to the impact field.

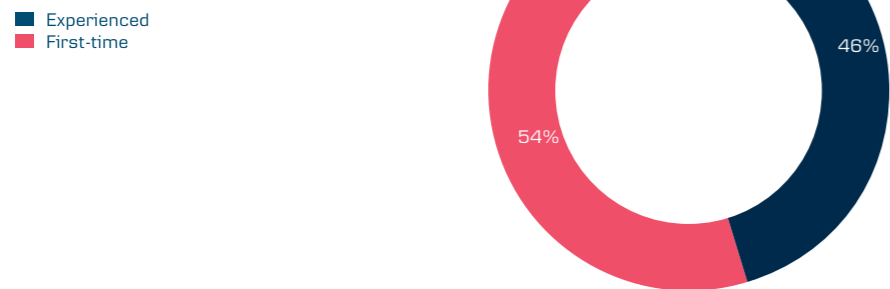
Conclusion

To conclude, the Nordic impact founders/CEOs have significant business experience.

Most impressively, 46% of the founders have entrepreneurial experience and almost 46% of the founders have business experience. In total around 75% of the Nordic impact start-up founders have a university degree (Bachelor degree or higher) compared to just 35% of the EU-20 population aged 25-54. Around half of these have an educational background within a business domain and half of them have an educational background within a technical domain.

Based on these numbers, we can confidently say that impact founders do not differ much on paper from their 'conventional' counterparts.

Figure 6.3
Distribution of Nordic impact start-ups entrepreneurial background
% distribution of 959 companies



Source: State of Nordic Impact Start-ups

MYTH #7

There are more women founders in the impact start-up scene

TRUE 24% of impact start-ups founders are women

According to SDG 5: Gender Equality, women are underrepresented in all levels of political leadership, in C-suite and managerial positions and widely within the global workforce.

Similarly, The Start-up Genome Global Start-up Economy Spotlight 2019 found the global average of women tech founders is just 14% and The State of European Tech 2019 found that the European average of women tech founders is 21%. Yet it is rumoured that women founders are more commonplace within the impact space. So, is the ratio of women founders/CEO better in the impact start-up ecosystem?

By mapping the gender distribution of the founders of Nordic impact start-ups, our study shows that 24% of the founders/CEOs are women.

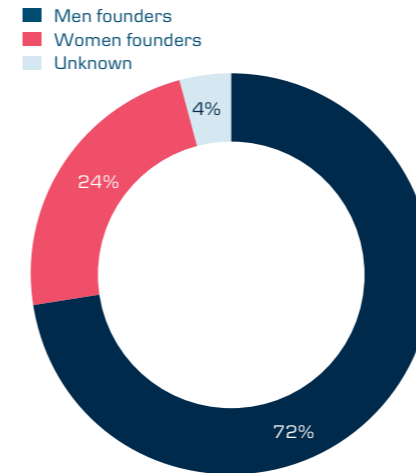
Based on that we see that the Nordic impact start-ups have slightly more women founders or CEOs, that in the average European tech start-ups and significantly more than the global average.

This ratio brings the Nordics into the top tier of the start-up ecosystems across the globe which are decreasing the leadership gender gap: Chicago, Mid-east Region, Ireland and New York City [The Start-up Genome Global Start-up Economy Spotlight 2019].

The average ratio of women founders varies very little across the Nordic countries. With 25% women founders, Swedish impact start-ups are marginally ahead of the other Nordic countries and the average for all companies.

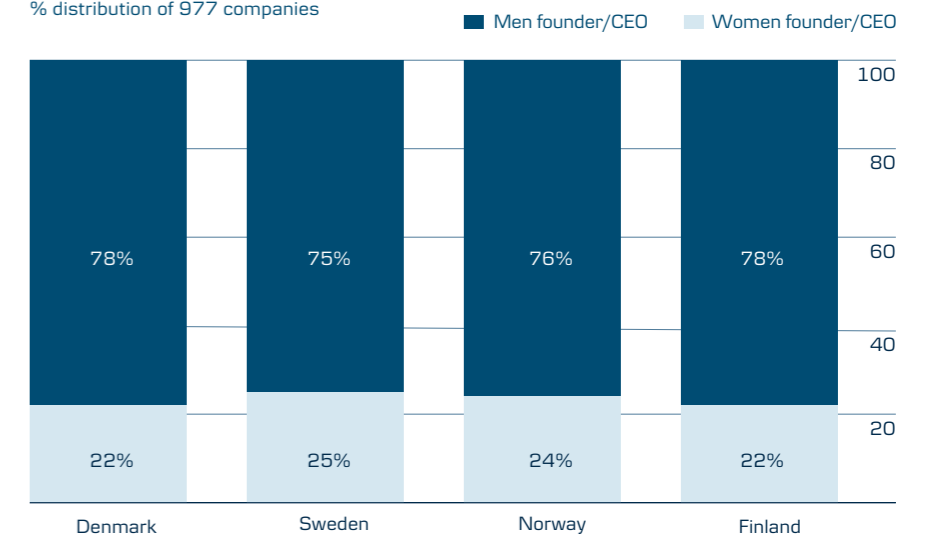
In the The State of Nordic Impact Start-ups 2019 we found that 14% of the start-up CEOs were women. The sample size for this year's report has increased and has been approached with a different methodology. Keeping this in mind, the large increase of percentage points still indicates that diversity is going in the right direction.

Figure 7.1
Distribution of women founders/CEOs in the Nordic impact ecosystem
% distribution of 1018 companies



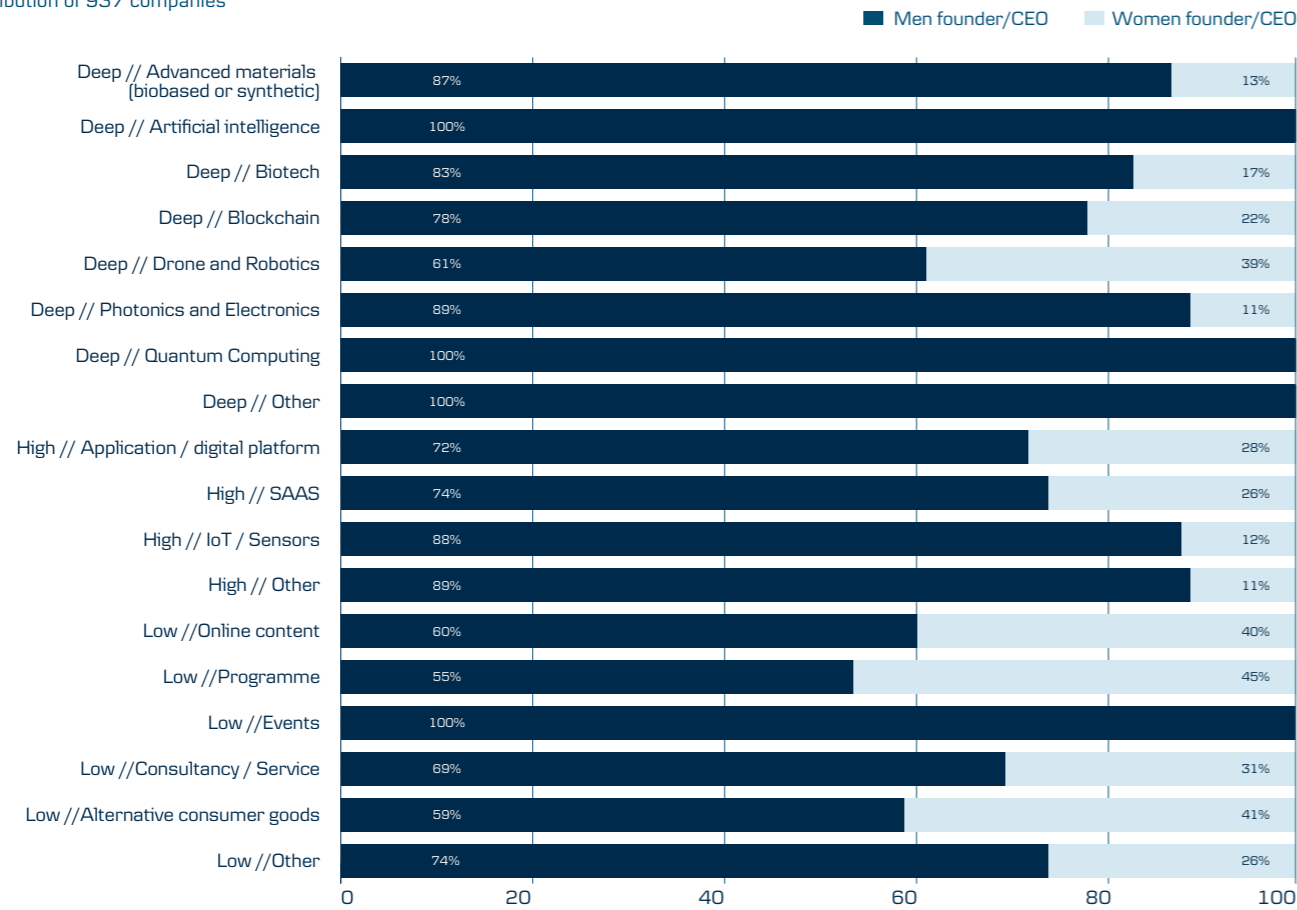
Source: State of Nordic Impact Start-ups

Figure 7.2
Distribution of gender of founders/CEOs in Denmark, Sweden, Norway and Finland
% distribution of 977 companies



Source: State of Nordic Impact Start-ups

Figure 7.3
Distribution of gender ratio of founders/CEOs based on start-ups' technology.
% distribution of 937 companies



Source: State of Nordic Impact Start-ups



Perspective: On diversity of impact teams
Thea Messel, Founder and Managing Partner, Unconventional Ventures

"It comes as no surprise that we see more diverse and underrepresented founders among start-ups who place impact at the core of their business. In our experience, women and minorities tend to be more conscious about what problems they want to solve and why. These are not 'nice to' but 'need to' solve problems that have a big impact on people and the planet. Problems that have been and continue to be disregarded as legitimate market opportunities by the traditional investment community. Change is coming and luckily more and more investors are waking up. Hopefully more investors will also understand that backing diverse founders is key in order to be a part of the next wave of impact start-ups changing the face of what a successful start-up looks like. The founding team is the starting point"

Develop Diverse - a Danish software company making diversity the new norm

Develop Diverse is built upon the idea that technology can help businesses build a talented and diverse workforce, thus becoming more sustainable and successful. Develop Diverse

is creating several AI-based software tools that enable businesses to recruit the best talents by eliminating bias and leveraging diversity.



As we wanted to take a closer look at what's driving the increase in women founders, we cross-compared the founder's gender and the type of technology offered by the start-ups. We found the highest ratios of women founders within start-ups offering Low-tech solutions such as Online Content, Programmes, Events and Consumer Goods. Within start-ups offering High-tech solutions, we found the biggest proportion of women founders was to be found within Applications/ Digital platforms and SaaS products. The ratio of women founders working within Deep-tech such as artificial intelligence, quantum computing and photonics and electronics is the lowest representation.

Conclusion

Women founders are more prevalent amongst impact start-ups, than amongst 'conventional' start-ups. Our findings show that 24% of the founders/CEOs in the Nordic impact ecosystem are women. Comparably, the estimated global average of women tech founders is 14% and the European estimated average is 21%.

If we dig deeper, we see the highest ratios of women founders within Lowtech impact start-ups and the lowest ratio in the group of impact start-ups working with Deep-tech technology. This is not surprising given that we still experience a general underrepresentation of women in STEM fields and disciplines today.

In conclusion, our findings indicate that the gender diversity in the Nordic impact scene is moving in the right direction and is further ahead than its conventional counterpart. But 24% of women founders is still too low a statistic. It is not only an impact challenge, but also a general societal challenge with no silver bullet solution. A further exploration of the differing needs of men and women founders could be beneficial to decrease the gender gap further.

MYTH #8

Impact cannot be measured

PARTLY FALSE Impact measurement is still in its infancy, but 20% of Nordic impact start-ups quantify their impact performance indicators

Within the impact space, impact measurement is one of the hottest topics for debate. Impact measurement is still in its early stages, but initiatives such as the Impact Management Project and The Upright Project are working to build consensus around best practice techniques.

However, we still hear a lot of murmurs from the broader ecosystem that impact cannot be measured and we, therefore, should be wary of impact start-ups as we do not know if they are actually succeeding in making a difference. So what is up and down: Do start-ups quantify their impact, and if yes, how do they do it?

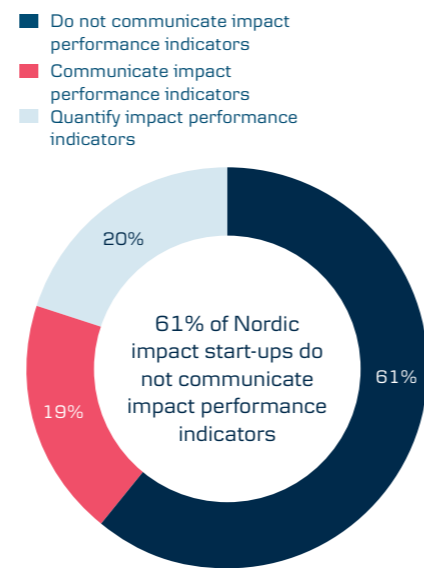
Our study shows that the adoption of impact measurement amongst Nordic impact start-ups is still in its infancy. In Myth 9, we will see that 79% of start-ups align their vision with impact, 39% mention impact performance indicators. Only 20% of the start-ups quantify their impact performance indicator(s) [e.g. "We have saved 36.925.338 meals equivalent to 92.313 tons of saved CO2"] and even fewer benchmark their impact [e.g. "In 2019 we tripled our impact in terms of meals saved"].

The most common impact performance indicator among the Nordic impact start-ups addressing environmental issues is 'Reduction of CO2 and other greenhouse gases', with 29% of those measuring their impact in this way.

Amongst start-ups tackling social and humanitarian issues, in general we see far fewer examples of impact performance indicators. Within this pool, 'No. of Beneficiaries' is the most common benchmark.

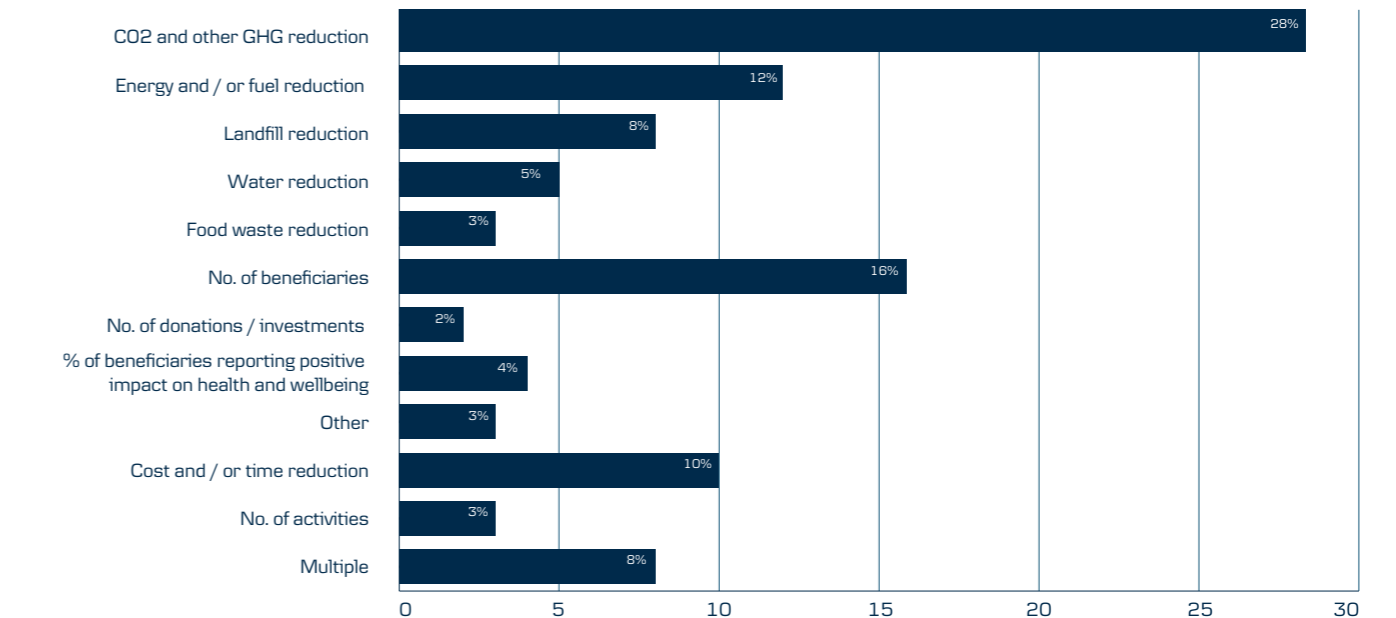
In other cases, Nordic impact start-ups are using non-impact metrics to quantify their progress such as 'Cost / Time saved' or 'No. of Activities' (i.e. transactions, customers) accomplished that year. In these examples, we can see that some Nordic impact start-ups are using more classic business-as-usual approaches to quantifying their impact by highlighting the cost and time saving elements.

Figure 8.1
Distribution of Nordic impact start-ups measuring impact
% distribution of 1018 companies



Source: State of Nordic Impact Start-ups

Figure 8.2
Distribution of impact metrics amongst start-ups
% distribution of 386 companies



Source: State of Nordic Impact Start-ups



Perspective: On impact measurement

Espen H. Daae, Investment Chief, Social Investments, Ferd Social Entrepreneurs

"Although impact start-ups are designed to deliver impact by nature, it may sometimes be difficult for them to measure the impact created beyond the basic quantification of indicators such as CO2 reduction or number of beneficiaries. Constraints may include lack of financial or personnel resources, difficulties in setting objectives as well as limited access to beneficiary outcomes data or poor data quality. Thankfully, we are seeing the development of robust impact management methodologies, validated benchmark data and capable practitioners who can support start-ups in developing and refining their impact management systems. Impact measurement is also key to the development of social impact bonds / social outcomes contracting, and a growing number of Nordic start-ups are successfully using impact data in their sales pitches to both public and private customers as well as to investors."

Kamupak - a Finnish waste-reduction start-up quantifying their impact

Kamupak is enabling consumers to fight the battle against single-use packaging. By offering a digital deposit service for reusable take away packaging, Kamupak is working to replace disposables with a circular solution.

Furthermore, Kamupak provides a detailed breakdown and lifecycle of the environmental impact of their solution, quantifying their impact with regards to the reduction of CO2.



Figure 8.3
Start-up impact measurement and growth journey

	Solution discovery	Customer discovery	Customer validation	Efficiency customer creation	Scale/growth
Impact	What is the SDG challenge to address? Can I create an additionality solution? Does the solution have inherent ethical problems?	Who is affected by the SDG challenge (directly and indirectly)? What features are required to address the societal pain?	Is my customer interested in the solution and will they pay for it? Are other stakeholders interested in solving the problem and will they pay for it?	What is the most efficient way to solve the SDG challenge and is the impact scalable? Does the biz model have other SDGs impacts (positive/negative)?	What is the lifetime Impact value to society vs Impact cost of acquiring them?
Measure	Describe Intent. Quantify impact potential. Assess potential negative side-effects Tools and inspiration: Research and understand via UN SDG, B Impact Assessment etc.	Identify the impact "Total Addressable Market", impact drivers and KPI's Tools and inspiration: Look at peers, standard indicators as GRI, IRIS etc.	Validate impact drivers and KPI's Tools and inspiration: Seek market/impact validation	Identify and manage indicators for side-effects (positive/negative). Tools and inspiration: Reassess using e.g. Impact Management Project, B Impact Assessment	Manage the organisation; e.g. introduce ESG reporting if needed. Tools and inspiration: Formalise using e.g. B-corp, GRI, IRIS, SASB standards etc. (if required)

Source: State of Nordic Impact Start-ups

How the start-ups might measure their impact is one element. Another is when and how it is feasible for them to measure their impact. The main purpose (and first priority) for the impact start-ups should be on finding solutions to the big problems and reach the level of scale where they can benefit the lives of many. Conventional start-ups have proven to be able to provide solutions with great speed, by following a journey through the phases of idea to to solution and scaling - all the while seeking validation from customers and the market. Applying that thinking can provide us with some guidance on when and how a start-up needs to understand how impact measurement fits into their journey.

Figure 8.3 is an attempt to carry through those thoughts as an example of such a journey.

Recognising that all start-ups and journeys are different, the impact measurement journey should be adapted to the needs of the start-ups, investors and other stakeholders involved. The mentioned tools and inspiration are only examples - and for some start-ups other are better suited. Likewise the right timing will differ from start-up to start-up.

Conclusion

In conclusion, we can see that impact measurement amongst Nordic impact start-ups is still in its infancy, with only 20% quantifying their performance measurement indicators.

Taking a closer look at these numbers, we see a big difference in maturity. While the measurement of environmental impact is relatively widespread, the measurement of social impact is very limited.

In addition, there is a significant pool of Nordic of impact start-ups who are demonstrating business-as-usual approaches to impact measurement by using more classic measures of 'Cost / Time Saved'.

Though meaningful impact measurement metrics are important to track on a longer perspective, we advocate that the first priority for the impact start-ups should be on finding solutions to our biggest problems and reaching a scale where they can have widespread impact.

The more we align on a common ground and frameworks which are adjusted to the type of start-up in question, the easier it will be to assess the success and impact of these start-ups.



Perspective: On impact measurement

Annu Nieminen, CEO, The Upright Project

"Start-ups should also pay attention to the human capital they employ. What is achieved with those smart and talented brains, programming skills and business degrees? Typically the environmental cost of start-ups is pretty low, especially in the beginning when operations are still small in scale. In order to justify the use of these brains and to cover their opportunity cost, a start-up needs to get something valuable done in their core business."

"What about measuring, then? All in all, start-ups should not get too stuck on measuring their impact, but rather focus on making it happen. Understanding the big picture of your largest negative and positive impacts is enough. What matters is your core business - your product or service, not so much the "green" or charity efforts around it. As long as the costs and gains of your basic business model make sense, and your product or service solves a big enough problem compared to the resources it employs, then you're fine"

MYTH #9

The majority of Nordic impact start-ups promote their SDGs

FALSE Only 10% of Nordic impact start-ups mention the SDGs

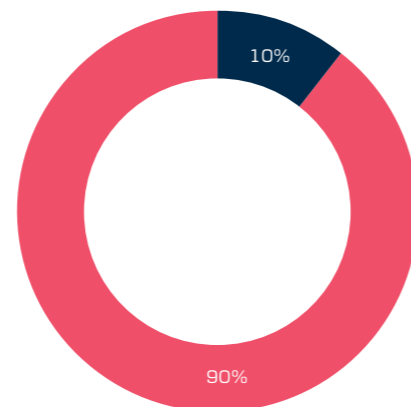
The UN's 17 SDGs have been accepted as a guiding star and common language on a global level. Impact as a category has emerged in tandem with this global movement, referring to business solutions that help address the most pressing environmental, social, and economic challenges in line with the SDGs. But how many impact start-ups are actively promoting their alignment with the SDGs externally?

Though the SDGs are the lingua franca of impact amongst governments, NGOs, large companies and investors (Impact Report: Nordic Investors 2019), only 10% of the Nordic impact start-ups actively promote their alignment with the global goals on their websites and/or social media profiles. Fewer yet promote their alignment to specific SDGs which they are looking to tackle through their core business. 79% however do align their vision to impact. These range from high-level communication on topics such as the 'planet', 'society' and 'purpose', to the use of ecosystem specific terms such as 'impact', 'sustainability' and 'social start-up'.

The Impact Report: Nordic Investors 2019 found that many impact investors align investments according to the SDG framework. Conversely, this report shows that only few of the Nordic impact start-ups apply the SDG framework as a part of their positioning - bringing up the question of whether impact start-ups and impact investors are speaking different languages?

Figure 9.1
Distribution of impact start-ups mentioning the SDG they are addressing
% distribution of 1018 companies

- No. of startups that promote one or more SDG
- No. of startups that do not promote any SDGs



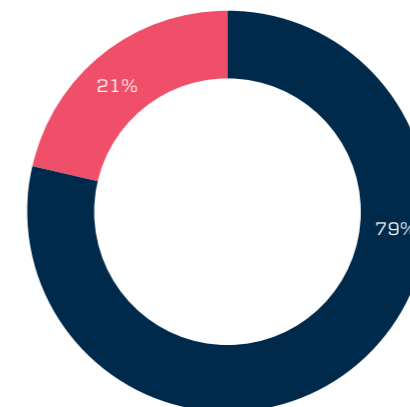
Source: State of Nordic Impact Start-ups

One could argue that the start-ups instead are speaking the language of their customers, by emphasizing what matters to their specific target group, e.g. reducing costs by reducing energy consumption as we have seen in some cases. However, as many of them apply broad and relatively unspecific claims, it could also be interpreted as a symptom of lack of alignment with the biggest challenges. This interpretation is in line with our finding presented in 'Myth 2 Nordic impact start-ups are solving the most pressing challenges'.

Whilst many are used to associating impact with certain types of companies, often largely driven by marketing slogans and external positioning, the analysis conducted for this report has revealed something quite different. The analysis has shown that it is often the case that many impactful companies are quietly improving our lives, through their sound product and services, without making much fuss.

Figure 9.2
Distribution of impact start-ups applying impact terms as prominent part of positioning
% distribution of 1018 companies

- No. of startups using impact for positioning/branding
- No. of startups not using impact for positioning/branding



Source: State of Nordic Impact Start-ups



Perspective: On the SDGs

Jesper Højbjerg, Business Angel and Vice Chairman, DanBan

"Many business people are now wearing the round and multi-coloured UN SDG badge. CEO's and investors have really begun to use this SDG framework in the way they speak, understand and relate to impact. But this is not the same as investing in it.

Some business people feel more accustomed with ESG metrics and don't have the incentive to switch to another framework. Others just think it's superfluous - for them, it goes without saying that their smart water pump implemented in a sub-saharan desert addresses SDG 6 Access to Clean Water and Sanitation. Since everything is connected, you can also identify most projects with all 17 of the goals - which is when it can become green-washing unless it's related to deeper level systemic changes.

We see more and more investors relating to the SDGs - in Denmark, for example, byFounders and Den Sociale Kapitalfond are doing this. It is likely that DanBan will do this too one day. From our perspective, it would be advantageous if start-ups looking to raise capital follow suit."

Conclusion

Though the SDGs have become a widely applied framework for explicating impact, only 10% of the Nordic impact start-ups actively promote their alignment with the global goals on their websites and/or social media profiles. However, almost 80% of start-ups promote their alignment with other impact terms on their websites and/or social media profiles. Many of them apply broad and relatively unspecific claims as 'sustainability', 'climate-friendly', 'environmental and 'impact', which could be indicate the start-ups

are not actively aligning themselves with the biggest challenges (which also supports our findings presented in Myth 2 Nordic impact start-ups are solving the most pressing challenges).

While many are used to associating impact to certain types of companies, often largely driven by marketing slogans and external positioning, we found that oftentimes many impactful companies are quietly improving our lives through sound technologies and products without explicitly referring to impact-related terms.



Perspective: On the SDGs

Thomas Bisballe, CSO and Co-founder, Impactr

"Most start-ups have a hard time using the SDG's as north stars - internally and externally - because they are so broad and say little about the actual work being done. You end having to re-frame and re-purpose the underlying targets. They don't deliver a concrete framework for communicating or capturing most impact models.

Start-ups have the luxury - compared to more mature business - of delivering on very specific targets like 'food waste' which is hard to contain to one singular SDG. You end up slapping on five SDGs that might be relevant to your purpose (eg. SDG 12 and SDG 1), but it doesn't really ease the communication of the possible outputs of your business model.

Secondly, from our experience, they clearly resonate more in the Nordics than globally. Their use is not that widespread in populations outside of the Nordics.

Thirdly, most early stage start-up communication is about buy-in from investors. Not a lot of them use the SDG framework, especially in the pre-seed space where there are very few dedicated impact investors using SDG's in their selection process or investment thesis.

As for Impactr, we are deliberately moving away from integrating them in our framing and as well as our product. Our users don't really relate 'impact' categories, so we are trying to identify more 'lifestyle' oriented categories which are linked to our specific product and value proposition."

MYTH 10

Investors lack data on impact start-ups

PARTLY FALSE The data is just as imperfect as for non-impact start-ups

According to The Impact Report: Nordic Investors 2019 investors main concerns around impact investing concerns:

- 67% needed more data on past performance of impact investments
- 54% needed better sources of information and more transparency
- 54% think impact markets have poor liquidity and exit options

But how does this relate to the data insights we have gained in this report? We take a retrospective look at the myths and our key findings to shed some light on the topic:

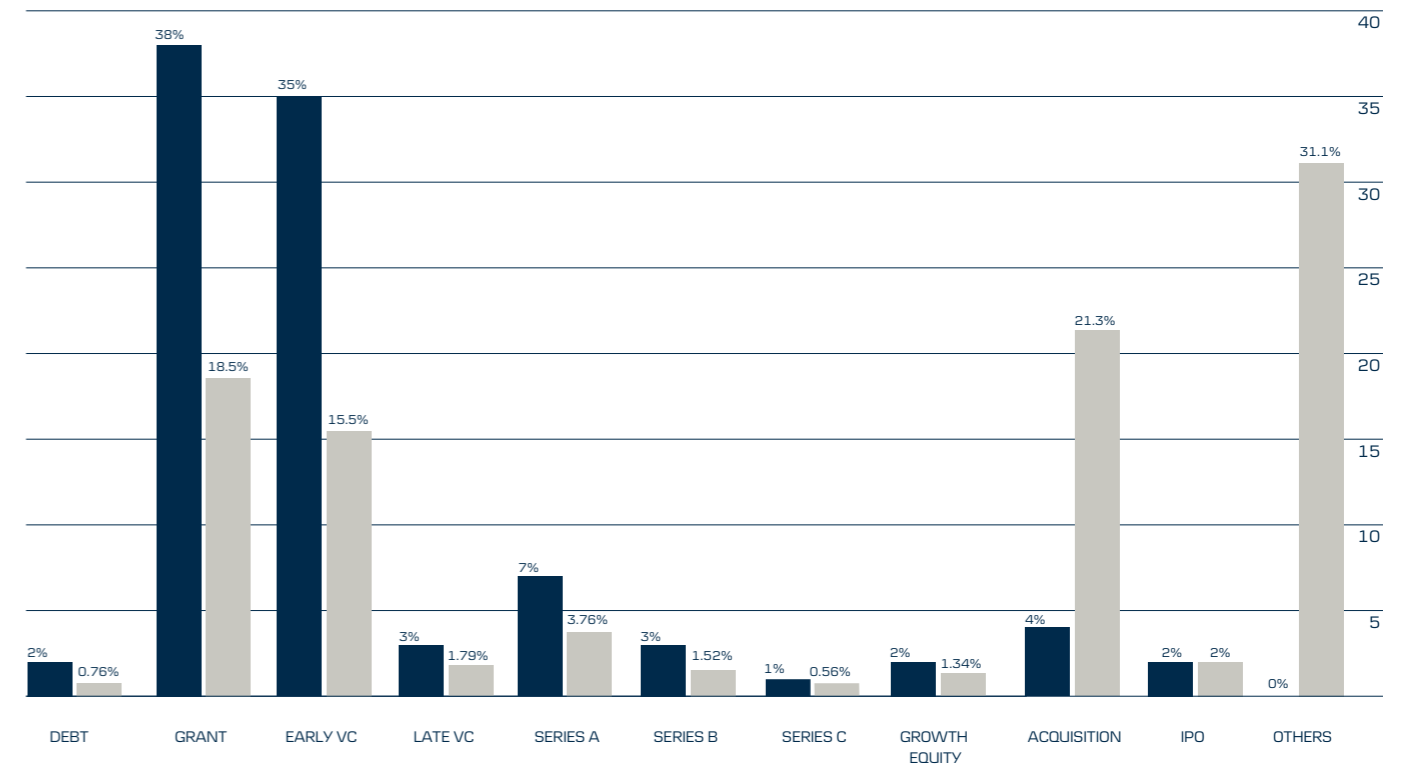
In 'Myth 1: The Nordic impact ecosystem is a global leader within impact start-ups', we found that while impact investments are surging, the data on impact start-ups are still in its infancy.

An emerging field like impact start-ups naturally comes with limitations. Notable examples from the past include the Silicon Valley tech scene prior to the commercial growth of the Internet in 1995, and the data on fintech start-ups when Paypal was founded in 1998. Just like we see with impact today, these spaces were new and unknown, with little investor history on winning business models or solid investment theses. However, the upside

Figure 10.1

Distribution of round type - Nordic impact start-ups vs. all Nordic start-ups

Sample is based on 20828 deals on Nordic start-ups and 402 deals on Nordic impact start-ups.



Source: Dealroom and State of Nordic Impact Start-ups





Perspective: On data on impact start-ups

Rachel Browning, Impact Investment Consultant, AndSimple

"There is limited data on funding, because many impact funds have not had exits yet. There is so much data available on sustainability issues but even with extreme amounts of data and ESG analytics we struggled to predict things like the Volkswagen emission scandal. For some investors, there will never be enough data."

for investors was substantially bigger for those that entered the scene earlier compared to those who waited.

In 'Myth 2: Nordic impact start-ups are solving the most pressing challenges' and 'Myth 3: Impact start-ups are a special breed of start-ups' we found that the Nordic impact start-ups differ considerably from each other - in terms of focus as well as impact and scalability. Additionally, we found in 'Myth 9: Impact start-ups have fundamentally different business models than regular start-ups' that the business models of Nordic impact start-ups are similar to their 'conventional' counterparts.

In summary there are strong indications that impact start-ups differ considerably from each other - and that they often have more in common with non-impact start-ups working within the same vertical, than with others put in the same horizontal 'impact' category. Therefore, the best data on impact start-ups could yet to be found within the verticalized data-set of traditional data sources. Is that sufficient?

We do not believe so. We foresee that traditional data sources will make it easier to filter for impact companies - and not just for their financial performance, but for their impact performance as well.

In 'Myth 6: Impact start-up founders lack business experience' we saw that the founders of the Nordic impact start-ups hold strong business acumen - either through education, work, or entrepreneurial experiences. While some of the founders have impact profiles through and through, we also see a substantial portion of entrepreneurs with experiences from the non-impact start-up scene, who are now turning their hand at impact ventures. With this foundation of highly experienced founders, we are optimistic for the budding impact scene that we have observed evolving since we published our first report on Nordic impact start-ups Insight report: Impact start-ups 2018.

However, we still believe that the acceleration of the Nordic ecosystem needs further speed through significant stakeholder collaboration if 1) we as a region want to take a stronger position in this space and 2) we want meaningfully to contribute to reaching the UN 2030 Agenda.

This notion is confirmed when we cross compare the distribution of round type for Nordic impact start-ups and all Nordic start-ups. As seen in figure 10.1 the data indicate that there is "overrepresentation" of Nordic impact start-ups in the early rounds and an "underrepresentation" of Nordic Impact startups in the later rounds compared to more traditional startups.



Perspective: On impact data

Tommy Andersen, Managing Partner, byFounders

"In terms of investing in the impact space, there has certainly been a lack of good data for investors. Of course, that is partly due to the fact that the impact arena is fairly new. But I think that is changing now. We see full on impact investment funds that only invest in the impact driven businesses and we see blended funds that are doing partly traditional investments and partly impact investments. From a data perspective, the data collection on the performance of these funds and start-ups is really maturing. We, as investors, now have ample access to data on impact companies and start-ups. It used to be this black hole, but it's not anymore. And that includes +impact and what they do in this respect."

Even though data on round type do not reflect it yet, we foresee that over time the boundaries between impact start-ups and non-impact start-ups will begin to dissolve. Many of the Nordic impact start-ups work as systematically as regular tech start-ups do and apply many of the same metrics. As impact investments become more mainstream, the ecosystem will strengthen and the frameworks for measuring impact along a growth curve will become more common. With this maturation, we can expect to see the quality of performance data and information improve.

In conclusion

The insights we have gained in this report have been gathered through publicly available data sources. As with the rest of the ecosystem we have also encountered challenges to access available data. As it stands, the best data is to be found in traditional data sources within verticalized categories. While we expect that the borders between impact start-ups and conventional start-ups will dissolve, we foresee better and more data will become available on the impact start-ups as the ecosystem matures. But instead of sitting back and waiting, we should take action and discuss what we can do to improve available data and accelerate the progress among the relevant stakeholders.

Methodology

The myths

The myths investigated in this report have been inspired by a number of widely held beliefs that we have seen circulating in the ecosystem since the inception of +impact.

The prevalence of these beliefs have been validated through a series of semi-structured interviews with stakeholders of the ecosystem, alongside new stories and reports within the media. These beliefs have been reframed as myths - which we have sought to either bust or verify.

Each myth has been investigated through a range of insights gathered from data triangulation.

The data

This insight report includes 1018 impact start-ups. This dataset has been sourced from the Hub, +impact and Green Innovation Group throughout January 2020.

Throughout February, March, and April 2020, this dataset has been manually enriched with additional data points from start-ups' websites, LinkedIn, Tracxn and Crunchbase, as well as through a partnership with Dealroom.

To add a further nuance to the myths explored, we have included acknowledged literature sources in the form of reports, books or articles.

Furthermore, case-studies and quotes from industry leaders have added a qualitative dimension to the issues explored.

Term definition; impact

We define an impact start-up as 'a start-up company that addresses one or more of the UN Sustainable Development Goals at the core of its business and has the potential to scale'.

An impact start-up, therefore, is a start-up where the potential for positive societal and environmental impact lies within the core business model. Simply put, if you were to remove 'impactability', you would also remove profitability. Though there are more start-ups which have a positive impact on the planet and society, we have only included start-ups which meet this criteria within our dataset. Start-ups where impact is peripheral to the business, i.e. a diversity policy on hiring, have not been included in this report.

A start-up's identification with "impact", has not necessarily been a determining factor in its inclusion within the impact dataset.

This means that we have included some companies within the dataset, that do not communicate their impact explicitly, but do offer a business model, product or technology that has a positive environmental or societal impact.

By the same token, even though a start-up may identify as "impact" or "environmental" in their communications, it may still be excluded from the dataset since such claims can be made without the start-up actually delivering environmental or societal impact.

As a consequence, some of the figures in this report are based on smaller samples of start-ups where the data has been attainable.

Within our dataset, we see start-ups working between the parameters of implementation and innovation. Whilst some are providing existing, higher-quality or more efficient solutions to well-known challenges, others are developing novel solutions which will transform industries - and indeed society itself. We see a need for a wide range of start-ups working along this continuum, and therefore do not rank one start-up against another.

Finally, it is necessary to differentiate between actual impact and potential impact within our dataset. In line with last year's report, we have not measured the actual impact of the start-ups, but have evaluated the potential impact that would be achieved if the start-up is to succeed and grow.

Of course, we cannot yet know if this potential will be fulfilled. As such, The State of Nordic Impact start-ups 2020 serves both as an insights report and an inspiration piece for how the Nordic impact start-up ecosystem might mature and mobilise in the coming years.

Appendix figure 1

Distribution of Nordic impact start-ups addressing the solutions according to Project Drawdown 2020, Scenario 1 stopping climate change close to 2 degrees of global warming. % distribution of 1018 companies

Rank	Project Drawdown Solutions	% of Nordic impact start-ups	Scenario 1 - Gigaton CO2 Eguivalent reduced, 2020-2050
1	Reduced Food Waste	2.7%	87.45
2	Health and Education	1.0%	85.42
3	Plant-Rich Diets	2.3%	65.01
4	Refrigerant Management	0.3%	57.75
5	Tropical Forest Restoration	0.0%	54.45
6	Wind Turbines (Onshore/Off-shore)	0.2%	47,21+10,44
7	Alternative Refrigerants	0.3%	43.53
8	Utility-Scale Solar Photovoltaics	0.7%	42.32
9	Improved Clean Cookstoves	0.1%	31.34
10	Distributed Solar Photovoltaics	1.7%	27.98
11	Silvopasture	0.0%	26.58
12	Peatland Protection and Rewetting	0.0%	26.03
13	Tree Plantations (on Degraded Land)	0.0%	22.04
14	Temperate Forest Restoration	0.0%	19.42
15	Concentrated Solar Power	0.5%	18.60
16	Insulation	0.1%	16.97
17	Managed Grazing	0.1%	16.42
18	LED Lighting	0.5%	16.07
19	Perennial Staple Crops	0.0%	15.45
20	Tree Intercropping	0.0%	15.03
21	Regenerative Annual Cropping	0.9%	14.52
22	Conservation Agriculture	0.3%	13.40
23	Abandoned Farmland Restoration	0.0%	12.48
24	Electric Cars	2.0%	11.87
25	Multistrata Agroforestry	0.1%	11.30
26	High-Performance Glass	0.0%	10.04
27	Methane Digesters	0.1%	9.83
28	Improved Rice Production	0.0%	9.44
29	Indigenous Peoples' Forest Tenure	0.0%	8.69
30	Bamboo Production	0.0%	8.27

Appendix figure 1

Distribution of Nordic impact start-ups addressing the solutions according to Project Drawdown 2020, Scenario 1 stopping climate change close to 2 degrees of global warming. % distribution of 1018 companies

Rank	Project Drawdown Solutions	% of Nordic impact start-ups	Scenario 1 - Gigaton CO2 Eguivalent reduced, 2020-2050
31	Alternative Cement	0.1%	7.98
32	Hybrid Cars	0.0%	7.89
33	Carpooling	0.9%	7.70
34	Public Transit	0.1%	7.51
35	Smart Thermostats	0.7%	6.99
36	Building Automation Systems	0.4%	6.47
37	District Heating	0.1%	6.28
38	Efficient Aviation	0.0%	6.27
39	Geothermal Power	0.2%	6.19
40	Forest Protection	0.1%	5.52
41	Recycling	0.4%	5.50
42	Biogas for Cooking	N/A	4.65
43	Efficient Trucks	0.0%	4.61
44	Efficient Ocean Shipping	0.1%	4.40
45	High-Efficiency Heat Pumps	0.2%	4.16
46	Perennial Biomass Production	0.0%	4.00
47	Solar Hot Water	0.1%	3.59
48	Grassland Protection	N/A	3.35
49	System of Rice Intensification	0.0%	2.78
50	Nuclear Power	0.2%	2.65
51	Bicycle Infrastructure	0.0%	2.56
52	Biomass Power	0.3%	2.52
53	Nutrient Management	0.1%	2.34
54	Biochar Production	0.1%	2.22
55	Landfill Methane Capture	0.1%	2.18
56	Composting	0.0%	2.14
57	Waste-to-Energy	1.2%	2.04
58	Small Hydropower	0.0%	1.67
59	Walkable Cities	0.0%	1.44
60	Ocean Power	0.5%	1.38

Rank	Project Drawdown Solutions	% of Nordic impact start-ups	Scenario 1 - Gigaton CO2 Eguivalent reduced, 2020-2050
61	Sustainable Intensification for Smallholders	0.0%	1.36
62	Electric Bicycles	0.3%	1.31
63	High-Speed Rail	0.0%	1.30
64	Farm Irrigation Efficiency	0.1%	1.13
65	Recycled Paper	0.0%	1.10
66	Telepresence	0.0%	1.05
67	Coastal Wetland Protection	0.0%	0.99
68	Bioplastics	0.6%	0.96
69	Low-Flow Fixtures	0.2%	0.91
70	Coastal Wetland Restoration	0.0%	0.77
71	Water Distribution Efficiency	0.5%	0.66
72	Green and Cool Roofs	0.0%	0.60
73	Dynamic Glass	0.0%	0.29
74	Electric Trains	0.0%	0.10
75	Micro Wind Turbines	0.0%	0.10
76	Building Retrofitting	0.3%	0.00
77	Net-Zero Buildings	0.4%	0.00
78	Grid Flexibility	0.4%	0.00
79	Microgrids	0.1%	0.00
80	Energy Storage (Distributed /Utility-Scale)	0.9%	0.00
Total percentage of Nordic impact start-ups		23%	

We will continue to support impact start-ups

We believe that the Nordic countries show potential to become a global epicentre for impact start-ups. However, in order to make this dream a reality, we must continue to support the scaling of impact start-ups, help build capabilities, and connect impact start-ups with new business partners. At Danske Bank we will continue to support the development and share the facts and insights that can help us build a strong community around the impact start-ups.

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