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Final Thesis

**Industrial policies for innovation:  
the role of civic engagement.  
A case study on Sweden**

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## **Abstract**

Industrial policies represent a strong mean to change the economic structure of a country in order to obtain growth and competitiveness. As we know from experiences and literature, during the formulation and application of industrial policies, governments can face information problems and can be driven by personal interests rather than societal needs. These failures are the reason for many critics and concerns about industrial policies use. So far, researchers didn't deepen the possible answers to these failures and literature presents only few solutions.

“Industrial policies for innovation: the role of civic engagement. A case study on Sweden” presents civic engagement as a possible solution to government failures and to better formulate and implement industrial policies for innovation. Through academic research and a case study in Sweden, regarding the improvement of civic participation during monthly local board meetings, this thesis represents a confirmation that a space for civic engagement in the governance of industrial policies, can play a fundamental role in providing improvements.

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## Introduction

Industrial policies are a strong tool to change the economic structure of a country. Following the definition of Curzon Price (1981), industrial policy comprises “any government measure, or set of measures, to promote or prevent structural change”. Government industrial policy has to coordinate this set of measures in order to obtain growth and competitiveness. As we know from experiences and literature, industrial policies present three main failures: the information problem; the interest-group and the Self-Seeking-Bureaucrats. These failures are the reason for many critics and concerns about industrial policies use. So far, researchers didn’t deepen the possible answers to these failures; literature presents some solutions but there is room for deepening. Moreover, literature doesn’t present, or at least hasn’t focused on, civic engagement as a possible solution to government failures and as a mean to better formulate and implement industrial policies. This is why I chose with “Industrial policies for innovation: the role of civic engagement. A case study on Sweden”, to study how civic engagement, with the limited meaning of political involvement (Adler, 2005), can solve all the three main government failures and can contribute to formulate and implement more efficient and effective policies.

The idea of this thesis starts from a case study in Sweden (presented in chapter III), precisely in Skärholmen district (Stockholm), when my group project Beyond Words received the task to improve the civic participation during monthly local board meetings. In order to achieve this task, we had to understand the overall situation plunging in the community. We organized meetings with clerks and local politicians, we did interviews to inhabitants, we met civil organizations in order to really understand why local board meetings were not working properly. Doing this four-months project we could see and understand the concrete and real problems regarding local political civic engagement and gave me empirical evidences from which to start my thesis. After having gathered insights from local community, I did research to find confirmation in literature.

In the first chapter I introduce the economic context in Sweden, underling the capability of Sweden to innovate. We will see that Sweden invests seriously on R&D and on workers training in order to be always technologically updated. Moreover, we will see that Sweden is among the top countries in innovation indices, such as the European Innovation

Scoreboard (EIS) and the Global Innovation Index (GII). Chapter I makes readers conscious that Sweden is one of the world's innovation leaders.

In chapter II, we will see the literature regarding Industrial policy with a focus on innovation policies in Sweden. The first half of the chapter is useful to make clarity about what industrial policy is, what are the issues regarding its formulation and implementation and what are the main solutions following literature. The second half of the chapter focuses on Sweden. First, it regards the general investments that Sweden has done from 2017 to 2020, to make us understand government priorities, such as gender equality, employment, education and environment. Secondly, it introduces the Research policy bill "Collaborating for knowledge - for society's challenges and strengthened competitiveness" where is written the direction of research policy for the next ten years to improve Sweden's capacity for innovation. It is an important part because till 2015 Swedish Research council was the only council commissioned to formulate and implement innovation policies. The last part of the second chapter concerns the National Innovation Council (NIC). Created in 2015 by the Prime Minister, it represents the autonomous council which has the duty to formulate and implement industrial policies for innovation. It represents a drastic change towards innovation policies seen as political policies rather than research policies. As it is written in the paragraph "Swedish National Innovation council and the element of discussion" we see that there is a collaboration and a coordination between the Research Council and the NIC at creating innovation policies. This paragraph is crucial because introduces the idea of civic engagement as a solution of government failures. The NIC in fact, represents a forum of discussion between many operators, such as academic professors, multinational firm representatives, unions etc. This discussion-dialogue is the key element of the effectiveness of the NIC. I will focus on civic engagement rather than dialogue as a whole.

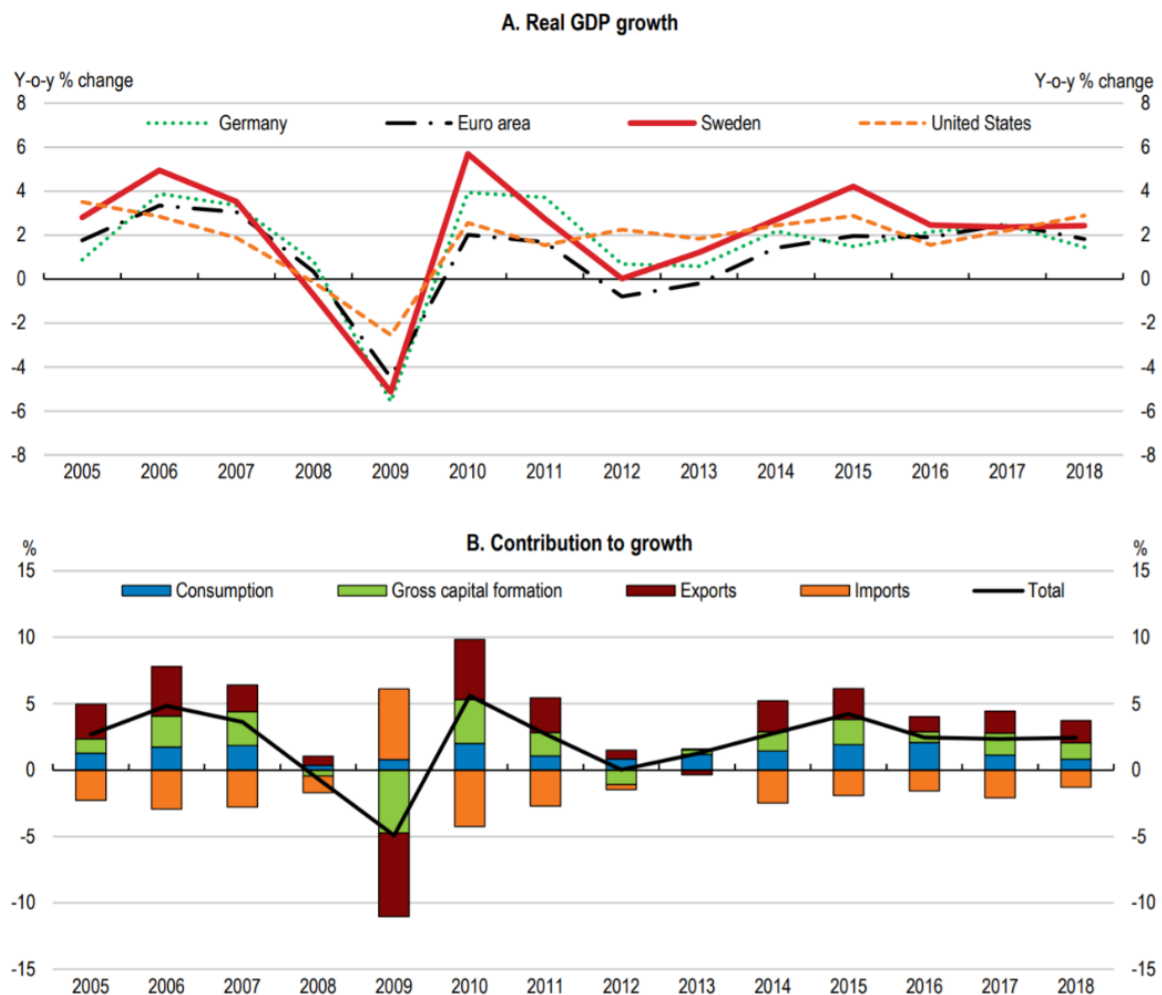
In chapter IV there is my analysis of the case study where I present the motivations of why civic engagement can be a solution to government failures. I will present them starting from the insights gathered through the case study and then finding confirmation by literature.

## I. Swedish economic context

With about 10ml of citizens, whose 17,7% under 15, 20,1% over 65, 17,8% foreign born, Sweden is a strong knowledge-based economy, well integrated in global value chains, with high standards of living and well-being, where its inhabitants can rely on income and gender equality and a high environmental quality.

Looking at the Figure 1, we notice that during the last five years Sweden has had a strong expansion: its GDP has increased at an average rate of about 3%. Over the same period, growth has been broad-based, with consumption, investments and exports all contributing seriously. Imports has been pushed up by a strong domestic consumption.

Figure 1. Output growth is robust and broad-based.



Source: OECD Overview 2019.

## 1.1 Industry structure

In 2018 the total number of companies, both goods producing and service producing, were about 1.1 million of units with a total of 2.9 million employees. Business companies had total net sales of 9,111 billion Swedish crowns and created a value added (contribution to GDP) of 2,633 billion crowns. Business enterprises' total assets counted for SEK 19.473 billion.

Service sector in Sweden is becoming more and more important, in fact, 64 percent of the total number of enterprises, were service-producing companies in 2018, which employed about 67% of the employees. They also represented 62% of the added value and 61% of the total assets in the business sector.

*Table 1. Economic overview for the total business economy, the goods producing and the service sector. 2017-2018*

*Comment:* the industry classification follows SNI2007.

	Goods producing companies		Service-producing companies		Business in total	
	(SNI 01-43)		(SNI 45-96 excl. 64-66, 84)		(SNI 01-96 excl. 64-66, 84)	
	2018	2017	2018	2017	2018	2017
Number of companies	408 543	407 481	734 833	721 010	1 143 376	1 128 491
Number of employees (full-time equivalents)	954 918	934 615	1 965 579	1 938 916	2 920 497	2 873 531
Net sales (SEK billion)	3 435	3 152	5 676	5 388	9 111	8 540
Value added (SEK billion)	992	937	1 641	1 564	2 633	2 501
Total assets (SEK billion)	7 648	7 409	11 825	11 157	19 473	18 566

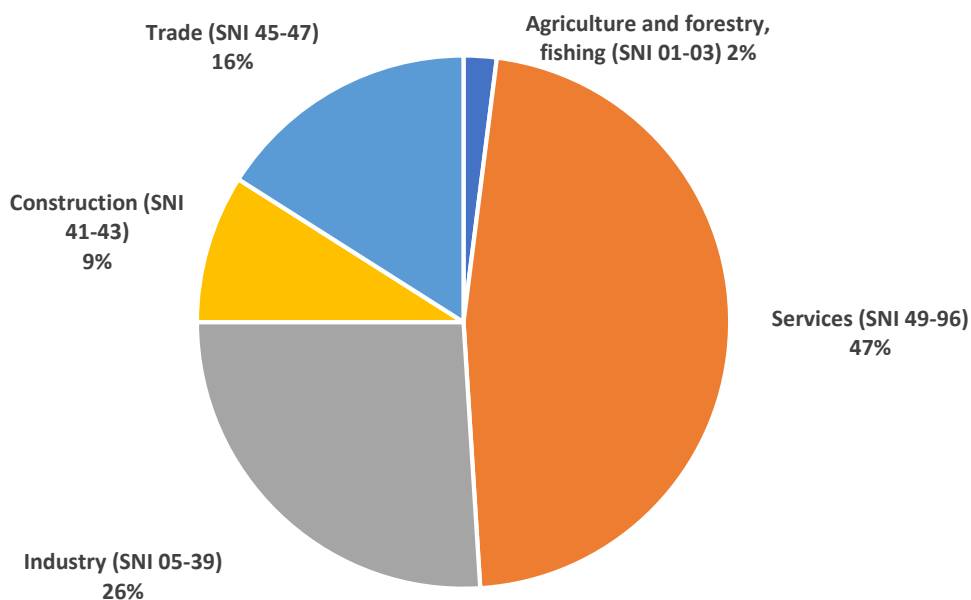
*Source:* SCB Sweden.



The service industry has the highest number of companies and it's the first group for business added value as we can notice from the figure 2, with 47% of the total (in table 1, service-producing companies included also Trade group); whilst industry has 27% and trade 16%. Construction and agriculture have 9% and 2% respectively. The distribution of value added between different industry groups didn't change significantly compared with previous years.

It is noteworthy that the industry group Agriculture, forestry and fishing represents only 2% of the added value but had 21% on the total number of companies as we can see in figure 9.

Figure 2: Business value added per industry group in 2018, per cent.



Source: SCB Sweden.

If we consider companies according to their size, looking at table 2, we can notice that small and medium-sized enterprises represent the largest part of the Swedish community. 96% of the total number are so-called micro enterprises with less than 10 employees. However, the highest increase of the number of companies between 2017 and 2018 was registered by the larger size classes: companies with more than 250 employees increased

by 4.6%, while companies with 50-249 employees increased by 3.1%. It is noteworthy underling that 1098 companies with more than 250 employees together employed about 34.9% of the total number in the business sector in 2018.

The distribution of business enterprises by size classes and their contribution to GDP was relatively unchanged compared with previous years.

*Table 2. Business structure by company size (employees) in 2017 and 2018.*

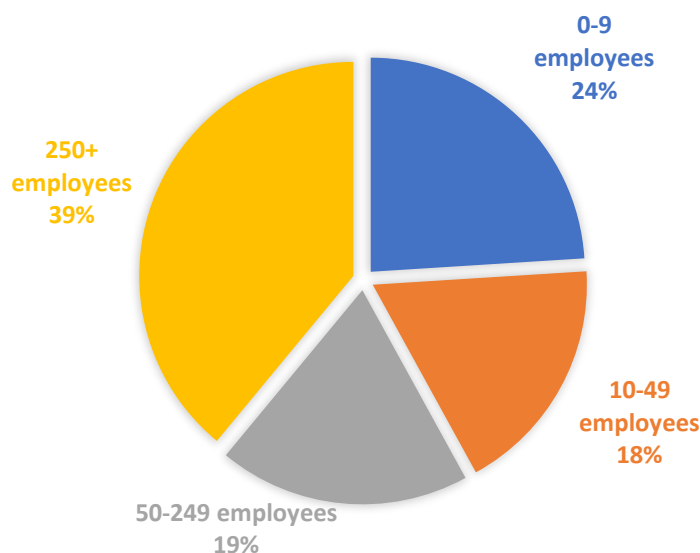
	0-9 employees		10-49 employees		50-249 employees		250+ employees		Overall	
	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
Number of companies	1 102 551	1 088 152	33 881	33 621	5 846	5	1 098	1 050	1 143 376	1 128 491
Average number of sets	672 153	681 318	659 892	653 106	568 273	550 440	1 020 179	988 667	2 920 497	2 873 531
Net sales (SEK Billion)	1 915	1 842	1 712	1 606	1 838	1	3 646	3 342	9 111	8 540
Value added (SEK billion)	633	610	486	472	498	479	1 016	940	2 633	2 501

*Source:* Source: SCB Sweden.

Although micro enterprises with less than 10 employees represent 96% of the total number of companies in Sweden, they accounted for just 24% of the business value in 2018 (see table 2).

Companies with 10-49 employees, representing less than 3% of number of companies, contributed for 18 percent to the value added. Companies with 50-249 employees, 0.5% of the total number, accounted for 19% of value added. It is noteworthy that companies with 250 or more employees, representing just under 0.1 percent the number of companies, contributed for 39 percent to the total added value in 2018.

Figure 3. Value added of the business sector per size class (%)

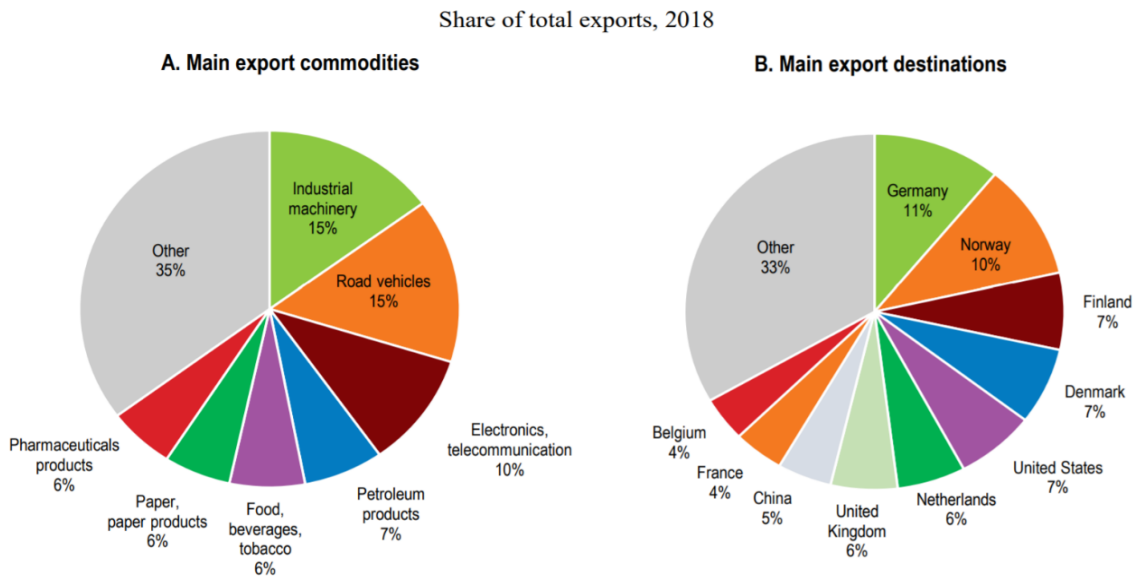


Source: SCB Sweden.

## 1.2 Foreign Trade

Sweden is very open to foreign trade, its exports of goods and services in 2018 represented 45,68% of its GDP in 2018 following World Bank data. Looking at figure 5, we notice that industrial machinery and road vehicles groups were the top exports of goods by commodity market with 15% of the total amount in 2018; followed by electronics and communication (10%), petroleum products (7%), food, beverage and tobacco (6%), paper and paper products (6%) and pharmaceutical products (6%). Sweden's top trading partners are Germany, both for imports (17,9%) and exports (10,6%), Norway, Finland, Denmark and the United States. The second largest supplier of goods and services in Sweden are The Netherlands, followed by Norway, Denmark and The United Kingdom. The European Union is Sweden's largest trading partner.

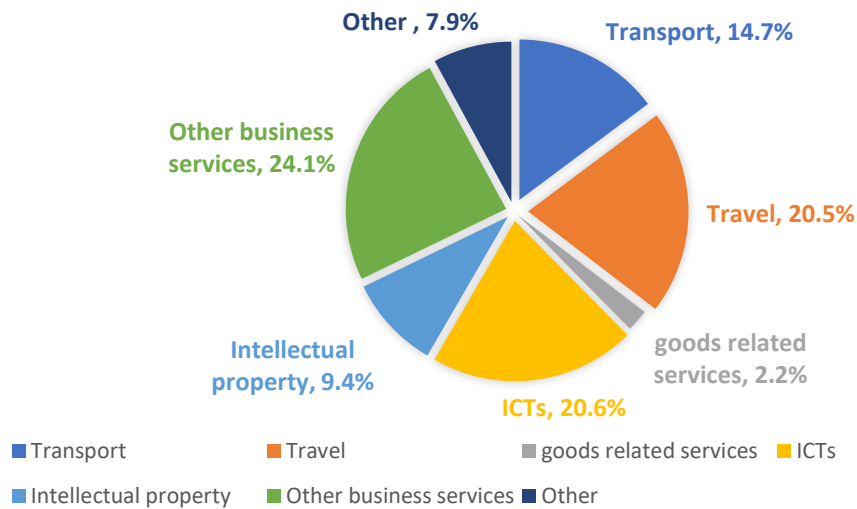
Figure 4. Swedish exports of goods by commodity and market (2018)



Source: OECD Overview 2019.

If we look at the commercial services exports, from figure 5 we notice that ICT (Information and communication technology) is the largest export item with 20,6% of the total. It's followed by services for travel with 20.5% and transport (14.7%). The main companies are Ericsson, ABB, Elekta, Electrolux, Hexagon.

Figure 5. Swedish commercial services export, % (2018)

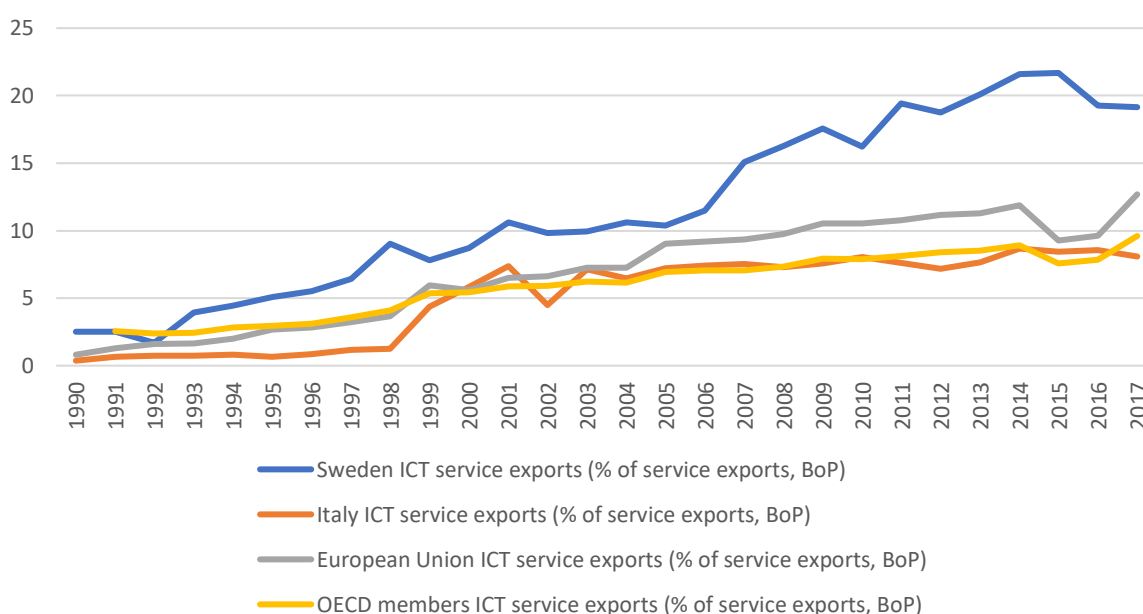


Source: WTO 2018.

Sweden, in fact, is among the best in OECD countries for the availability, quality and affordability of high-speed Internet. Swedish economy has the largest share of value added coming from ICT of OECD countries and is among the top ten exporters of ICT services. Regarding ICT service export, from figure 6 we can see a constant increase since 1990 until today thanks to investments in the sector.

Digital technology has helped Swedish companies to move up the value chain in order to focus on high value-added services such as marketing and product design. Moreover, Sweden is also a leader in IoT. Sweden is trying to achieve its goal of having 98% of households and companies connected to 1 gigabit per second Internet by 2025 (OECD, *Sweden well ahead in digital transformation yet has more to do*<sup>1</sup>). In 2009, 89% of Swedish inhabitants had access to internet at home, whose 83% had broadband. 90% of the businesses used internet and had a broadband connection. Small enterprises used internet with a lower degree, 85%, whose 74% had broadband (Swedish Ministry of Enterprise, 2010).

Figure 6. ICT service exports (% of service exports, BoP)



Source: The World Bank.

<sup>1</sup> Available at: <https://www.oecd.org/sweden/sweden-well-ahead-in-digital-transformation-yet-has-more-to-do.htm>

### 1.3 Labour market in Sweden

Sweden's employment rate is one the highest in the European Union. It reflects the high participation of women (Employment rate 15-65-year-old is 68,3% in 2018. 70,3% among men and 66,2% among women according to statista.com), the strength of the economy and labour market institutions providing strong job incentives. Various economic sectors have labour shortages, although the unemployment rate (6.3%) is still higher than the OECD average. Unemployment is concentrated within the most vulnerable groups, such as low-skilled workers and immigrants who struggle to find job.

Figure 7. The employment rate among OECD members.

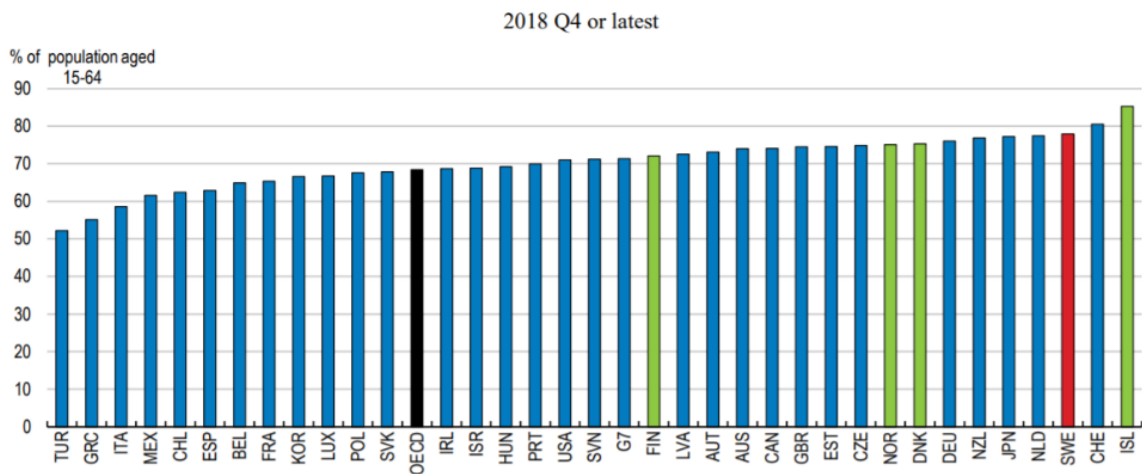
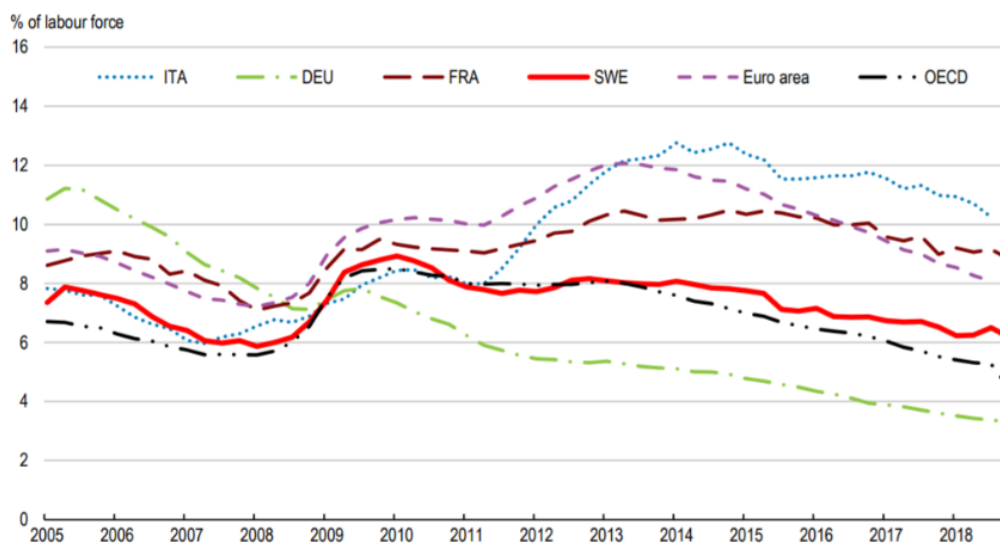


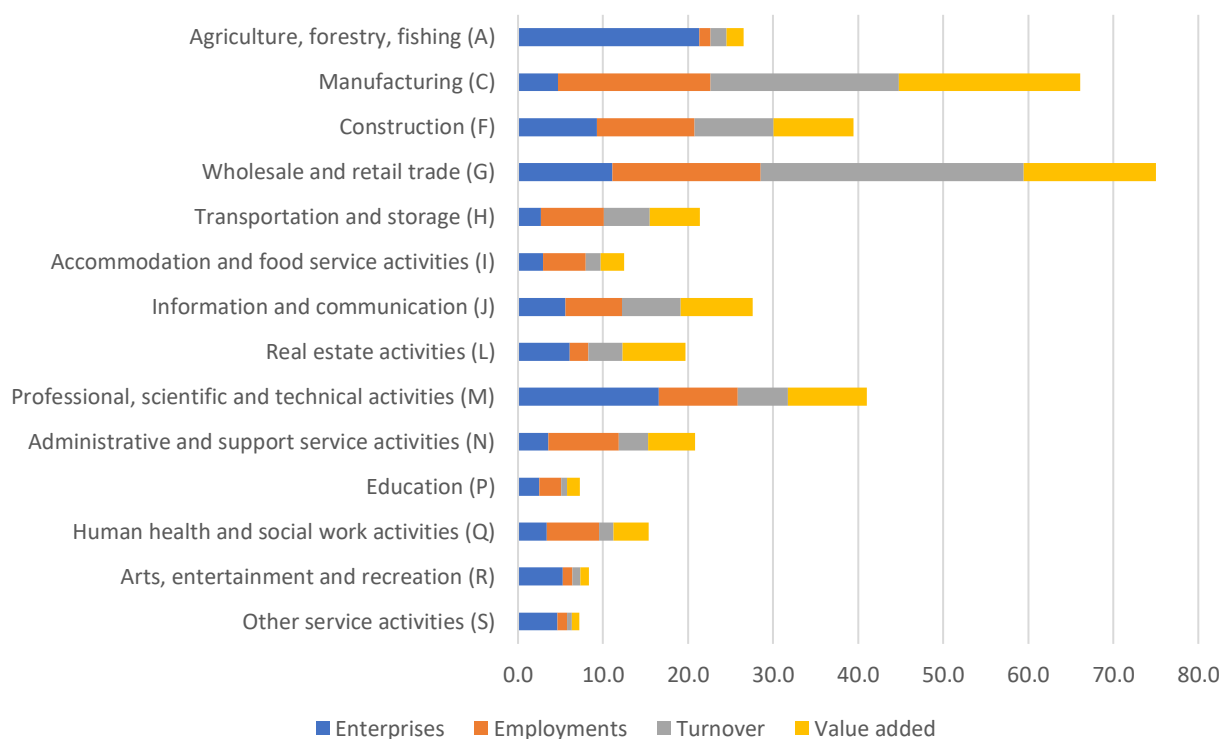
Figure 8. Unemployment rate has declined.



Source: OECD Overview 2019.

The Figure 9 gives an idea of all the industry groups in Sweden, about their dimension (number of companies), the number of employees and how they account for the added value. As we already said before, Agriculture, forestry and fishing industry group represents only 2% of the total added value, but it represents 21% of the number of companies. Manufacturing has only 4,7% of enterprises but employs 17,9% of the total number of employees. According to figure 10, the main manufacturing industries are Manufacture of motor vehicles, trailers and semitrailers, which employs 14,3% of employees and contribute with 15,3% of added value; and Manufacture of machinery and equipment with 12,7% of employees and 13,9% of added value.

Figure 9. Share of total non-financial business economy enterprises, employment, turnover, value added by industry (NACE sections) 2018, percent.



Source: SCB Sweden.

Looking at figure 11 regarding the service sector, we notice that Retail trade (except of motor vehicles and motorcycles), and Wholesale employ the largest number of workers (22,3%) and real estate activities has the second largest value added (11,9%) with only 3,3% of employees.

Figure 10. Share of total manufacturing value added and employment by industry (NACE sections) 2018, percent.

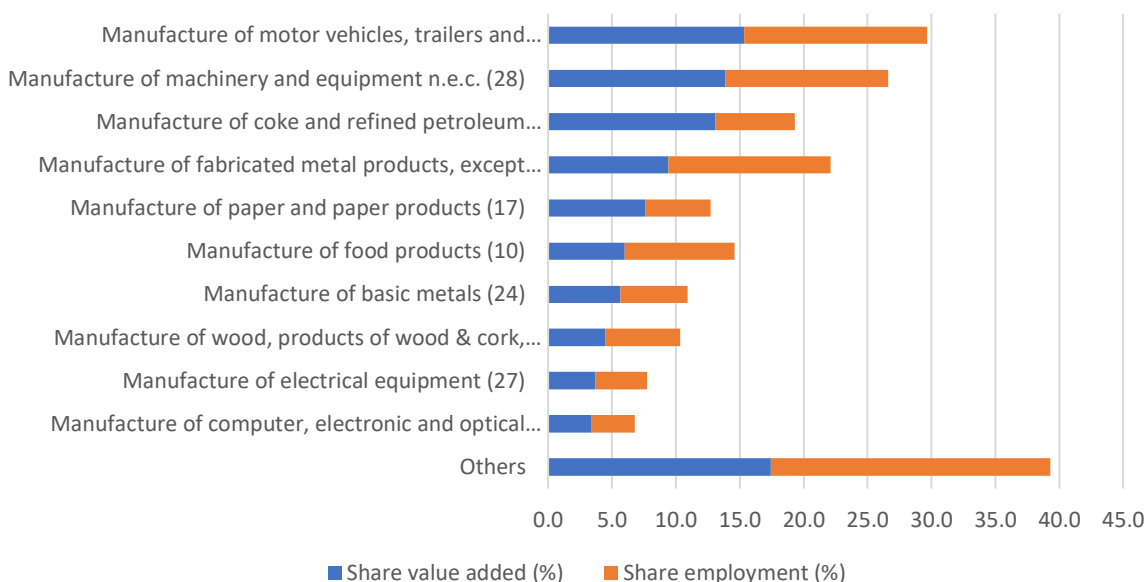
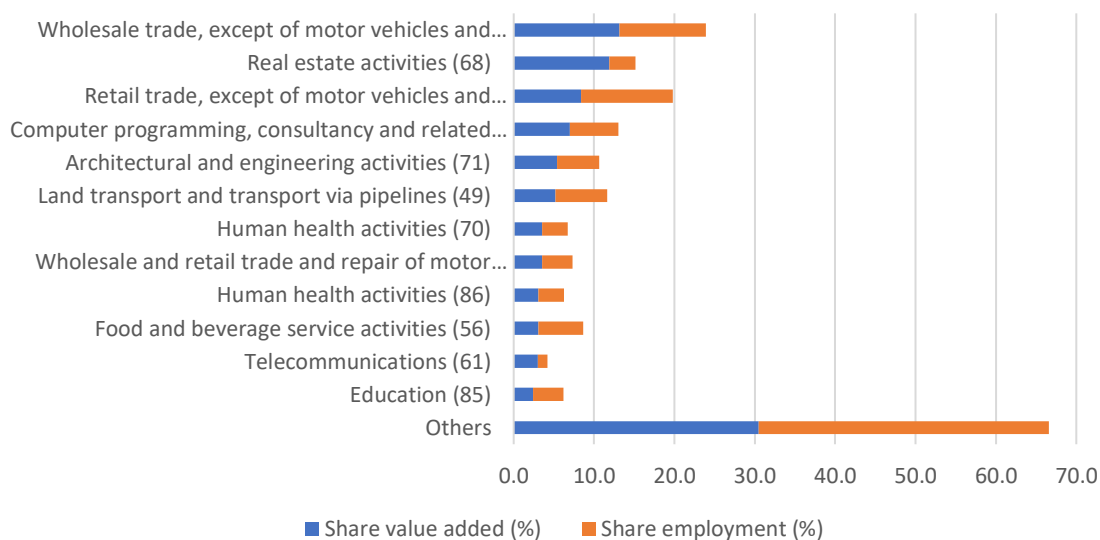


Figure 11. Share of total service sector value added and employment by industry (NACE sections) 2018, percent



Source: scb.se<sup>2</sup>

<sup>2</sup> Excel document available at: [https://www.scb.se/contentassets/b0157255a4404761a79c29d266f3cde5/kalldata\\_2018\\_eng.xls](https://www.scb.se/contentassets/b0157255a4404761a79c29d266f3cde5/kalldata_2018_eng.xls)

Summary available at: <https://www.scb.se/en/finding-statistics/statistics-by-subject-area/business-activities/structure-of-the-business-sector/structural-business-statistics/pong/tables-and-graphs/business-structure/share-of-total-non-financial-business-economy-enterprises-employment-turnover-value-added-by-industry-nace-sections/>



Economic and social context in Sweden is positive broadly: the employment rate fosters inclusive growth and a high level of well-being, even though salaries are close to the OECD average. Life satisfaction is among the highest on the rank of OECD countries and working hours amount is good: only 1% of employees regularly works very long hours. The indicators for civic engagement and governance, air and water quality, personal security and the health status of the population are high.

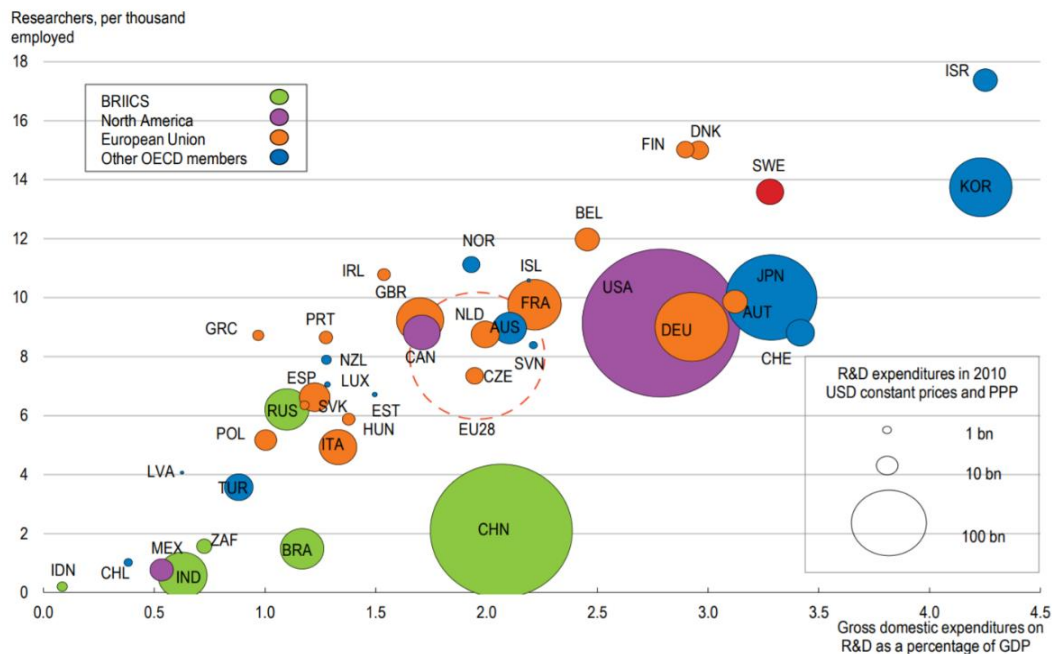
Swedish workforce is highly skilled (while adult skills are among the best compared with OECD countries, the cognitive skills of 15-year-old are on average) and according to OECD recent research, it represents one of the main strengths of growth. Swedish workers rank highly in each area of the OECD Survey of Adult Skills (PIAAC), mainly in problem solving. In the paragraphs above, we saw that Sweden invests a significant amount in ICT. However, Sweden is facing shortages of qualified ICT workers: the proportion of tertiary graduates in science is upon the OECD average, while the proportion of ICT graduates is on average. A main problem is that women is under-represented among both science and ITC graduates. Encouraging networking and cooperation between trade associations and schools, civil organizations and the business community, would facilitate the entry of women in science and technology-related professions, extending the pool of skilled workers and increasing gender equality.

A key point for the Swedish skilled workforce is the high participation in adult learning. The share of adult learning is high among all demographic groups. In 2017 adult lifelong learning and training percentage was 30.4%, the double of the “Education and Training” target of 15%. Low-qualified persons who participate in lifelong training are 20.5% and unemployed persons are 45.3%, both above the EU average of 4.3% and 10.1% respectively. Sweden keeps prioritizing lifelong learning and training for low-skilled workers with a focus on strengthening regional cooperation to better meet labour market needs (European Commission, 2019).

## 1.4 Sweden as innovation leader

Thanks to its investment, Sweden is one of the world's innovation leaders. Not only Sweden is home to the largest number of multinational companies per capita, it also serves as a base for tomorrow's emerging industries, including environmental technology, life sciences and ICT (IVA, 2014). This is possible through its highly skilled workforce and the large investment Sweden is doing on R&D (about 3% of its GDP). For a comparison, Italy spent 1,39% in R&D in 2018 (Eurostat). Looking at the figure 12, we notice that Sweden is among the countries who invest the most on R&D, as a percentage, together with Japan, South Korea, Israel and among the countries with the highest number of researchers per thousand employed.

Figure 12. Sweden invests heavily in R&D.



Source: OECD 2019.

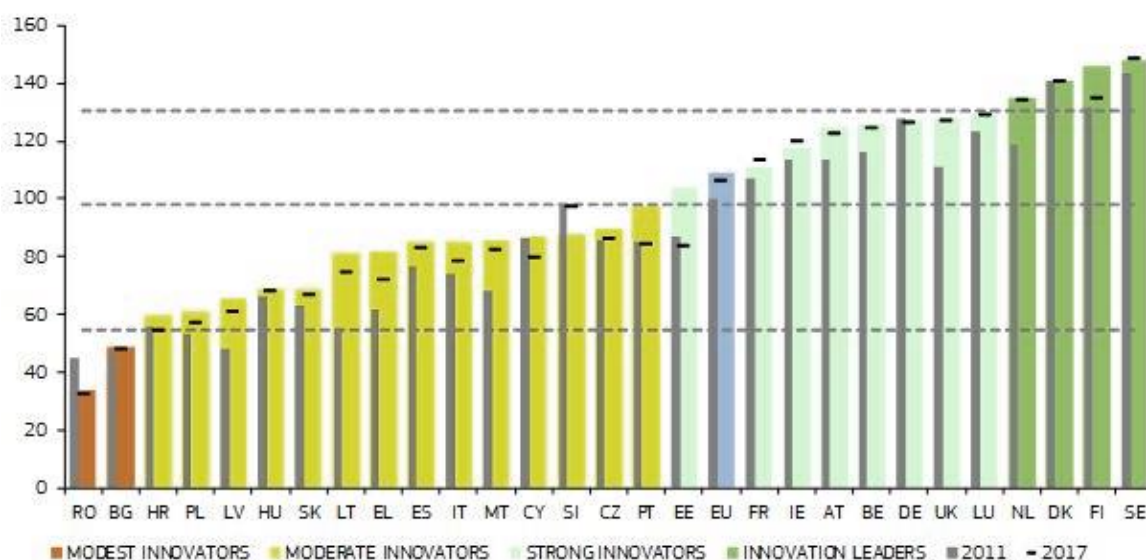
This brought Sweden to become one of the best-performing countries in the European Innovation Scoreboard, in terms of R&D investment and outcomes and to be ranked second in the Global Innovation Index (GII) in Europe, after Switzerland, and among high-income countries.

### 1.4.1 European Innovation Scoreboard (EIS)

The investments in highly skilled workforce and high investment in R&D brought Sweden to be the 2019 EU Innovation leader according to the European Innovation Scoreboard drawn up by European Commission.

According to their scores, EU countries fall into four performance groups: innovation leaders, strong innovators, moderate innovators and modest innovators. Sweden is followed by Finland, Denmark and The Netherlands. Luxemburg and the United Kingdom fall from the innovation leader group to the strong innovators one, while Estonia joined the strong innovators group for the first time. Italy is among the moderate innovators.

Figure 14. European Innovation Scoreboard ranking.



Source: European Commission, EIS.

Innovation-leader countries usually perform well in most of the specific areas of innovation. While, strong and moderate-innovator countries perform well in some specific area of innovation. The framework of the IES (European Innovation Scoreboard)

2019 distinguishes four main types of indicator and ten innovation dimensions, creating in total 27 different indicators (European Commission, 2019).

Framework conditions captures the main drivers of innovation performance external to the firm and differentiates between three innovation dimensions:

- The *Human resources* dimension incorporates three indicators and quantifies the availability of an educated and high-skilled workforce. Human resources dimension includes population aged 25-34 with completed tertiary education, new doctorate graduates and population aged 25-64 involved in education and training. Denmark ranks first, followed by Sweden, Finland, United Kingdom and the Netherlands.
- *Attractive research systems* incorporates three indicators and quantifies the international competitiveness of the science base by focusing on International scientific co-publications, most cited publications and foreign doctorate students. Luxemburg is the top performing country, followed by Denmark, the Netherlands, Sweden, and United Kingdom. These countries are open for international cooperation, researchers are well connected internationally, and the quality of research output is high.
- *Innovation-friendly environment* captures the environment where companies operate and incorporates two indicators (Broadband penetration among enterprises and Opportunity-driven entrepreneurship) quantifying the degree to which persons set up businesses as they see new opportunities, such as innovation. Denmark is the top-performing country, followed by Finland, Sweden, the Netherlands and Luxembourg.

*Investments* captures investments made in both the business and public sector and distinguish two innovation dimensions:

- *Finance and support* integrates two indicators and quantify the access of money for innovation projects by venture capital investments and the government support in R&D through investments in universities and government research organizations. France ranks first in this section followed by the Netherlands, Luxembourg, Finland and Sweden.

- *Firm investments* integrates three indicators of investments (either R&D and non-R&D) that companies make in order to obtain innovation, and the efforts firms make to improve ICT skills of their employees. Germany is the best country in this section, followed by Finland, Sweden, Belgium and Austria.

*Innovation activities* captures different aspects of innovation in the business sector and distinguishes three dimensions:

- *Innovators* integrates three indicators quantifying the percentage of companies that have introduced innovations into the market or into their organizations, regarding both process and product innovators, marketing and organizational innovators and small and medium enterprises that innovate in-house. Portugal ranks first, followed by Finland, Austria, Belgium and Greece.
- *Linkages* integrates three indicators quantifying innovation capabilities by looking at collaboration among innovative enterprises, research collaboration among public and private sector, and how much the private sector invests into public R&D activities. Austria is the best country, followed by Belgium, Finland, Sweden and the Netherlands.
- *Intellectual assets* captures different forms of intellectual property rights (IPR) created in innovation process, including trademark applications, PCT patent applications and design applications. Malta ranks first in this section, followed by Finland, Austria, Belgium and Greece.

*Impacts* captures the output of firms' innovation activities and distinguishes two innovation dimensions:

- *Employment impacts* quantifies the impact of innovation on employment and integrates two indicators measuring Employment in knowledge-intensive activities and Employment in fast growing firms in innovative sectors. Ireland ranks first in this section, followed by Malta, the United Kingdom, Sweden and Luxembourg.

- *Sales impacts* quantifies the economic impact of innovation and integrates three indicators measuring Export of knowledge-intensive services, Exports of medium and high-tech products and Sales due to innovation activities. Ireland ranks first, followed by Germany, United Kingdom, Slovakia and Cyprus.

For more details, visit the website of the European Commission:  
[https://ec.europa.eu/commission/presscorner/detail/en/QANDA\\_19\\_2998](https://ec.europa.eu/commission/presscorner/detail/en/QANDA_19_2998)

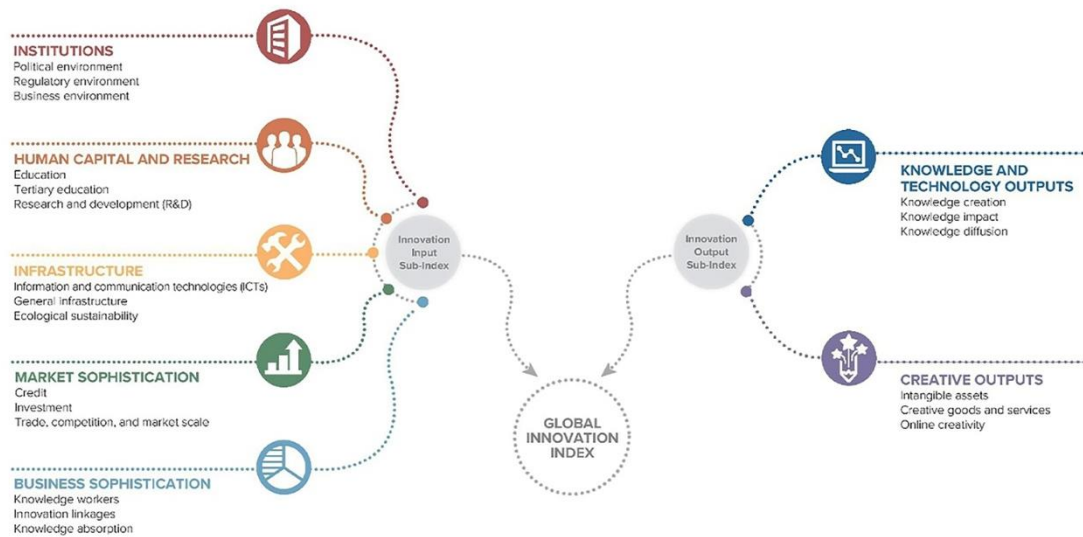
About Sweden in particular: <https://ec.europa.eu/docsroom/documents/41892>

#### *1.4.2 Global Innovation Index*

The GII is co-published by INSEAD, Cornell University and the World Intellectual Property Organization (WIPO). The GII recognizes innovation as a key driver of economic growth and development, and it aims at providing a rich innovation ranking and analysis regarding about 130 economies. GII is becoming both a key reference about innovation and a “tool for action” for economies that incorporates the GII into their innovation policies (WIPO, 2019).

The index makes a ranking of the innovation capabilities and results of world economies. It quantifies innovation according on criteria that includes human capital and research, institutions, credit, infrastructures, investment, linkages; the creation, absorption and spread of knowledge; and creative outputs. The GII has two sub-indices (the Innovation Input Sub-Index and the Innovation Output Sub-Index) and seven pillars, each containing three sub-pillars.

Figure 15. Framework of GII, 2019.



Source: Globalinnovationindex.org.

It consists of around 80 indicators, grouped into innovation inputs and outputs, and it aims to understand the multidimensional aspects of innovation. Sweden ranked second in 2019 and third in 2018.

The relationship between innovation inputs and innovation outputs indicates which economies best translate innovation inputs into innovation outputs. Sweden’s economy is among the ones that effectively translate its expenditure for innovation investments into more and higher-quality outputs. Sweden, compared to other economies in the Europe region, performs above average in all seven GII pillars.

Reading in details the seven GII pillars regarding Sweden, it’s noteworthy focusing on the pillars where Sweden ranked first, second and second respectively in 2019: *Business Sophistication*, *Human Capital & Research* and *Knowledge & Technology outputs*.

*Business Sophistication* regards the Knowledge of workers (training courses offered by firms, female employed degree, knowledge-intensive employment), the innovation linkages (Universities and industry collaborations, state of cluster development) and

Knowledge absorption (intellectual property payment, high-tech imports, ICT services imports, research talent in business enterprise).

*Infrastructure* regards ICT and its access, its use, the government's online service and e-participation; general infrastructure as electricity output, logistic performance; and ecological sustainability counted with GDP/unit of energy use, environmental performance and ISO 14001 environmental certificates.

*Knowledge & technology outputs* regards knowledge creation (patents by origin, utility models by origin scientific and technical articles), knowledge impact (growth rate of PPP\$ GDP/worker, new businesses, computer software spending, high- & medium-high-tech manufactures) and knowledge diffusion (intellectual property receipts, high-tech exports, ICT exports).

To deepen this argument, you can read the article of Global Innovation Index at the following link: [https://www.wipo.int/edocs/pubdocs/en/wipo\\_pub\\_gii\\_2019/se.pdf](https://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2019/se.pdf)

The full report of GII 2019 is available at: <https://www.globalinnovationindex.org/userfiles/file/reportpdf/gii-full-report-2019.pdf>

#### *A good foundation upon which to build*

Altogether, indicators and international indexes confirm that Sweden has a strong position in many areas. It represents a solid base where to build future growth and development, but the challenge is how to maintain this position. The matter of how Sweden can retain its global competitiveness has been debated recently.

The answer lies inside innovation policies. In the next paragraph we will explore what Sweden is investing into and how is composed and formulated an Innovation policy in Sweden. Moreover, we will deepen the literature regarding industrial policy and its main critics.



## II. Industrial policies

### 2.1 Definition and role of industrial Policies

“Industrial policy” has had many meanings in literature: in the development literature it was synonymous of “Industrialization policy” (Lall, 1987) and of “manufacturing strategy” (Warwick, 2013-04-05); to others it means a targeted sectoral policy, not necessarily aimed at the whole of manufacturing or even limited to the manufacturing sector in its scope. What is sure is that the dissent concerning the role of industrial policies is also due to a lack of clarity in its definition. Following what Curzon Price attests (1981), industrial policy comprises “any government measure, or set of measures, to promote or prevent structural change”. Sometimes industrial policies are employed to protect and preserve existing industries or to face structural crisis, but their main role is to foster and promote structural change towards more productive and dynamic activities. Economies, therefore, define incentives and disincentives that affect the industrial production and the allocation of resources. By modifying the relative supply of public goods, such as education, health, communications and defence or altering income distribution through transfers, governments manage to affect also the structure of industry. If we look at the several definitions over the years, we notice that the major part focuses on productivity, competitiveness and economic growth. For example, Krugman and Obstfeld (Warwick, 2013-04-05) define industrial policy as “an attempt by a government to encourage resources to move into particular sectors that the government views as important for future growth”. Others attest that industrial policies should promote also structural change in ways that are environmentally sustainable and socially inclusive. Therefore, some countries use industrial policies to protect industries against sector crisis, others use industrial policies to decrease regional disparities.

In economic literature there’s a distinction between “functional” and “selective” (“horizontal” and “vertical”) policies. Functional policies are those aimed at improving “the framework in which firms and industries operate and where market mechanisms ultimately determine survival and prosperity”. They use incentives for R&D, port facilities, power supply and improvement of the legal framework for business. Selective policies, instead, support specific activities over others through trade protection and subsidies in the form of tax incentives or soft loans whenever these are targeted at specific

firms, regions or sectors. Strictly connected to this definition, Ha-Joon Chang (1994) in *the political economy of industrial policy*, defines industrial policies “as a policy intended to affect particular industries to achieve outcomes that are perceived by the state to be efficient for the economy as a whole”.

This group of definitions considers industrial policy mainly as incentives toward firms, industries or sectors. There’s another group of researchers that defines it more as a mean to govern complex processes of structural change in order to achieve different economic and societal objectives, such as growth, productivity, competitiveness, innovation, employment, environmental sustainability, territorial and social rebalancing and political independence from other countries. This concept can be seen in the definition of Johnson (1984) where he attests that “Industrial policy means the initiation and co-ordination of governmental initiatives to leverage upward the productivity and competitiveness of the whole economy and of particular industries in it.” Inside this definition there’s the concept of the current and wider meaning of Industrial policy: coordination. In order to change the sectoral composition on an economy, industrial policies involve the development of new industries and steady renewal of their competitive advantages. This requires actions from the private and the public sectors on several fronts. it involves several measures from different fields and government offices, all aimed at one objective. This is the reason why one of the hardest roles of industrial policies is precisely coordination.

"Industrial policies are concerned with promoting industrial growth and efficiency." (OECD, 1975)

"Industrial policy may be generally defined as any government measure, or set of measures, to promote or prevent structural change." (Curzon-Price, 1981)

"...the term industrial policy indicates the relationship between business and government on a microeconomic level..." (Wachter and Wachter, 1981)

"...everything which is useful to improve growth and competitive performance." (Adams and Klein, 1983)

"Industrial policy... means government policy aimed at or motivated by problems within specific sectors." (Tyson and Zysman, 1983)

"Industrial policy means the initiation and co-ordination of governmental initiatives to leverage upward the productivity and competitiveness of the whole economy and of particular industries in it." (Johnson, 1984)

"Industrial policies refer to those policies intended to affect in some ways manufacturing or service industries." (Graham, 1986)

"...a wide-ranging, ill-assorted collection of micro-based supply initiatives which are designed to improve market performance in a variety of occasionally mutually inconsistent ways." (Geroski, 1989)

"Industrial policy is an attempt by a government to encourage resources to move into particular sectors that the government views as important to future economic growth." (Krugman and Obstfeld, 1991)

Industrial policy is one "aimed at particular industries (and firms as their components) to achieve the outcomes that are perceived by the state to be efficient for the economy as a whole." (Chang, 1994)

Industrial policy "can be defined as any policy affecting the allocation of resources to industry and in this sense embraces both macroeconomic policy ... as well as the more traditional areas of microeconomic policy." (Sharp, 1998)

Industrial policy is "every form of state intervention that affects industry as a distinct part of the economy." (ForemanPeck and Frederico, 1999)

Narrow view: "Restrict attention to policies that target particular firms and industrial sectors."

Broad view: "any policy that shapes or influences the competitiveness of a country's firms and industries." (Beath, 2002)

"...restructuring policies in favour of more dynamic activities generally, regardless of whether those are located within industry or manufacturing per se." (Rodrik, 2004)

Industrial policy is "the activity which creates a favourable environment for European business in general, the manufacturing sector and its industries in specific." (Aiginger and Sieber, 2005)

"Industrial policy refers to a set of measures taken by a government and aiming at influencing a country's performance towards a desired objective." (Pitelis, 2006)

As we said above, there's disagreement about the definition and the usage of industrial policies: Neoclassical theory criticises selective policies because differential support for activities may distort the allocative efficiency of markets. Competition between firms and entrepreneurs with different businesses reward efficient businesses and drive the less competitive ones out of the market. It's this mechanism of entry, exit and innovation that creates a competitive market and therefore productivity growth. Others, in contrary, argue that selective industrial policies are necessary to solve market failures. In fact, there are several theoretical arguments to justify selective interventions (Altenburg, 2011):

- **Coordination failure.** Many investment projects need simultaneous investments in related activities to be viable. If the related activities are not yet available and they are not tradable, there won't be investment from entrepreneurs unless someone else at the same time will invest in those related activities. Hence, a degree of coordination is necessary.
- **Dynamic scale economies and knowledge spillovers.** It could be attractive for society to invest in an emerging economic activity even if the initial investments might not pay off for individual entrepreneurs. This is because individual investors are not able to anticipate the range of new technologies and markets that may develop at later stage of maturity of this industry and appropriate all the gains of those activities.
- **Informational externalities.** Developing a new business idea involves costs and risk of failure. When the idea is materialized, competitors can rapidly copy it and reduce the rents that can be reached from the business innovation. Because of it, there's a case for governments to foster and encourage the discovery of business opportunities and innovative businesses.
- **Environmental externalities.** Environmental public goods such as clean water and biodiversity or clean air, are not sufficiently taken into consideration in private investments. It's a government's duty to lead technology investments towards environmentally sustainable choices.

As we already said, in order to change the sectoral composition of an economy, we need the development of new industries and an upgrade of their competitive advantages. This, as underlined, needs private and public actions on several fronts. As Freeman has argued (Altenburg, 2011), in order to reach competitiveness, we need co-evolutionary dynamics among institutions and firms in several domains. This means that policies, such as regulatory and supportive, generic and specific, focused on the macro and micro level, are needed to develop competitive new activities. Firms rarely become competitive without the support of an environment of suppliers, production-oriented services and pressure from competitors. For example, it might be important to support activities that do not pay off immediately; or to support activities that would emerge only with simultaneously interrelated investments; investments that an entrepreneur couldn't afford by its own. Other firms, when start to specialize and to create new markets, need new services that are not available yet and sometimes can't be provided by market actors. Sometimes government action is needed to organize collective action among firms, that may be fundamental for small enterprises to achieve economies of scale. In these cases, industrial policies accelerate industrial change in order to achieve more competitive and higher value activities.

So far, we read some arguments underling why industrial policy is necessary. Nevertheless, part of researchers does not agree with its use. Theoretically everyone agrees with industrial policy's objective, but there's dissent about the right degree of intervention. This group claims that selective policies that support some sectors or regions over others, interfere with the balance of the market price mechanism. They also argue that governments are not very good at identifying coordination failures for instance, and their actions can lead to a decreased allocative efficiency and to incorrect incentives for bureaucrats and investors.

However, history has experienced many industrial policy successes and failures. There's fully evidence that governments have had a main role supporting the successful industrialization. This happened to Germany, the USA, and Japan for example. On the other hand, there are many examples of misguided government interventions that wasted public resources and distorted markets without obtaining the desired effects.

To conclude, it is difficult to judge whether an industrial policy has had a central role in achieving predetermined goals. This because it is impossible to know what would have

happened if government had not intervened or had taken different measures. Moreover, it is also difficult to argue, even ex post, whether a policy was a success: industrial policies are not cost-free. Even if, through them, a government achieve the planned goals, these objectives can come at a high cost for citizens and/or consumers. It is impossible to decide whether such investment would have been better spent in other activities. This is why there is a strong debate around industrial policy. The real question regarding industrial policy is not whether a policy should be adopted, but what the most appropriate mix is.

### *2.1.1 Government failures within industrial policies*

The literature has proved several government failures (Wolf, 1989; Krueger, 1990; Le Grand, 1991; Chang, 1994; Lerner, 2009; Di Tommaso and Schweitzer, 2013; Schuck, 2014). In this research I'm going to present the main ones because most of the intellectuals agree with them. The first problem that governments can face while creating and implementing a policy is to be driven by particular interests and not by societal needs. Internal and external pressures can lead policy makers to act egoistically and not follow society well-being. On the one hand, policy makers can be strongly influenced by external lobbying groups of society and rent-seekers which are able to express their ideas louder than others and to influent decisions in order to attract benefits from public expenditure (The interest-groups). On the other hand, politicians and bureaucrats could follow personal interests by looking for greater power, prestige, higher wages and benefits in general, even though it would bring disadvantages for the community (The self-seeking-bureaucrats).

Moreover, even if government does follow collective goals and not private interests, the potential government incapacity to manage and overcome information asymmetries and to identify targets and means to promote those objectives, might represent another failure. The capability of processing and translating all the information in concrete and efficient industrial policy programme, is not obvious. There may be multiple societal needs and goals that can't be solved at the same time and several tools and measures to achieve them (The information problem).

### *The information problem:*

While contemplating a policy, governments have a cost to collect and process information in order to make the right decisions. Along with processing all the information, states have also to monitor the compliance of lower-level bureaucrats and the individuals at whom the program is targeted. Part of the information problem is the lack of information and even if states have information, it's not obvious that they are able to process them. Governments don't know about the future course of events and they can correct the policy afterwards only at prohibitive cost. Another problem, called asymmetric information (Stiglitz, 1987), is that states are at an informational disadvantage with the firms that are subject to the policy. If so, firms can extract more than needed and deserved from public action. Since governments have not all the relevant information, instead of picking the winners according to incomplete information, they should support productive behaviour in general (Chang, 1994).

### *The Interest-Group:*

According to the interest-group approach, governments are seen as an arena where influential groups, lobbies and societal movements face or allied with one other to influence and make the industrial policy in its own favour' (Skocpol, 1985, p. 4). Following this concept, the loudest and the most powerful groups will manage to affect policy makers and the policy will be biased toward them. According to Stigler (Chang, 1994), the pioneer of "regulatory-capture" of the Chicago School, "regulation is acquired by the industry and is designed and operated primarily for its benefit" through fixed prices, entry restrictions, subsidies, subsidies to complements and restrictions on substitutes. Politicians support companies, sectors or territories just because they are better organized with their lobbying activity or because they can offer a stronger support during political elections. This process would lead to public support in favour to those who don't need it. Political control over this process is limited by the high cost of acquiring information by voters and the frequency of voting.

Any partial interest of society must have the chance to be considered in the decision-making process, and there should be an accurate discussion regarding the objectives

effectively pursued by the government as well as the priority targets that better promote those goals.

*The Self-Seeking-Bureaucrats:*

The self-seeking-bureaucrats theory follows the postulate that bureaucrats are no different from other persons in pursuing their own interests. It is not believable that the same individual works ethically and for the community during the office hour and egoistically after it. This is the reason why bureaucrats might follow private interests in order to reach power, reputation, patronage and higher salary. For these reasons, it's rational to assume that they maximize budget of their bureaux rather than social output. Even though politicians, bounded by the re-election desire, don't want too high taxes, the outcomes and the budget will likely be in favour of the bureaucracy.

This is because politicians are at an informational disadvantage regarding the cost of the bureaux, either because they lack the knowledge of such functions and because bureaucracy is in monopolistic position and therefore it's difficult to judge and value their efficiency. Politicians monitor bureaucrats just checking that total costs of state expenditure don't exceed total benefits. Therefore, bureaucracy will likely produce public goods and service in more than the optimal quantity.

*Political problems within industrial policies: Legitimacy and Democratic control.*

Along with the three main problems that we just seen in the above paragraphs, it is noteworthy underling two political problems that can appear while discussing of industrial policy: legitimacy and democratic control. There are several political issues that can be present, we will analyse these two because the most important ones in this context.

Legitimacy: first, interest-groups and self-seeking-bureaucrats can make citizens believe that government is not working in favour of the community. Secondly, as we already seen, bureaucrats have budgeting power and the authority to allocate property rights, making the possibility for bureaucracy corruption. All these problems can lead to doubts regarding the role of the state as a societal guardian.

Democratic Control: bureaucracy inside industrial policies has often created concerns about democratic control. The fact that bureaucrats are not subject to popular elections, and they have a strong power in creating and implementing industrial policies, might



mean that efficiency dominates democratic values (Chang, 1994). Because the bureaux have a main role, industrial policies are less subject to democratic control. Beside the critics, there's the awareness that a degree of bureaucratic control is necessary for any organization and society because many decisions must be taken promptly in respond to changing situations and therefore efficiently; response that couldn't be rapid if taken with a democratic process. Moreover, bureaucrats must be as rational as possible: if they were elected by citizens, they would be tied by consent. The answer is a balanced mix of democratic control and efficiency. One way to balance the degree of democratic control is to make industrial policy process more transparent. We will deepen this argument in the next paragraphs.

### *2.1.2 Possible solutions*

#### *Possible solutions to information problem:*

As we can read in literature, information problem, the limited capacity of governments to collect and process information, is determined mainly by states' decision-making structure and its degree of centralization. *Ceteris paribus* the less layers of decision makers the more efficient the decision-making. Therefore, a more centralized decision-making process can save costs (such as communication and negotiation costs) and time through quicker decisions. On the other hand, a more centralized decision process results in less rational decisions because they have only information coming from the top-decision-makers and not from the operative units; resulting in an uncomplete set of information.

However, this doesn't mean that a decentralized decision-making structure is always the best solution. It would be more rational but it would lack of efficiency because of the time and costs needed. Moreover, every case depends on the nature of the decision. Another problem that we can find reading *The political economy of industrial policy* regarding decentralization of decision-making process is the existence of the sub-goal identifications. The perception of the world tends to be biased by individual's experiences. For example, if we ask entrepreneurs to tell us the main problems a company can face, their answers will be influenced by their own experiences as entrepreneurs. For this reason, where sub-goal identifications exist, it's not necessarily true that a decision

made at local level will be the most appropriate. When an issue is of a global nature, top-decision makers can identify problems and relative solutions more correctly precisely because they don't have sub-goal identification problems. One more rule to follow is that top-decision makers should work only on government strategic task about the economy as a whole on the long term; delegating day-to-day task to the lower-level decision makers. If the same unit work on both tasks, the pressure of daily deadlines and the supervising of daily activities make postpone analytic tasks. Freeing top-decision makers from daily activities will improve state's capability to process information.

Improving organizational design may, therefore, solve information problem and reduce information asymmetry between the top-decision makers and the low-level decision makers, and between the state and other agents.

*Possible solutions to interest-groups and to self-seeking-bureaucrats problems:*

Regarding the problem of interest-group, one possible solution concerns the problem of collective action: Peltzman (Chang, 1993) argues that the reason why producers, rather than consumers, capture policy makers is that their smaller number makes collective action easier. This version of the interest-group approach then attests that the best way to avoid the possibility of regulatory capture is to deprive the state of the power to regulate.

Regarding the self-seeking-bureaucrats problem, we must say that the realisation of bureaucratic personal interest through overprovision of public goods and services depends on the institutional setting and the political process around the bureaucracy. For example, if written sitting tests are used to assume bureaucrats, as in Japan or in Korea, it is harder to expand bureaux, a good way to maximise budget, than when higher officials can easily recruit anybody they want. Yet, if the state acts as a predatory (acting as a discriminating monopolist, develops a property-rights structure and a tax system which maximise its 'profit' or net revenue (tax minus expenditure), if necessary at the expense of social productivity), it likely under-provides rather than over-provides public goods and services, reducing the problem of bureaucratic self-seeking. Yet, in societies where the 'principal' is the diffused public, bureaucrats are less free to do whatever they want. In this case the bureaucracy is more vulnerable to media and public controls than private firms are, reducing, hence, their chance to seek personal interest.

Conscious of these solutions from literature, the aim of my thesis is to explain why and how civic engagement may be a solution of government failures and a solution to better formulate and implement industrial policies in general. In chapter III I will present my case study, developed in a district in Stockholm, then in chapter IV I will explain my theory starting from the practical case study and then using literature.

## 2.2 Innovation policies in Sweden

### 2.2.1 Budget Bill 2017-2020

Every four years Swedish government publishes the Budget Bill document where it proposes reforms to strengthen the economy and general wellbeing of citizens. It's noteworthy analysing this document because we can quickly notice the key points the Riksdag (the Swedish government) considers fundamental for the future of Sweden. In the Budget Bill 2017-2020<sup>3</sup> the main objectives to follow were:

- More people in work. The reduction of the unemployment rate (already one of the lowest in EU), supported also by investments in the education system. For example, education obligation for new arrivals so they can easier find job; support for small and growing businesses; adult training initiatives.

Table 3. Reforms and financing in the Budget Bill for 2018. More people in work.

SEK Billion	2018	2019	2020
Reforms			
<b>More people in work</b>	<b>7.30</b>	<b>10.1</b>	<b>11.4</b>
More and easier paths to jobs	0.60	0.72	1.08
Expansion of adult training initiative	0.76	1.68	2.50
Special measures for new arrivals to get into work	0.63	0.90	0.78
Growth throughout the country	1.67	2.12	2.28
Reduce taxation of employee stock options in certain cases	0.21	0.21	0.21
Expansion of growth support	1.80	1.44	1.44

<sup>3</sup> A summary is available at: <https://www.government.se/press-releases/2017/09/budget-bill-for-2018-building-our-society--investing-for-the-future/>

Tax reduction for trade union membership fees	1.34	2.67	2.67
Other job reforms	0.26	0.36	0.40

Source: Swedish Ministry of Finance<sup>4</sup>

For this plan “More people in work”, the Riksdag decided to invest 7,3 billion of Swedish crowns (SEK) in 2018; 10,1 in 2019 and 11,4 in 2020. An increase of about 38% the second year and 13% the third year.

- Sweden must have equitable knowledge-based education. “All schools must be good schools”. This group of measures wants student to learn more; teaching profession to be more attractive; to reduce disparities in schools; more teachers and smaller classes.

Table 4. Reforms and financing in the Budget Bill for 2018. Equitable knowledge-based education.

SEK Billion	2018	2019	2020
<b>Reforms</b>			
<b>Equitable knowledge-based education</b>	<b>2.4</b>	<b>4.6</b>	<b>7.0</b>
Measures to improve equity and knowledge development	1.83	3.75	6.25
Extended compulsory schooling and reading, writing and arithmetic guarantee	0.08	0.19	0.19
Better upper secondary school completion rates and quality	0.39	0.39	0.39
Investments for an attractive teaching profession	0.15	0.24	0.19

Source: Swedish Ministry of Finance

<sup>4</sup> Reforms and financing in the Budget Bill for 2018 available at: <https://www.government.se/4a6e13/globalassets/government/dokument/finansdepartementet/pdf/bp18-pdf-och-excel/reforms-and-financing-in-the-budget-bill-for-2018.pdf>

- Sweden will be a fossil-free welfare nation. It is notorious that Sweden has always been focused on being environmentally sustainable. With this goal of being one of the world's first fossil-free welfare nations, Sweden underlines the will to promote a sustainable and green economy where innovation can't be separated from sustainability. This is the reason why the Government has made the largest investments in climate and environment in Sweden's history. The Government has strengthened climate and environmental efforts through measures such as Reinforcement of the Climate Leap; Promotion of fossil-free transport and travel; Greater investment in solar cells.

Table 5. Reforms and financing in the Budget Bill for 2018. Sweden will be a fossil-free welfare nation.

SEK Billion	2018	2019	2020
<b>Sweden will be a fossil-free welfare nation</b>			
Reinforcement of the Climate Leap	0.80	1.30	2.30
Promotion of fossil-free transport and travel	0.96	0.74	0.91
Bonus-malus system	0.02	1.25	1.64
Greater investment in solar cells etc.	0.76	0.84	1.37
Clean seas and protection of drinking water	0.69	0.79	0.90
Green Industry Leap	0.30	0.30	0.30
Dynamic and toxin-free urban environments	0.23	0.70	0.75
Preservation of key biotypes	0.27	0.27	0.27
Long-term rules for sustainable biofuels	0.51	0.95	0.71
Other environmental and climate investments	0.48	0.72	0.82

Source: Swedish Ministry of Finance

- Welfare system must be strengthened. The Government has implemented extensive initiatives in the welfare system because “everyone must contribute, and everyone will share in the growing prosperity”. Noteworthy measures are investments in favour of maternity, health care system and investments for better conditions of children and young people. But the main investments that we need to stress, are the investments towards local government and county councils to shorten queues and improve coordination and the staffing situation.
- Sweden’s economic strength to benefit everyone. Worthy measures are the Higher child allowance, the ending tax gap between pensioners and wage earners
- Sweden must be secure. Sweden must be a country in which everyone is secure and safe, regardless of where they live.

These were the key points of the Budget Bill for the four year 2017-2020 to understand in what direction Sweden wants to go. Now we are going to analyse the Research Bill programme regarding the measures towards innovation.

In the next two paragraphs we will discuss of how research policy and innovation policies are created and implemented. Till 2015, the dominance of linear view in the research policy community led to a linear approach to innovation policy as well. Innovation policy was dominated by research policy. The Research Council is asked to write the Research policy Bill, representation of the broad direction of research and innovation in Sweden, and till 2015 it was the only council regarding innovation and research. When the National Innovation Council was created, Sweden started a new form of governance of innovation policy. Now there are two separated and independent councils concerning research and innovation.

### 2.2.2 *Research Policy Bill*

In November 2016 was presented the research policy bill “Collaborating for knowledge - for society’s challenges and strengthened competitiveness”<sup>5</sup>. The bill presents the direction of research policies for the next ten years to improve Sweden’s capacity for innovation, focusing on the measures of the period 2017-2020. As we will see in the next pages, important cornerstones are the increased basic appropriations to higher education institutions, initiatives in research linked to global societal challenges and increased resources to strengthen Sweden’s innovative capacity. Particular importance is given to the name of the document. The Government wants to see more and more collaboration between higher education institutions, the business sector and society as a whole in order to meet their major societal challenges and strengthen their competitiveness. The objective of Sweden is to be “one of the world's foremost research and innovation countries and a leading knowledge nation, where high quality research, higher education and innovation leads to society's development and welfare, the business sector's competitiveness and responds to the societal challenges we face, both in Sweden and around the world”. Education, research and innovation must be at the service of people for a sustainable, solidary and equal society. The government is driven by the idea that research concerns the whole society, not just those who are directly active in research.

The conditions for the long-term perspective of university and college strategic planning should be strengthened through increased funding for research and research level education. The collaboration of higher education institutions with the surrounding society and the link between education and research are expected to strengthen. Furthermore, the government reports several measures to promote attractive conditions for postgraduate students and young researchers and to promote gender equality in higher education and research.

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<sup>5</sup> A summary is available at: <https://www.government.se/press-releases/2016/11/collaborating-for-knowledge--for-societys-challenges-and-strengthened-competitiveness/>  
The original text of “Knowledge in collaboration - for society's challenges and strengthened competitiveness” is available at: <https://data.riksdagen.se/fil/276B2209-A8A3-411E-AF7F-1706658FB9EB>



For the period 2017-2027, Sweden has underlined the general direction and objectives to follow:

- it shall be an internationally attractive country for investments in research and development. Public and private investments in research and development should continue to exceed EU goals.
- Research quality as a whole shall be reinforced, and gender equality shall increase.
- Engagement and societal impact shall increase.

As we already know from the first chapter, Sweden is an internationally successful research and innovation country that has long invested in research and development. But in recent years the Swedish research and innovation system has seen relatively weakened compared to other prominent countries. This weakening applies to both research and innovation. A change is therefore needed, focused on research and innovation policy that promotes more effective, active and long-term use of resources as well as a stronger and clearer impact between universities and colleges and the surrounding society.

Inside the Research policy bill, we find seven efforts to strengthen research and innovation.

### *Social challenges*

At the UN summit in September 2015, all UN member states agreed on an action plan, Agenda 2030, with 17 objectives that has led to development throughout the world. For the first time, the world has agreed on one global and overall vision for environmental, economic, and social development. The vision is also about poverty reduction, peace, inclusive and democratic societies, better governance and social problems solving. A gender perspective must permeate all the goals in the agenda. The new UN sustainability goals are an important part of Sweden's research policy. In December 2015, the so-called Paris Agreement, was also adopted for long-term and ambitious climate work in the countries of the world. The agreement means that the work of limiting emissions and building resilience against climate change must be intensified over time.

These goals provided the conditions for new and unexpected combinations and collaborations. Now it's more important that medical, scientific and technological advances are linked to research and knowledge in the social sciences and humanities to meet the social and science challenges we face. It is also important that universities, industrial research institutions, business and the public sector are linked to increase innovation. To meet societal challenges, it is important not to stop at the research but to actively work to knowledge-based solutions that are verified and implemented in daily life. The government's ambition is to safeguard free research and at the same time research policy must respond to global and national societies challenges and societal needs. In order to meet societal calls, there's need of collaboration between higher education and society in general to develop new sustainable solutions.

The government, together with the National Innovation Council, has identified five areas with special priority in this bill. Priority areas of global and national relevance are climate and environment, health and increased digitalisation. Priorities of more national nature includes creating a secure, inclusive and sustainable society and to improve knowledge results in the Swedish school system. The government emphasises that the climate issue is the fate of our time and one of the government's top priorities. It is therefore of great importance that research and innovation policy can contribute to knowledge in order to create more sustainable cities and transport systems with fossil-free and resource-efficient transport and travel. Research and innovation that can contribute to reduced transport needs are also important. It also points out that increased knowledge is also needed about climate processes, on the effects of climate change and on how society can adapt to changing climates.

On the challenge of digitalisation, the government states that digitalisation is the single most important driver for today's development of public activities and that it is at the same time the most important tool for creating systems across value chains, in collaboration with private actors, that can address new societal challenges. The bill points out that the information and communication sector is currently undergoing a strong structural transformation and that it is important that Sweden makes use of and retains the competence that exists in terms of, for example, the development of the internet and high-tech production. The Government notes that, while the rapid digitisation that society is undergoing opens up major opportunities, there are also risks that should be taken into account, such as network and information security and the protection of privacy.

The government wants to bring about a pool of interdisciplinary research to find common solutions in order to meet societal challenges. The government therefore wants to emphasize the importance of cohesive knowledge environments where, in addition to interdisciplinary research, and cross-sectoral collaboration, there is also a close link between research and education at different levels.

*Strong and responsible universities through:*

- A new control and resource allocation system
- Increased funding for research and education in doctoral
- Strategic research areas
- Evaluation and follow-up of research

The state's distribution of research grants must be long-term and create driving forces for higher quality in all research. Increased research grants enable a number of changes to help Swedish research maintain its leading position in the world. It gives higher education institutions greater control over their priorities. The higher education institutions also need to develop their collaboration with the surrounding society. Further expected increased research grants contribute to the higher education institutions being able to recruit the best researchers for the future, take greater responsibility for research infrastructures and successfully participate in major EU program. The reinforcement of appropriations aims to improve conditions and opportunities for merit for teachers and researchers in higher education research. The government's purpose with the increase in funding is not to increase the number of researchers, but to increase the quality.

A reinforcement of grants for research and education at postgraduate level in combination with the mission of gender mainstreaming that all state universities have received, should lead to a more equal, strategic and quality secure distribution of research funding. The investment in strategic research areas must continue but should be developed in order to strengthen i.e. collaboration, research affiliation in higher education and gender equality. It is important that Sweden invests in quality and outstanding research environments

regardless of where in the country and at which universities these environments are available. It is important that the proportion of teachers with a doctoral degree increases. Research is a driving force for strengthening, throughout the country, community building and it's of great importance for the development of a business community which is becoming increasingly knowledge-based.

*Attractive conditions for young researchers and a gender-equal university through:*

- Better terms for PhD students
- Attractive pathways for young researchers
- Follow-ups of scholarship-funded doctoral students, qualifications and fixed-term contracts in college
- A gender-equal university

A prerequisite for world-class Swedish research is that we succeed to attract and retain young prominent researchers from both Sweden and other countries. A broad recruitment to postgraduate education as well as attractive and clear career and merit paths after a doctoral degree is of crucial importance for the quality of Swedish research. In Swedish universities, women and men must be able to work in equally conditions and with the same opportunities for merit and career. Knowledge and skills, not the gender of the individual, should be crucial for a research career. It is therefore important to create equal opportunities for women and men to qualify, both in postgraduate education level and later in the research career. The career situation of young researchers needs to be improved and there should be a predictability of the future conditions when a young woman or man begins a career as researcher.

Moreover, the Swedish government is a feminist government. Gender equality is high on the agenda, which means that everyone's issues related to gender equality and power relations between the sexes are high prioritized. Women and men today do not have the same opportunities to do careers in universities and colleges. This goes against the gender equality political goals that Sweden has set and is a waste of people competence. Gender

perspective research in different disciplines is crucial for the government to be able to push on the national societal development and contribute to a more equal development globally. Surveys of how many women and men work in research and development shows that one third are women and two thirds are men.

*Strategic research efforts to meet societal challenges through:*

- Ten-year national research program
- Special research efforts
- Improving the quality of knowledge in school and education system
- Open access to research results

To meet our societal challenges, we need to create strong research, learning, training and innovation environments that include different community areas. The government sees an increased need for special investments in interdisciplinary and cross-sectoral research and innovation to meet the complex nature of societal challenges, both in Sweden and globally. Higher education should be an integral part of these initiatives. It is often the students who most quickly utilize and transfer knowledge to business and society, which is why education should be closely linked to both research and innovation environments. Collaboration with society is also important for gathering knowledge from societal actors about various interests and needs. Through this collaboration the societal actors will take care of the research results and implement them in their respective activities.

*Collaboration programs through strategic areas of innovation through:*

- Strategic innovation areas
- Initiatives and measures that contribute to collaboration programs

The government has set up the National Innovation Council to implement knowledge exchange and collaboration in order to contribute to Sweden's innovation and competitiveness. The next paragraph explains in detail how it is composed and its role. Following discussions in the Innovation Council, five collaboration programs linked to the societal challenge presented in this Bill, have been set up. These programs will stimulate and build collaboration between businesses, universities and colleges and the public sector in general. The programs are Next Generation Travel and transport, Smart cities, Circular and bio-based economy, Life-science and Connected industry and new materials. In the budget bill for 2017, the government proposes a strengthening of the strategic innovation areas in order to lay the foundations for a long-term and in-depth cross-border collaboration.

Strategic innovative areas aim to develop internationally competitive innovation environments through collaboration between industries and sectors, universities and colleges, research institutes, business, public sector, civil society and other actors at different levels of society. The effort shall contribute to concentration and renewal in areas where Sweden and Swedish business has advantages and is considered to be important for future growth and that can help to meet global challenges.

*Strong cross-border environments through:*

- Research infrastructures
- Increased accessibility and use of research infrastructures
- Test and demonstration environments
- Developed efforts through industrial research institutes

Swedish researchers, companies and public organizations need to have access to the best research infrastructures. They include facilities, instruments, knowledge collections and services and aims to be used by researchers or research groups in all research areas. A well-balanced investment between research and research infrastructure must exist. In order for Sweden to continue to be a strong research country requires a well-functioning

digital infrastructure. The government also believes that the incentives for the use of the mentioned facilities for research infrastructure should be developed. Through attractive research infrastructures that can be used in education and research or as testbed for business, Sweden's attractiveness and competitiveness can increase. Sweden will continue to be a globally attractive place for the eminent research and innovation. In January 2016, the government launched Testbed Sweden, a gathering of forces for innovation, to encourage new ideas and solutions to be tested in Sweden. Their objective is to make more attractive to invest in Swedish research and innovation environments.

The industrial research institutes have a central role in enabling especially small and medium-sized enterprises to keep up with and take advantage of similarities with the rapid technological development. To increase the ability to compete with specialized products and services, in the budget bill for 2017 the government proposes a strengthening of the activities of industrial research institutes.

*Attractive terms for investment through:*

- Investments in innovative business ideas
- Framework condition for innovation

Sweden's attractiveness in the global knowledge economy must be strengthened. Capital and human knowledge seek out the countries with the most attractive conditions. In order to strengthen Sweden's position, the Government should focus on creating more innovative growth and more jobs from the investments it makes in research and development. The innovation climate needs to be strengthened through efforts to develop collaboration between universities and schools, research institutes, large companies, young innovative companies, other authorities, municipalities and county councils as well as civil society.

Universities and colleges must be open to society and work for a good dialogue about research, needs and achievements. When the surrounding society also actively participates in the dialogue, researchers can contribute with knowledge and analyses and

at the same time, society's actors can contribute with their knowledge and identifying socially relevant needs to test the research. Digitization creates opportunities to streamline co-operation impact and utilize new knowledge in a way that reaches the whole society and all parts of the country.

An interview to the minister for instruction about the research bill is available at:  
<https://www.janssen.com/sweden/regeringen-lagger-fram-forskningsproposition>



### *2.2.3 Swedish National Innovation Council (NIC) and the role of discussion*

Created by the Prime Minister (Stefan Löfven) in February 2015, the National Innovation Council's general task is to advance Sweden's development as an innovation nation and strengthen its competitiveness. The Council meets 6 times per year, where two of these meetings are regional. It is chaired by the Prime Minister and has its dominant focus on innovation rather than research. The NIC consists of 10 external advisors from industry, unions and academia, including three university professors (from environmental studies, innovation studies, and one university vice-chancellor), one union representative of large firms (Volvo Group, Stora-Enso) and small firms (including innovative entrepreneurs and one business angel). The NIC members are present because of their personal capacity and do not represent their organizations, or any political party. Five government representatives take part: along with the Prime Minister, the Minister of Enterprise and Innovation, the Minister of Finance, the Minister of Research and the Minister of International Development Cooperation and Climate (also Deputy Prime Minister) participate in the meetings.

With the creation of NIC, now in Sweden there are two different and independent organizations that concern innovation: The Research Council (Forskningsberedningen), that has been working for decades, is chaired by the Minister of Education and Research and has the task to advise the government when developing a research bill that has to be presented to Parliament every fourth year; and The National Innovation Council. This separation has given a much higher degree of importance to innovation policies issues regarding coordination, collaboration and the ways how to implement innovation policies at best. Moreover, it reflects the fact that research and innovation are not the same. Research policies and innovation policies are different phenomena either: they have different objectives, use different policy instruments and thus, their political governance should be separate. In order to develop an effective and efficient innovation policy independent of (but coordinated with) research policy, it is a great advantage that two separate councils exist. NIC is, therefore, not a science/research and technology/innovation policy council. Instead, it is dedicated to dealing with innovation policy in a much broader sense than most of the Science, Technology and Innovation Policy Councils in other countries.

The NIC represents an arena and a forum where issues and proposals regarding innovation take place and are fostered. Participants have the chance to test cooperation methods and find common goals and ways to solve social challenges and open dialogue between local, regional and national activities (Government offices of Sweden)<sup>6</sup>. As we will see in chapter four, coordination and cooperation between local, regional and national level is fundamental in order to create and implement effective policies; moreover, the more coordination, the higher the outcomes coming from the policies. The National Innovation Council meetings focus on how society can address complex social challenges through innovation and cooperation. It has an advisory role and provides new perspectives on key issues in innovation policy. It works in order to improve Swedish innovation system and society's capability to efficiently and positively respond to innovation challenges.

Before NIC, no space for dialogue existed for presenting to the government and discussing with Ministers proposals, advances, and achievements made in the fields of innovation and innovation policy (Edquist, 2018). And there was no organized way through which the government could reach innovation policy ideas from outside-citizens. This was possible only because of a change in politics and more specifically, a change in political will toward new ideas and prospectives. Concepts and ideas were around but not reached and exploited, until some politician was prepared and enough open to do so (as we will see in chapter III and IV, this is a current issue also at local level). The operation of the NIC received several critics by commentators because it is very informal, which is a conscious decision by the government. However, mechanisms exist in order to transform the advices of the council members into political decisions, if the government so wishes.

Charles Edquist attests that innovation policy design includes not only the identification of what should be achieved by new policies, but also how existing policies should be changed. It means that together with the creation of new efficient policies, NIC and its participants have to work and identify existing policies that might not be working well, and thus being inappropriate, in order to find the best way to change them. Hence, an important part of innovation policy is to evaluate previous policies and, sometimes, correct policy mistakes. At national level, the writer already proved the effectiveness of

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<sup>6</sup> Available at: <https://www.government.se/articles/2019/11/discussions-meetings-and-collaboration-for-developing-sweden/>

the NIC presenting in his paper two examples where the NIC and its participants helped to improve innovation policies (Edquist, 2018, p. 874).

To do so, he looked at whether the discussions during the meetings actually influenced government innovation policy, and whether they positively influenced the results. In the last paragraph, we will focus on the “discussion” element and on its crucial role when creating an industrial policy.

But first, I decided to write here below some questions and answers during interviews at NIC’s members in order to better explain their vision and opinion about NIC<sup>7</sup>:

*“Why is it important for the Innovation Council to have meetings in different regions of Sweden?”* Question for Lena Miranda, CEO of Science Park Mjärdevi and member of the National Innovation Council, participant of the meeting in Kalmar.

Lena Miranda: “The Government has expressed the desire to see more innovation – not just in the business sector but in all areas – throughout the country, and not limited to metropolitan areas. I think this is the right way to go. Innovation happens everywhere, and our job is to create the best possible conditions to contribute to this. We have to make sure that people feel they are involved and create an impact – inclusion is very important to also ensure the survival of democracy. Around our country, there are many good examples at local and regional level that are important for us to see and understand at national level when decisions on new initiatives are to be taken. From this perspective, the Innovation Council’s visits around the country are important.”

*“What do you consider to be important lessons from today’s meeting and which are also relevant to the national policy?”* Question for Cecilia Schelin Seidegård, Deputy County Governor of Kalmar County and participant of the meeting.

Cecilia Schelin Seidegård: “Innovation takes place throughout the country. We need to find forms to spread good ideas between different regions in order to benefit from what already exists. There is a strong commitment to work together to make a difference. We

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<sup>7</sup> The interviews is available at: <https://www.government.se/articles/2019/11/discussions-meetings-and-collaboration-for-developing-sweden/>

can take the initiative and conduct tests on a small scale, which can then be implemented on a large scale.”

Prime Minister Stefan Löfven in Trollhättan on 25 October 2017: “By meeting in a region and having a dialogue with regional actors, I hope to gain even more perspectives, ideas and suggestions for developing innovation policy that benefits the entire country. In Trollhättan, five members of the National Innovation Council – Isabella Lövin, Helene Hellmark Knutsson, Carola Öberg, Sigbritt Karlsson and Charles Edquist – and I are meeting regional and local actors from the county administrative board, the region, municipalities, academia, business and cooperation arenas, such as Lindholmen Science Park and Innovatum. The Council's work is important for gaining new knowledge and new ideas to develop national policy. It is a matter of creating good conditions for innovation, strengthening our international competitiveness and improving our ability to resolve social challenges together.”

*“What is the purpose of a seminar?”*

Prime Minister: “I want the Government's approach to be open and inviting. This is necessary for a constructive discussion and development of government policy based on dialogue with those most closely affected by it. The seminar aims to enable more people to participate in this discussion and contribute their ideas and suggestions.”

### *The discussion element inside the NIC*

What we learn from the existence of the NIC is that a wider discussion regarding innovation policies represents an important factor, as stressed by the prime minister Stefan Löfven and by Charles Edquist. Already conscious that in Sweden there are many examples of dialogue between politics and civil society (one is the board meeting of my case study) and that Swedish government advises dialogue in many government policies, the NIC represents the clearest example of dialogue between individuals and policymakers in order to create and better implement innovation policies and to reach coordination and collaboration. Dialogue inside the NIC is between many actors (external advisors from industry, unions and academia, one union representative of large firms and small firms), in my thesis I will focus on civic engagement in order to explain why civic participation may be a solution for the government failures.

A good dialogue may enable politicians to gain more knowledge about citizens' values and needs, to be used as a basis for decisions on important matters; to have a deeper understanding of citizens' opinion about particular issues; to give clear transparency and information about decisions already made in order to make citizens well informed and to improve involvement, trust and acceptance; to give voice to people who are seldom heard (instead of paying attention to the loudest groups).

We see briefly what citizen dialogue can reach from a democracy perspective, and we will deepen it in chapter IV:

- more engagement increases the citizens' knowledge about the democratic processes.
- Participation through citizen dialogue builds democratic legitimacy.
- Participation in different contexts strengthens the social capital in the community as well as the individual.
- Citizen dialogue within the decision-making process establishes a sense of responsibility among the citizens. This is an important point even if they do not get what they want, because they understand the background of the decision and it makes it easier to accept it.

From an efficiency perspective:

- Participation in citizen dialogue increases the understanding and the acceptance of prioritised measures and policies.
- Through dialogue, citizens have a better understanding of local government's activities and more acceptance of them.
- Citizen dialogue creates alignment between public service and citizens' needs. Needs of a community always change and there's the risk that local authority, or government one, offers services that nobody requires.
- More dialogue brings transparency and awareness about what local authority is doing and what results has achieved.
- Increased transparency leads to better quality of public services.

Introducing citizen dialogue to the governance processes can bring some risk and therefore requires careful planning and preparation. It requires logistics and the ability to be at once reactive, proactive and interactive to be really effective.

The most dangerous risk is that citizen dialogue creates a more unequal democracy where those who are already influencing decision makers, get a further forum to bias decisions. Politicians and political authorities don't have to use channels where they feel safe and comfortable with, as public meetings in the council chambers, but they have to seek citizens where they gather. By doing so, they will obtain citizens' view and opinion about the issue on question.

Increasing democracy through citizen dialogue is important, but there must be a balance between democratization and efficiency. We already saw in paragraph 2.1.2 that for any organization and society there must be a degree of bureaucratic control because many decisions must be taken quickly and efficiently; response that couldn't be rapid if taken with a democratic process.

Another risk is that citizens lack the knowledge or the interest of the issues' background. A wider view is essential in order to prioritize measures and make citizens aware of the whole context. The parties should therefore make the situation clear through information flows.

### III. Beyond Words' report: Citizen Dialogue: Strengthening Local Democracy through Dialogue

R.20-01



Beatrice Nordling

Gijs Aangenendt

Giulio Fiorenza

Felicia Hjelmqvist

Kesaobaka Pelokgale

Josephine Stephen

Shweta Pathak



## Preface

The report that you are about to read is the result of a creative and in some respects chaotic project, where students from different disciplines and universities have worked with challenges that Stockholm, as a county and a city, is facing.

The city is our lab! is the motto for Openlab. The students have worked with challenges provided by Stockholm City and Stockholm County Council from a wide range of areas. Within the framework of a 15 credits master course, the students worked in project groups of 6-8 persons for one full semester. To develop an understanding of the issues at hand, the students engaged in the challenges through the use of various research methods such as interviews and observations, as well as literature studies. The students then developed a number of proposals for solutions, one of which was pursued further to create a more concrete solution that has been tested in real-world situations.

Whilst working together at Openlab, students from different disciplines met and interacted with each other not always without complications. However, in these encounters something new and exciting can emerge. The students carry with them experiences of interdisciplinary discussions and solutions - a very important competence for facing challenges of the future.

The result of all discussions, analyses, and syntheses is documented in this report. Of course, the report can only cover parts of this dynamic and creative process. We who have worked as teachers in this course have had our main function as coaches, providing tools during different phases of the project. The students work according to a process model based on Design Thinking and Scrum. Creative ideas and systematic thinking merge together to form a final project result.

For us, this is learning at its best – Freedom, Creativity, Social interaction, Engagement, and FUN! But it is also based on real challenges in society – the idea is that Openlab’s projects should contribute to a better Stockholm for its inhabitants.

The city is our lab!

Ivar Björkman	Mats Danielson
Executive Director	Stockholm University
Sofia Vikström	Martin Jonsson
Karolinska Institutet	Södertörn University

## Abstract in English

This report summarizes the process and end-result of the interdisciplinary group Beyond Words' work on citizen dialogue in the Skärholmen district during the spring of 2020. In January, Beyond Words received a challenge to increase citizen engagement at the Skärholmen district board meetings. The purpose of these meetings is to increase democracy, have a citizen dialogue, and provide information about local political decisions. The challenge was to attract a more representative crowd to the meetings, and to increase the number of people attending. With Design Thinking theory and methods freshly acquired in our toolbox, we started tackling the challenge. We empathized, ideated, defined, prototyped and tested repeatedly during the course of several months. We showcase here our four final solutions, aimed to strengthen local democracy with the help of citizen dialogue. They focus on educating local politicians, accelerating existing dialogues, facilitating residents' ideas, and integrating dialogue in the decision-making process. The final solution "Develop your District" enables residents, politicians and clerks to connect and collaborate in an inspiring, user friendly and transparent way. We hope our solutions may inspire to think about the how of citizen dialogue and local democracy in a new way, and that we thereby contribute to a positive development in society.

## Sammanfattning på Svenska

Den här rapporten sammanfattar processen och resultatet av den tvärvetenskapliga gruppen Beyond Words arbete för medborgardialog i Skärholmens stadsdel under våren 2020. I januari mottog Beyond Words en utmaning att öka medborgares deltagande och engagemang på stadsdelsnämndens sammanträden och frågestunder. Syftet med dessa möten är att stärka den lokala demokratin, ha en konstruktiv medborgardialog, samt att tillhandahålla information kring lokala politiska beslut. Utmaningen var att locka fler människor till mötena, bland med annat i syfte att mötesdeltagarna bättre skulle representera invånarna i stadsdelen. Med Design Thinking teori och metoder i vår nya verktygslåda tog vi oss an utmaningen. Vi lyssnade och förstod, kom på nya idéer, byggde prototyper och testade dessa med våra uppdragsgivare upprepade gånger under våren. Vi visar i rapporten fyra lösningsförslag för att stärka demokrati på lokal nivå och säkra en konstruktiv medborgardialog. De fokuserar på att utbilda lokala politiker, främja

befintliga dialoger, underlätta för medborgares idéer, och att integrera dialog i den ordinarie beslutsprocessen. Den slutgiltiga lösningen vi presenterar, “Develop your District”, möjliggör för boende, politiker och tjänstepersoner i Skärholmen att få kontakt och samarbeta på ett inspirerande, användarvänligt, och transparent sätt. Vi hoppas att alla våra lösningsförslag kan inspirera till nya sätt att tänka kring lokal demokrati och medborgardialog, och att vi på så sätt bidrar till en positiv utveckling i samhället.

## 3.1 Introduction

### 3.1.1 *Beyond Words*

We are a multidisciplinary group from diverse backgrounds working together to solve a challenge regarding citizen dialogue in the district of Skärholmen. We named our group *Beyond Words*, as we wanted to focus on the very core of what dialogue is: moving from conversation towards implementation.



**Giulio Fiorenza**  
Smiling person who loves to travel and know different cultures. A fika together is the best way to know each other



**Gijs Aangenendt**  
I am a history and humanities enthusiast, who likes to read and explore the beautiful nature around me with my backpack and tent.



**Beatrice Nordling**  
I am a curious person who likes to live and learn! And the ultimate way of doing that is playing my guitar, preferably together with others.



**Josephine Stephen**  
Proudly an engineer, which is a major career achievement for females in my cultural background. I like working with children to create simple solutions by using simple materials that surround them.



**Shweta Pathak**  
A Clinical Research background makes me to explore everything. I like to chat with friends and most of the time I will be seen with a smiling phase.



**Felicia Hjelmqvist**  
I'm a creative and reflexive person who loves to jump into new projects which broadens my perspective, both professional projects as well as smaller personal ones. Right now I'm trying out a new watercolor technique.



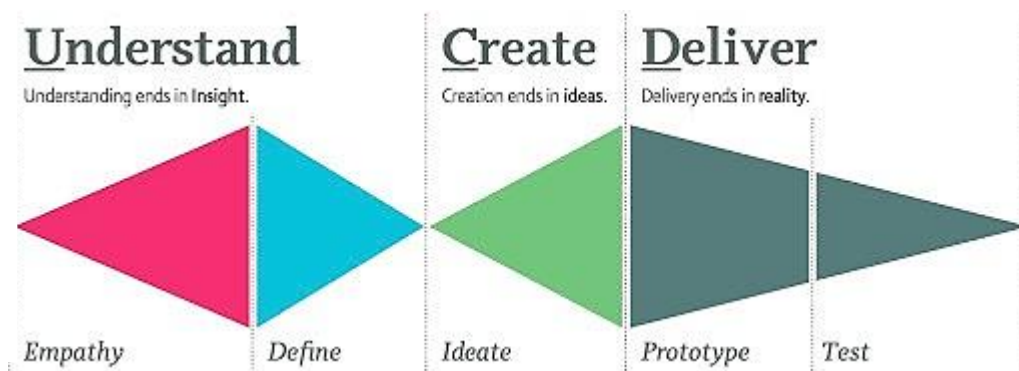
**Kesaobaka Pelokgale**  
A reserved but fun loving individual who seeks to put a smile on everyone who I come across. Always eager to meet new people and learn new things.

### 3.1.2 Design Thinking

This report is the end result of a master's course on design thinking for social innovation. The diversity of our group in terms of backgrounds and perspectives is considered a strength in design thinking as it leads to breakthrough insights and solutions.

The design thinking process follows a 'double diamond' structure that can be broken down into steps where we either create or make choices. This repetitive methodology brings forth a wide range of possible ideas and solutions, followed by the narrowing down to address the core of the issue at hand. During the course we followed the steps of the diamond structure twice. The first time we focused on "doing the right thing" while the second time it was all about "doing the thing right". Each of the diamonds can be further divided into five stages: 1) empathy, 2) define, 3) ideate, 4) prototype and 5) test. The image below illustrates our process:

Figure 16. Diamond structure of Design Thinking.



### 3.1.3 The original challenge

The course is case-based and thus began with us receiving a societal challenge from representatives from the district of Skärholmen within the city of Stockholm. The following question was posed to us:

*How can we make our local political board meetings more accessible?*

This question refers to the Skärholmen district's board meetings. The board is the governing organ of the district and is politically appointed. Every month they meet to decide on matters relevant to the district, and during this meeting there is an open hour, in which anyone can come in and ask questions to the board about matters relevant to the district. In this meeting, local politicians and other stakeholders, officials working for the district and residents from the area, participate. The idea of the open hour is to strengthen local democracy through an open dialogue with the residents on local issues such as park plans, citizen proposals and leisure activities. The questions can be related to the agenda of the meeting or concerns and opinions that they might have. The residents are welcome to stay for the rest of the meeting too but are not allowed to participate in the discussion or decision making.

*Figure 17. Citizen asking a question during open session in Skärholmen.*



Our challenge givers were concerned that these meetings were not promoting participation in an open citizen dialogue in the way they wanted. Main issues were that not enough residents attended the meetings, and that the few that did were not representative of the community at large. Our challenge givers reasoned that this could be because many residents in the district have a lack of trust towards politicians. They also suggested that there could be a language barrier deterring citizens from participating

in the meetings, as many residents in the neighbourhoods are born in other countries. Information on decisions made during the meeting also stayed in the meeting room, as the meeting minutes are not widely dispersed, and only available in Swedish. Another problem was that not all residents know what the responsibilities and duties of the local politicians were, which meant that citizens at times would be confused as to which matters to bring up and which not during the meeting.

From this problem statement the original direction for our solution was to make it easier for residents to attend the local board meetings and engage in issues relevant to the district, while also improving the ways in which information from the meetings was made available to the public.

## **3.2 Empathy**

The first step in the design thinking process is to get a clear understanding of the challenge at hand to get to the core of the issue. This is done through empathizing with relevant stakeholders. Empathizing can be done through observations, interviews and immersion. The aim of this stage is to get an understanding of whom we are designing our solution for and what their needs are.

### *3.2.1 Stakeholders*

The first step of the empathy phase is to discern who to empathize with. This is usually done by compiling a stakeholder map which captures all relevant actors related to the challenge. We made the distinction between internal and external stakeholders, meaning those that affect district matters directly and indirectly.

Figure 18. Complete stakeholder map



From the stakeholder map we identified three main stakeholders, with whom we empathized through observations, investigative interviews and immersion. We came to the conclusion that these three actors were at the core of our challenge. These are the residents of Skärholmen, the politicians and the clerks working for the district.

### 3.2.2 Empathizing with the main stakeholders

Figure 19. Interview with challenge givers, chairman and director





We began our journey of a deepened understanding by interviewing our challenge givers who work for the Skärholmen district. During these interviews, we identified a certain worry connected to the subject of citizen dialogue. While dialogue is a prioritized and important issue in the district, there is also a concern that the citizens will get too high expectations of what is possible to do, gain too much power, or bring forward suggestions or ideas that are not under the district's jurisdiction and therefore not actionable for the politicians and clerks working there. As a result, one of the main issues that the interviewees brought forward was that the residents need to understand and adapt to the administrative organization of the city:

*“We would like people to be more involved in everyday matters, but **we don’t want people to get too high expectations of what is possible to do.**”*

We found a certain contradiction within these statements, considering that a dialogue is by definition a two-way street. We started asking ourselves questions like: for whom is the dialogue, and what does the district hope to get out of it? If we put ourselves in the residents’ position, is it likely that we will meet the officials’ expectations? Here, we started thinking about how we could apply a user-centered approach with the residents in focus for our work.

### 3.2.3 Empathizing with clerks

Figure 20. The citizen hosts working with dialogue in Vårberg



Moreover, we talked to several clerks working with different types of dialogue in various parts of the district. We found that there is plenty of expertise in the field of citizen dialogue already existing in the district, and a wide range of ongoing initiatives targeting the residents of Skärholmen. Below are some thought provoking quotes from our interviews:

*"A participatory process would help the politicians gain legitimacy in their office. If they are smart, they will use it more".*

**Urban planner**

*"It is up to the politicians to try to meet their residents. Not only by sitting and waiting for residents to come to the meetings."*

**Citizen counselor**

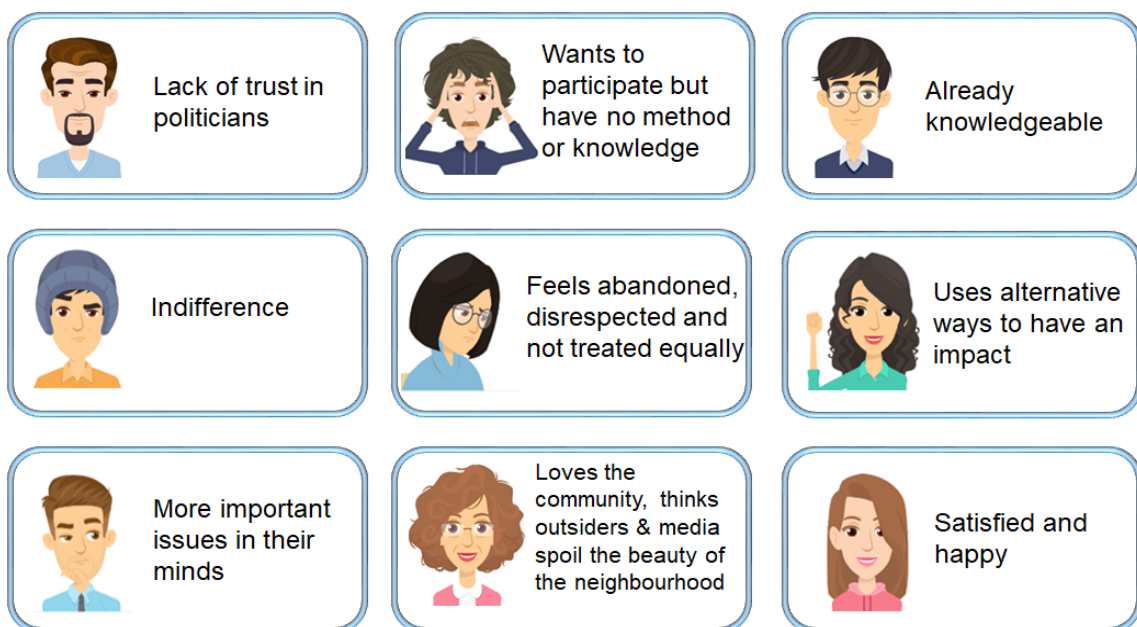
*"The contact through existing organisations works the best."*

**Communications officer**

Realizing that there was no lack of forums for dialogue in the district but rather a disconnect between those dialogues and the district board, we began thinking about how we could integrate the existing dialogues into the desired dialogue between residents and politicians.

### 3.2.4 Empathizing with residents

Figure 21. Nine categories of residents



Lastly, we went to the four neighborhoods of Skärholmen and interviewed residents there. We met with a lot of people and were able to discern nine different categories of attitudes towards local democracy and dialogue.

*Uses alternative ways to have an impact:* This group is already engaged in the local community, in religious groups, interest groups, groups on social media. These people are using existing forums of dialogue, but these forums seemed rarely to be connected to the local political level.

*Lack of trust in politicians:* This group was initially scornful about politicians, but as the interviews continued, a common denominator was that they all wanted the politicians to be more present in the neighborhoods and talk to them. Another theme that came up with this group was the lack of feedback from politicians: “I see them writing down my opinion, like you do now, but what happens next?”.

*Indifference:* The people in this group do not want to engage or to have an impact, even if they had a simple way to do so. This was not a very big group.

*Satisfied and happy:* A group of residents who were simply happy and satisfied with their neighborhoods and therefore saw no need to engage. “Why change a winning concept?”.

*More important issues on their mind:* For many people the number one issue that they talked about was the violence, drug dealings and gangs hanging out at night in the district. Any relevant dialogue would have to be about these problems.

*Already knowledgeable:* This was a small group of people working in collaboration with the district, and so were aware of the possibilities of having an impact on the neighbourhood.

*Wants to participate but have no method or knowledge how:* This is a very large group of people from all neighborhoods in the district. This is a group that wants to be part of the

development and has many ideas for what they would like to happen, but they had no idea how to have an impact or affect change: “No one asked”.

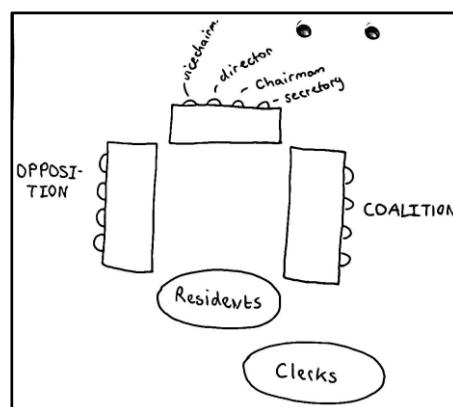
*Feels abandoned, disrespected and not treated equally:* This was a group of people who focused on that everyone should be treated the same - with equal amounts of respect and dignity. This group feels abandoned by society and the police. “I know parents of children who died in gang violence, and they say that nobody cares”.

*Loves the community and thinks that outsiders and/or media spoil the beauty of their neighbourhood:* In this group, there was an emphasis on the very special sense of community and caring for one another that exists in the neighborhoods within the district, and annoyance with the negative image of the district portrayed in the media.

### 3.2.5 Observations at board meetings

As part of the empathize phase, we also attended several board meetings across Stockholm. These visits allowed us to observe and experience the meetings from the perspective of our three main stakeholders: the residents, politicians and clerks and see local differences in the way the meetings are organised.

Figure 22: Sketch of board meeting



Our main finding was that the setting of the meeting demands a lot from the residents. Firstly, they are expected to come to the meeting at the designated time and location, which are often not properly and timely advertised. Secondly, they need to read up on the items on the agenda to stay up-to-date on the activities and decisions of the board. These documents are written in formal Swedish and quite difficult to access. Lastly, residents need to make sure their questions fall under the district's jurisdiction. If not, the residents will be referred to the city of Stockholm, with whom they might not know how to get in contact. For any resident, the distinction between the district's and the city's responsibility can be quite hard to understand that the park close to your home is a question for the local board meeting while the square next to it is not.

The dialogue between the board and the residents is structured and formal. Asking a question with a microphone in front of a large group of politicians and clerks might be uncomfortable or intimidating for residents. Often when a resident asked a question, only the chairman would reply. In some instances, the dialogue was steered by annoyance and irritation, rather than constructiveness and mutual respect. Based on this we asked ourselves where the dialogue should take place and how it can be more accommodating towards residents.

### **3.3 Define**

From the insights gathered during our interviews with residents, clerks and politicians, we created five different personas, fictional characters, which you create based upon your research in order to later ideate solutions for these different user types. They capture the insights and needs from the stakeholders that we gathered during the empathizing phase. The personas help redefining the original challenge into a new point of view. From the point of view, ideation starts which is the next step of the design thinking method.


### 3.3.1 Personas

**Erna**  
22 years, Student  
Part of local organisations




*"I really like Skärholmen. Why does the media only report about negative events? I want to share my experience of Skärholmen"*

**Giorgio**  
56 years,  
Shop owner in Skärholmen



*"I would like to express my opinions and ideas but I have no idea how! I never had the opportunity"*

**Hanad**  
35 years,  
Nurse, living in Skärholmen



*"Honestly, I'm scares about the problems like violence and drugs. I feel powerless and note seen. Where are the politicians?"*

**Mike**  
37 years,  
Urban planner for the district



*" I talk to citizens often. My work would benefit if we had better communication between the departments in the district"*

**Sara**  
42 years,  
Politician, lives in Varberg



*" I am newly elected and pressed for time, but trying to get the hang of the political procedures. I think dialogue sounds good but I'm not sure where to start"*

#### *It would be game changing to*

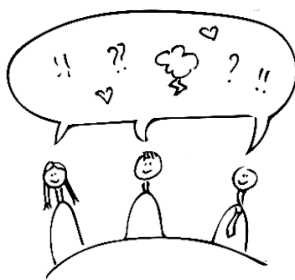
<p>Promote a new channel to provide <b>Erna</b>'s experience of the district and connect her existing engagement with local decision makers.</p>	<p>Create an accessible and engaging channel that inspires collaboration between <b>Giorgio</b> and decision makers.</p>
<p>Create a transparent collaboration between <b>Hanad</b> and decision makers where both the discussion and the actual change is visible to everyone.</p>	<p>Create a platform where <b>Mike</b> can share the content and results of his dialogues with colleagues and which would involve the local politicians.</p>
<p>Create an educational training that guides <b>Sara</b> through the steps of being a politician and facilitating citizen dialogue.</p>	

### 3.3.2 New Point of View

After listening and taking on various viewpoints from our stakeholders, we redefined the original challenge to a new point of view. This point of view was based on our main insights from the empathizing phase.

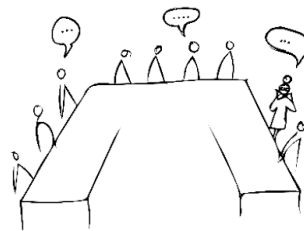
After several iterations we reached our redefined Point of View:

Figure 23: Sketches of key insights



#### Key Insight 1: Existing dialogues

Employees of the district have many dialogues with residents all across Skärholmen, but these dialogues are often not connected and do not seem to reach the politicians on the board.



#### Key Insight 2: Setting of board meetings

The current setting of the public board meetings demands a lot from the residents. They are expected to show up at the designated time, read up on all the documents that are being discussed and ask questions that fall within the responsibilities of the district.



#### Key Insight 3: Engaging residents

The residents have ideas about the development of their neighbourhood, but they lack the knowledge or trust in political system to engage. Engaging in local politics should have a low threshold, be user-friendly and transparent.

***“How might the district board meetings become the final step of a systematic and transparent dialogue process between residents and local decision makers?”***

The district board meetings are where decisions are made but often not where ideas for the development of Skärholmen are generated. Solutions for improving citizen participation in a local democracy should, thus, include the whole process from idea to decision making and involve the main stakeholders. With this in mind, we started ideating for a new solution.

### 3.4 Ideate

Generating ideas is one of the core concepts of design thinking. Mentally it represents a process of “going wide” in terms of concepts and outcomes, laying the foundation for the prototype and test phase. There are different ways to ideate, all with a focus on generating ideas rather than evaluating ideas. The following are two techniques we found productive and simulating during the ideation phase.

*Brain writing:* All team members write/sketch their ideas on post-its and pass them on to the next who will elaborate on it, and so forth. Without any form of explanation of the post-it, we experienced that the other team members understood ideas differently, often resulting in two or more equally useful ideas instead of one!

*Storyboarding:* Storyboarding made our ideas come to life. Having a concrete story that visualised our ideas helped us discuss the content of the solutions and eventually come to agreement as a team. Since this technique proved to be so helpful, we decided to make storyboards for the majority of our concepts.

Figure 24. Example of storyboard



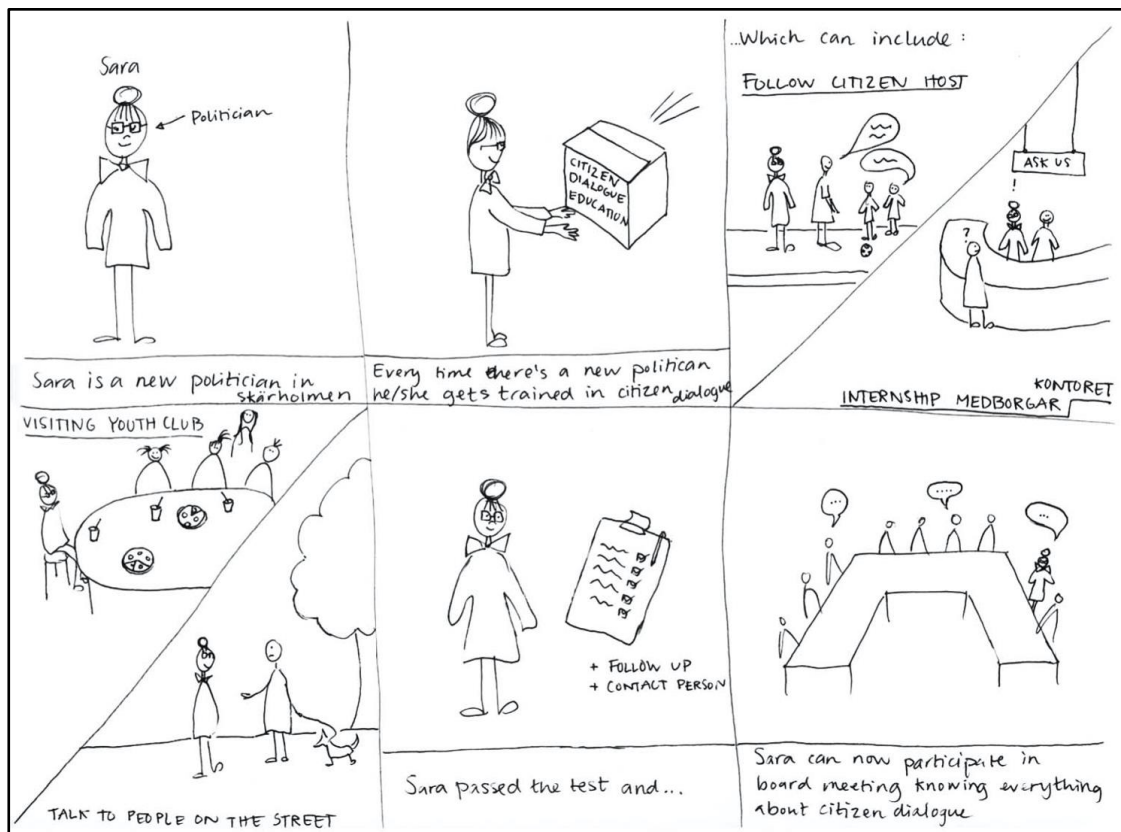
Our ideation process led to four initial concept solutions, each pointing in a different direction called “Education Package”, “Overview of existing dialogues”, “Ideation Coach” and “Dialogue as a mandatory step”. Each of these solutions were created with



the key insights, personas and point of view in mind. While the course requires us to zoom in and develop only on one of the solutions, we hope our challenge givers will consider all ideas as we believe they can contribute to strengthening citizen dialogue and local democracy in different ways.

### 3.4.1 Education Package

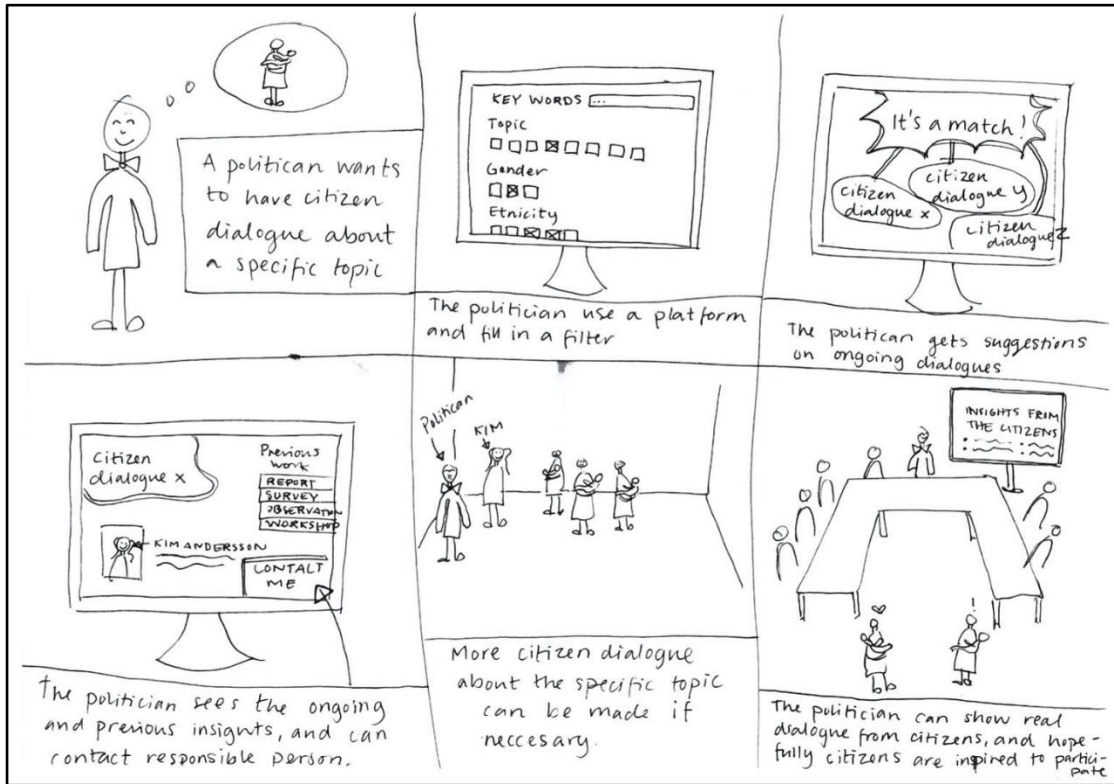
Figure 25. Education package concept.



This idea focuses on our persona Sara's perspective. In the storyboard, we show how all newly elected politicians get an introduction to the *what*, *why* and *how* of citizen dialogue. This involves interning at the citizens' office and participating in already existing dialogues, for example a youth club meeting. Through this introductory education, Sara is given the tools and the contacts to engage in citizen dialogue to the extent she is able in her role as a politician. As Sara, and many of the other politicians in the board work full time at other jobs, they need to be able to connect with existing dialogues without putting too much time into figuring out how.

### 3.4.2 Overview of existing dialogues

Figure 26. Dialogue overview concept

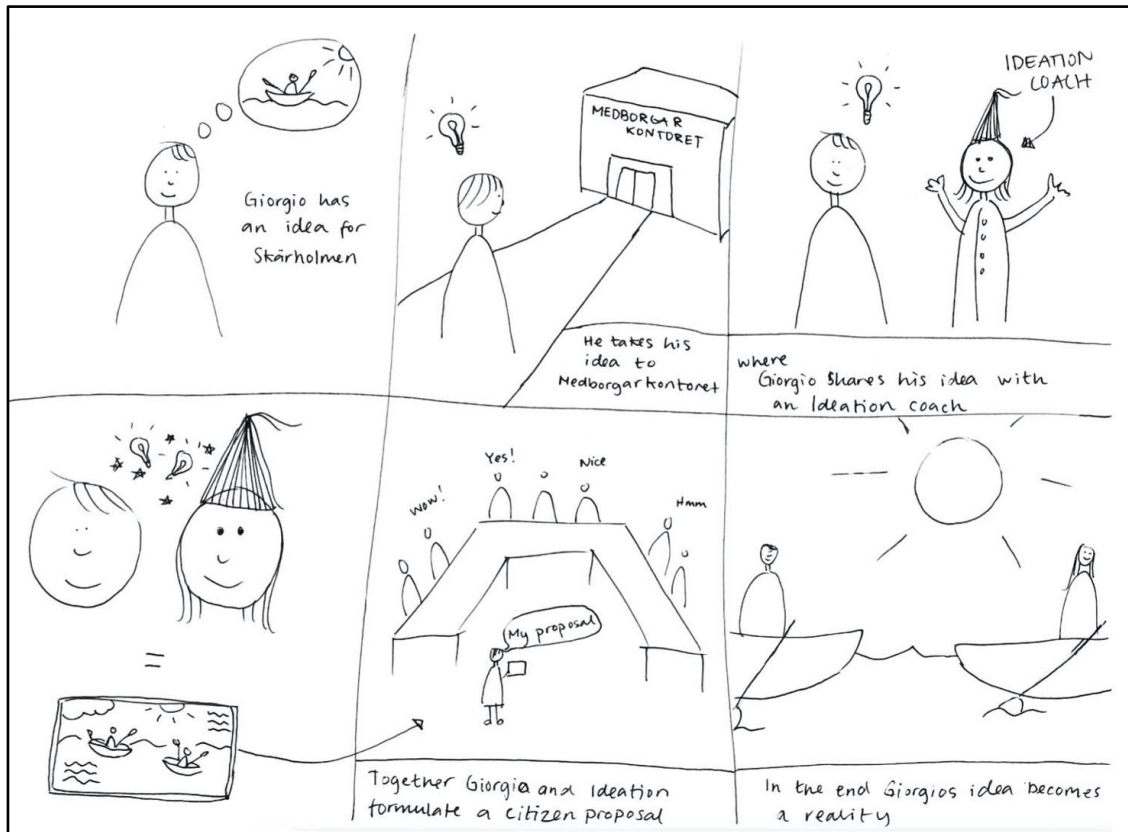


This idea joins the perspectives of the politicians and the officials working in the district. The storyboard shows a platform that connects internal stakeholders with relevant existing dialogues. For instance, if there is a decision on a specific topic coming up, the politicians and involved officials can connect to relevant citizen groups via this overview. In the platform, both upcoming and past dialogues are accounted for, and it displays a contact person for the dialogue. The platform solves the problem of working in silos, as it is transparent and open for everyone working in the district. It provides a direct connection to residents, and outreach through existing dialogues increases the legitimacy of the decision-making process.

Perhaps the citizens who talked to the politicians and/or clerks are also inspired to attend the board meeting or otherwise engage further. Through this concept, it is possible to build on existing ideas and connect existing stakeholders with new ones.

### 3.4.3 Ideation Coach

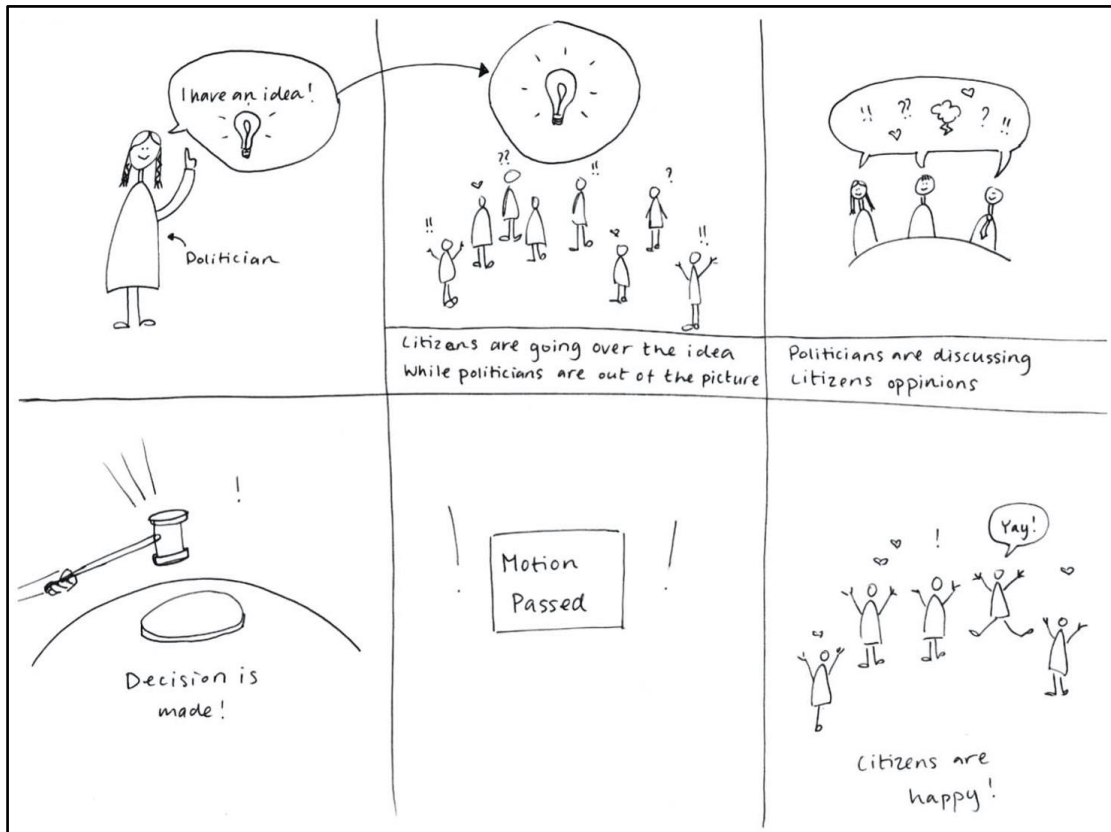
Figure 27. Ideation coach concept



This solution focuses on the perspective of the citizen persona Giorgio. He represents a fairly large group of residents from our interviews: has ideas for the improvement of its district but doesn't know how to convey them. This concept addresses the fact that it needs to be simple and engaging to share your ideas and contribute to the development of the district. Therefore, there is a person helping and engaging with citizens in this process - an ideation coach. This function will guide residents in developing their ideas and help them put them in a format appropriate for a citizen proposal. If the idea does not fall within the responsibilities of the district, the coach will make sure the citizen gets in contact with the right office or function. This solution smoothes out the hurdle between having an idea and formulating it as a suggestion for change. It is a facilitating function for residents to directly contribute more to the district's development and increase local political engagement.

### 3.4.4 Dialogue as mandatory step

Figure 28. Dialogue as a mandatory step concept



This is a systematic long-term solution that is not related to a specific persona, but rather wants to emphasize the fundamental role of citizens in local politics. The core of this idea is that a dialogue in which residents are involved is required for a decision in the board. If no dialogue has taken place, there needs to be an account of why this is not relevant for this particular matter. The dialogue must be well documented and transparent but could be done in any way suitable for the particular decision. For example, the dialogue could be realized through in-person meetings, online participation, community councils or other interest groups, discussion with citizen representatives, or by suggestions from the citizens themselves. The strength of this solution is that it builds on the existing decision-making process and imitates the procedure practiced with for example gender analysis in decision making. These two (gender analysis and dialogue) could also easily be integrated.

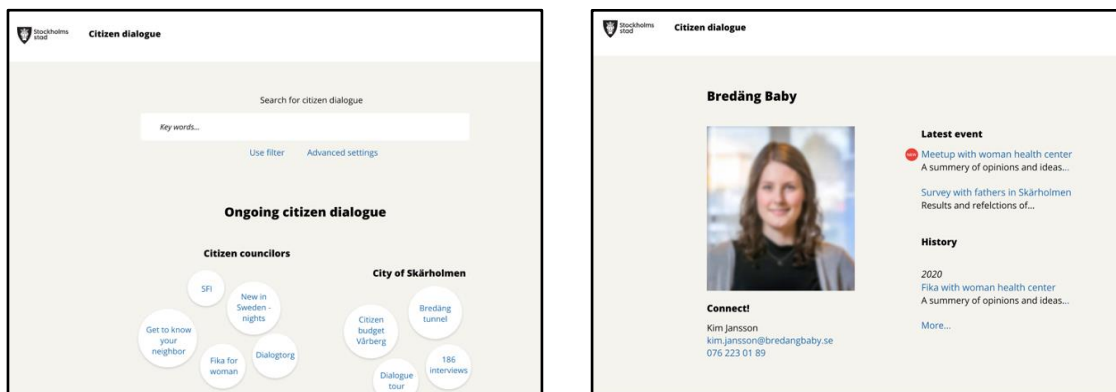
### 3.5 Prototyping

The next step in the design thinking process is to transform the solution ideas into prototypes. Prototyping serves two main purposes: it allows testing with users, in our case politicians, clerks and residents, and it provides a renewed opportunity to empathize. Instead of explaining the idea, the users themselves can experience and interact with the prototypes. The users' interactions with the prototype show their needs and possible developments of the concepts moving forward. For each solution we designed a prototype suitable for online testing. The redesigning of our prototypes sparked new ideas, most notably the combination of “dialogue as mandatory step” and “overview of existing dialogues” to make it easier for the politician to locate the right citizen groups for the mandatory dialogues.

#### *Prototype “Overview of existing dialogues”*

Figure 29 and 30: Prototype Overview of existing dialogues

Fictional pages on Skärholmens website showing the existing dialogues employees of the district are currently having with citizens, including summaries of dialogues, upcoming events, and contact details of the person responsible for the dialogue.<sup>8</sup>



<sup>8</sup> The prototype can be accessed [here](#).

## Prototype “Education Package”

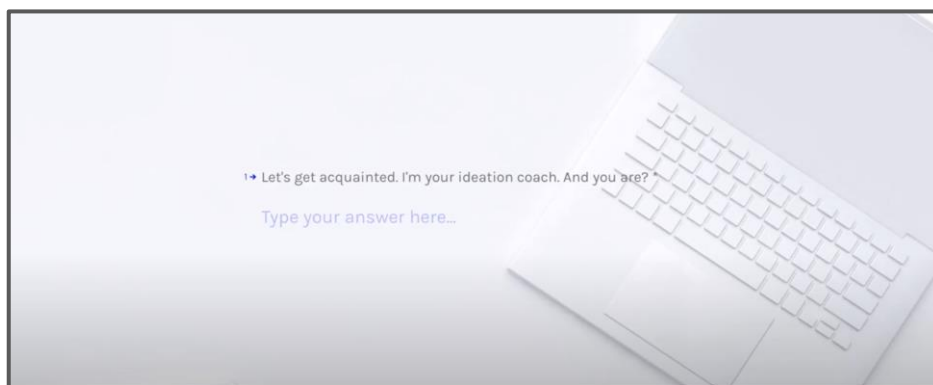
Figure 31. Prototype Education Package



Animation in which a citizen dialogue educator meets a newly elected politician. The educator guides the new politician through all the steps of the Education Package, preparing him for having constructive dialogues with citizens.

## Prototype “Ideation Coach”

Figure 32. Prototype Ideation Coach



Online interactive, encouraging and user-friendly tool for citizens to fill in their ideas for the improvement of Skärholmen with the possibility of meeting an ideation coach to further develop their idea.

## 3.6 Testing

### 3.6.1 Testing Process

#### Education package

*"I guess that would actually be fun! I can't believe I haven't already thought about that (about politicians interning at the citizens' office)."*

*"There is a such a lack of time..."*

*"My party engage with the citizens a lot already."*

#### Mandatory dialogue

*"Keep working on this one! We could test it for one or two years, and if it is successful, implement it permanently."*

*"The real problem is the gap that exists between citizens and the physical building of the citizens office."*

#### Ongoing dialogue

*"It is not always appropriate for politicians to attend all meetings. Sometimes it can be intimidating and disturb the ongoing meeting."*

*"Apparently I don't know about all dialogues that are going on. I would use this to look for issues that I am interested in to see what dialogues have already taken place."*

#### Ideation coach

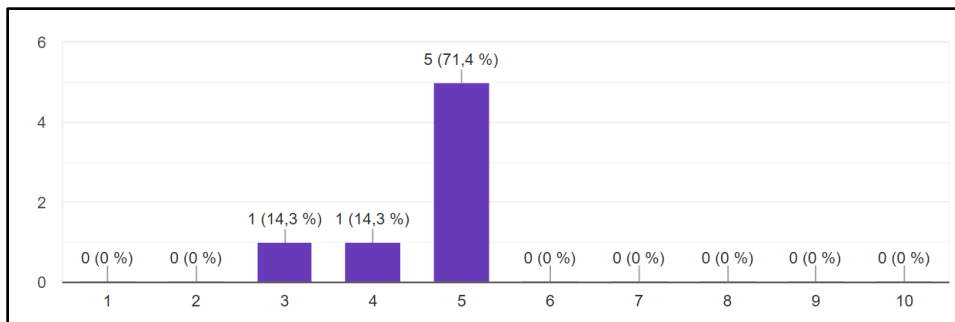
*"It is very hard to get the right questions to the right people at the right time."*

*"It is important to have the opportunity to express yourself, but I think there would have to be a staff to attend to the citizens' ideas."*

To test and validate our ideas, we reached out to the politicians in Skärholmen's district board. We scheduled interviews with three politicians from different political parties. We also sent out a survey to all the politicians in the district and eight of them replied. From the replies we drew the following conclusions:

- *The majority of the politicians have other day jobs and therefore have very limited time.*
- *The majority of the respondents think that a functioning citizen dialogue is highly important.*
- *The majority of the respondents think that the current structure of the board meeting is not satisfying in terms of facilitating citizen dialogue:*

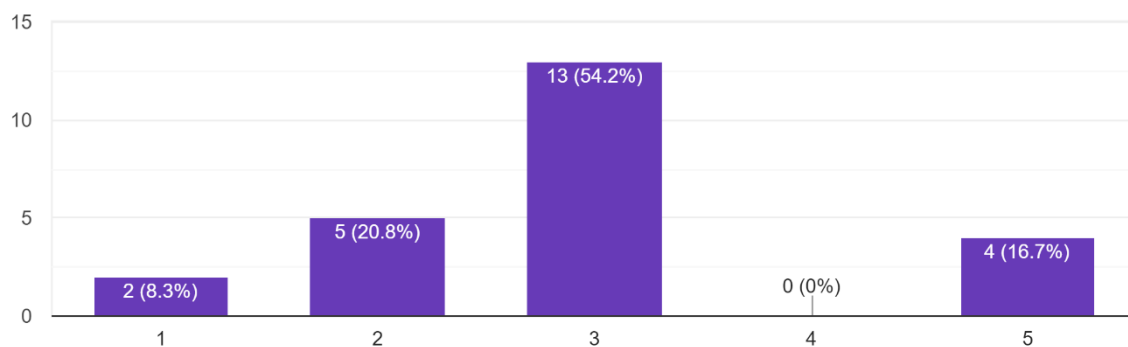
Figure 33. How satisfied are you with the current board meetings in regard to citizen dialogue on a scale 1-10?



Finally, we sent a survey to some of the social media groups in the district such as “Bredäng Baby” and “Södra Sidan 127”, to which 24 persons responded. The majority of the respondents believe it is important to have a possibility of sharing ideas, and everyone stated that they would be willing to participate if such a platform existed. For some, having a relevant topic to ideate on, would increase the willingness to start contributing to the development of the district.

One of the questions related to the current possibility of sharing ideas gave interesting results. Some citizens were very satisfied with it, while others were less or dissatisfied. Perhaps this can be explained by the fact that some respondents were already knowledgeable of the ways to have an influence, while others were not and therefore dissatisfied with the possibilities to engage.

Figure 34. Residents satisfaction level with possibilities of sharing ideas/opinions





### 3.6.2 Selection process

After several interviews and interpreting the data from the surveys, we had received much actionable feedback on our four candidate ideas. Several of the stakeholders that we interviewed liked some combination of our ideas, so after some consideration we concluded that we had to choose between our four original ideas and two additional combination ideas in the final selection process.

To facilitate our decision-making process, we used a weighted point system. We decided on five categories that we found to be the most important in our selection. They were in order of their importance:

1. Impact on citizen dialogue	2. Our interest	3. Easy to implement	4. What politicians liked	5. Originality
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The group agreed on the ideas' score within these categories, and then we eliminated the three alternatives with the lowest score. This left us with the three ideas:

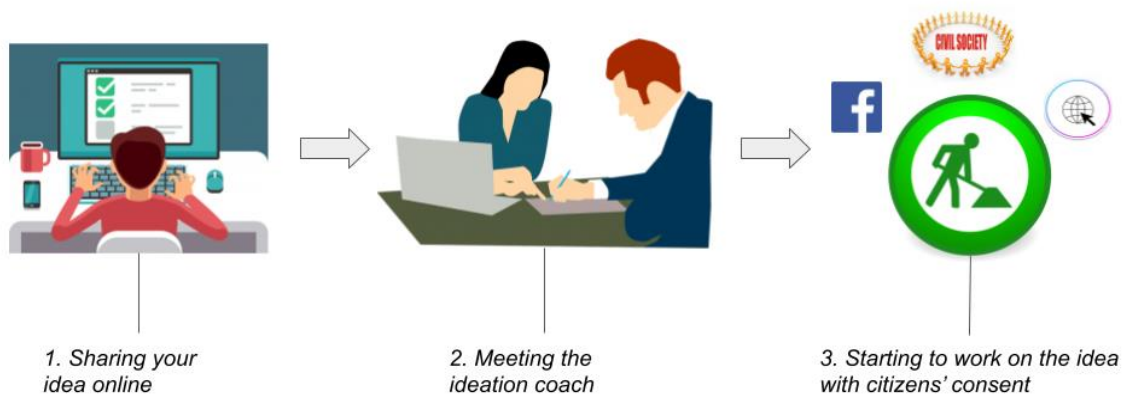
1. Combination of mandatory step + ongoing dialogue
2. Education package
3. Ideation coach.

After that we did an individual voting in the group, and **we landed in the decision to go for the Ideation coach-alternative**. This is an idea that received a lot of positive feedback and interest from the politicians, and that also gathered a lot of interest in the group.

### 3.6.3 Finalizing the idea

Now that we had selected the “Ideation Coach” as the final idea to work on, but it was not clear exactly how this idea should work in reality. This was actually one of the reasons we selected this idea: it needed the most work out of all the remaining alternatives and we were hoping the other candidate solutions would get attention from our challenge givers regardless.

Figure 35. Initial process of Ideation coach



We wanted an online concept which was easy to use and to access. At the same time, we liked the thought of the ideation coach as a physical person, as some residents probably are less familiar with digital devices and also because physical contact builds trust in another way. We drew a tentative process outline for a more refined version of the Ideation coach-concept. When we approved the general structure, we started to think about the details of the process.

### *3.6.4 Testing variations of the final concept*

To finetune our final concept, we tested variations of it with our challenge givers, clerks and politicians. These variations, drawn up in user journeys included physical as well as digital ideation coaches and explored different ways of handling citizens' ideas. Below we summarize the main takeaways from these sessions.

#### *Integration with upcoming platform*

From the interviews, we concluded that it was a good idea to connect the Ideation Coach to the platform that is currently being developed to strengthen the dialogues on urban planning in the district. That platform already has a lot of the functionality that we are looking for, and it has been tested and used in capitals over the world. Among other features, the platform allows for an upvoting system and co-creation of ideas. This collaborative feature was featured in one of our variations and one of the aspects that was emphasized by the interviewees.

#### *Transparency*

The interviewees also emphasized the importance of transparency. They appreciated the idea of a tracking system in which the user gets continuous updates on what happens with her idea, as well as an open archive of ideas that have not been realized but have been considered. This way, the citizen's idea is visualized as a part of the democratic process and the connection between the two is clearer for the residents as well as for the district officials.

#### *Physical versus digital ideation coach*

We learned that the audiences vary depending on the form of dialogue: digital communication versus physical gatherings. While the first mainly engages young women, the latter attracts older audiences. For our end-solution we take this into consideration and suggest that both forms of dialogue can be used within the concept. We also took into consideration that the traditional way of having an impact in the district (citizen proposals,

showing up to the board meetings) attract more residents from an older age group. Moreover, there exist official councils to the board for youth, elderly and people with disabilities. We therefore directed our attention to a group of “in-betweens” that are not represented in these forums but have ideas to share, according to our resident group “Wants to participate but have no method or knowledge how to”. This is the main **target group** for the final solution.

#### *Handling all ideas*

We also received feedback that it would be a strength if the platform could handle all ideas, also the ones that do not fall under the district's jurisdiction. We therefore went forward with this “**one way in**”-solution as well.

#### *Inspiring residents*

Lastly, during the interviews, we realized that we needed to develop the very first step of the process further: how the residents get knowledge of and engage with the Ideation Coach. We therefore put much thought into this in our end-solution.

### **3.7 Final Concept: Develop your District**

In this chapter we present our final concept. It incorporates all important feedback from the testing phase and combines appreciated features from various versions of the original ideation coach concept. It integrates a digital platform with persons assisting as ideation coaches and incorporates this into the existing structure of the district management. This concept is more complex than the original idea, and the ideation coach is only a part of the solution. The new name for this final concept is “Develop your district”. The base structure of the concept is as followed:

Figure 36. Basics of “Develop your District”

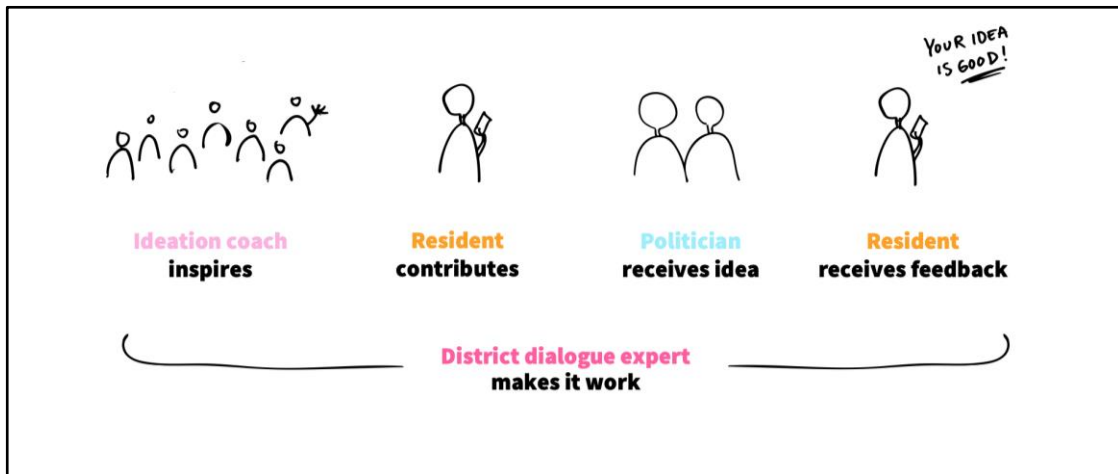
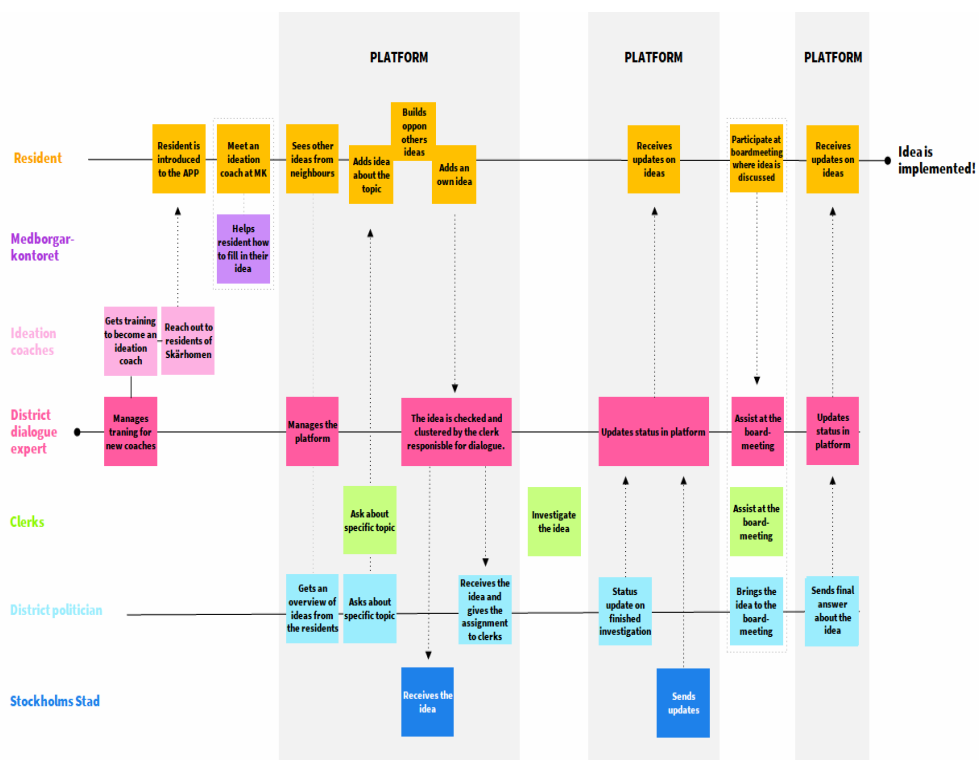


Image 21 shows a process map of the solution showing exactly who does what and how the ideas flow from one function to another. The process starts with the ideation coaches introducing the platform to the residents inspiring and convincing them to share ideas on the platform and hopefully ends with ideas that are approved and ready to be implemented!

Figure 37. Systematic overview of platform



### *Role of Ideation Coach*

In our final solution, the ideation coach can be a clerk, a teacher, citizen host or anyone that wants to facilitate local democracy and have a positive impact in her community. The ideation coaches will be educated by the district dialogue expert. They will receive basic training on how local matters are handled in the district, which matters fall under the district responsibilities and which ones belong to Stockholm Stad or other relevant actors. In addition to this the training will also result in the ideation coaches being able to navigate on the platform and being able to explain and show it to those who show interest. Last and most importantly the ideation coaches are there to reach out and engage people to participate in local democracy. They will be equipped with the right tools to inspire people, for example by having promotion materials of recent successful participation by residents. This way, engagement is strengthened through already existing local networks, as the certified ideation coach reaches out to people and explains the importance of sharing their ideas. This group of facilitators work as the connection between the residents and the user-friendly platform.

### *Residents Platform*

The platform is user friendly and simple. Residents download the app and see others' ideas and to those, post ideas on a specific topic that is trending on the platform or add an idea of their own making. Citizens will receive updates on district matters they subscribe to as well as invitations to specific events, for example board meetings. The platform will also include recent examples of implemented ideas as a way to convey to the residents that their ideas can in fact materialize.

*Figure 38. Mock-up of platform in its mobile version*



### *District Dialogue Expert*

This is an official working for the district who organizes the ideation coaches and provides the training and regular meetups. This Dialogue Expert is the product owner of the platform and has an overview of all the ideas that enter it. She is responsible for clustering ideas and doing quality checks, for instance correcting stuck errands or ideas ending up in the wrong channels. The district dialogue expert is knowledgeable on the political and organizational structure of Skärholmen and Stockholm Stad and able to direct the ideas of residents to the responsible person or organization.

### *Role of Clerks*

Other officials in the district can function as ideation coaches in their daily interactions with residents of Skärholmen. They can be included in the process if their expertise is required at the board meeting or to formulate replies to the residents' ideas. This is similar to how the process of citizen proposals works today.

### *Role of Politicians*

The politicians can see the ideas the residents submit in the platform and assign clerks to investigate these as formal citizen proposals if the resident agrees. They are also connected to the district dialogue expert via the platform and the board secretary along with the politicians make continuous updates to errands in the platform, which automatically leads to a notification on the resident end. The platform also allows for creating polls and gauging residents' opinions on certain issues, which provides a good starting point for politicians' citizen dialogue.

## **3.8 Implementation**

When it comes down to deciding whether or not to implement the "Develop your District" concept, we would like to highlight the key strengths of the concept. We believe that these features really speak for the implementation Develop your District-proposal.

### 3.8.1 Key Strengths

#### *Inspiration*

Inspiring residents of Skärholmen to contribute to the development of their district might very well be the hardest part to achieve. Instead of the district of Skärholmen formally asking for ideas and input, residents are approached by a friendly and familiar face (i.e. the ideation coach) who might give the little nudge someone needs to start thinking and contributing!



#### *User-friendly*

The platform does not require the right language or knowledge about the bureaucratic system of Stockholm to start contributing. The district dialogue expert will make sure their ideas end up in the right hands, so that the resident does not have to manoeuvre through the bureaucratic jungle of Stockholm to find the correct place. All ideas and answers are handled through the same platform.

#### *Transparent*

Added ideas are traceable every step of the way from the arrival all the way to approval and implementation. In case of a rejection there needs to be a justification. Having the ideas in one place will make the work of the district easily accessible and show that some ideas actually materialized.

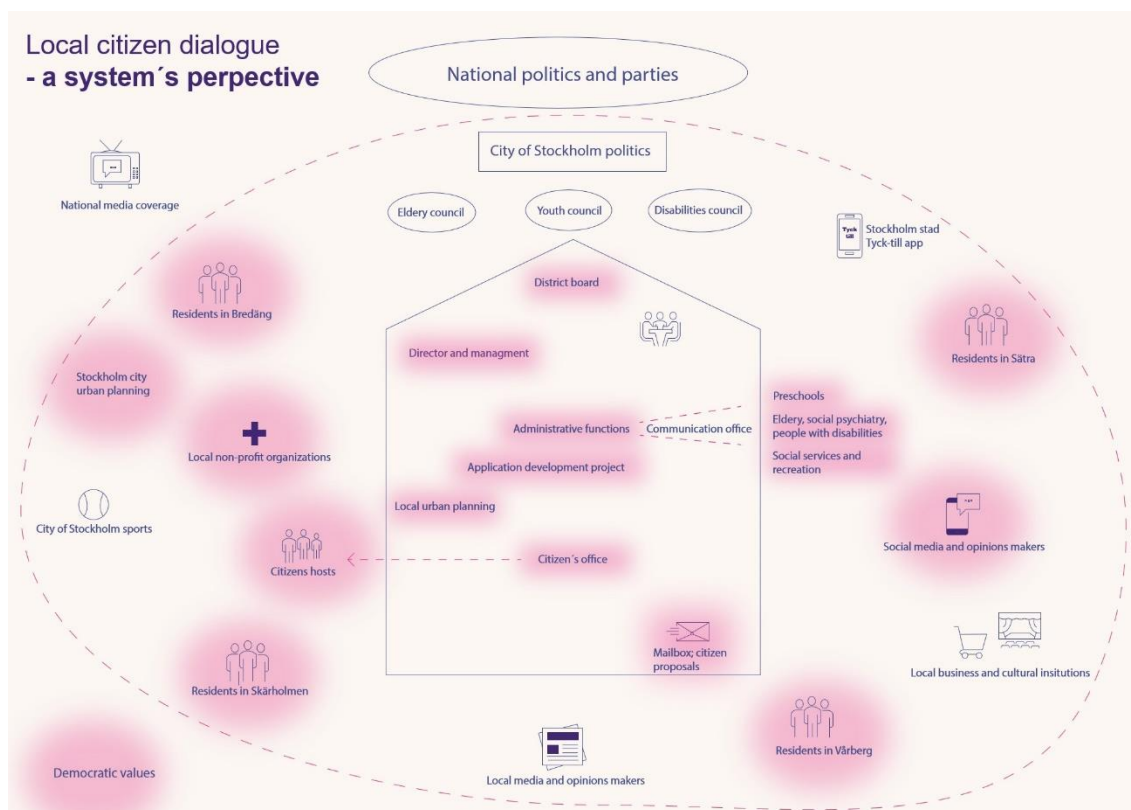




### Integration in existing system

While our concept might seem complex, it actually builds upon the current organizational structure of the district. This systems map shows what integrations we are making through this solution. The platform uses the current system of citizen proposals, and also draws inspiration from how the district's communication office works today. For example, parents with young children are reached through the schools in a similar manner to how we envision our ideation coaches to reach out to residents. Citizen counselors, schoolteachers, staff at youth recreation centres can all become ideation coaches and introduce the platform to their target groups. This way, the concept builds on existing relations and connects them further to forward dialogue on all levels. Which connections we make are emphasized by the pink circles in the systems map.

Figure 39. Systems map of Skärholmen district in relation to citizen dialogue.



### 3.8.2 Costs versus benefits

It is not easy to quantify the benefits of an increase in participation in local democracy, as it is to estimate the costs of the platform. In terms of costs, we identify 1) the development of the platform, 2) its maintenance, 3) personnel costs of district dialogue expert and ideation coaches.

In terms of benefits we identify possible savings as a result of improved quality in public services and quality of life for the citizens living in Skärholmen. A general rule of thumb regarding improvements in quality for businesses and organisations is that it can cut up to 20% of the total budget. We realize that our solution alone is not going to create that improvement in quality, and certainly not overnight, but we think that the fact that there are such enormous possible gains to be made, speaks for the implementation of the concept. Furthermore, we would like to point out some of the other important possible benefits related to the concept:

Figure 40. Intangible benefits in business case for the Develop your District-concept



### **3.9 Future steps**

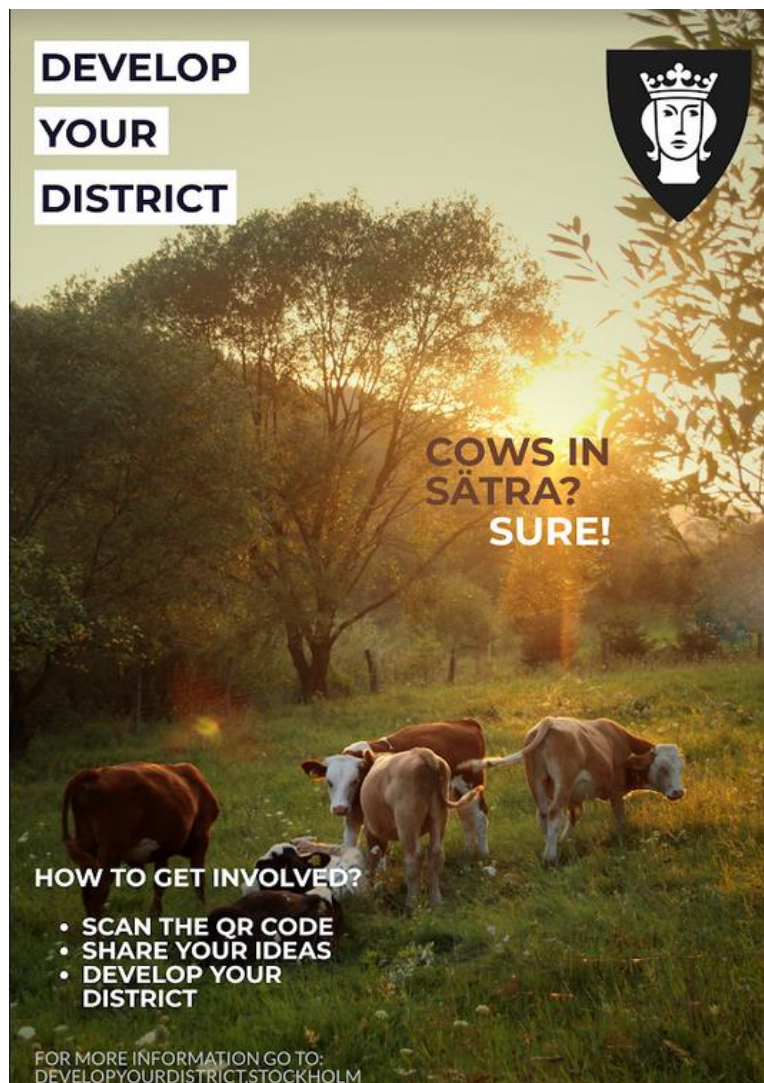
The development of the platform is already underway, and our suggestion is to get a price estimate for how much it would cost to add this functionality from the development team. After that, we suggest testing the dialogue training program for interested candidates - there is enough experience and know-how in the district already to organize this with existing resources. Our recommendation is to test on a small scale, as per usual with IT-development, to increase the scale after initial bugs and problems are fixed. We see that this scale easily could expand to all fourteen districts in Stockholm city. Skärholmen will be the pioneering pilot district where it all started, paving the way for a more transparent and including democratic process on the local level.

### **3.10 Final words, and beyond!**

During our project we did extensive interactive research, which we believe supports the strengths of our suggested ideas. To provide an open and transparent citizen dialogue is fundamentally a question of reinforcing democratic values in a society and promoting engaged and trusting citizens. We in Beyond Words do hope to be able to contribute to this development with our ideas.

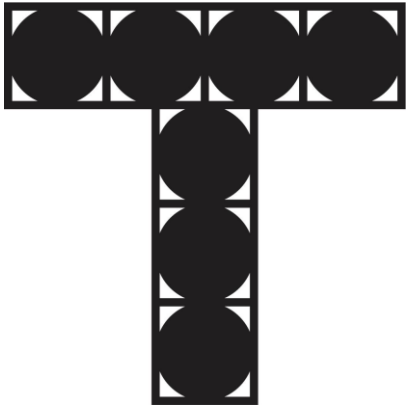
The full report is available at:  
[https://www.dropbox.com/s/zafe69kn3avsc3r/Final%20Report\\_Beyond%20Words.pdf?  
dl=0](https://www.dropbox.com/s/zafe69kn3avsc3r/Final%20Report_Beyond%20Words.pdf?dl=0)

Figure 41. Poster promoting Develop your District.



# CITIZEN DIALOGUE

## *Strengthening Local Democracy through Dialogue*



This report summarizes the process and end-result of the interdisciplinary group Beyond Words' work on citizen dialogue in the Skärholmen district during the spring of 2020. The challenge was to attract a more representative crowd to the meetings, and to increase the number of people participating.

The report showcases four final solutions, aimed to strengthen local democracy with the help of citizen dialogue. They focus on educating local politicians, accelerating existing dialogues, facilitating residents' ideas, and integrating dialogue in the decision-making process. The final solution "Develop your District" enables residents, politicians and clerks to connect and collaborate in an inspiring, user friendly and transparent way.

Openlab is a creative centre that provides opportunities for finding solutions to challenges in society. In cooperation with our partners and other actors, we create proposals for innovative solutions for the Stockholm region. We do this across the lines between different disciplines and professions. The reports from Openlab are results from students' interdisciplinary cooperation within the framework of a 15 ECTS master course.



## **IV. CE as a solution to government failures: analysis of Beyond Words' project**

As read in chapter III, Beyond Words worked at local level in order to strengthen political participation among citizens of Skärholmen (Stockholm). Talking, interviewing and working with citizens, clerks and politicians, we understood some of the main problems contrasting local democracy, political participation and local authority function. In the next paragraph I intentionally summarised what we got from our case study, presenting only the insights more relevant for my thesis.

In chapter II I anticipated that civic engagement might be a possible solution to all five government and political issues (three government failures and two political problems) concerning industrial policies, in this chapter I will analyse and compare the evidences we found at local level with the problems existing at national one. Starting from Beyond Words' project and then continuing with the literature, we will see that a working civic engagement solves both local level issues and government failures.

The case study is a fundamental part of my dissertation because represents empirical evidences and therefore, a solid basis from which to start. Working for four months in Skärholmen gave us many realities and experiences, without whom my thesis would have been only a theoretical work.

## 4.1 Insights from our work

*First group of interviews: our challenge givers (the politician chairman of the board and the director of Skärholmen)*

During these interviews we noticed a concern regarding the increase of dialogue and citizens' responsibilities: there was a concern that citizens will get too high expectations of what it is possible to do, gain too much power, or bring forward suggestions or ideas that are not under the district's jurisdiction and therefore not actionable for the politicians and clerks working there. A first insight we noticed was the lack of trust in citizens from clerks and politicians of Skärholmen.

“We would like people to be more involved in everyday matters, but we don't want people to get too high expectations of what is possible to do”

Another main issue that the interviewees brought forward was that residents need to understand and adapt to the administrative organization. We found that there was confusion about how administrative machine works and about local policies content.

*Second group of interviews: clerks of Skärholmen (such as urban planner, communications officer) and Citizen Counsellor*

We talked to several clerks working with different types of dialogue in various parts of the district. We found that there is plenty of expertise in the field of citizen dialogue already existing in the district and a wide range of ongoing initiatives targeting the residents of Skärholmen. This means that dialogue between citizens already exists, what is missing is the dialogue with politicians.

Some thought provoking quotes from our interviews:

“A participatory process would help the politicians gain legitimacy in their office. If they are smart, they will use it more” (Urban Planner, 2020);

“It is up to the politicians to try to meet their residents. Not only by sitting and waiting for residents to come to the meeting” (Citizen counsellor, 2020);

“The contact through existing organizations works the best” (Communications officer, 2020).

*Third group of interviews: citizens*

During the four months of group project, we had the possibility to meet and interview a lot of people. Through personal interviews at the beginning and then by surveys, we were able to discern nine different categories of attitudes towards local democracy and dialogue:

- **Lack of trust in Politicians:** This group was initially scornful about politicians, but as the interviews continued, a common denominator was that they all wanted the politicians to be more present in the neighbourhoods and talk to them. Another theme that came up with this group was the lack of feedback from politicians: “I see them writing down my opinion, like you do now, but what happens next?”.
- **Wants to participate but have no method and knowledge:** This is a very large group of people from all neighbourhoods in the district. This is a group that wants to be part of the development and has many ideas for what they would like to happen, but they don't know how to have an impact or affect change: “No one asked” was an answer of a citizen. The will of helping and participating is strong, but there's no way of dialogue. At local level the department should exploit the existing dialogue channels or create new ones in order to catch the huge opportunities and the several advantages coming from citizens. But we will see this point in the next paragraph.
- **Already knowledgeable:** This was a small group of people working in collaboration with the district, and thus already aware of the possibilities of having an impact on the neighbourhood.
- **Indifference:** People in this group do not want to engage or to have an impact, even if they had a simple way to do so. This was not a very big group.
- **Feels abandoned and not treated equally:** everyone should be treated the same. This group reflects a problem of inclusiveness.
- **Uses alternative ways to have an impact.** This group is already engaged in the local community, in religious groups, interest groups, groups on social media. These people



are using existing forums of dialogue, but these forums seemed rarely to be connected to the local political level (That's why politics should use the right channels. For example, they could upgrade and start to use digital tools for engaging more citizens. They are in different levels of communication). At local level for example, some citizen instead of using the board public and administrative meeting to share its ideas, was using other platforms such as social networks. This can represent a problem because citizens' ideas and needs don't reach public authority and therefore can't be used to improve and develop the city. There should be one common channel of dialogue.

- More important issues in their mind: for many people the most important issues that they talked about were the violence, drug dealings and gangs hanging out at night in the district. Any relevant dialogue would have to be about these problems.
- Loves the community and thinks that outsiders and/or media spoil the beauty of their neighbourhood: in this group, there was an emphasis on the very special sense of community and caring for one another that exists in the neighbourhoods within the district, and annoyance with the negative image of the district portrayed in the media.
- Satisfied and happy: a group of residents who were simply happy and satisfied with their neighbourhoods and therefore saw no need to engage. "Why change a winning concept?".

#### *Fourth group of interviews: politicians*

We interviewed politicians from Skärholmen and we sent a survey to whom eight local politicians filled it out. At local level, most of politicians has another main job alongside politics, in fact, time was a constant problem among politicians. These are the main insights we found:

- First of all, politicians don't have time for dialogue with citizens. This was the common answer we received from most of our interviewees. One solution is that politicians find space and time for citizens; another solution is to find a channel that doesn't ask too much time to politicians and let people share their ideas.
- Sara Grolander, together with other her colleagues, is aware of the potential of dialogue but she doesn't know where and how to start. In the survey, half of the politicians answered that citizens' perspective is always important in decision making and gave 10

points out of ten for the importance of citizen dialogue. “It is very hard to get the right questions to the right people at the right time” (Sara Grolander, 2020).

An intuitive and efficient channel for dialogue should be the first step at local level. This fact underlines the lack of communication between citizens and local politicians, or at least that there could be more dialogue. The second most important thing that Sara Grolander noticed represents one of the most important advantage civic engagement can bring: civil society’s current needs and problems. We will discuss better and deeper in paragraph 4.2, but one role of civic dialogues is to let government know about current needs in order to create a more aligned industrial policy and to better implement it.

- People participating the board meetings are not representatives of citizens (and most of the times are just angry citizens). “An ideal citizen dialogue would be many smaller meetings with the right people to answer the questions that arise. More focused smaller meetings around specific subjects. But it is also hard to open up for dialogue if there is no room to actually implement the ideas”. The structure of the meetings must fit participants’ habits. Someone is aware that the board meeting is not the most adapt channel to have dialogue through. Some politicians did want to become a more efficient link between citizens and the government but has no way to do so.

The existing channels are not working. From the interviews we can notice that the current channel of communication at local level is not working neither for politicians, nor for citizens. To confirm it, five over eight politicians gave 5 points out of 10 for the level of satisfaction with the current board meetings. The other three gave 3, 2 and 1 point respectively.

- New politicians have no clear ideas of how board meetings work at the beginning and about citizens dialogue either. Not only citizens must be educated to participate and be proactive, but also politicians must be educated about their job, the importance and potential of dialogue and to be a present part in the community. In the survey, 5 politicians over 8 answered they didn’t receive a proper training or education in citizen dialogue, while five declared that would be interested in it.

At the question “What changes would you like to make to the current citizen dialogue in Skärholmen?” some worthy answers were:

“I think they should reach out broader and to more citizens. Go where people already are instead of expecting them to come to a meeting”;

“To begin with, it's very limited. Build trust by listening to local voices outside the municipality building and taking them into account in decision making. Take on a balanced chairing of the meetings so that no participants feel discriminated during the open session. Create spaces where citizens can meet and develop their ideas in order to mobilize their power to change. Use social media to announce the possibility for contributing with citizen suggestions, and the meeting dates and where they take place”.

### *Observations at several board meetings across Stockholm*

These visits allowed us to observe and experience the meetings from the perspective of our three main stakeholders (the residents, politicians and clerks) and see local differences in the way the meetings are organised. Our main finding was that the setting of the meeting demands a lot from the residents: firstly, they are expected to come to the meeting at the designated time and location, which are often not properly and timely advertised → dialogue should be easy, transparent and accessible; secondly, these documents are written in formal Swedish and quite difficult to access → hard sharing of information; lastly, residents need to make sure their questions fall under the district's jurisdiction. For many residents, the distinction between district's and the city's responsibility can be quite hard to understand → public administration, government and local policies, bureaucracy should be clear and easy to understand.

## 4.2 Confirmation by literature

### *Lack of trust in citizens*

The first problem we find reading Beyond Words' group project is the lack of trust in citizens. This issue shouldn't exist because people have the capacity, willingness and conditions to contribute to innovation. Innovation is reliant on people's capacity and conditions to develop new ideas and implement these in new solutions that change society, both on smaller and larger scales. In the Research policy bill 2017-2027, we find a strong connection between research and society because they can find societal solutions working together (paragraph 2.2.2).

To utilize the capacity and power of initiative of the entire population is therefore the starting point for a powerful innovation strategy (The Swedish Ministry of Enterprise, Energy and Communications, 2012). In fact, one of the three main principles inside the Swedish Innovation Strategy is the "implementation of the strategy based on a holistic view". It attests that for an effective implementation of an innovation policy there must be developed coordination between policy areas and policy levels; dialogue with actors in industry, the public sector and civil society; and a process of continuous learning. Sweden, therefore, in order to implement its innovation policy at the best, knows that it must strengthen dialogue with civil society as well. Citizens are seen as an incubator of ideas that can help innovation and development in a country. Moynihan (Alta Foscher) asserts that from citizens come up "innovative solutions to public problems that would have not emerged from traditional modes of decision making". Regarding Sweden, the government does believe that people have the knowledge, skills and expertise to contribute to innovation. The population's willingness to change and the capability to quickly adopt new solutions are factors that benefit businesses' innovation capacity, just as in the public sector and civil society. Knowledgeable and well-informed citizens, users and consumers are significant driving forces for innovation. The capacity to involve people in co-creation and open innovation is therefore even more important. Active involvement of users and consumers in innovation processes is facilitated via new social tools and digital platforms, among other things.

### *Communication channels*

New ways and tools to involve users and citizens in innovation processes and discussions, is strictly linked with a second problem we found during our project: the channels to involve people play a fundamental role. It's a government's task, both at local and national level, to find or create a forum-platform for dialogue. As we found out, at local level a main problem was that there were many existing ongoing dialogues between citizens, but they didn't reach politicians or, in a government point of view, policy makers. Without reaching politicians, all the potential ideas and information about current needs can't arrive at government level. In this sense each country, while developing industrial policies, should facilitate and promote conditions for citizens to contribute to innovation. To do so, the government can either exploit the existing channels already used by citizens or can implement and create new ones according to population's habits. As we found out for example, very few people were going to physical board meetings even if they concerned their own city. This happened because people were already discussing problems and issues regarding Skärholmen through other channels (local community, in religious groups, interest groups, groups on social media). Along with the creation of functioning venues for dialogue, each state should create coordination between different areas as well as between local, regional, national and international levels. Collaboration at several different levels of the public sector system is needed from the local and regional to the national level. As explained in the Swedish Innovation Strategy, the regional level plays a vital role in the implementation of the strategy for new industrialization, not least through its proximity to the industrial sector.

As we saw in paragraph 2.2.3, Sweden tries to increase communication regarding innovation policies through the implementation of the National Innovation Council. We know that it has already had its successes.

### *Inclusiveness*

Another problem we found interviewing citizens, was the feeling of inequality and abandonment. Inclusiveness in a society plays an important role: when people move between workplaces, regions and countries across the world, the opportunity to develop and combine knowledge, skills and experience increases. Innovation and creativity also benefit from meetings and collaboration between people of different genders, ages and

ethnic origin. An open, inclusive society that welcomes people's mobility and utilizes their differences is therefore of fundamental importance to innovation. This is crucial in a global and fast-paced society, in order to take advantage of all sources of creativity, innovative ideas and the capacity for change.

*Lack of information, transparency, legitimacy and trust in politicians*

Other main insights that we notice reading the project, can be gathered together because are strictly connected: lack of information from the government toward citizens and vice versa; lack of transparency (presence of confusion about how administrative machine works and about local policies; no feedback from local politics and therefore no communication); lack of legitimacy; lack of trust in politics in general.

Information plays a fundamental role because through dialogue channels, it can bring transparency, accountability, legitimacy and trust in government.

Working dialogue → Information sharing → Transparency and accountability → Legitimacy and trust in government

Strong local media services and social media are fundamental in order to share information among citizens (to inform them of resource decisions, events on budget calendar, outcomes of processes) and for their participatory and involvement. The access of information, that must be provided in accessible formats in a timely manner, is the basic for transparency of national and local programs. Effective access to local public information and institutionalization of participation mechanisms create a virtuous circle based on relationships of trust that, in addition to giving legitimacy to the actions of local authorities, reduces the gap between the local state and society thereby strengthening relations not only among civil society actors but also with the local government, the private sector and among the various citizens' groups (Manroth, 2014). One of these factors is the availability of timely, user-friendly, reliable, and comprehensive information, a pre-condition for effective civic engagement. This underlines why a working and proper channel of dialogue is fundamental. Trust is increased also by public participation. Participation helps to enhance governmental legitimacy, improve outcomes

of macro-economic policies and raise the frequency and quality of governmental responsiveness (Manroth, 2014; Brinkerhoff, D. W. and Goldsmith, A. A., 2003).

Concerning the three main government failures within industrial policies, during the formulation of industrial policies, we find one of the main government failures: in democratic countries policy makers need political consensus, therefore, they may be driven by external groups as we already know. Civic engagement brings legitimacy to the government, transparency, consensus and reduce the risk of favouritism towards lobbying groups. Di Tommaso, in an article he's currently writing, finds a possible solution in communication with society and stakeholders. A good external flow of information, regarding the policies, helps citizens to better accept changes in their life and economy habits and create transparency and trust among citizens (voters).

Getting more participation results also in better creation of state policies and better implementation: policy creation refers to citizens entering into a dialogue that shapes policy content and to whom the policy is directed. Policy implementation refers to citizen engagement in the way policies are eventually put into practice by administrative bureaucracies (Cooper, 2006). More citizens participation in planning, budgeting, delivering means also more accountability for clerks and politicians and it brings to less corruption and more efficiency and effectiveness. This is how civic engagement may solve the second government failure of self-seeking bureaucrats. With participation there's more control and less incentive to operate for personal interests. Moreover, good connections between governments and citizens increase willingness of civil society to work with the government increasing the acceptance of policies (Brinkerhoff, D. W. and Goldsmith, A. A., 2003). By enhancing transparency and accountability, it helps to build legitimacy and to increase again trust in government. This helps to manage citizens' expectations, build ownership of development processes, and encourage compliance with policy decisions.

As we understood, trust has a main role: trust in the public sector organizations among citizens, businesses and users, is at the centre of a functioning society. In order to protect and strengthen it, public sector organizations must focus on users' different needs of and conditions to use public services. In Sweden, there are good conditions for public services to benefit from involving citizens and users. In a developed e-government, for instance, there is a great potential for new solutions that facilitate citizens and businesses' daily

communication with the public sector. A developed e-government will contribute in making the public sector more open and to work more efficiently and offer services which are easy. The target is a more open and smarter public sector which supports innovation and participation (Swedish Innovation Strategy).

The importance of local government for citizen's trust and participatory is crucial: if local government doesn't succeed in engaging citizens, in both human resources and systems, in planning, budgeting and managing the delivery of public goods and services, along with facilitating civil organizations, all the benefits coming from a good civic engagement won't arrive at government level. Everything starts at local level, from local politicians and clerks. A strong local capacity helps also to develop civic society advocacy.

### *Civil society's needs*

As we already said above, civil society can play a role in identifying needs for pushing politicians to respond appropriately; highlighting problems with quality, efficiency and resource management, including corruption; providing information about how well the system works through service-monitoring and user feedback (Hossain, 2018); increasing inclusiveness; sharing ideas and purposes for innovation. Among all the role of civil society, the identification of needs plays a crucial part when we talk about government policies. Alta Fölscher attests in "Participatory Budgeting" edited by Anwar Shah, that civic engagement in public affairs can increase state effectiveness. When citizens have the opportunity to make their needs known and hold public institutions to account, public resources are likely to be used more efficiently and to deliver public goods and services that are better aligned with citizens' needs. Local communities have the best knowledge of their needs and preferences and of local conditions. This opportunity to share societal needs, represents a solution to the information problem: increasing civic engagement reduces information asymmetry between firms and the state, along with increasing the amount of information that policy makers can use while formulate a government policy. Since public services and public goods are better aligned with citizen's needs, public resources are more effective and efficient. Citizens participation reduces information gap between national and local level, increasing government effectiveness (Alta Fölscher in Anwar Shah, 2007). Moreover, Anwar Shah states that with citizen participation during the policy creation, measures will reflect local context, needs and realities.



Efficiency means both “doing the right things” and “doing them in the right way”. “The right questions to the right people at the right time” (Sara Grolander, 2020). This is what you we obtain through local civic engagement!

## Conclusion

Reading “Industrial policies for innovation: the role of civic engagement. A case study on Sweden” we get a clear idea of industrial policies overview: their main qualities and concerns. On the one hand we know that industrial policies are an efficient tool to achieve growth and development, on the other side we know that government can face three main issues when formulating and implementing industrial policies: policymakers might be driven by particular interests and not by societal needs, and there might be lack of information or information asymmetries that government is not able to manage and overcome.

Literature finds possible solutions for the information problem in an improvement of the organizational design: this would lead to a less information asymmetry between the top-decision makers and the low-level decision makers, and between the states and other agents. The new design should create a balance between efficiency, coming from a centralized structure, and a major rationalization of policymakers coming from a greater flow of information in a more decentralized structure. Regarding interest-group problem, Peltzluan (Chang, 1994) argues that the main reason is that smaller-number groups make collective actions easier. Lobbying groups are better organized to communicate their needs to policymakers and therefore have more chance to influence them. Consumers should organize themselves in order to communicate with government in a more efficient way. Eventually, concerning the self-seeking-bureaucrats problem, we understood that the realisation of bureaucratic personal interest through overprovision of public goods and services depends on the institutional setting and the political process around the bureaucracy. Changing the institutional setting and the political process around the bureaucracy, would reduce their chance to seek personal interests.

Chapter II, precisely paragraph 2.2.3, presents the element of discussion concerning industrial policies for innovation. The Swedish National Innovation Council (NIC) represents the proof that a wider discussion, which includes also civic engagement represented by unions, brings improvements on innovation policies.

In chapter III and IV, where I focused more on the role of civic engagement rather than broad discussion, we learn that the main insights (positive and negative factors and evidences in general) regarding local political engagement are: lack of trust in citizens; the importance of communication channels; lack of inclusiveness; lack of information,

transparency, legitimacy and lack of trust in politicians; the role of civil society's needs. The case study represents a further confirmation of the importance Sweden gives to civic engagement.

From these insights we gathered through the case study, chapter IV gives reasons on how the main issues existing in local political context can be solved and how civic engagement can solve government failures regarding industrial policies for innovation. The first problem regarding policymakers seeking consensus in democratic countries can be solved by civic engagement that brings legitimacy to the government, transparency, consensus and reduce the risk of favouritism towards lobbying groups. The second government failure of self-seeking bureaucrats can be solved because more citizen participation in planning, budgeting and delivering means also more accountability for clerks and politicians and it brings to less corruption and more efficiency and effectiveness. With participation there's more control and less incentive to operate for personal interests. Concerning the last main failure, the information problem, civic engagement gives the opportunity to share societal needs, reducing information asymmetry between firms and the state, along with increasing the amount of information that policy makers can use while formulate a government policy. Local communities have the best knowledge of their needs and preferences, therefore when there is civic engagement, public services and public goods are better aligned with citizens needs and therefore public resources are more effective and efficient. Citizens participation reduces information gap between national and local level, increasing government effectiveness in general.

In conclusion, even if Beyond Words is not directly linked with industrial policies, it enabled to understand aspects that can be used and extended in larger scale such as industrial policies for innovation. "Industrial policies for innovation: the role of civic engagement. A case study on Sweden" gives the confirmation that a space for civic engagement in the governance of industrial policies, can play a fundamental role in providing improvements. This thesis wants to represent an element to foster new researches regarding the role of civic engagement and, more broadly, regarding new solutions to improve industrial policies use and to reduce their weaknesses.

Due to the time, I didn't deepen topics that I would have liked to. The argument is huge and complex. In future it would be interesting to do more research about:

- the role and achievements of the National Innovation Council over the years and its possible use in other countries. It is a relatively young council (since 2015) so in the following years we have the possibility to study and measure its effective role. Even though, we already have some witnesses about its first positive results.
- Whether all the insights and findings I presented in this thesis, regarding both local and national level, could be applied outside Sweden, and trying to understand which features of the context and background affect and influence the most the results we found (e.g. gender equality, lifelong learning programmes, high level of wellbeing, etc.). Therefore, whether the effectiveness and the positive results we found giving space to civic engagement inside the governance of industrial policies, are seriously affected by specific context characteristics.
- Starting from the assumption that civic engagement has an important role inside the governance of industrial policies, studying how to balance this further element of decentralization with the equilibrium between top-down and bottom-up processes.

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