

MAJOR GROWTH
in the tech industry

TECH IS A BASE FOR DEVELOPMENT
– of other businesses

SWEDISH EXPORT
relies on tech

A REPORT FROM SWEDISH IT AND TELECOM INDUSTRIES

Tech – Sweden's new basic industry



CONTENTS TECH – SWEDEN'S NEW BASIC INDUSTRY

PREFACE

Tech has become a new base for the Swedish economy	4
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DEVELOPMENT TRENDS AND NEW MARKETS

The tech industry is growing and evolving	6
--	---

An expansive industry that lays the foundation for new markets	8
---	---

The degree of digitalisation in business is varying – but increasing	10
---	----

The tech industry is growing	12
-------------------------------------	----

INDUSTRY POSITION

Tech is transforming and increasing the competitiveness of the Swedish economy	16
---	----

A new Swedish basic industry has emerged	16
---	----

The development of the tech industry compared to traditional basic industries	18
--	----

INTERVIEWS IN TECH

Voices from Sweden's new basic industry	30
--	----

Reference list	40
-----------------------	----

Other sources	40
----------------------	----

Tech has become a new base for the Swedish economy

Innovation and new technology have always been forces driving societal development forward. Digitalisation is now one of the strongest factors for change. The tech sector has become an increasingly important part of society, a prerequisite for our economic development and for how we live our lives. The tech industry – our new base for the Swedish economy – is broad, and larger than what we traditionally have referred to as IT and Telecom. It also encompasses businesses in, for example, computer games, health (HealthTech), finance (FinTech), and the school (EdTech).

The foundation for Swedish prosperity was historically laid largely through our ability to extract and refine raw materials like iron ore and forest. The industrial revolution, fuelled by electrification, as well as the development of the service sector, fundamentally changed our society. Digital and technological development has increasingly affected – and is affecting – our economies and societies, and we are now talking about a fourth industrial revolution.¹ Characteristic of this fourth revolution is the digital raw material in the form of data, which increasingly contributes to innovation and adds great value. The use of data and technology is also a basis for sustainable societal development and for our ability to live up to the global sustainable development goals of Agenda 2030.

Technology is all around us, and with us, all the time. Most of us carry a smartphone with constant internet connection in our pocket. Shopping, booking travel, or performing bank transactions digitally has become so common that we no longer think of it as the radical change it is. A car made today can have dozens of computers and advanced cameras controlling performance, safety, and energy consumption. In the technology industry, tech has become an indispensable part of product content and automated processes, and robots are a basic prerequisite for growing e-commerce.

The tech industry enables the development of other industries. It is not just the traditional industries that are changing but also the service sector in general. And in the boundaries, new disruptive markets with high digital content emerge, such as foodtech and cleantech. The tech industry is dependent on both traditional and new markets advancing, and on strong partnerships.

The establishment of the tech industry as a new base for the Swedish economy is most clearly seen in its contri-

bution to GDP. Since 1981, the industry's contribution has grown by 1,300%, and, in 2020, it amounted to SEK 281 billion. The industry's contribution to GDP in absolute numbers is almost as large as the contribution from the traditional Sweden basic industries combined.²

Sweden relies on exports, and, in 2020, our export of goods and services amounted to a value corresponding to 44% of GDP.³ The tech industry's contribution to Swedish export has increased by nearly 1,200% since 1998, totalling SEK 140 billion in 2020. This corresponds to over six percent of Sweden's total exports. Traditional basic industries, such as paper, pulp and wastepaper, metals, and plastics and rubber accounted for just under five, four, and two percent respectively of total exports in 2020.

In addition, the industry's direct contribution to employment has increased. From 2010 to 2018, the number of employed in the industry increased by 29,600 people, which is an increase of about 15%. The IT-intensive sectors accounted for over 60% of new jobs created in Sweden between 2006 and 2016.⁴ In 2018, the industry employed a total of more than 216,000 people. The Swedish Public Employment Service estimates that 21% of today's hours worked in Sweden will be automated over the next ten years, corresponding to a little more than one million jobs. Meanwhile, automation and various societal trends are expected to generate 1.3 million new jobs by 2030.⁵ In order to be a job-creating force, the tech sector, as well as other parts of society, need increased access to digital competence and enhanced digital maturity.⁶

Even before the corona pandemic, we were in the middle of a strong structural transformation driven by digitalisation and technology. This development has been accelerated, and great digital strides have been made. However, much of digitalisation, its societal benefits and value to the economy, still lies ahead of us. In order to capitalise on all the potential that exists, we need a world-leading tech sector in Sweden. With this report, Swedish IT and Telecom Industries want to highlight the great values that the tech industry brings to society. Moreover, the value added by the industry is increasing. We urge policy makers, government agencies, academia, and other key stakeholders to safeguard this important industry. Tech has become a vital enabler and basis for sustainability, competitiveness, employment, and prosperity. Tech is Sweden's new basic industry.



Åsa Zetterberg
Managing Director
Swedish IT & Telecom Industries



"Technology is all around us, and with us, all the time."

Åsa Zetterberg

¹World Economic Forum, Fourth Industrial Revolution.

²The total sum in absolute numbers for the traditional Swedish basic industries of Agriculture, Forestry and Fishery, Mining and Quarrying, Wood Products, Pulp, Paper, and Printing, and Rubber and Plastics to SEK 293 billion in 2020.

³Ekonomifakta. Export och import över tid (Exports and imports over time). 2021.

⁴OECD - Measuring the digital transformation (2019)

⁵The Swedish Public Employment Service. Automatiseringen på den svenska arbetsmarknaden (Automation in the Swedish labour market). 2020.

⁶Forskning.se. Digital kompetens - en bristvara inom offentlig sektor (Digital competence - a scarce resource in the public sector). 2021.

DEVELOPMENT TRENDS AND NEW MARKETS

The tech industry is growing and evolving

The tech industry can be broadly divided into four sub-industries: Software and IT Services, Telecommunications and Infrastructure, Hardware Manufacturing, and Sales and Service.

Software and IT Services is a broad subindustry of products and services that includes all software, all computer programmes, and digital solutions.

The subindustry Telecommunications and Infrastructure includes the physical infrastructure and the services that uphold it (electronic communications services and electronic communications networks).

Hardware Manufacturing, in turn, encompasses the manufacture of computers, network equipment, mobile telecommunications equipment, and other components.

The fourth subindustry, Sales and Service, includes, among other things, service of hardware and software products as well as the actual sales functions to private consumers and businesses.

The above subindustries constitute the IT and telecom-intensive part of the tech industry. In addition to these subindustries, tech companies can be found in many other industries. The exact scope of the industry is thus probably grossly underestimated.

TECH INDUSTRY STATISTICS

The tech industry statistics in the report are based on select SNI codes: 26, 42, 46, 58, 61, 62, 63, 82, and 95 at a five-digit level.

The delimitation likely underestimates the scope of the broader term "tech industry", for example regarding products and services in industries that emerge in the boundaries between the traditional IT and Telecommunications industry and other traditional industries.



An expansive industry that lays the foundation for new markets

The tech industry is both producer and supplier of goods and services and is a basic prerequisite for businesses in other industries to function and develop. Some of the main reasons for companies to go digital include the opportunity to increase productivity, create new offerings, reach new markets and customers more easily, and reduce internal costs. This way, they can create new businesses and jobs that benefit the entire economy.⁷

But the impact of the tech industry is greater than that. As traditional industries and sectors are increasingly digitalised, using more and more technology, opportunities arise for the emergence of completely new markets in the tech industry. There are already several established markets that have formed in the boundaries between the traditional IT and Telecom industry and other traditional industries. Thus, the tech industry not only drives progress in traditional industries but also gives rise to completely new markets in connection with them.

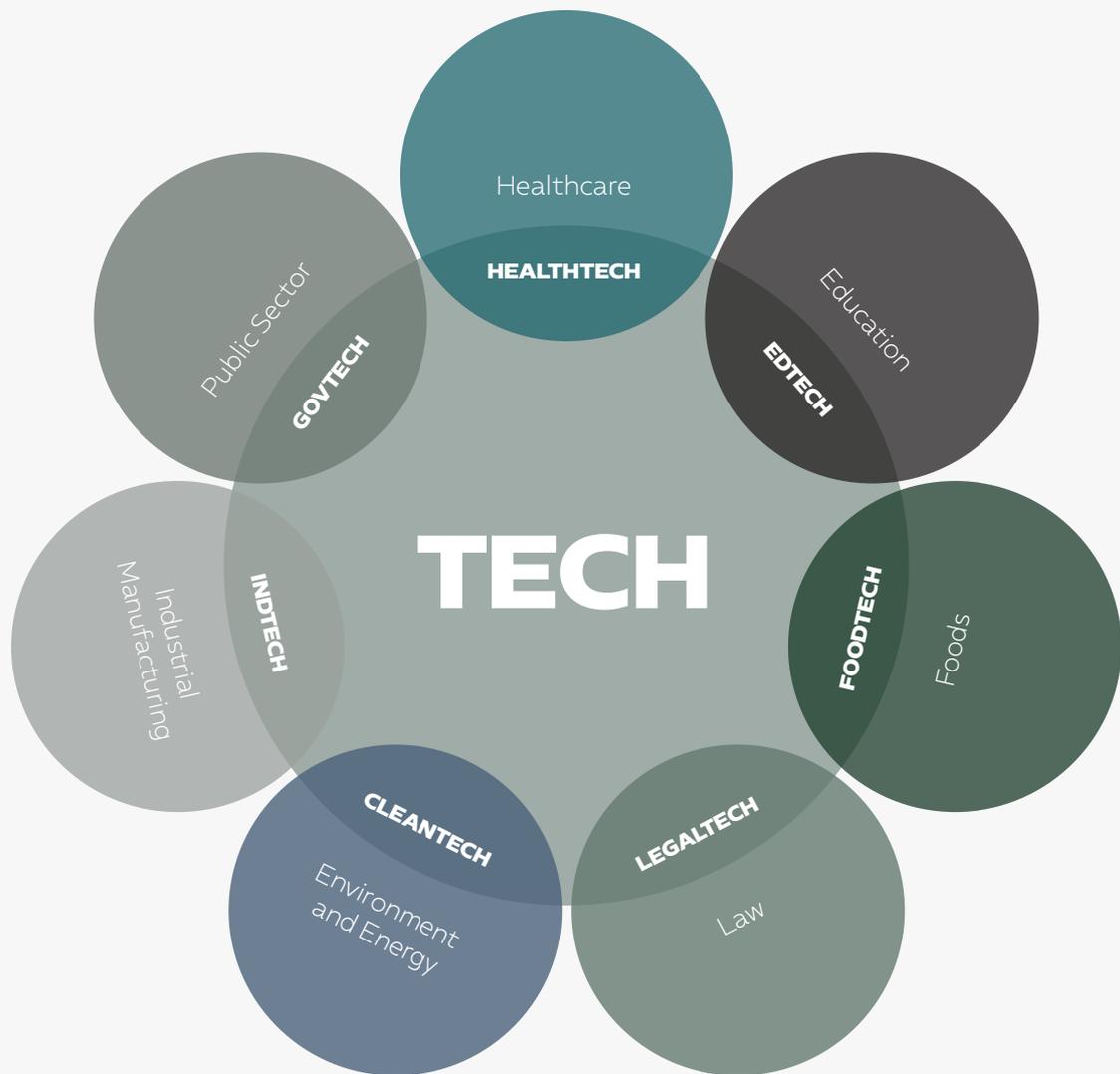
Digitalisation and increased use of technology in the education sector have led to the emergence of EdTech. High-tech development, along with the need for a better and more efficient healthcare, have laid the founda-

tion for HealthTech. Data is also a prerequisite for the industry's use of AI technology, robotics, and automation for more profitable and less resource-intensive production, which has laid the foundation for IndTech. Even in law, development takes place in the form of increased digitalisation of business law services, LegalTech. In the food sector, the influence of tech has contributed to FoodTech, which has transformed all parts of the value chain, from production of new, sustainable foods to digital services for delivery. CleanTech, in turn, which is adjacent to the field of environment and energy, brings together all processes, products, and services that reduce negative environmental effects through, for example, energy efficiency and sustainable use of resources.

The technical innovations developed by private companies in the tech industry also have a transformative effect on the public sector, not least through the significant digitalisation that is increasingly taking place among public actors. Another new market, GovTech, is emerging in the boundaries between the tech industry and the public sector to meet the needs for technological solutions in the interface between citizens and authorities.

⁷ Swedish Agency for Growth Policy Analysis. Digital maturity of companies 2018-2019.

A selection of new markets in the borderlands to traditional industries



The degree of digitalisation in business is varying – but increasing

The impact of the tech industry is greater than just its own contribution, as it constitutes a prerequisite for the digitalisation of other industries and thereby society.

The figure shows how far various sectors in Sweden have come in terms of digital maturity, weighted based on an index among OECD countries.⁸ The measurement is based, among other things, on how individual companies in various sectors use a number of different technologies, the number of employed IT specialists, whether their own staff perform functions like IT operations, software, development of business systems or web solutions, and what features are offered on their websites.⁹ Information and communications companies are naturally at the forefront of the digitalisation process and rate well above the average for all sectors. The

sectors for energy and recovery, commerce in terms of motor vehicle service workshops, and real estate companies and managers are also above average.

Another measure of digitalisation is the use of IT services and IT equipment. This use has increased markedly in several major industries in recent years.¹⁰ At transport and warehousing companies, for example, the proportion of employees using computers to perform their tasks increased from 38% to 62% between 2014 and 2019.

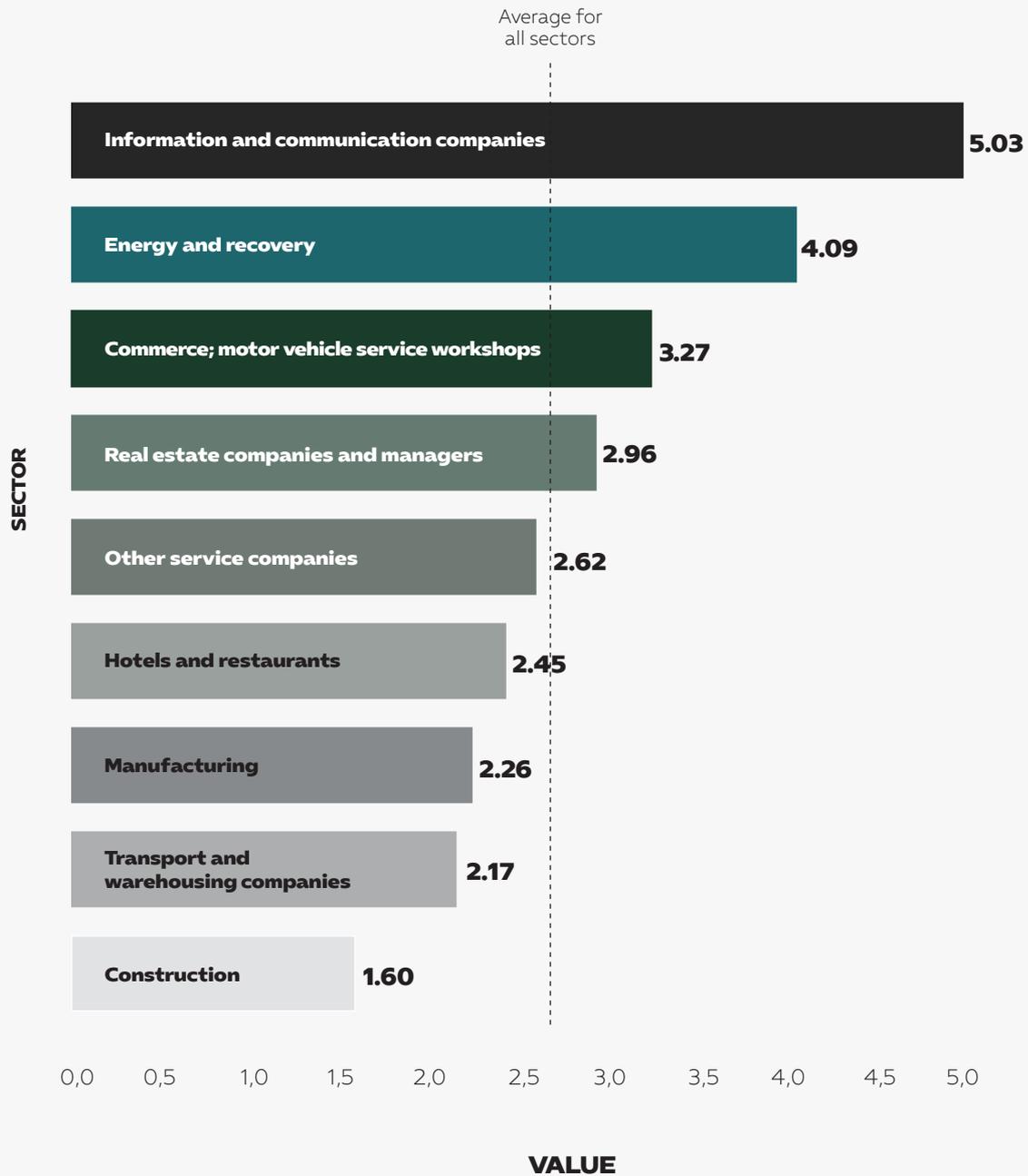
Spending on IT products and IT services also provides an indication of the degree of digitalisation in the business community. This spending doubled between 2017 and 2019, and the spending on software specifically in-

⁸ Swedish Agency for Growth Policy Analysis. Företagens digitala mognad 2018 (Digital maturity of companies 2018). 2019.

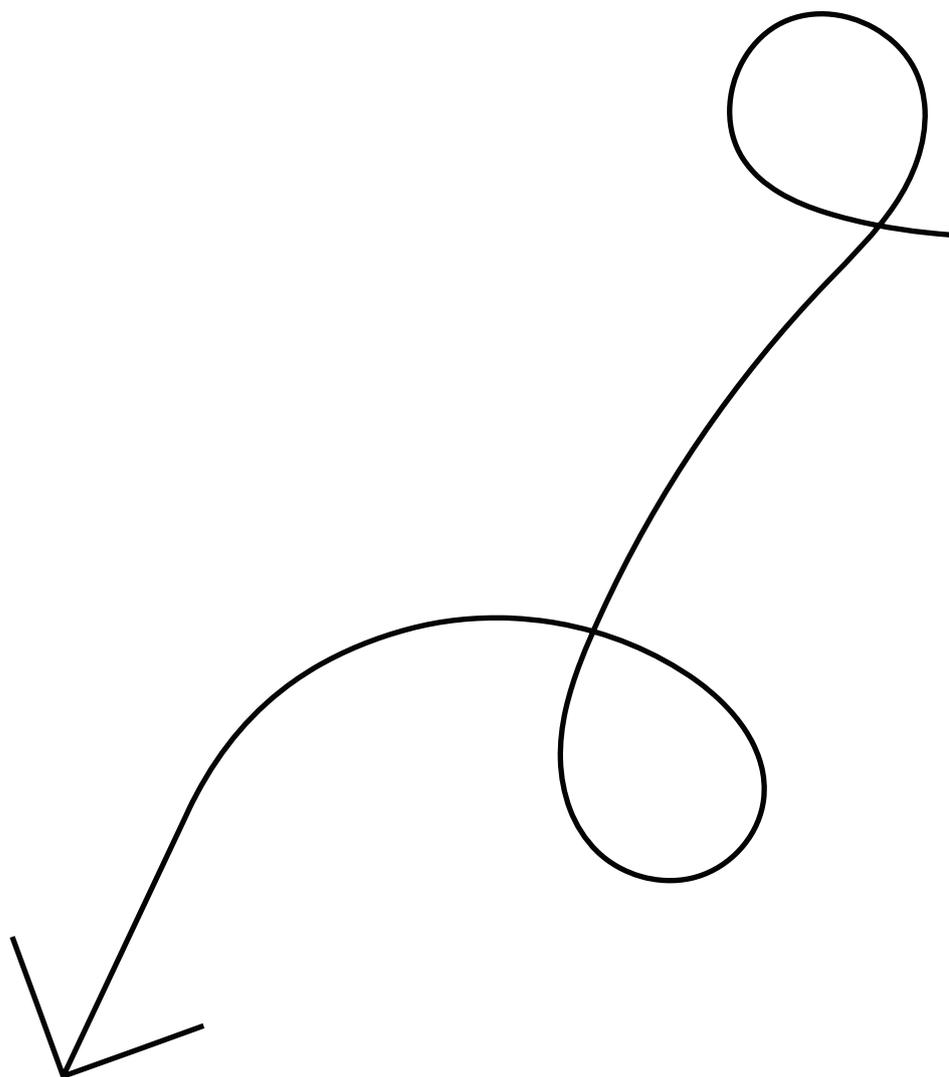
⁹ Maximum value 12.

¹⁰ Statistics Sweden. IT-användning i företag (IT use in companies). 2020.

Digitalisation value per sector 2018



Source: Calculations from the Swedish Agency for Growth Policy Analysis based on microdata from the Statistics Sweden survey on IT use in companies.



Techbranschen växer

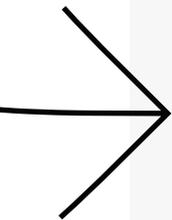
The chart on the next page shows the number of employees in the tech industry in Sweden, which increased by 29,600 people between 2010 and 2018, corresponding to 15%. In 2018, a total of 216,300 people were employed in the tech industry, and the industry accounted for 4.6% of employees in Sweden.

The subindustry Software and IT Services alone accounted for the largest increase in employees from 2010 to 2018, 49,100 people, which is a 50% increase. From having just over half of total employees in the tech industry in 2010, 68% of employees worked in the subindustry Software and IT Services in 2018.

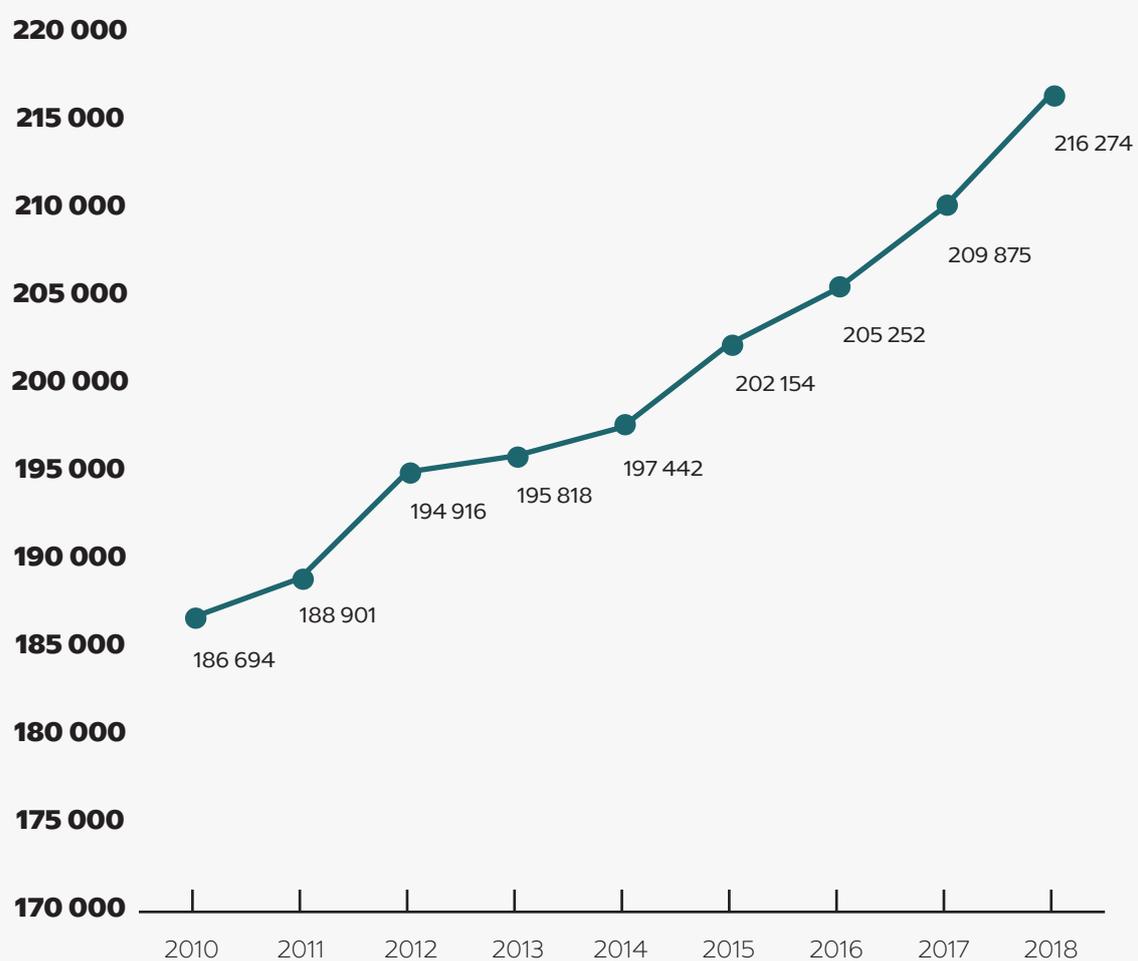
In addition, the number of companies in the tech industry increased by about 8,200 between 2010 and 2018 – an 18% increase. This is higher than the growth of companies in the business community in general, which was 16% during the same period. In 2018¹¹, the tech industry was made up of a total of a little more than 51,500 companies, representing about 4.5% of all companies. The increase has been mainly in the area of Software and IT Services, which accounted for about 95% of all new companies. 97% of the companies in the industry in general have 0–19 employees.¹²

¹¹ Statistics Sweden. Företagens ekonomi 2018 (Economy of companies 2018).

¹² Relates to 2018.



Number of employees in the tech industry 2010–2018



Source: Statistics Sweden

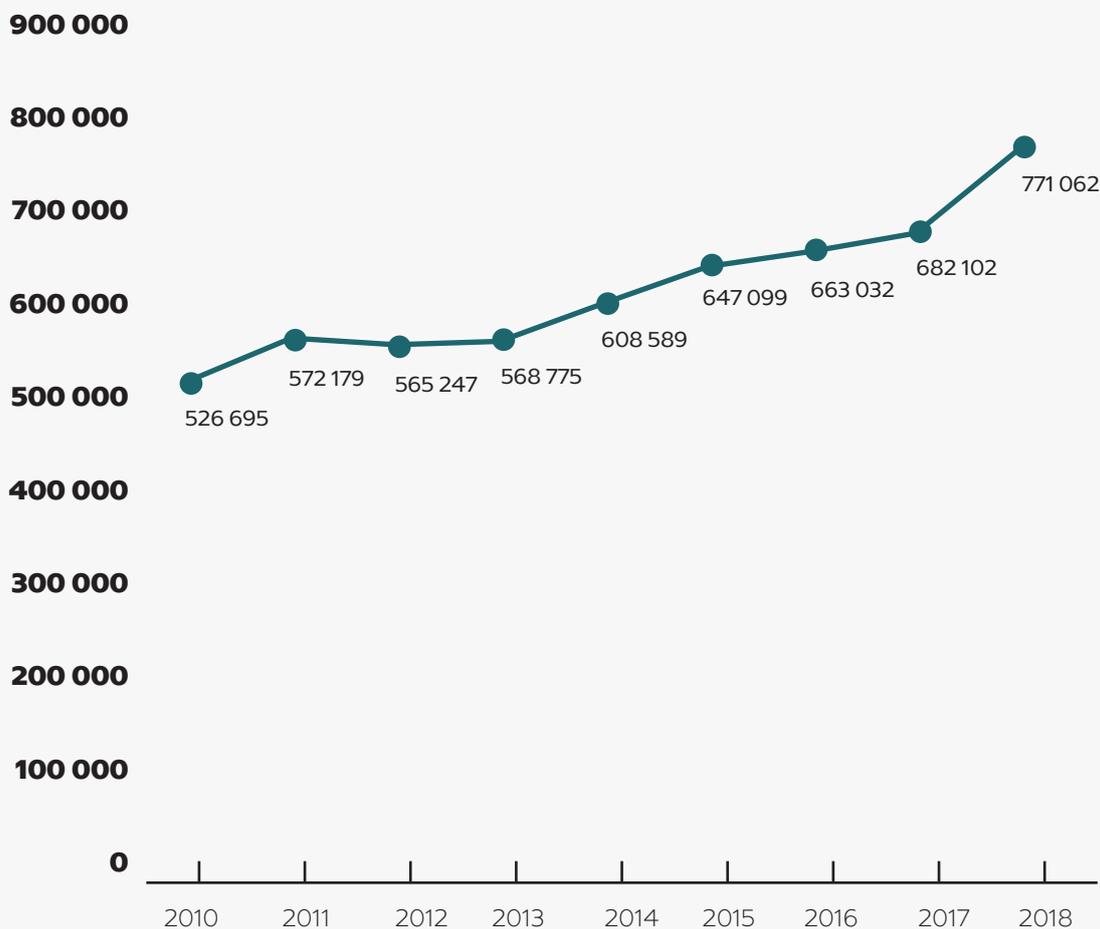


The chart below presents the sales trend in the tech industry between 2010 and 2018. During this period, sales increased by over SEK 244 billion and, in 2018, sales amounted to SEK 771 billion. This corresponds to a 46% increase.

The subindustry Software and IT Services drives development, increasing its sales by over 240% during the period. From 33% of total sales in the tech industry in 2010, it accounted for nearly 55% in 2018.

Tech industry sales 2010–2018¹³

In SEK million.



Source: Statistics Sweden

¹³ The chart is based on SNI codes at a two-digit level since there is no available data at a five-digit level. The actual contribution of the tech industry is thus underestimated.

INDUSTRY POSITION

Tech is transforming and increasing the competitiveness of the Swedish

A new Swedish basic industry has emerged

As society has evolved and turned increasingly high-tech, with needs for climate adaptations, the need for the tech industry and its products and services has increased significantly. They are such an integral part of our economy today that it is difficult to imagine society without them. The tech industry has not merely contributed to Swedish export, generated jobs, and allowed for innovations and new solutions in society. It has turned into a foundation in the Swedish economy, providing solutions and services that generate growth and productivity in all industries. Since the industry's indirect effects in the form of jobs, growth, products, and services in other industries are difficult to quantify, the contribution of the tech industry to employment, GDP, and export will probably always be underestimated.

At the same time, the development of the tech industry is only in its infancy. New products and services, such as different solutions linked to artificial intelligence (AI), 5G, and the Internet of Things (IoT), are being implemented at an increasing pace in sectors like healthcare, education, energy, and heavy industry. Its contribution to overall societal development is extensive, yet most of its development still lies ahead of us.

Sweden's historical prosperity development is based on growing industries. Industries that refine raw materials represent a vital part of the country's business community, generating export revenues and jobs around the country. Based on its role for our modern and innovative society of knowledge, the tech industry has emerged as

a new basic industry, refining and protecting digital raw material in the form of data, and offering smart products and services. How good we are at extracting and refining this raw material will play a significant role for our future growth and competitiveness. Good interaction between the tech industry and other industries is and will always be crucial.

We live in a connected society that generates massive amounts of data. More and more of what we do in our personal lives, at work, in the business community, and in the public sector relies on the access to data and data-driven products and services. Data, along with technology like artificial intelligence (AI) and new capacity in the form of 5G, broadband, cloud services, etc., create new opportunities for analysis, decision support, optimisation, and automation. In this context, issues linked to data ownership, integrity, ethics, and security have become increasingly important. Data is thus a key raw material in today's society, and something which many companies build their business concept around. Those who can find, refine, and protect this critical resource will come out as winners.

As a result of the digital structural transformation and increased use of data, the global demand for processing power, data transmission capacity, and storage capacity is increasing. Thanks to our great access to renewable energy, low prices, and a stable political environment, Sweden has a unique ability to attract investments in the data centre industry.

The tech industry's contribution to employment, GDP, and export will probably always be underestimated



The development of the tech industry compared to traditional basic industries

To clarify the tech industry's important and growing role for the Swedish economy and labour market, this section describes how the industry has developed over time in comparison with traditional basic industries, which, historically, have been of great importance for Sweden's economic development.

The chart on the next page shows contributions to GDP from the tech industry and from traditional basic industries between 1981 and 2020. From just under one percent of GDP in 1981, the tech industry now constitutes 5.8% of Sweden's GDP.

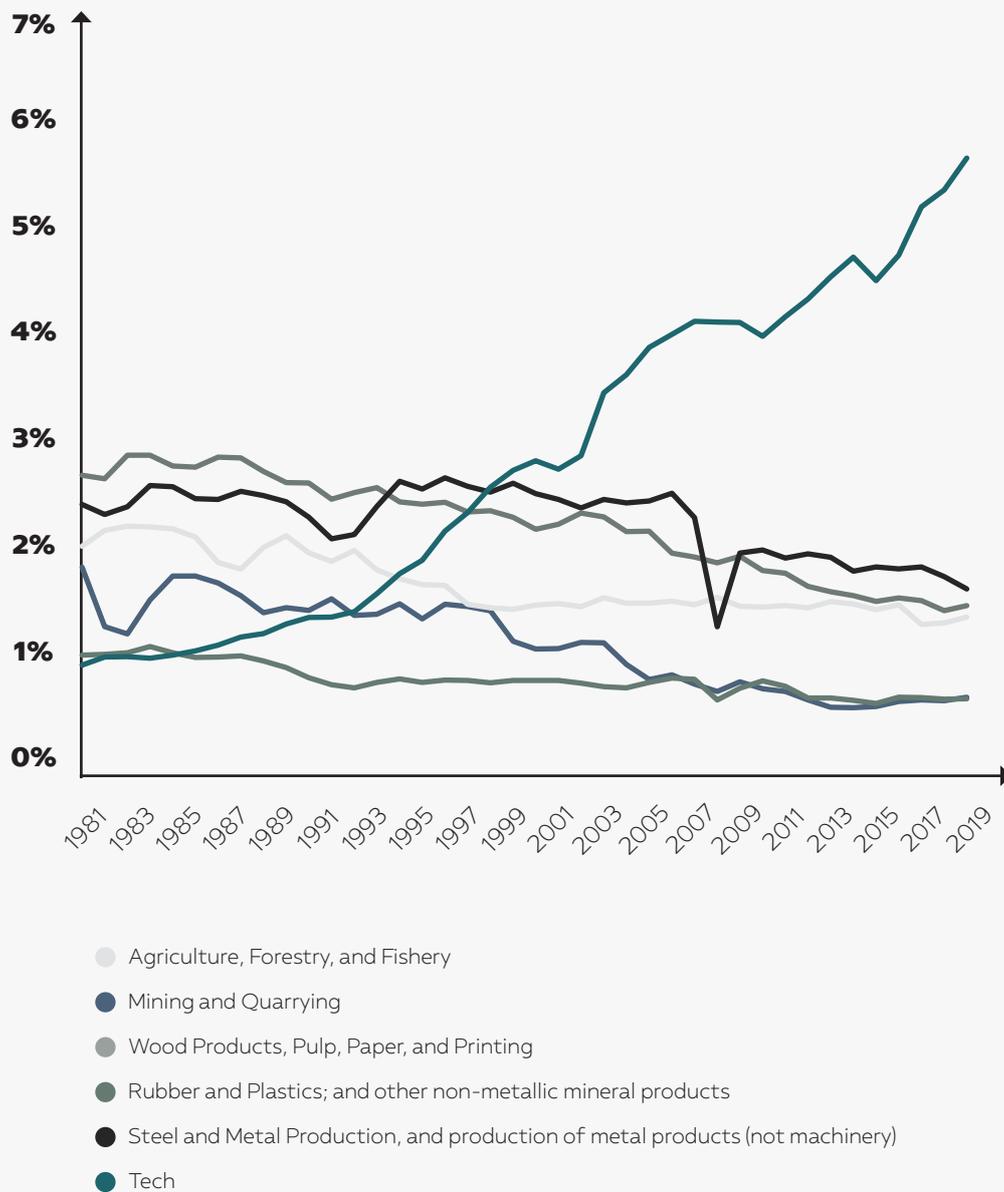
The total value added of the industry's products and services has grown from just over SEK 21 billion in 1981 to SEK 281 billion in 2020 – more than 1,300%.¹⁴ In the traditional Swedish basic industries, the value added increased by an average of 30% less during the same period. The fields of Agriculture, Forestry, and Fishery, as well as Steel and Metal Production increased the most, each by about 53%. The value added of the tech industry in 2020 was almost as large as the value of the traditional Swedish basic industries combined.

¹⁴ The statistics relate to GDP from production and is based on quarterly data summarised annually. GDP defined from production and valued at market price is the sum of the value added that is generated by Swedish entities' production activities plus the net of product taxes less subsidies.

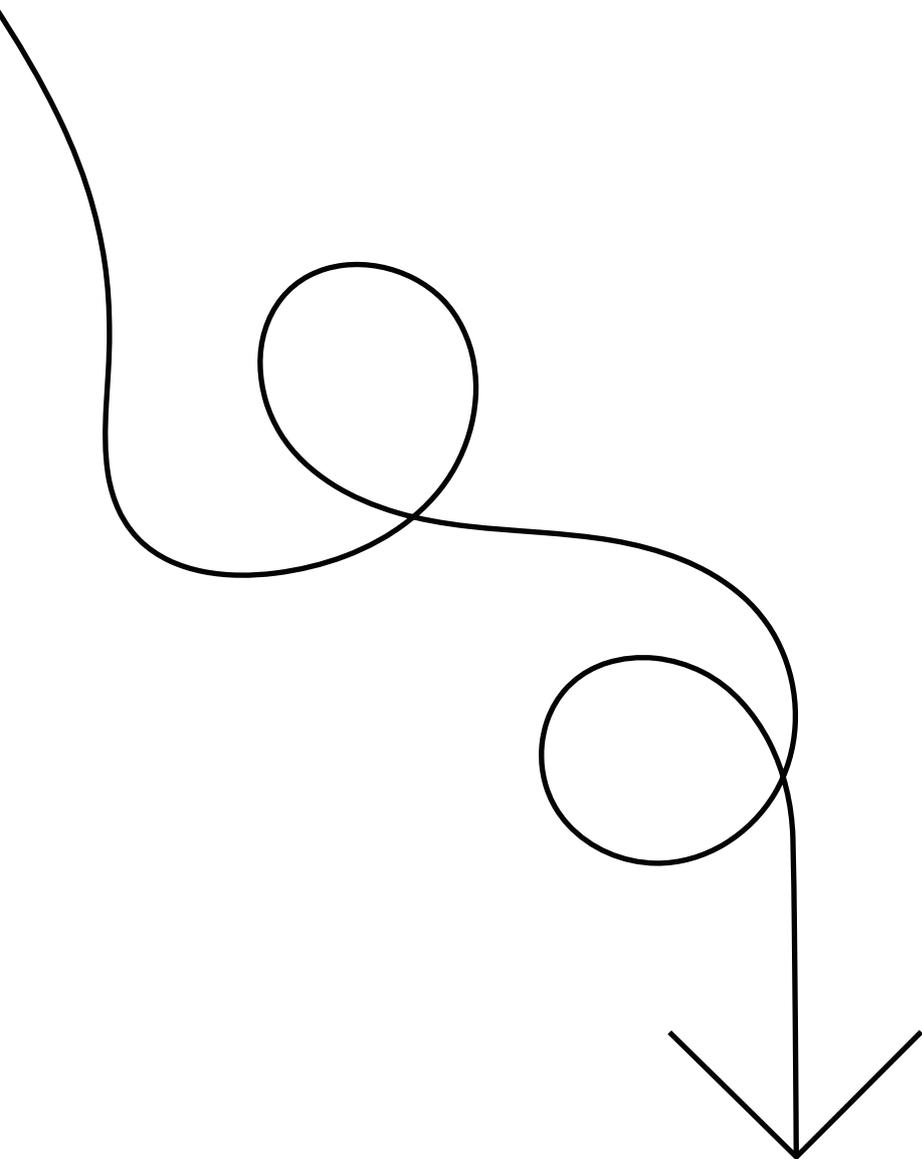
¹⁵ The chart is based on SNI codes at a two-digit level since there is no available data at a five-digit level. The actual contribution of the tech industry is thus underestimated..

The tech industry's contribution to GDP compared to traditional basic industries 1981–2020¹⁵

In percent of BNP.



Source: Statistics Sweden



The chart on the next page presents the development of people employed in the tech industry and in traditional basic industries between 2008 and 2018. The number of employed in the tech industry has increased significantly compared to the traditional basic industries. From 2008 to 2018, employees in the tech industry have increased by 43,070, corresponding to 37%.¹⁶ Meanwhile, the number of employed in the traditional basic industries either remained unchanged or decreased, except in the field of Agriculture, Forestry, and Fishery, where employees increased by about 24%, and in the field of Mining, where the increase was about 8%. Employees in Wood Products and Pulp, Rubber and Plastics, and Steel and Metal Production, with their respective associated products and services, decreased by between 8 and 23 percent. The total number of

employed in all sectors in society increased by just over 13% in the same period.

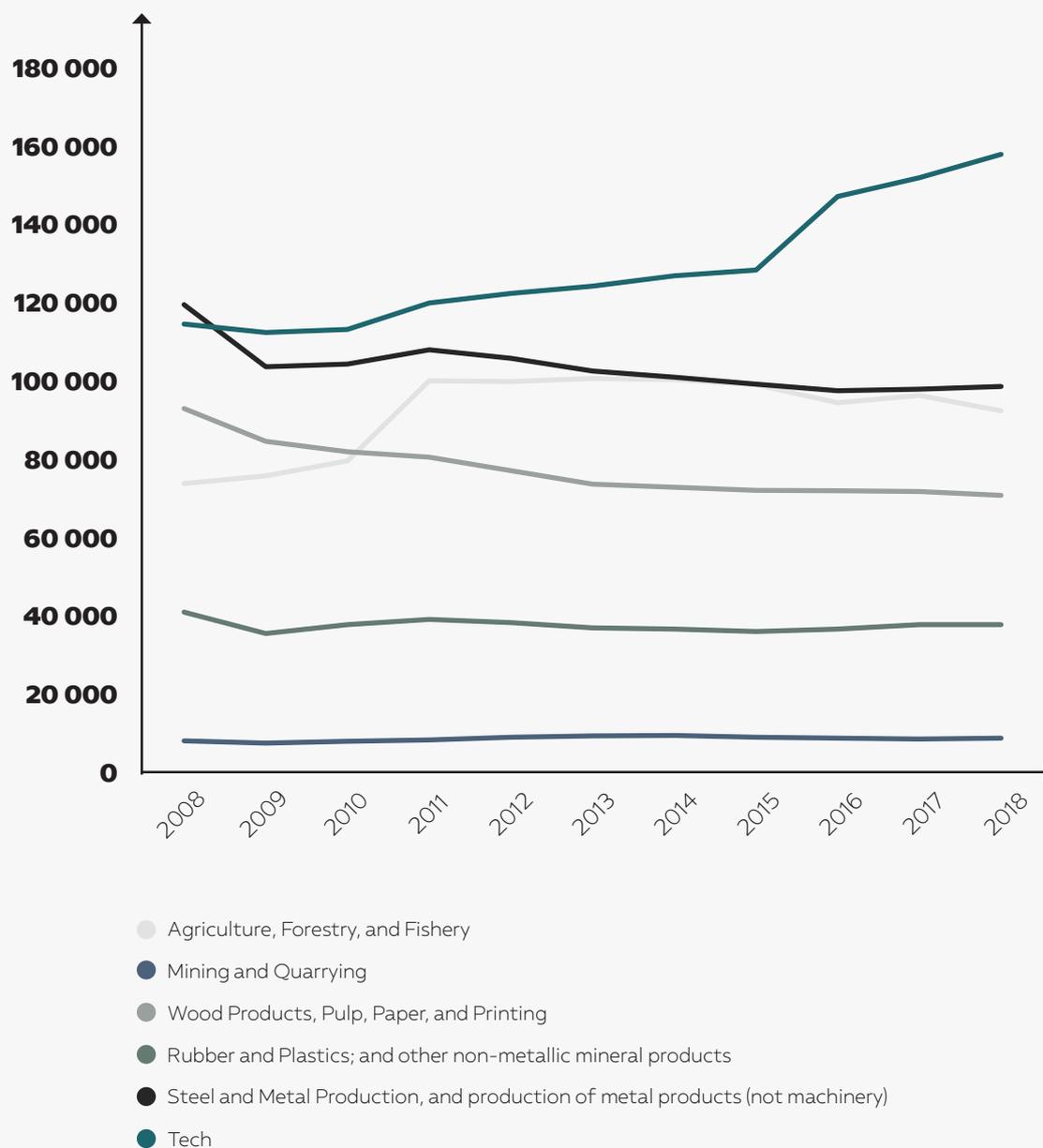
The digital structural transformation affects the labour market, and the Swedish Public Employment Service estimates that the equivalent of just over one million jobs will be automated over the next ten years, while automation and a number of societal trends are, in turn, expected to generate 1.3 million new jobs by 2030. As a result of the technical shifts, completely new professions will emerge as well.¹⁷ The need for education, upskilling, and reskilling has perhaps never been greater. It is not just about meeting the tech industry's own competence needs of an additional 70,000 people with digital cutting-edge expertise by 2024¹⁸, but the need of the entire business community and society.

¹⁶ The chart is based on SNI codes at a two-digit level since there is no available data at a five-digit level.

¹⁷ The Swedish Public Employment Service. Automatiseringen på den svenska arbetsmarknaden (Automation in the Swedish labour market). 2020.

¹⁸ Swedish IT & Telecom Industries. The IT Competence Shortage. 2020.

Number of employed in the tech industry compared to traditional basic industries 2008–2018

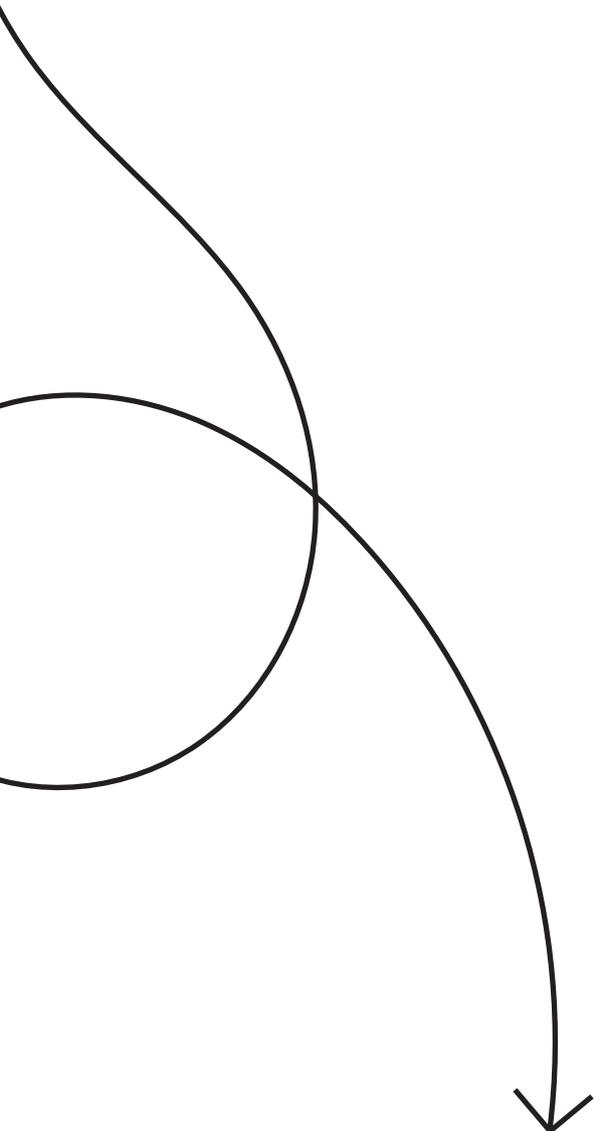


Källa: SCB





In 2020, exports from the tech industry were almost three times the exports from traditional basic industries like iron and steel



The chart on the next page shows total export value of goods and services from the tech industry as well as from traditional basic industries between 1998 and 2020. The importance of the tech industry for Sweden's economy and prosperity has increased markedly in this period, and its exports have grown from SEK 11 billion to just over SEK 140 billion. In 2020, exports from the tech industry were almost three times the exports from traditional basic industries like iron and steel (SEK 56 billion), twice the exports from paper, pulp, and similar products (SEK 80 billion), and almost on par with forestry (SEK 150 billion). That same year, Sweden's total service and product exports amounted to SEK 2,203 billion.

The tech industry accounted for over 6% of Sweden's total exports in 2020. The export of data services alone amounted to over SEK 116 billion in 2020. The traditional basic industries – Paper, Pulp, and Wastepaper, Metals, as well as Plastics and Rubber – accounted for just under five, four, and two percent respectively of total exports. The tech industry is strong even when compared to other industries in the business community. Only the fields of automotive and other business services constituted a larger share of total exports in 2020, nine and eight percent respectively.

¹⁹ Tele, data, and information services. The classification in the chart is based on Standard International Trade Classification (SITC).

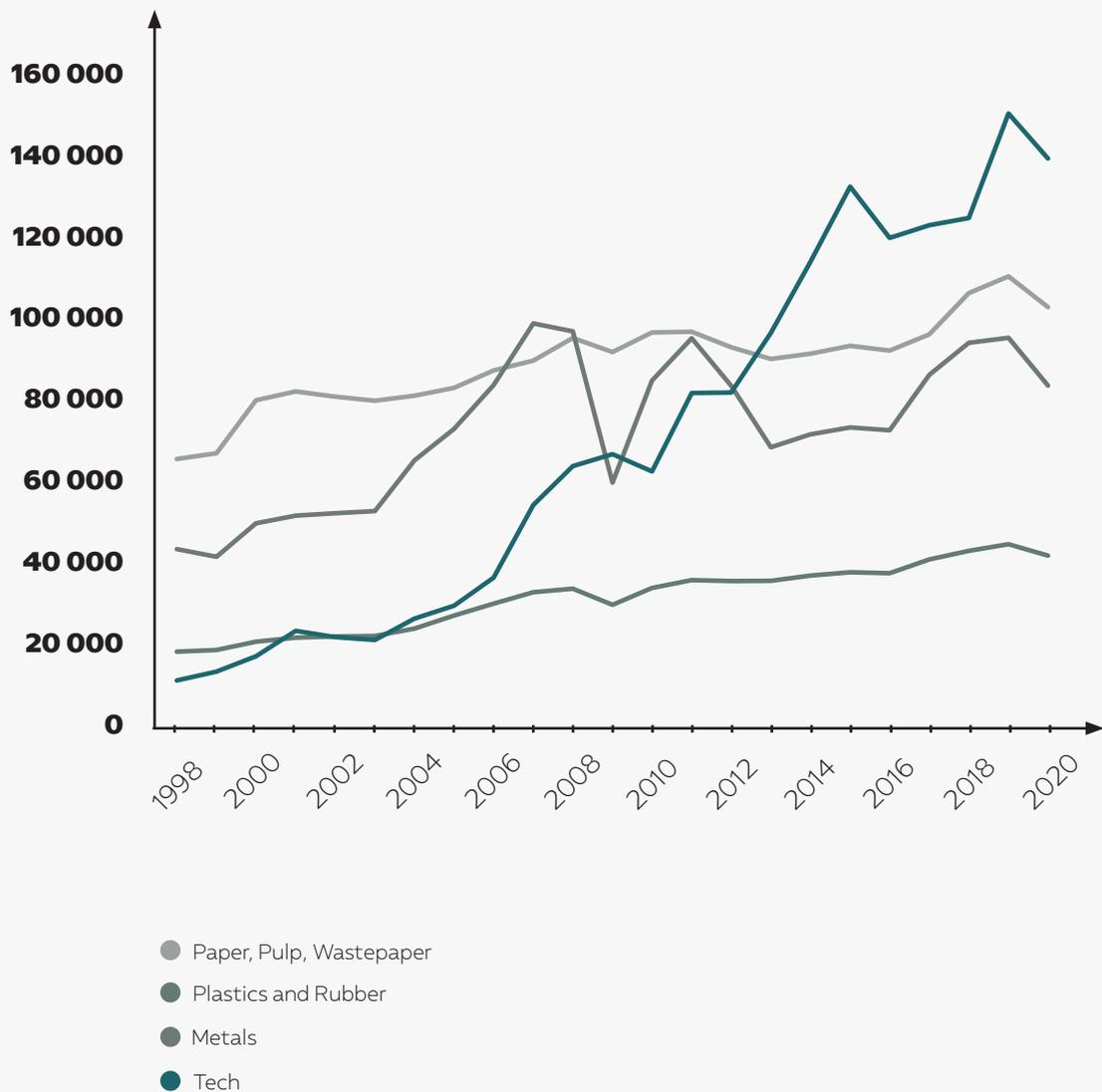
²⁰ Swedish Forest Industries. Skogsnäringens betydelse för ekonomi och välfärd (The importance of the forest industry for the economy and welfare). 2019.

²¹ Statistics Sweden. Sveriges Export (Sweden's Exports). 2021.

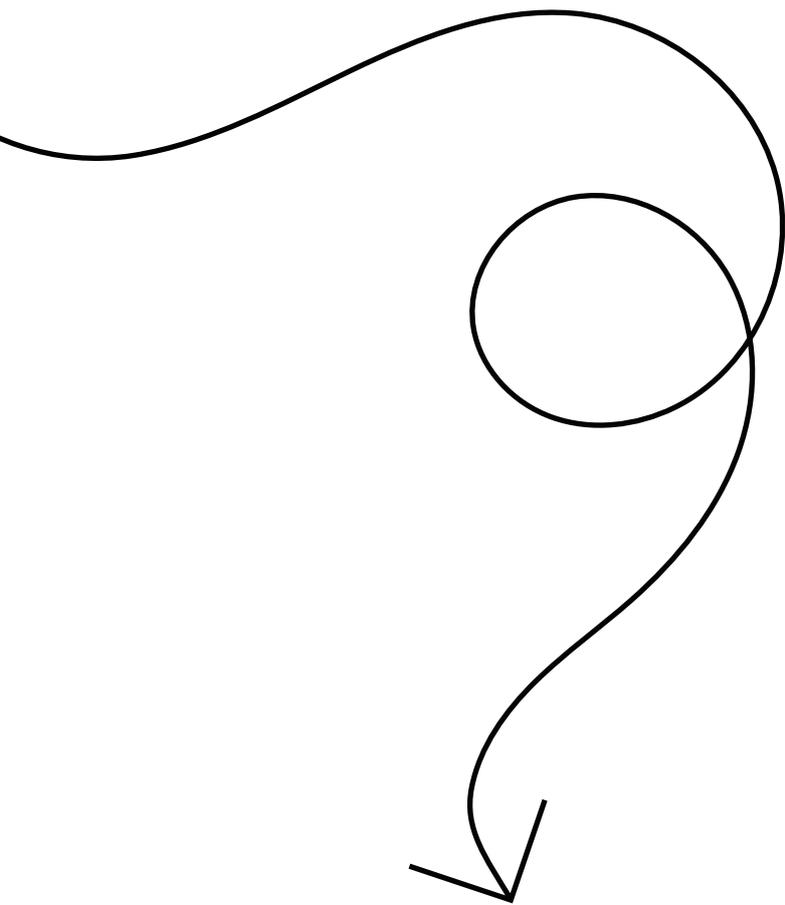
²² The chart is based on SNI codes at a two-digit level since there is no available data at a five-digit level. The actual contribution of the tech industry is thus underestimated.

The export value of the tech industry compared to traditional basic industries²²

In SEK million.



Source: Statistics Sweden



The chart on the next page shows total sales in the tech industry as well as in traditional basic industries between 2000 and 2018. During this period, the tech industry's net sales increased by about SEK 155 billion – the largest increase in absolute numbers compared to traditional basic industries. The increase since 2000 corresponds to about 40%. Agriculture, Forestry, and Fishery, Rubber and Plastics, as well as Steel and Metal Production saw a larger percentage increase, with 194%, 88%, and 79% respectively, but a significantly smaller one in absolute numbers.

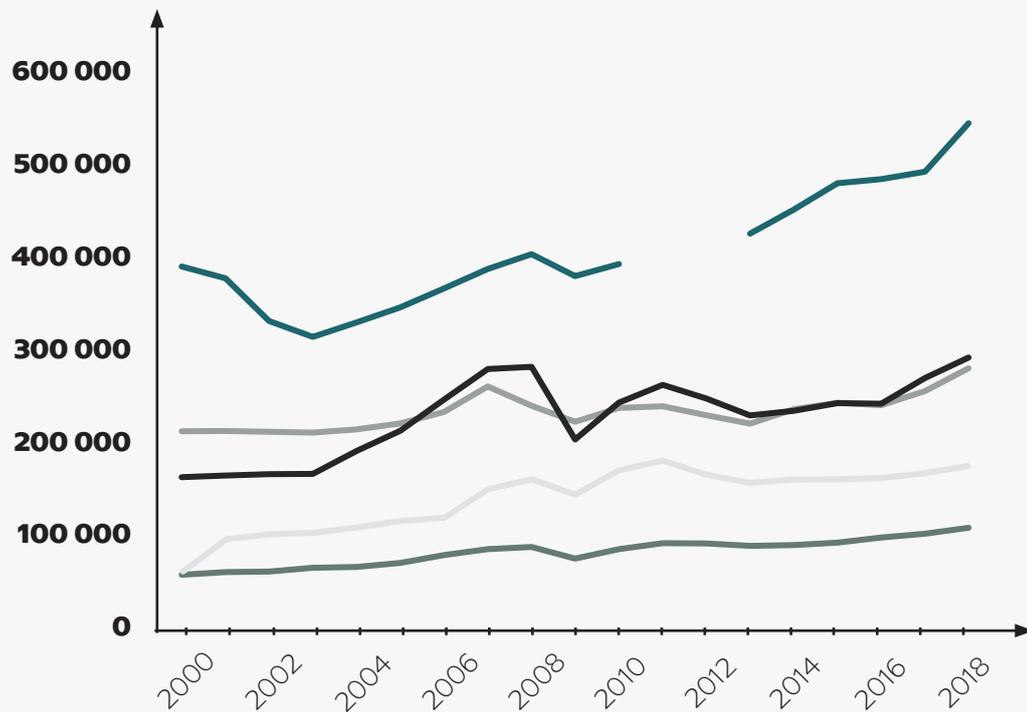
The major drop in sales for tech companies in the early 2000's was due to the so-called "dot-com bubble". If, instead, the comparison would start in 2003, after the period of major stock market declines for tech companies, the tech industry has enjoyed the largest growth in both absolute numbers and percent, with an increase corresponding to 73%. The corresponding increase in the traditional basic industries between 2003 and 2018 was an average of 61%.

²³ Net sales refer to income from the companies' main operations for goods sold and services performed. Published net sales are exclusive of excise duties and are also adjusted for merchandising (i.e., the income from goods that are both produced/bought and sold abroad without crossing national borders has been deducted). BAS accounts 30–37 excl. 3750.

²⁴ The chart is based on SNI codes at a two-digit level since there is no available data at a five-digit level. The actual contribution of the tech industry is thus underestimated. Data for 2011 and 2012 for one of the tech industry's subindustries is missing due to the fact that Statistics Sweden did not report any, as the subgroup was either too small or classified.

Tech industry sales compared to traditional basic industries 2000-2018²⁴

In SEK million.



- Agriculture, Forestry, and Fishery
- Wood Products, Pulp, Paper, and Printing
- Rubber and Plastics; and other non-metallic mineral products
- Steel and Metal Production, and production of metal products (not machinery)
- Tech

Source: Statistics Sweden

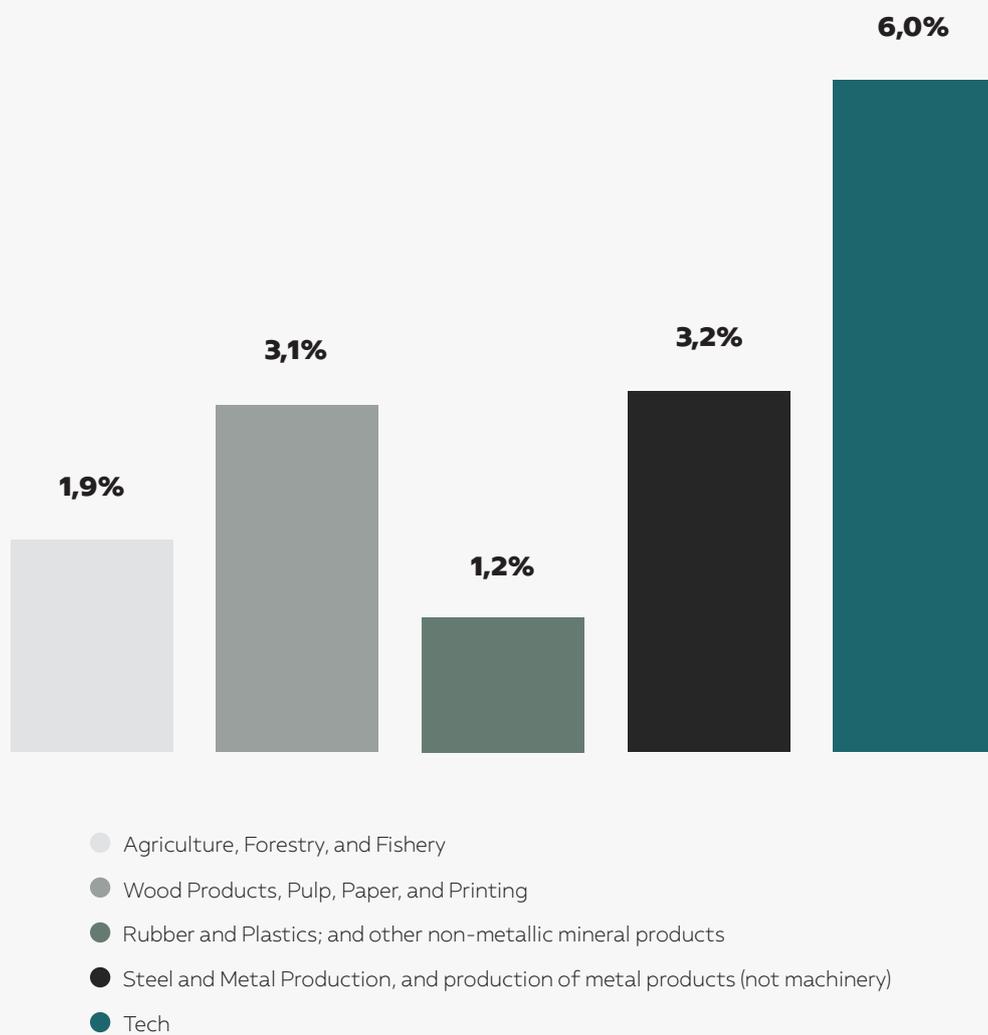
The below chart shows total sales of the tech industry and traditional basic industries as a percentage of total sales of the business community in 2018. The tech industry accounts for a significant share of total sales, and the field has established itself at a much higher level than traditional basic industries. Since 2013, the tech industry's share of the business community's total sales has been relatively constant at around 6%, and the sector's

sales in absolute numbers now constitute 63% of the basic industries combined.

The tech industry's subindustry of computer programming, computer consultants, and information services drives the development and, in 2018, this subindustry alone accounted for nearly 3.5% of total sales of the business community.

The tech industry's share of total sales of the business community²⁵

As a percentage for the year 2018.



Source: Statistics Sweden

²⁵ The chart is based on SNI codes at a two-digit level since there is no available data at a five-digit level. The actual contribution of the tech industry is thus underestimated.



**The tech industry accounts
for a significant share
of total sales of the
business community**



INTERVIEWS IN TECH

Voices from Sweden's new basic industry

The tech industry encompasses a wide range of companies. We asked four of our member companies to tell us how they contribute to the development of society,

what major changes we will see in their fields in the coming years, and what Sweden needs to do to get more global tech companies.

**"Let's not fall
behind again"**



A professional portrait of Hélène Barnekow, CEO of Microsoft Sweden. She is seated in a modern black office chair, wearing a dark, textured blazer and matching trousers. Her hair is blonde and styled. She is wearing a necklace with a heart-shaped pendant, a bracelet, and rings. The background is a solid dark grey.

Hélène Barnekow
CEO Microsoft Sweden

"Now we need to secure a more modern legislation as well as strong collaboration."

Tech is a new basic industry that contributes to the development of many areas in society. How does Microsoft contribute?

Microsoft has a 35-year history in Sweden, with many strong partnerships in various industries and sectors of society. Through digitalisation, we want to strengthen the ability of individuals, companies, and society to make Sweden a world leader. We therefore invest in Sweden's digital infrastructure and in our ecosystem to drive digital transformation that will give public and private organisations new opportunities for innovation. We also help increase digital competence in Sweden through various educational initiatives and partnerships. This provides a solid digital foundation for the future growth of society.

What is the biggest change we will see in your field in the coming 5–10 years?

Digital technology will become an increasingly important part of both our private and professi-

onal lives. Using AI, we will be able to do the jobs we do today with higher quality and efficiency. In the coming 5–10 years, we will see a wave of increasing automation, for example in healthcare and transport. We will also discover — more and more — how AI can support us in understanding the outside world by analysing texts, images, and other data that we're surrounded by.

What does Sweden need to do to get more global tech companies?

As a country, we need to work with all the parameters, such as technology, our know-how, and policy making. We have fallen behind in certain areas, mainly in the public sector. This has complicated many of the digitalisation projects in Sweden. Now we need to secure a more modern legislation that supports decision makers in digitalising their businesses as well as strong collaboration in terms of IT training and competence.

"With AI, we can help ensure that every cent of our tax money is used as efficiently as possible"

Tech is a new basic industry that contributes to the development of many areas in society. How does Tendium contribute?

Every year, municipalities and regions procure goods and services for hundreds of billions of kronor, but our current procurement system is dysfunctional, which prevents us from getting sufficient value for our money. Complex rules and uncertainties lead to many small companies not being able to participate in procurements, and this inefficiency affects Swedish competitiveness as well as innovation capacity. Tendium works to develop solutions to improve and streamline public procurements using AI. We help companies that want to participate in procurements, and we also see great potential in using AI to help municipalities, regions, and procurers ensure that every cent of our tax money is used as efficiently as possible.

What is the biggest change we will see in your field in the coming 5–10 years?

I think we will see an increased use of data throughout society in the future, even in the

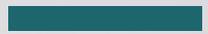
public sector. Data as digital raw material will also be available in a whole different way. Just in field of procurement alone, an increased use of AI for analysing large amounts of procurement data can contribute knowledge, which, in turn, makes the public sector better at setting requirements. For example, an analysis of the impact of various requirements can contribute important knowledge on whether local businesses are at all able to participate in a procurement, or if the requirements exclude, for instance, small companies.

What does Sweden need to do to get more global tech companies?

In general, there is a low tolerance for failure in Sweden, and this makes it difficult for smaller companies and entrepreneurs to obtain financing and grow here. A lot of financing has clear requirements for revenue or company composition, which makes it difficult to seek financing if, at the same time, you're spending large amounts on development. If we don't find a better way to secure financing for small companies, they risk being acquired long before they have even begun their journey.



Hannes Dernehl
CEO Tendium



Catharina Borgenstierna
CEO Camanio Care



"Creating change and digitalising the public sector requires courageous leadership"

Tech is a new basic industry that contributes to the development of many areas in society. How does Camanio contribute?

Sweden, like many other countries, has a large and growing group of older people who need health and social care. At the same time, we have fewer and fewer people who work in elderly care, and it's often difficult to recruit, as working in elderly care is still very much seen as a low-status profession. Our welfare, and especially our elderly care, is an under-digitalised sector, which means that digital solutions to bridge the gap between need and supply are used only to a very small extent. Camanio develops technical solutions that contribute to increased security for the elderly while helping healthcare professionals prioritise their working hours, thus reducing their stress. Through a service platform with connected services like social alarms and motion sensors, information and data are created that facilitate the work and improve the work environment for healthcare professionals, which leads to more people receiving better care.

What is the biggest change we will see in your field in the coming 5–10 years?

The single most important thing that needs to

happen is for the public sector to achieve a broader implementation of technology, with a standardised technical infrastructure for sharing data and standardising protocols, among other things. We should draw inspiration from our neighbouring country Finland, which uses a single common system, Kanta, for both regions and municipalities. A similar solution with a common infrastructure would unlock great potential for Sweden. But creating change and digitalising the public sector requires courageous leadership, one that dares to implement. That's what we need in Sweden.

What does Sweden need to do to get more global tech companies?

A strong domestic market with a public sector that dares to buy and use technology is extremely important if Swedish companies are to establish themselves internationally. To revisit Finland, we can see that more Finnish companies, thanks to a great domestic market, are now moving on to other countries and new business. In Sweden, we're very afraid of things going wrong, but in order to actualise change, we must dare to try, dare to fail, and then adjust and correct to keep moving forward. That takes both courage and leadership.

"The network has never been more important"

Tech is a new basic industry that contributes to the development of many areas in society. How does Telia contribute?

Technological development has had an enormous impact on the development of the entire society, of people, and of businesses. With our long history dating back 168 years, Telia has been an important part of this development through innovations that have led to radical changes throughout society, such as mobile telephony, 4G, and the expansion of the fibre network. In May 2020, we also launched Sweden's first public 5G network, the expansion of which is now continuing all over the country. In the initial phase, the expansion is mainly focused to city centres, where the flow of people is larger, but in the long term, we will be rolling out 5G outside the cities as well. Our goal is for the 5G network to reach more than 90% of the population by 2023. The network has never been more important. It's a prerequisite for a well-functioning digital economy with more innovation, more sustainability, and more security. The network is also what connects us, from north to south.

What is the biggest change we will see in your field in the coming 5–10 years?

We are headed towards a future of increased digitalisation and automation. The 5G network is designed to connect things and make them communicate and act quickly and automatically. With 5G, we will see smarter, mobile robots that can move around the factories. In the green industries, they talk about precision agriculture. There are connected robots that can sense what are crops and what are weeds, and that quickly remove all weeds. This reduces the use of pesticides and contributes to a sustainable society. Another area that will change with 5G is healthcare. It will provide increased opportunities for mobile healthcare, for example in rural areas. Together with Region Västerbotten, Telia has carried out a

test involving mobile mammography, where a car with mammography equipment connected via 5G has driven around the region, offering exams in a simpler way. The network is innovation, and not least 5G will change most sectors in society over the next 10 years.

What does Sweden need to do to get more global tech companies?

One of the prerequisites is obviously what we just talked about; continued access to a robust and secure infrastructure and communication solutions to develop the next generation of digital services that can then be scaled and exported to the rest of the world. Predictable regulations are a key prerequisite for continued investments in the networks. We are finally getting started with 5G, but many leading digital nations are already looking at 6G. Let's not fall behind again.

Parts of the answer to this highly interesting and important question are beyond our control as a company and an industry. A bolder public sector that dares to invest in the use of new technology can stimulate the development of new ideas and companies. Our large industrial clusters in, for example, manufacturing and mining are leading examples of this. But in general, global competitiveness is about structural and long-term investment in innovation and education and providing opportunities and freedom for motivated people to dare to invest early in ideas that can pay off globally. It's important that we produce many new start-ups with the ambition to grow. At the same time, our large global companies must be able to adapt to a world driven by exponential technological development. Access to education is fundamental for developing businesses on a broad front, and society has a great responsibility in making sure that our centres of learning and universities are active and well adapted to future needs.

A professional portrait of Anders Olsson, CEO of Telia Sweden. He is a middle-aged man with short, light brown hair, wearing a dark navy blue blazer over a light blue button-down shirt. He is smiling slightly and looking directly at the camera. The background is a dark, gradient grey. To the right of his head, there is a white text block with a teal horizontal bar below it.

Anders Olsson
CEO Telia Sweden

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A REPORT FROM SWEDISH IT AND TELECOM INDUSTRIES

Tech – Sweden's new basic industry

Swedish IT and Telecom Industries is an industry and employer organisation for all businesses in tech, IT, and telecom that, together with its members, work for a world-leading tech sector in Sweden.

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