

# Virtual meetings – why and how Sweden will become the world leader

The benefit for people, the environment, and what we  
can do to capture it



# Table of contents

Summary .....	3
The pandemic and the new working life .....	5
Meetings, journeys and virtual meetings in Sweden .....	8
Virtual meetings in Sweden today and tomorrow.....	11
The value of virtual meetings for Sweden .....	16
Making Sweden a world leader: roadmap to capture the benefits.....	20
Appendix .....	28

The report is based on analyses of public data and statistics on journeys, physical meetings, and virtual meetings. Additionally, Cisco, in conjunction with Norstat, has conducted a user survey of 1,000 managers and employees in the Nordic region, as well as interviewed different groups of personnel to understand meeting habits, changes during the pandemic, as well as thoughts surrounding virtual meetings in the future. If no other source is given, statistics and quotations on attitude to, and use of, virtual meetings refer to the survey and focus groups mentioned.

# Summary

Sweden and the world are in a historically difficult situation – a pandemic which is affecting people’s lives, health, and financial situations. It has also forced us to change how we work, travel and meet other people. Some things will gradually return to how it was before the pandemic, but much that we have been forced to change will remain.

One change that might endure is how we travel and meet in working life. Before the pandemic, every year Swedes travelled the equivalent of 20 return journeys to the moon – just to and from meetings. Only just over a quarter of our external meetings took place digitally. Now that journeys and physical meetings have become difficult to undertake during the ongoing pandemic, the norm has instead become virtual meetings. The shift has taken place out of acute necessity and has not been pain-free for everybody. However, in a short period of time we have simultaneously taken major steps forward in digitalisation, invested in new technology and learned new ways of working that have proven to function better than we thought – three in five of those who changed to digital meetings think that it has gone better than expected. Two in five say that they will travel less and have more virtual meetings, even after the pandemic.

Such a shift has a major value for the individual, employers and society as a whole. The individual gains more flexibility and leisure time and the employer saves travel costs and increases productivity.

If Sweden was to increase the proportion of virtual meetings with 15–30 per cent

the expected benefits would be economic gains of SEK 20–40 billion and a 550,000 ton reduction in CO<sub>2</sub> emissions; productive working time of 20–40 million hours, which is now spent behind the steering wheel or waiting at the airport, would be freed up for work or leisure time.

**If Sweden was to increase the proportion of virtual meetings with 15–30 per cent the expected benefits would be economic gains of SEK 20–40 billion and a 550,000 ton reduction in CO<sub>2</sub> emissions.**

Gender equality would also benefit if more people could participate in meetings on the basis of relevance and expertise instead of the possibility to travel – today men travel more often, greater distances and more expensively than women, who to a higher degree instead choose virtual meetings.

Sweden’s digitalisation objective is that we will be best in the world at using the opportunities presented by digitalisation. Today Sweden is already world-leading within several areas of digitalisation, with good infrastructure, a technologically literate population, authorities and cutting-edge companies however, there is room for improvement of virtual meetings. While Sweden is one of the countries in the world with the highest expenses for business travel, the investments in digital technology for virtual meetings are tiny, even in international comparisons. In Sweden they are equivalent to 0.4 per cent of the travel

costs, a lower proportion than in the majority of OECD countries. In Finland, for example, the proportion is twice as high, and in the USA four times as high.

There are major differences within Sweden too. More digitalised sectors and occupational groups, such as the communications industry or IT specialists, hold 3-5 times more virtual meetings than the groups which utilise the option least.

State and government, public and private employers, as well as system suppliers, can institute measures together to ensure that Sweden captures the benefit of virtual meetings. They can develop strategy and governance, standards and culture, as well as the technological infrastructure to create the best possible conditions for virtual meetings.

### Measures to capture the benefit of virtual meetings

	State and government	Employers	System suppliers
<b>Strategy and governance</b> 	 Develop and clarify regulations and legislation surrounding digital meetings Govern authorities in appropriation	 Secure the benefit through strategies and follow-up for journeys, meetings and digital meetings	 Cooperate within the industry to ensure more digital meetings in society, for clearer benefits and training of users
<b>Norms and culture</b> 	Use virtual meetings as an instrument to achieve environmental and climate goals Expand and make permanent REMM and REDI collaborations	Develop a good meeting culture through training and guidance Create incentives and share the gains	
<b>Technology and infrastructure</b> 	Invest in digital infrastructure for Sweden as a whole Ensure top class meeting infrastructure for all authorities Develop and guarantee security	Offer the right technology and working environment adapted according to the operation's needs Invest in user-friendly and open systems Take an overall approach to security	Enable interoperability between different systems Develop the user experience based on the customers' needs Offer highest possible security

# The pandemic and the new working life

## A shift towards a new normality

We find ourselves in one of the most tumultuous periods for two generations. The corona pandemic is causing massive human suffering and is having a profoundly negative impact on the economy throughout the world. The pandemic's long-term effects are still unforeseeable, but it is likely that many of the changes that individuals, employers, and entire sectors have now been compelled to make in a short period, will persist or fundamentally change how we interact, work, and move around in the future. The world will return to normal, but it will be a new normality.

**"It has been an eye opening experience. It works much better than I thought"**

Working life for many people has fundamentally changed. One third of Swedes are working from home and the physical meeting has been replaced by virtual meetings, which are implemented using video technology. Business travel, conferences and trade fairs have been almost completely cancelled. At the same time as activity in certain sectors has slowed down or stopped completely during the pandemic, developments within digitalisation and new, flexible working models have accelerated. Individual companies and authorities have been forced to make innovations which previously appeared to be unimaginable – health care, property viewings, large conferences, weddings and funerals have been made available digitally. At the same time as

many employees have had to learn to work remotely and cooperate virtually for the first time. The proportion of Swedes that use virtual meeting tools in their job has increased substantially in just a few months.

## The perception of the workplace will change

The transition has brought major challenges. People have had to learn new technologies they are not used to. Daily interactions and informal discussions with colleagues and customers are now more difficult and not everybody has had time to adapt their working environment. The workload has increased for some, with numerous meetings closely together without a break. However, most people are discovering that the transition is functioning far better than imagined. Almost two in three (58 per cent) of Swedish managers and employees in Cisco/Norstat's survey state that the switch from physical to digital meetings has gone better or much better than expected. The most positive surprises are in sectors which before the pandemic had a relatively low proportion of digital meetings, such as the industrial and construction sectors, and tourism. With reduced travelling many people are experiencing increased productivity, reduced stress, greater flexibility and more time for the family. Sweden has had Europe's highest proportion of people who to some extent worked from home (37 per cent) already before the corona pandemic.<sup>1</sup> The proportion has increased substantially during the pandemic, and both employees and decision-makers believe that

<sup>1</sup> Eurostat (2020): Employed persons working from home as a percentage of the total employment, by sex, age and professional status (%)

acceptance for and expectations of mixed forms of working will increase considerably. Consequently, more companies are now considering offering their employees the option of working from home on a permanent basis.

**”Many has not been trusted to work from home previously. Managers have now observed that things are actually happening. It will change radically and be positive for personal well-being”**

### How has the transition to virtual meetings functioned?

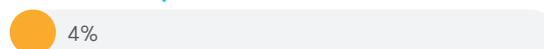
Better than expected



As expected



Worse than expected



Source: Cisco/Norstat's survey

When hiring knowledge about and experience of implementing and leading virtual meetings will be important. Employers in different sectors are preparing for that issues surrounding working remotely and digital meetings might become part of contracts and job descriptions. They also need to review how responsibility for the work environment can be ensured when work is moved out from the workplace. But the norm of what a workplace is might also change. The demand for, and design of, office premises will change when more work is performed in the home.

## Changed travelling patterns

Travelling will restart, both inside and outside the country's borders, but will be at lower levels than before the crisis for some considerable time. It is likely that employers will perform risk analyses to a greater extent before journeys are approved, in distinction from before when employees largely made decisions on business travel themselves. Three in four employers in a global survey<sup>2</sup> also think that some or the majority of employees will be unwilling to travel, even six months after all restrictions have been lifted. The range on offer might also be lower, with flights in particular expected to be more expensive and complicated to execute: an average ticket can currently cost 50 per cent more as planes are being run with more empty seats to reduce the risk of infection<sup>3</sup>, and there can be several hours to wait before departure as a result of increased hygiene and security requirements. Requirements for face masks and tests are already being introduced at some airports and the service on-board has also been cut back for hygiene reasons. The international air transport organisation IATA predicts that the aviation market will not recover overall for three years<sup>4</sup>.

In addition, many people have discovered that journeys are often not necessary, 39 per cent in Cisco/Norstat's survey state that they will travel less for work after the pandemic and instead have more digital meetings. Only one in twenty thinks that they will travel more. Of those who expect that they will have more digital meetings, one third (36 per cent) refer to new knowledge/experience of digital solutions

<sup>2</sup> Global Business Travel Association (May 2020): 2020 Coronavirus Poll May 20, 2020

<sup>3</sup> IATA (May 2020): IATA Calls for Passenger Face Covering and Crew Masks (press release)

<sup>4</sup> IATA / Tourism Economics (April 2020): Air Passenger Forecasts

that they did not have before Covid-19. Many employers will be thinking more strategically about where their employees are located and how they move about – one in four managers (23 per cent) state that their organisation will be producing a new policy for meetings and business travel, or changing their existing policy, after the pandemic.

**”I think that many people have learned to work digitally, so travel won’t be like it was before”**

These changes, which were forced by necessity, contain a positive potential for a more sustainable working life. The organisations that find the right balance between digital ways of working and the strengths of the traditional physical meeting will facilitate a more productive, cost-effective and environmentally friendly working life with greater flexibility and more leisure time. For the country as a whole, there is an opportunity to take a major step towards the overall objective of the government’s digitalisation strategy: that Sweden shall be the best in the world at utilising the opportunities created by digitalisation.

# Meetings, journeys and virtual meetings in Sweden

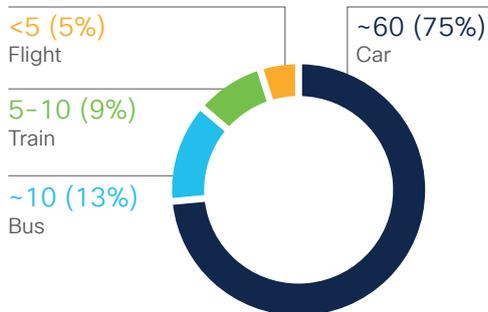
## Business travel and meetings today

Swedes have lots of meetings – we meet to plan, make presentations, run checks, solve problems, create, illustrate, sell, learn, teach and get to know.... On average Swedish officials have meetings 4.7 times, or five

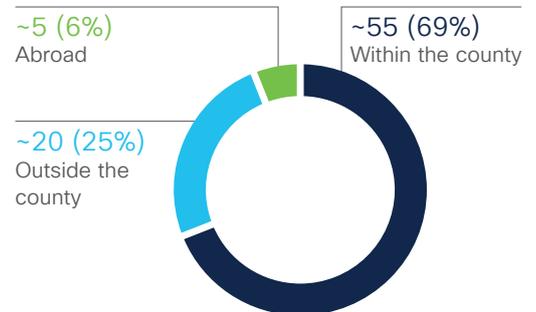
hours, per week.<sup>5</sup> Many of our meetings are outside the individual workplace or office and require travel.<sup>6</sup> In total, we travel ~15 billion kilometres every year to and from meetings – 20 return trips to the moon! We usually travel short distances, and typically by car.

### Greatest number of journeys are made by car...

Millions of journeys for meetings per year

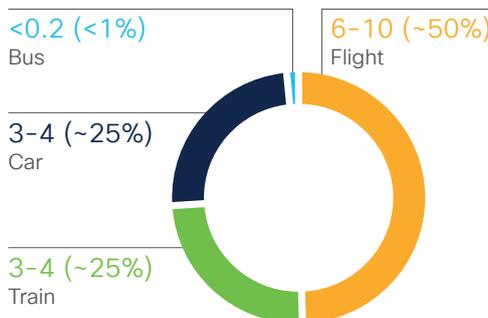


### ...and within the county

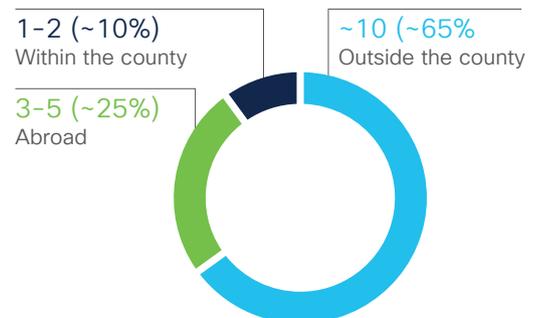


### We travel the longest distances by air...

Billion km travel to meetings



### ...and mainly domestic



Source: Own calculations based on Transport Analysis' Survey of Travel Habits and Cisco/Norstat's survey

<sup>5</sup> Svenska Möten 2019 (2020): En kartläggning av möten och möteskultur i svenska organisationer (in Swedish)

<sup>6</sup> In this report, travel refers to all types of transportation outside the individual workplace, and by travel to meeting, all such journeys with the main purpose of meeting other persons in professional contexts

On average we make 15 journeys per person, but there are major differences in how we travel - for example, men make almost twice as many journeys to meetings as women, and they more often choose to fly. This is probably explained to some extent by differences in occupations and roles, but the difference remains for men and women who have similar positions and travel for work: men travel more often, and women have more virtual meetings. An increase in the proportion of virtual meetings would thus potentially be able to contribute to giving women an increased chance of participating and of "the right person being in the right meeting" than is the case today.

**Men make almost twice as many journeys for meetings as women**

Average number of journeys for meetings per year



Source: Own calculations based on Transport Analysis' Survey of Travel Habits

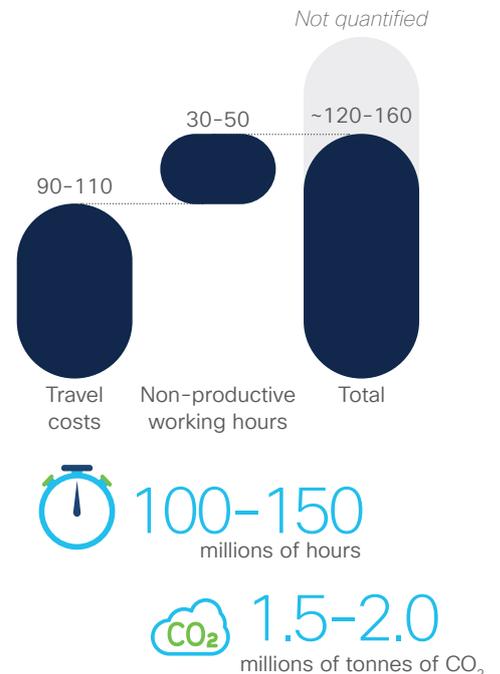
Journeys to meetings entail a major cost - in money, time and for the environment. The direct spending for transportation, accommodation, meals and expenses amounts to about SEK 90-110 billion per year. In addition, there is loss of production of around 30-50 billion just for the 100-150 million hours travelling with low productivity (there is also a productivity decrease from being away from the workplace before and after meetings, but that is hard to quantify). The environmental cost is also high: our

travel to meetings emits 1.5-2 million tonnes of carbon dioxide, the equivalent of almost 5 per cent of Sweden's total emissions. At the same time Sweden has a major challenge in achieving the target of 70 per cent lower emissions from the transport sector by 2030, or net zero emissions by 2045.

After Denmark, Sweden has the world's highest expenses for business travel in relation to the size of the work force. A position which - besides our fondness for meetings - can be explained by an open and export-dependent economy at Europe's geographic periphery, with large distances even within the country and a high cost level for transportation. At the same time, the major expense indicates the great potential for virtual meetings in Sweden.

**Journeys for meetings entail major costs**

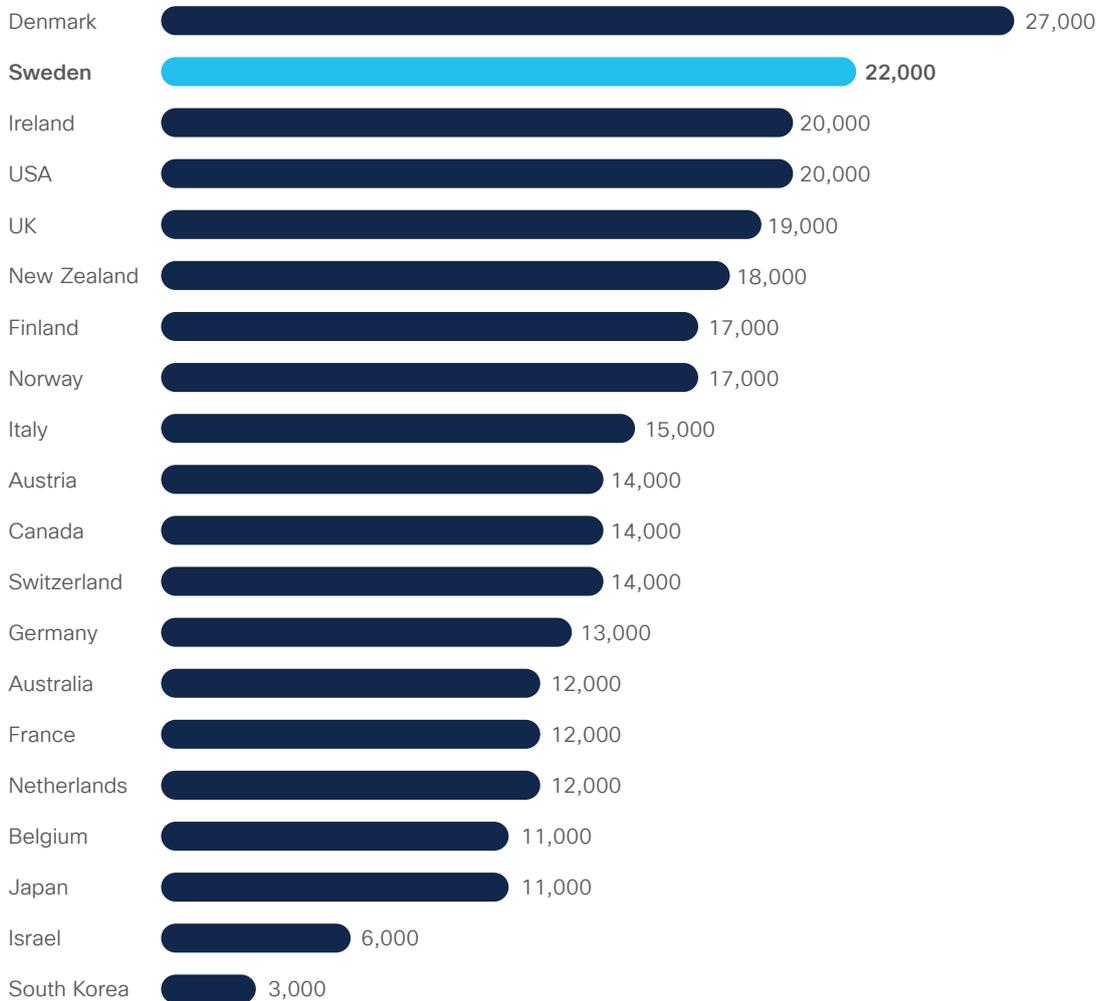
Billions of SEK



Source: Own calculations based on Transport Analysis' Survey of Travel Habits and Cisco/Norstat's survey

### We spend more on travel to meetings than the majority of comparable countries

Annual cost for business travel per employee, SEK



Source: World Travel & Tourism Council (2020) - Business Tourism Spending 2019

# Virtual meetings in Sweden today and tomorrow

Many meetings already take place virtually. 85 per cent of privately employed officials, and 70 per cent of those who are publicly employed, held at least a few meetings remotely in 2019. Cisco/Norstat's survey show that an average just over a quarter (28 per cent) of all external meetings – before the pandemic – were held virtually. Large companies and authorities, which often have several workplaces, have more digital meetings than small and medium-sized ones. Sectors that generally have come further in their digitalisation, such as finance and communication, have also digitalised their meetings to a greater extent than sectors such as industry, welfare and tourism.

The number of virtual meetings have at least doubled in all groups in connection with the pandemic, and the increase has been greatest in the sectors that had the lowest proportion of virtual meetings to start with – an unexploited potential has been revealed.

There are even differences among different groups of personnel. Those who are employed within IT also have, by a large margin, the greatest proportion of digital meetings; persons with analytical and administrative occupations also often choose virtual. People within education and research have the lowest proportion of virtual meetings, those with creative occupations which need hands-on collaboration, salespersons who need a close relationship with the customer and where the product needs to be displayed. Managers have a low proportion of virtual meetings and belong to the group that travel most frequently and most expensively. Managers are also concerned about security in virtual meetings more often than other groups.

**“They still want anything a bit sensitive to be handled physically”**

## Telia cut travel costs by 70 per cent<sup>1</sup>

Since 2001, Telia has been engaged in a long-term change process to cut travel costs and CO<sub>2</sub> emissions by increasing the number of virtual meetings. The focus has been on reducing air travel and changing a culture where business travel conferred status.

By setting a target for how much travel costs would be decreased and the introduction of a meeting policy, the focus was moved from details such as choice of transport, for example, to the more central issue:

If a meeting is necessary, how should it be held in order to be as economical, efficient and environmentally-friendly as possible? Investments in virtual meeting technology improved communication and the user experience, which facilitated the transition.

Over time, Telia has increased the number of virtual meetings five times, lowered travel costs by 72 per cent per employee, (the equivalent of SEK 240 million), reduced carbon emissions by about the same amount, made major time savings and also increased gender equality.

**“The major success factor for us has been to look at what we can replace travelling with. It has been important for us that good video conferencing equipment has been available. As it requires a cultural change to bring down travelling, it is important that having video meetings is simple – and that it really works”**

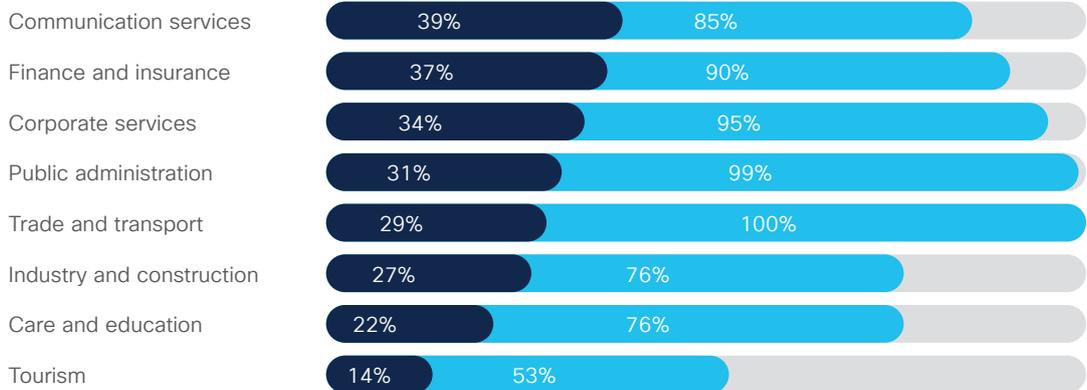
<sup>1</sup> Telia Sweden (2018): Tre konkreta steg att minska resande (in Swedish)

## Proportion of virtual meetings

% of total relevant meetings

● Before the pandemic ● During the pandemic

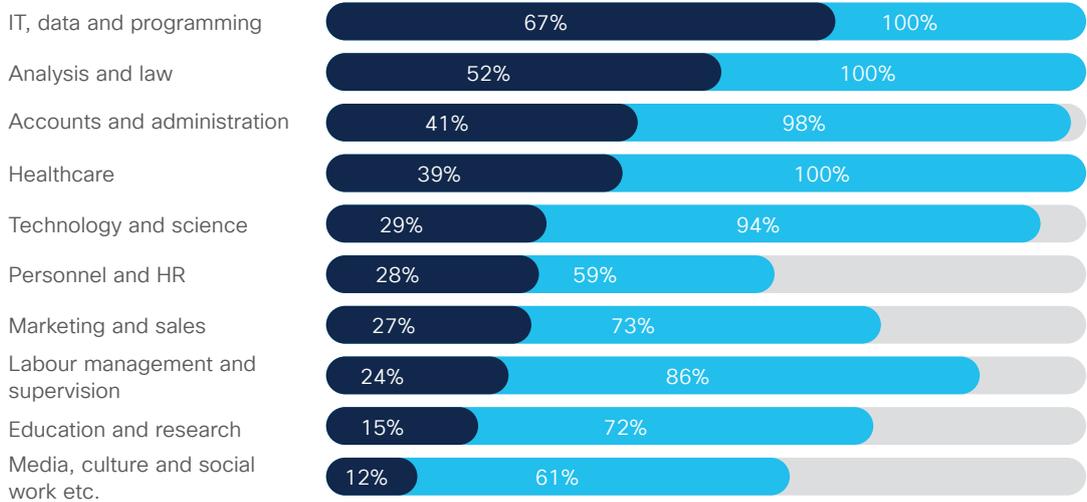
### All sectors more than doubled the proportion of virtual meetings



### Large companies have a higher proportion of virtual meetings



### Administrative occupations have the largest proportion of virtual meetings



### Younger people have a higher proportion of virtual meetings than older people



### Women have a higher proportion of virtual meetings than men



Source: Cisco/Norstat's survey

Younger people meet digitally somewhat more often than older, and women have a considerably greater proportion of virtual meetings than men, both before and during the pandemic.

**“We have a video conferencing facility. There is a big difference in the meeting experience, it feels like you are sitting in the same room”**

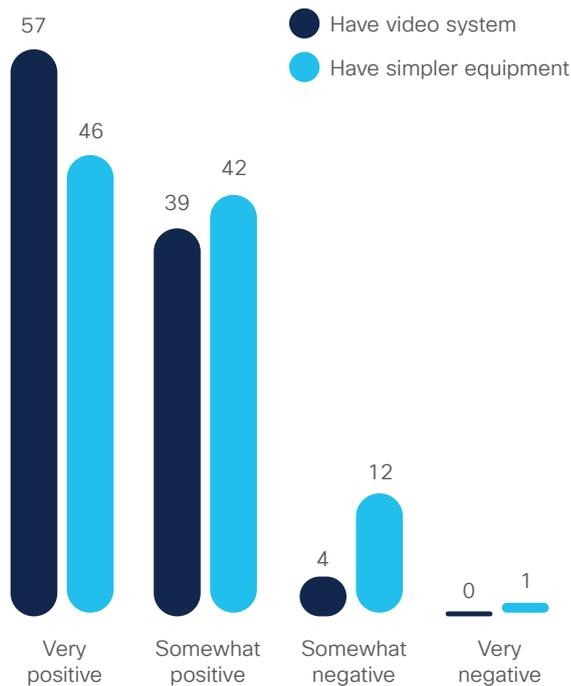
A majority of the respondents (89 per cent) have a positive or very positive attitude towards virtual meetings. In all age- and occupational groups, as well as in different sectors and types of organisations, more people are positive than negative towards digital meetings. The conditions in the workplace influence the employees’ attitude to meetings. Staff who are offered training in digital meeting technology are more positive than those who do not receive it, but most important is what equipment they have on site: the most satisfied (95 per cent positive) are

those who have video systems (software and video conferencing equipment) at their workplace, which illustrates the importance of quality in the meeting experience. For even though a simple video call on the phone or on a portable computer fills an important function, the perception of proximity and contact is often crucial for those who most often, and with the best results, replace journeys with virtual meetings.

In a normal situation, with no restrictions, we Swedes primarily choose virtual meetings in order to save time. More than half (59 per cent) give this as the main reason for replacing journeys with virtual meetings. Cost savings are also important, but about the same number state meeting efficiency and that more relevant persons can participate as reasons. Virtual meetings are often perceived as more structured and focused on the topic, with a greater chance of everyone having a say. Environmental benefits are also an important reason – a meeting with travel emits 150–2,000 times more carbon dioxide than a virtual meeting, depending on the journey’s length and mode of transport. Virtual also increases the opportunity for participants a long way away to take part and provides increased flexibility and possibilities to participate on occasions where a meeting would normally be postponed, for example, due

**Users with video systems are more positive towards virtual meetings**

Attitude to virtual meetings



Source: Cisco/Norstat's survey

**“You sometimes quite simply have to be on site, perhaps you have to see it with your own eyes, or hear how they sigh/groan about certain issues”**

to a cancelled train or flight. Informational meetings and reviews are also regarded as being more effective when they take place digitally. When meetings are instead held physically, then it is for the sake of personal contact, spontaneity, group dynamics and informal conversations – the coffee room

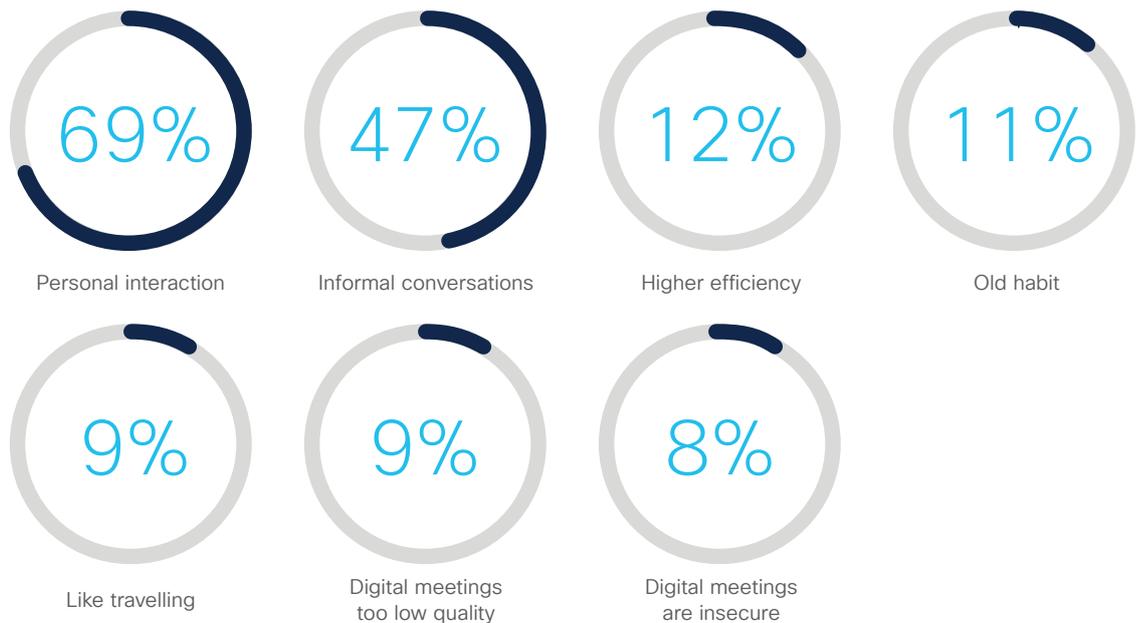
### Meetings are made virtual for time, cost, and efficiency gains

The most common reasons for making meetings virtual before the pandemic



### Meetings are held physically for personal and informal communication

The most common reasons for making meetings physical before the pandemic



Source: Cisco/Norstats survey

has not yet been digitalised. Many people feel, for example, that sales, start-ups and creative meetings function better physically, or think that it is more difficult to manage certain emotional, negative and personal discussions digitally. Others travel because they perceive there to be greater efficiency, because they have to, or out of habit - this is the fourth most common reason to travel to meetings.

Despite major costs for meetings and journeys, and the fact that many people travel solely out of habit or because they think it is enjoyable, only a quarter (26 per cent) of employers have a policy for journeys, meetings and virtual meetings. 40 per cent of employers monitor costs or the time taken for meetings and journeys. The highest proportion with an existing policy is to be found within finance and insurance, along with the public sector, but here too only 37 and 31 per cent respectively have a policy. In cases where there is a policy, it usually concerns how transport to meetings should take place, rather than under which conditions it should take place physically at all. 16 per cent don't know whether there is a policy or not, which risks making the control that exists ineffective. Not even half (45 per cent) follow up costs.

## An increased need for training, security and awareness

During the pandemic, employers have perceived an increased need to train their employees in virtual meeting technology. Many are seeking more guidance on how best to hold virtual meetings, and how employer and employee should manage the changes to the working environment that a transition to virtual meetings entails. A meeting culture is often lacking in which virtual meetings are a natural part with

advanced standards for expectations of availability, whether video should be on or off, how everybody has their say and how mixed meetings are best implemented where some participants are physically present and some digitally.

The technological conditions, satisfactory ergonomics in the home and how the workplace can be adapted to a greater need for quiet rooms, are also questions that employers are highlighting.

**”We will learn to work in this way, we are now learning tips and tricks and have already got past the initial obstacles”**

With increased remote working during the corona pandemic, information is being handled in new ways, which has cyber security implications. Already before the corona pandemic, the cost of cybercrime was running at an annual level of 600 billion dollars globally<sup>7</sup> and increased remote working and insecure forms of digital meetings are creating new security problems. Sweden is highly placed when it comes to awareness about cyber security among decision-makers, yet only half of Swedish companies have governing documents linked to cyber security. Eight per cent choose not to implement certain forms of virtual meetings due to lack of security, with decision-makers over-represented among them. Security consciousness is relatively low in other groups. It largely presupposes that there is someone in the organisation who has ensured that the digital forms of meeting that exist are secure. Awareness is also deficient in relation to the solutions that can make virtual meetings as secure as their physical counterparts.

7 McAfee (2018): Economic impact of Cybercrime - No slowing down. February 2018

# The value of virtual meetings for Sweden

The corona pandemic has forced us to multiply the number of virtual meetings. The alternative to travelling and meeting physically is often not possible. Hundreds of thousands of employees have learned to work more digitally, with companies and organisations in all sectors adjusting parts of their operations and investing in technology and expertise in order to utilise the possibilities for digital cooperation. These resources and experiences will remain in place even once travelling is an option again, and the prerequisites are thus present to continue to give virtual meetings priority over physical ones.

increase such as this would have a very great value for individuals, organisations and the Swedish society as a whole.

Even virtual meetings require investments, but comparisons with many other measures reveal virtual meetings to be cost-effective, simple to implement, and with a high potential: economic gains of SEK 20–40 billion, time freed-up for production or leisure of 20–40 million hours and half a million tonnes of CO<sub>2</sub> saved – at the same time as employees’ freedom and flexibility is enhanced.

There is major potential in all economic sectors. It is greatest for business services that employ a large proportion of the labour force and where travelling is a major expense. Industry and construction also have major opportunities thanks to the sector’s size. In terms of possible savings per employee, principally the finance sector, but also public administration, have major potential.

Certain parts of the economic benefit entail a transfer of profits from one economic sector to another, as well as geographically. Savings in transport services are matched by lower turnover for transport companies, absence of travel abroad entails consumption moving from other countries to Sweden. Certain sectors or regions that are currently hit hard by the pandemic might see lasting declines and might need additional support from society to manage a long-term transition. However, large parts of the value are purely beneficial for society and will benefit everybody – less environmentally harmful emissions, increased productivity in trade and industry as well as more leisure time and flexibility for employees.

## 15–30% more virtual meetings would deliver substantial gains



**20–40 billion** in lower travel costs and freed-up productive working hours, which is equivalent to **¼ of all corporate tax** paid in Sweden



**20–40 million** hours time saving, which is equivalent to the working hours for all of Sweden’s **police officers and firefighters**



**250,000–550,000 tonnes CO<sub>2</sub> equivalents** lower emissions, which is equivalent to **200,000 return trips to Thailand**

Source: Source: Own calculations based on SCB/Swedish Agency for Economic and Regional Growth’s statistics for travelling by Swedes. Transport Analysis’ Survey of Travel Habits. The Swedish Transport Administration’s estimate for productive working hours when travelling for work purposes as well as traffic data from various authorities

For many people, switching to 15 or 30 per cent more external meetings to a virtual form, compared with before the pandemic, would entail a relatively minor transition. It is usually sufficient to stick with the working methods that nevertheless proved to function best. Even a relatively modest

### Three examples of the benefit of more virtual meetings



**A public authority** with five regional offices and headquarters in Stockholm, about 500 employees and a budget of SEK 500 million. Half of the employees travel once a week to meetings within the county, every two weeks within the country for meetings at the regional offices with external stakeholders and collaborative partners as well as to take part in conferences and training.

By making one journey per month within the county and three domestic trips per year virtual (25 per cent fewer journeys for meetings), the authority can save **SEK 7 million per year, the equivalent of ~ SEK 15,000 per employee, ~ 25,000 hours in reduced travelling time and 85 tonnes of CO<sub>2</sub> emissions.**



**A regional service business** – an entrepreneurial accounting office in Dalarna which helps small companies and housing associations. The company has 20 employees and about SEK 20 million in turnover with a 5 per cent profit margin (SEK 1 million). The employees make an average of one customer visit per day, usually by car within the county. In addition, they travel domestically once a quarter for conferences or training.

By making one training session per year and 1–2 customer meetings per week virtual (25 per cent fewer journeys), the company can save **SEK 500,000 kronor per year, the equivalent of ~SEK 20,000 per employee or an increase in the profit margin of 2–3 percentage points, ~1,000 hours in reduced travelling time and 6 tonnes of CO<sub>2</sub> emissions.**



**An export company** with production in Småland with a market leading position in components for the vehicle industry. The company has a turnover of SEK 1.5 billion with a 10 per cent profit margin, as well as ~1,000 employees with 30 per cent of the staff as decision-makers, purchasers and salespersons who travel for work. They make an average of one domestic journey and one international journey a month to visit customers, subcontractors and collaborative partners.

By making one journey per month virtual, the company can save **SEK 15 million per year, the equivalent of ~SEK 30,000 per employee or an increase in the profit margin of one percentage point, ~9,000 hours in reduced travelling time and ~190 tonnes of CO<sub>2</sub> emissions.**

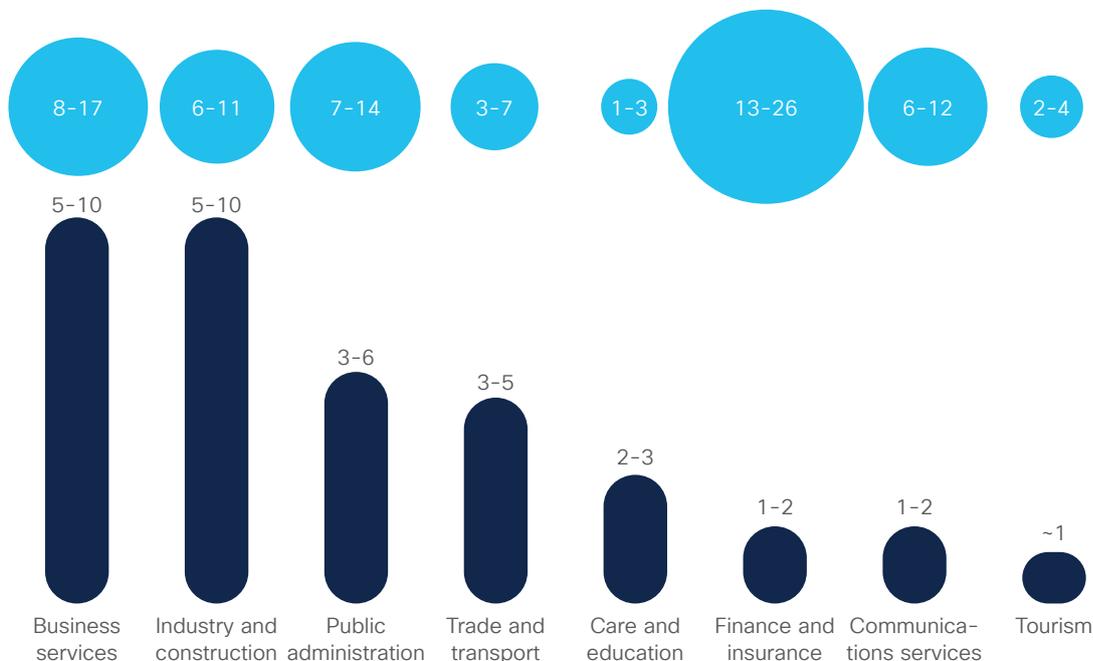
For calculations see method section in the Appendix



### Greatest potential exists within business services, industry and construction, as well as public administration

Saving potential with 15-30% more virtual meetings, billions of SEK per year

● Per employee, thousands of SEK



Source: Own calculations based on SCB/ Swedish Agency for Economic and Regional Growth's statistics for travelling by Swedes. Transport Analysis' Survey of Travel Habits. The Swedish Transport Administration's estimate for productive working hours when travelling for work purposes as well as traffic data from Swedavia

In other contexts, virtual meetings and interactions facilitate benefits and values over and above those quantified in the examples above. Gender equality increases when women – who travel less than men and already hold more virtual meetings today – have the opportunity to participate in more relevant meetings and contexts. Availability can increase, and everyday life be made easier for other groups that find getting to a meeting difficult. For many commuters, the option of working productively from home can free up several hours of leisure time every day. More people can have the opportunity to live and run businesses in the countryside. Virtual care meetings contribute to more cost-effective, more accessible and ultimately better health care. Legal processes become more

secure and more effective in that witnesses can participate via video, which is already possible today as all of Sweden's courts are equipped with secure, modern video conferencing technology. At the same time, digital technology can facilitate personal meetings and social contacts between people who would not otherwise have been able to meet or take part in communal events due to geographic distance or other physical obstacle.

A transition to more virtual meetings implemented in an aware and strategic way will enable businesses and organisations in all sectors to capture the value for the environment, time and economy without major changes or costs.



### Major value of digital care meetings

Digital technology in health and medical care can deliver major socio-economic gains, increase accessibility and improve the quality of care. The greatest potential is to be found within digital interaction and remote care consultations that can provide long-term socio-economic gains which will amount to SEK 20 billion per annum within five years<sup>1</sup>.

More effective flows can be created, with digital healthcare information leading on to an online consultation with doctors and other care personnel via video. It will relieve healthcare centres and specialist clinics and entail less administration as well as increased options to create more effective meetings. The care recipient can more quickly come into contact with specialist care before the situation deteriorates, cutting healthcare costs and reducing absence from work.

The growth of private digital care providers has started the transition and led to the regions introducing digital meeting platforms. This has accelerated during the corona pandemic with, for example, the number of digital care meetings increasing six-fold on Jönköping county's internal digital care platform, Vårdcentralerna Bra Liv, and helping to ensure care for individuals with poorer health too. Despite this, a low proportion of care meetings are currently digitalised, and there is further potential here to capture major values.

SEK 20  
billion in  
savings

### Video technology in Swedish courts

Video links and digitalisation are important tools in ensuring legal certainty and effectiveness in Sweden's courts. Today all 650 court rooms in Sweden are equipped with modern video technology for, among other things, remote witness testimony and simultaneous interpreting<sup>2</sup>, and thanks to the fact that the technology is in place, the courts can now also conduct hearings with parties who are not able to travel to the court due to the ongoing pandemic.

Besides time gains, fewer journeys to courts also mean economic savings in the form of reduced trial costs. Other positive effects are that questioning and testimony via video contribute to fewer cancelled trials, improved legal certainty and increased witness protection. Interpreters can now be available for more sessions than was previously the case where long journeys were necessary. Witness protection and legal certainty in criminal cases is also enhanced when the witnesses can participate without being physically present in the court room.

<sup>1</sup> McKinsey & Company (2017): Möjligheter för Sverige i digitaliseringens spår: Värdet av digital teknik i den svenska vården (in Swedish); McKinsey & Company (2016): The value of digital technology in Swedish healthcare

<sup>2</sup> Swedish National Courts Administration (2020): Kraftig ökning av domstolarnas användning av videoteknik (in Swedish)

# Making Sweden a world leader: roadmap to capture the benefits

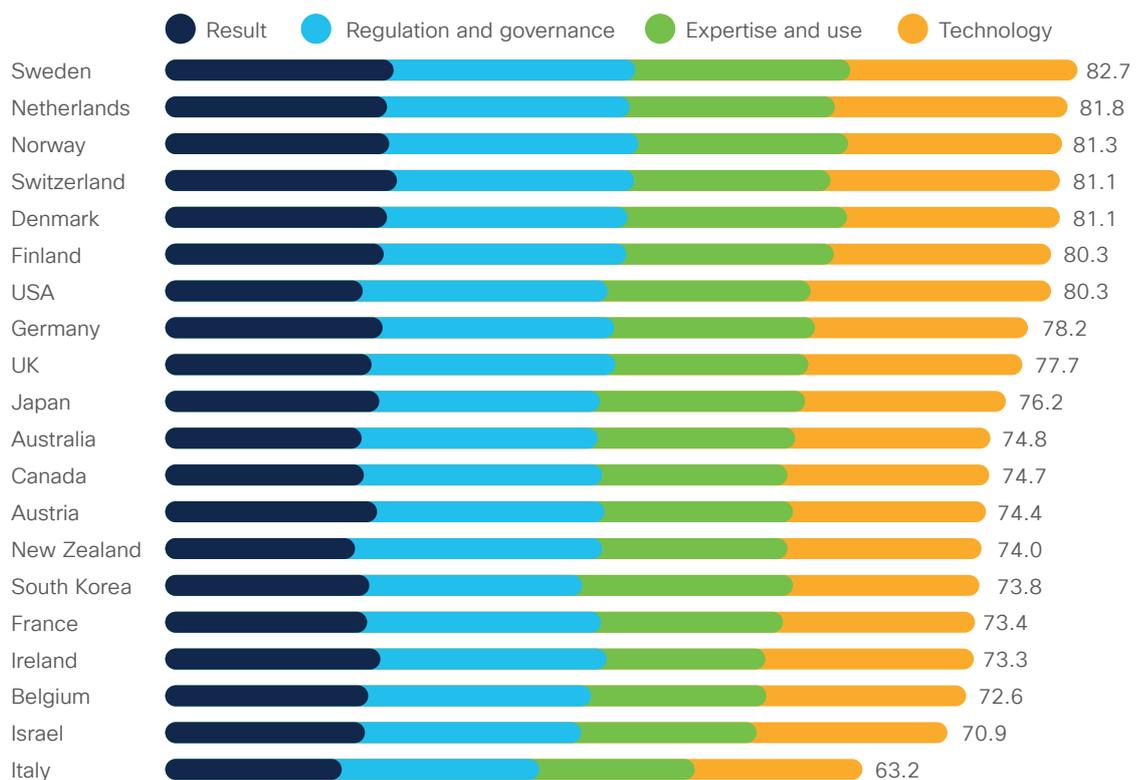
## Sweden in international comparison

According to the government, Sweden shall be best in the world at using the opportunities afforded by digitalisation. With large numbers of meetings and high travel costs, the potential in digital virtual meetings is particularly great in Sweden, even from an international perspective. And the conditions are excellent for Sweden to become best in the world – not just in the sense of holding a lot of virtual meetings, but that they will be well planned, with good availability and

participation, as well as with a high level of technological quality and security. Sweden has an excellent digital infrastructure, a digitally literate population and a tradition of embracing new technologies at an early stage. In international surveys of digital maturity and conditions for these dimensions, Sweden is highly placed, often at the top globally. For example, the digitalisation index, *Network Readiness Index*, ranks Sweden best in the world based on the following dimensions: results of digitalisation, regulation and control, expertise and use, and technology.

### Sweden tops the digitalisation index

Digitalisation index for the 20 largest OECD economies



Source: Portulans Institute (2020) - Network Readiness Index 2019

### Sweden invests relatively less into virtual meetings than comparable countries

Recurrent expenses for virtual meetings/expenses for physical meetings



On average, recurrent expenses for virtual meetings are <1% of business travel expenses

Comment: The index is based on licence costs for video conferencing and collaboration tools, divided by business travel costs per country, indexed according to the leading country  
 Source: IDC (2020) - IDC Semiannual Software Tracker, revenue for conferencing and team collaborative applications 2019; World Travel & Tourism Council (2020) Business Tourism Spending 2019

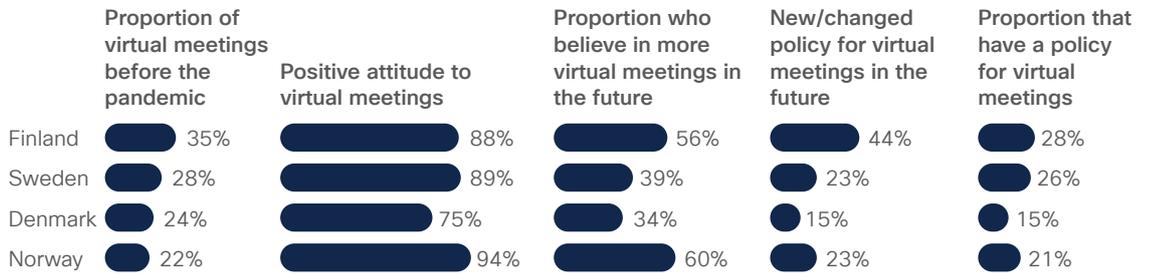
However, when taking the potential, the needs, and the excellent conditions, into consideration, Swedish organisations do not appear to be making proportional investments in virtual meeting technology. Sweden is number one in the world when it comes to expenses for business trips, while the investments in technology for virtual meetings are tiny even in international comparisons. In Sweden they are equivalent to 0.4 per cent of travel costs, a lower proportion than in our Nordic neighbours and most OECD-countries, even those with less potential or degree of digitalisation. In Finland, for example, the proportion is twice as high, in Switzerland three times higher, and in the USA four times as high.

True, the analysis is indicative and incomplete, but Cisco/Norstat's survey confirms and reinforces this picture. Only 51

per cent of Swedes who responded have access to professional software and 30 per cent to video systems, which can affect security, meeting quality, contact with other participants and effectiveness in Swedish virtual meetings.

From a Nordic perspective, the picture is similar across the countries, but with a couple of interesting differences. Finland consistently stands out as having the highest proportion of virtual meetings, with most respondents believing in a further increase and more control of meetings and travel after the pandemic. The Danes stand out as having the most negative attitude to virtual meetings. Sweden has excellent conditions to increase its proportion of virtual meetings thanks to a high proportion with a positive attitude.

### Finland leads in a Nordic comparison



Source: Cisco/Norstat's survey

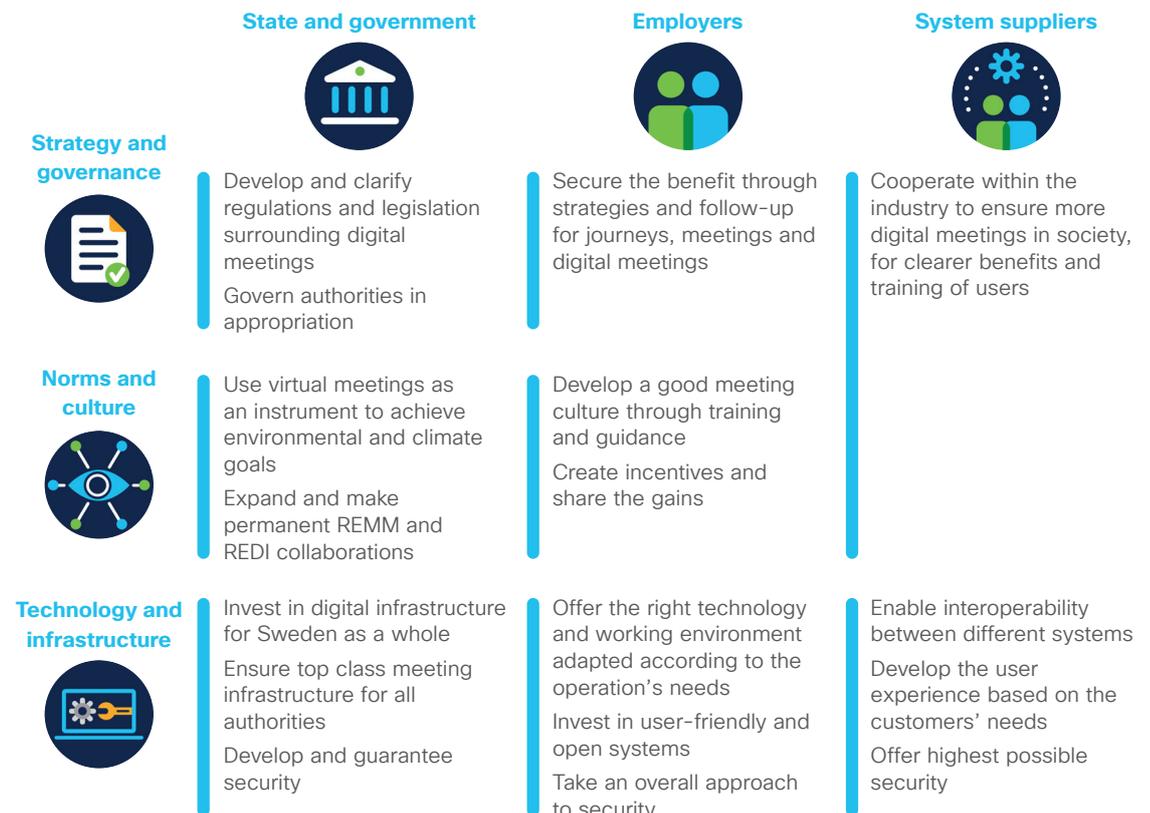
## Recommendations and proposals for action

Sweden thus has good conditions to achieve the potential of virtual meetings for economy, time and the environment – an opportunity that is still underexploited, even in international comparisons.

Even though the transition to virtual meetings requires considerably less investments than many other sustainability and productivity

measures (often relatively small changes in relation to the gains), it will not happen on its own. The public sector, the system suppliers and individual employers (private and public) can all institute measures to drive the development and ensure that it takes place in a strategic way which captures the benefits for all stakeholders. This includes working on technological conditions and infrastructure, on strategy and governance at all levels, as well as on norms and culture at all workplaces.

### Measures to capture the benefit of virtual meetings



## Government and state

The government and the state have an important role to play in using regulation, governance and public investments to create conditions for digitalisation of all sectors throughout the country. The public sector itself also accounts for 20–30 per cent of costs and 10–20 per cent of emissions linked to journeys and meetings and can through a coordinated introduction of more virtual meetings be a driving force for the entire transition and capture major benefits for the treasury and public employees.

- **Develop and clarify regulations and legislation surrounding digital meetings.** Issues surrounding data protection and the applicability of the principle of public access will be updated when more meetings take place digitally and minutes of meetings can be taken by recording meetings. The state can clarify the regulations and provide guidance for a wide range of user groups surrounding regulation issues. The work environment legislation can also be reviewed to clarify the employer's responsibility in connection with an increased proportion of working from home.
- **Invest in digital infrastructure for Sweden as a whole.** The broadband coverage in Sweden is already excellent. Given that fast connection is fundamental for a high-quality virtual meeting, the work to ensure high broadband quality throughout the country and for all age groups should proceed at a high pace, and also include extension of, for example, secure wireless networks in schools and public environments
- **Lead the transition through public management.** Some 1.5 million public employees can make a major difference for Sweden, and derive direct benefits

themselves if government agencies, municipalities and regions become world-leading in virtual meetings.

- The government can use the increased proportion of virtual meetings as one of several instruments to contribute to the transition of society and to meet Sweden's environmental and climate goals
- The REMM collaboration (Virtual Meetings in Public Agencies) can be made permanent and extended to cover all government authorities, to ensure an ambitious process- and method development, as well as follow-up and sharing of good examples. Similarly, SKR, for example, can work to expand the REDI collaboration (Virtual meetings in the public sector) for the municipal and regional sector.
- In its spending authorisations, the government can set requirements for targets, strategies and follow-up of journeys and virtual meetings. Reporting by authorities can include time consumption and gains, costs and savings as well as emissions linked to virtual meetings.
- Guarantee top class meeting infrastructure for all authorities, for example, through an agency-wide procurement of video- and collaboration tools and ensuring the interoperability of all systems used in the public sector.
- **Develop and guarantee security** by producing standards and certifications of secure meeting tools. These standards should apply for the public sector but can also function as guidance and recommendation for private companies that want to have a high level of cyber security in virtual meetings.

## Private and public employers

The most important changes are taking place at each individual workplace – and it is also the individual organisations that are capturing the major benefits of virtual meetings. Businesses, municipalities, regions, authorities and each employee can work strategically to exploit the potential optimally.

- **Secure the benefit through strategies and follow-up for journeys, meetings and virtual meetings.** Besides economic gains and time savings, virtual meetings are an effective way for an organisation to take responsibility for its environmental impact and increase its attractiveness as an employer. Given the potential, employers need to raise the issue out of the IT department to managerial level. In order to release the full value of the potential, clear goals need to be set for how meetings should take place, both in terms of use, costs and the environment. Such a strategy should clarify when journeys and physical meetings are desirable and the most suitable way to meet. Capturing the potential also requires follow-up to be strengthened and communicated in order to help to disseminate insights into what impact our meeting habits have on the organisation's costs, productivity and climate footprint.
- **Develop a good meeting culture through training and guidance.** In capturing the benefit of virtual meetings, it is often our habits that are the greatest barrier. Virtual meetings need to become a natural part of the organisation's meeting culture and a meeting strategy can therefore be supplemented with guidance and training that develops the meeting culture and provides tools for how digital meetings are implemented effectively. This can include practical aspects such as:
  - How does the technology function and how can it be utilised most productively?
  - How should a meeting agenda be developed for different formats?
  - How to ensure that everybody has a voice?
  - How to create common standards and expectations surrounding meetings?
  - How to ensure work environment aspects linked to working hours and ergonomics?

Managers should set good examples and show the employees that they follow the common standards.
- **Create incentives and share the benefits.** Behaviour changes most easily if people gain something from it. The benefits of virtual meetings are considerable – and the employees should share them. Employers can create systems to incentivise travelling less, for example, through giving back parts of the savings in travel time in the form of other investments for the employees, time off, or through incentives equivalent to the bonus points that a journey would have provided instead.
- **Offer the right technology and working environment adapted according to the needs of the operation.** To capture the benefit of virtual meetings, each organisation needs to have the technology and infrastructure in place to facilitate the development of the organisation's use of virtual meetings over time. It also needs to take place in a way that is secure and provides a satisfactory working environment.
  - Invest in user-friendly and open systems that make it possible to hold even more advanced meetings virtually, and continually develop the organisation's technology and conditions for virtual meetings

- Ensure a satisfactory working environment and flexible tools. Employers should increase the opportunities for flexible working, both in the near- and long-term in line with new habits becoming established. With changed habits and new forms of meetings come challenges surrounding how a good working environment can be ensured in a more flexible existence. Swedish employers need to ensure that office environments are suitable for more virtual meetings, with fewer participants, and also that there is meeting equipment available that facilitates virtual meetings both in the traditional workplace and in the employees' homes. These are increasingly important tools in competing for talent.
- Take an overall approach to security. The employees trust that the technology is secure – it is the employer's responsibility to ensure that they are right. Employers should invest in secure systems and train the personnel in proper processes (e.g. identification), for both physical and digital meetings.

## System suppliers

Neither public nor private actors can capture the potential of virtual meetings unless the suppliers of video conferencing products and digital collaboration tools continue to develop their solutions to meet the users' needs and wishes.

- **Collaboration within the industry to ensure more virtual meetings.** Certain questions cannot be resolved by individual suppliers, but rather require cooperation in the industry. Interoperability (see below) is one such important issue, but the industry also has common interests within skills development for users, strategies and standards to monitor benefits. Other examples can be using industry initiatives to raise standards surrounding how we meet and clarify time, cost and environmental benefits of virtual meetings and effective forms of work both for society and for individual organisations and users.
- **Facilitate interoperability between different systems.** It is taken for granted that we can make calls between different kinds of phone, send emails between different email programs, and access websites with different web browsers. Users expect the same thing from digital meetings. The industry should collaborate and develop standards and tools to enable communication between video conferencing systems, regardless of platform.
- **Develop the user experience based on the customers' needs.** Many users are still experiencing disruptions and lack of quality, or do not have the expertise to fully utilise the digital tools. The industry should further strengthen its user orientation in the development of digital collaboration tools. The user experience also needs to get closer to the physical meeting, with improved personal and spontaneous interaction and increased opportunities for collaborative meetings, which currently constitutes a barrier for some people to conduct virtual meetings.
- **Offer the very highest possible security.** In line with more and more data and communication going through virtual meeting tools, it will be increasingly important that the industry's actors ensure that the communication is safe. Examples of improvements are forms of authentication and encryption, establishing common certifications, and training of customers in secure use of the tools.

## REMM<sup>1</sup>

REMM – Virtual meetings in public agencies has been operated since 2011 by the Swedish Transport Administration. In two rounds, during 2011 and 2016, 81 authorities have been commissioned by the government to increase and develop use of virtual meetings within and between authorities. In recent years the authorities have focused on developing the technological infrastructure and expertise to have meetings digitally, which has delivered results. In the last eight years that the authorities have been involved in REMM-2011, they have reduced carbon emissions per employee by 15 percentage points more than other authorities (23 per cent compared with 8 per cent). Most employees of authorities are now able to hold digital meetings and further development of the technology and knowledge-enhancing initiatives have strengthened conditions for digital cooperation. Use of digital meetings has almost doubled during 2019. This is despite the fact that just 40 per cent of REMM authorities have a governing document which addresses digital meetings as a tool to reduce environmental and climate impact from business travel.

<sup>1</sup> Swedish Transport Administration (2015): Bäst i världen på resfri samverkan?! Resfria möten i myndigheter (in Swedish)

### REMM authorities substantially reduced emissions 2011-2019

Carbon dioxide emissions from business travel per employee



Source: Swedish Environmental Protection Agency – Environmental Management in the State 2019

# Working from home one day a week with virtual meetings can free-up commuting time equivalent to one week of holiday per year for the average Swede<sup>1</sup>

<sup>1</sup> IF / YouGov (2014): Average travelling time to and from work is 50 minutes in Sweden. This is equivalent to 208 hours over the course of a year (~250 days). 20 per cent fewer journeys thus frees up just over 40 hours



# Appendix

## Method and sources

To ensure depth and breadth in the report, external quantitative and qualitative sources have been supplemented with surveys as well as focus groups.

Together with Norstat, Cisco conducted a web panel and telephone survey during the period 6-18 May 2020, with a representative selection of 1,000 cross-sector respondents in the Nordic countries.

Focus groups were held 11-14 May with management teams and decision-makers in the private and public sectors respectively, salespersons, IT managers, HR specialists as well as occupational groups which travel a lot for work.

## Benefit calculations

The economic value of virtual meetings is based on Cisco's own calculations, which are based on previous analyses from authorities and research. Two types of benefit have been calculated.

- **Reduced travel costs:** Cost savings for organisations through reduced costs for travel, which includes transport, lodging and food costs.
- **Productive working hours freed up:** The value of the time saved through fewer journeys for work purposes. Here costs and potential are based on the more conservative measure of "cost of working hours" instead of the potential value that can be created during freed-up working hours

There are considerable indirect values that have not been included in the analysis as estimates of this value are regarded as too difficult to assess, for example, the value of improved environment, quality of life, health and meeting quality

### Reduced travel costs

#### Travel costs

For direct costs of travelling for work (transport, lodging and food costs) comparisons have been made of different sources' aggregated estimates (about 85-120 billion per year in Sweden)

- SCB (2018): Travel by Swedes 2017 - national key figures
- SCB (2020): Business travel by Swedes 2018-19 - national key figures (ordered from SCB)
- World Travel & Tourism Council (2020): Business Tourism Spending
- Global Business Travel Association (2017): Country outlook

As short trips for work purposes (for example an hour's customer visit in the same location) are not fully captured in the aggregated statistics of business travel, adjustments have been

made. Journey length for short journeys in *Transport Analysis (2017): RVU Sverige 2015-2016* - The national survey of travel habits has been analysed together with average cost per type of transport and km and added to the aggregated estimate.

The total costs have subsequently been adjusted down so as to only capture the part of business travel with "meeting as primary purpose". This was done based on information regarding purpose of business travel in SCB (2020): *Business travel by Swedes 2018-19* - national key figures (ordered from SCB) as well as *Transport Analysis (2017): RVU Sverige 2015-2016*.

### Value of reduced travel costs

The value has been calculated as a reduction of 15 to 30 per cent of the total estimated travel costs.

### Productive working hours freed up

#### Travelling times

Travelling time has been estimated from *Transport Analysis (2017): RVU Sverige 2015-2016* adjusted to only capture travelling time to those meetings that have "meeting as primary purpose".

The relationship with travelling time and costs for these journeys has then been applied to the total direct travel costs to calculate aggregate travelling time per type of transport.

#### Cost for non-productive working hours

The cost for travelling time per type of transport is calculated from *Swedish Transport Administration (2018): Analysmetod och samhällsekonomiska kalkylvärden för transportsektorn: ASEK 6: Kapitel 7 Värdering av kortare restid och transporttid (in Swedish)*.

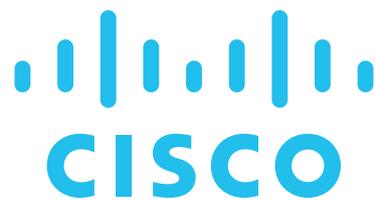
The above to some extent takes into account the fact that travelling time can be productive, however, the proportion of productive travelling time has been adjusted in order to capture the fact that it is technological developments in recent times (for example, better WiFi and connection) that have facilitated increased productivity. In addition, the estimates have been adjusted for inflation from 2014 to 2019 price level.

#### Value of freed-up productive working hours

The value has been calculated as a reduction of 15 to 30 per cent of the travelling time per type of transport, multiplied by the value per travelling time and type of transport.

### Sector distribution

The total value has been distributed between sectors based on *Transport Analysis (2017): RVU Sverige 2015-2016* distribution of journeys between sectors as well as Cisco/Norstat's survey and employment statistics from SCB.



**Americas Headquarters**  
San Jose, CA, USA

**Asia Pacific Headquarters**  
Singapore

**Europe Headquarters**  
Amsterdam, The Netherlands

---

Cisco has more than 450 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco website at [www.cisco.com/go/offices](http://www.cisco.com/go/offices).

Published June 2020

---

© 2020 Cisco and/or its affiliates. All rights reserved. Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: [www.cisco.com/go/trademarks](http://www.cisco.com/go/trademarks). Third-party trademarks mentioned are the property of their respective owners. The use of the word “partner” does not imply a partnership relationship between Cisco and any other company. This document is Cisco public information.