

Automation in Swedish Public Administration

Now and the next steps – towards AI

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The political level

Goals Parliament

An innovative and collaborative government administration that is legally secure and efficient, has well-developed quality, service and accessibility and thereby contributes to Sweden's development and effective EU work

Sweden should be the best in the world to make use of the possibilities of digitalization

Goals Government

An easier everyday life for citizens

Opener administration that supports innovation and participation

Higher quality and efficiency in the administration

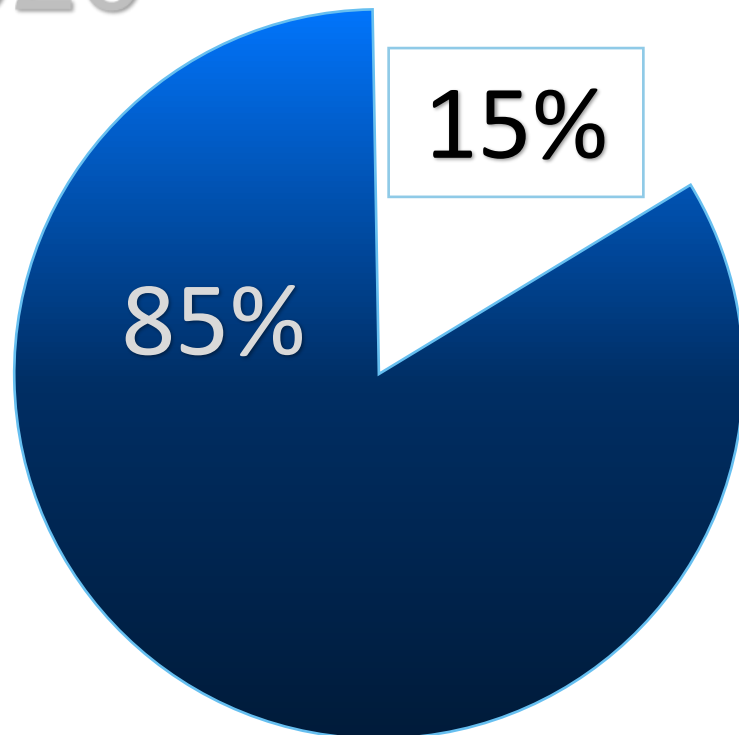
Government orientation

Digital should be the first choice in the public administration's activities and in contacts with private individuals and companies

Supportive of use of automation and use of new technologies to advance the use of automated decision making

The need for welfare is increasing rapidly especially due to the demographic challenge

2026

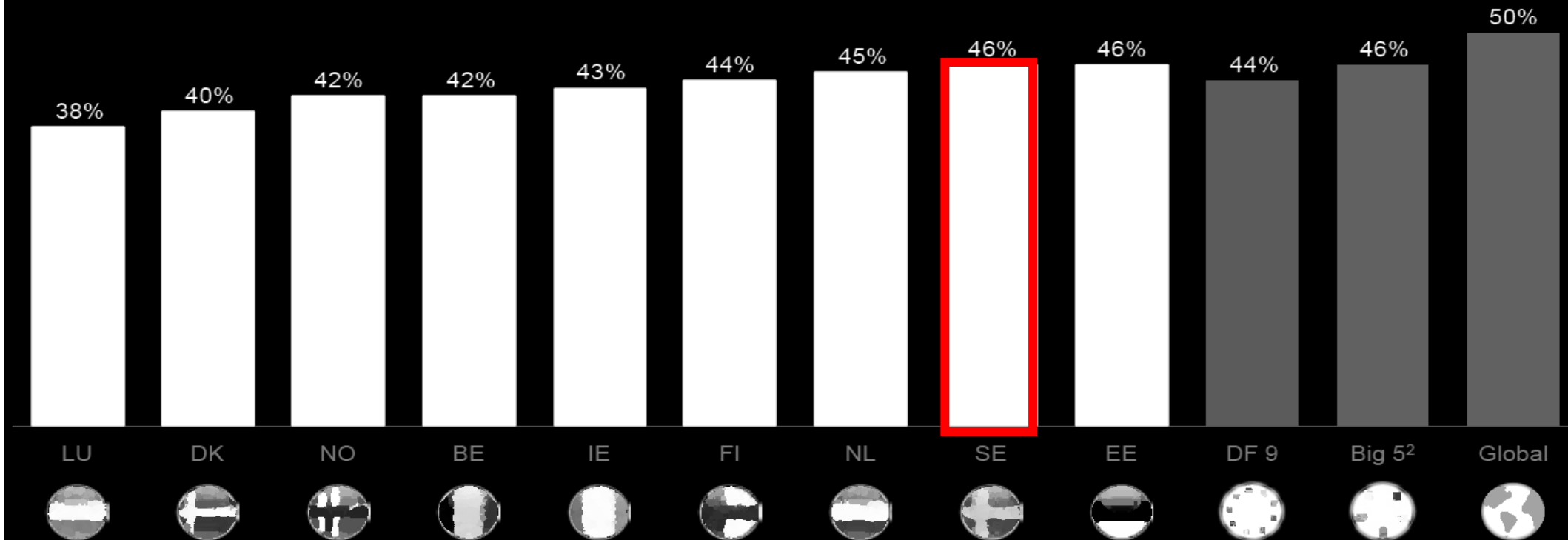


Digitalisation and
automation is a must

Significant potential in automation

Automation potential of digital front-runners is slightly below the global average

Aggregated technical automation potential across countries,¹ % of working hours



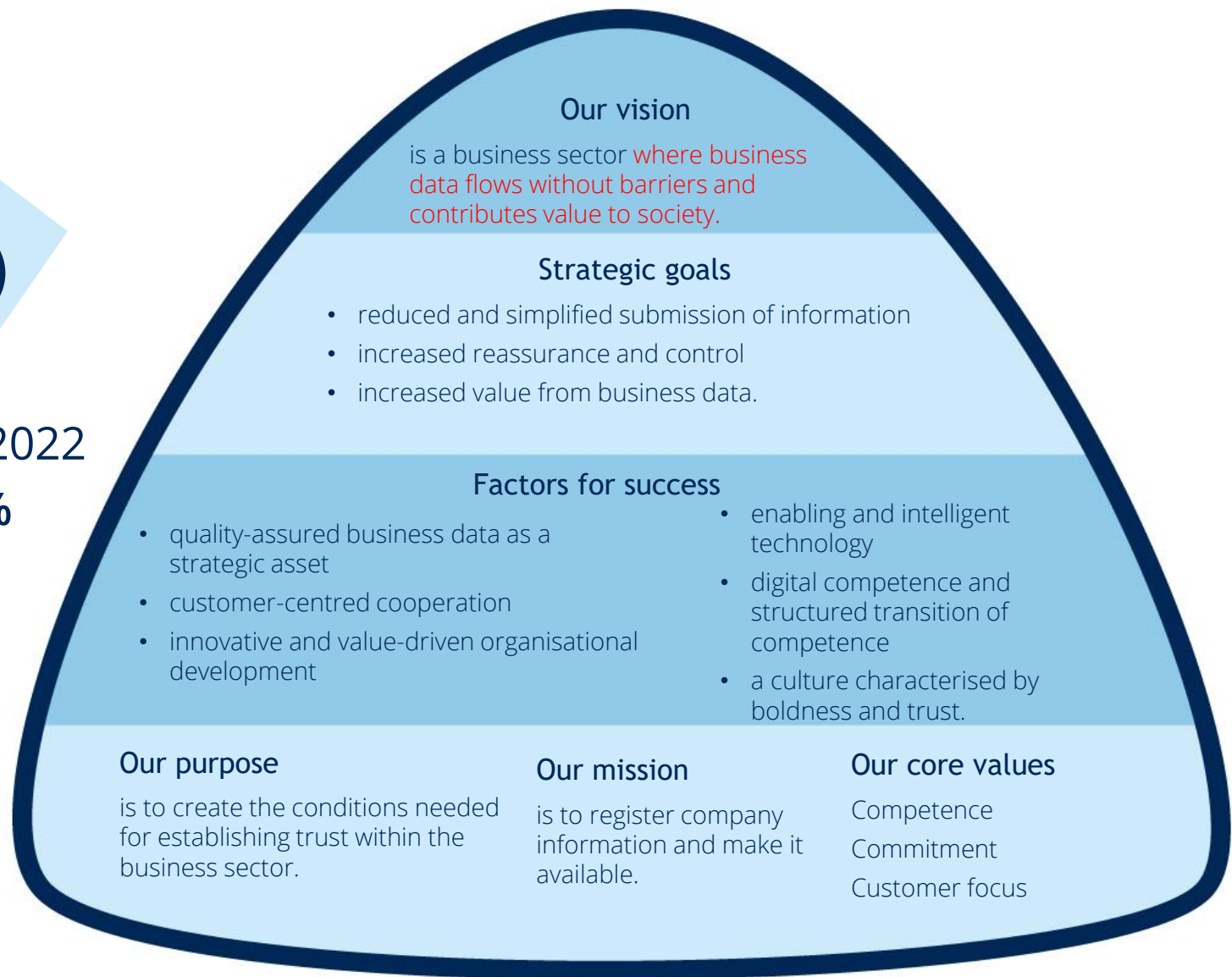
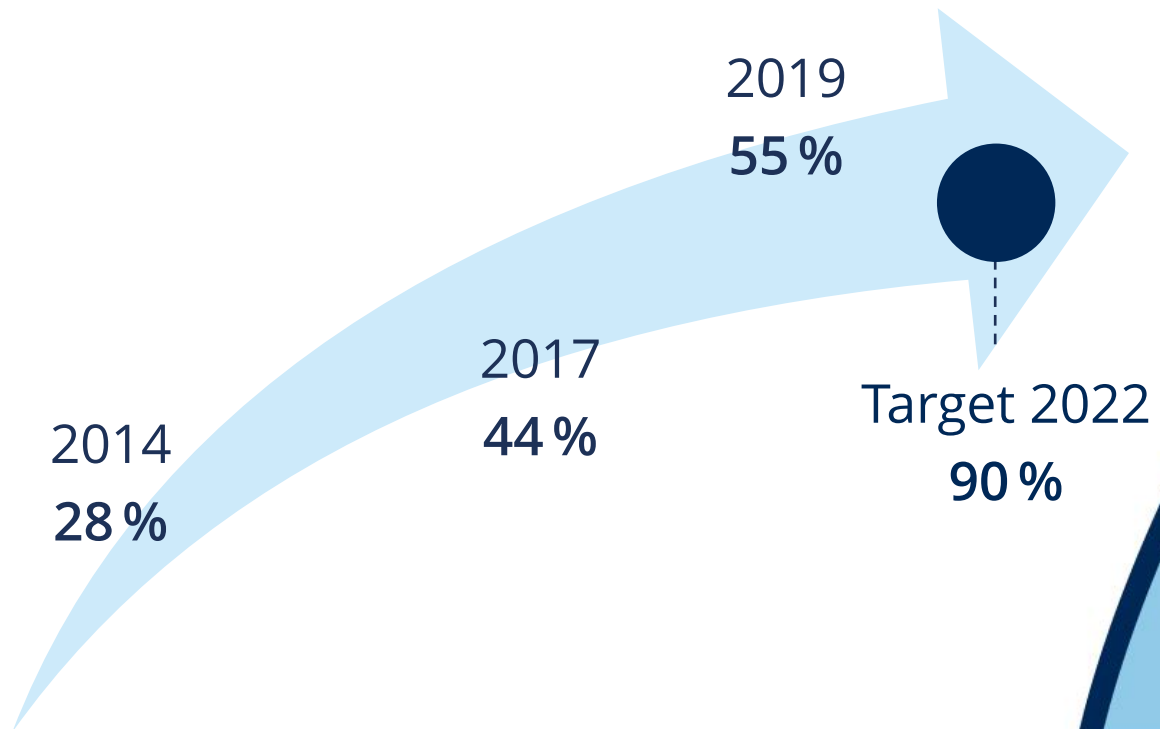
¹We define automation potential by the work activities that can be automated by adapting currently demonstrated technology.

²France, Germany, Italy, Spain, and the United Kingdom.

Source: National Statistics, McKinsey Global Institute; McKinsey analysis

Swedish Companies Registration Office

Total proportion of e-services



Automated decision making in public administration

Since 2018: In the law for public administration: all government agencies may use automated decision making. Previously in *lex specialis*.

For municipalities and regions there is a proposal to have the same possibility.

Automated decisions have been used since 1970 but the major evolution happened due to the general digitalisation of public administration.

Automated decision making is frequently used

In **2019**, 13 government agencies made **121** million automated decisions for individuals and companies

But only 20% of Swedish citizens are aware of this



Automated decisions and processes - Faster, more efficient, less costly

Swedish National Audit Office

Arguably also a higher degree of legal certainty and higher transparency .

Cases

Swedish Social Insurance Agency

3,3 million decisions regarding parental benefits were made in 2019.

56% decisions where fully automated. Manual decisions took 8,3 days and automated decisions took 3,1 days (faster now).

Swedish Tax Agency

The cost of decisions regarding decisions income tax return has fallen by 35% between 2015 and 2019

The estimated economic value of AI



14

billion euros yearly for Swedish
public administration -
using AI that is available today

AI is used in automated processes

In automated decision making: to categorise, evaluate and streamline

10,2 % of organisations in public sector use AI



Tabell 3. Andel som använt AI, fördelat per samhällssektor, procent och konfidensintervall, 2019

Samhällssektor	Procent	KI (±)
Företagssektorn	5,4	0,8
Offentlig sektor	10,2	-
Universitets- och högskolesektorn	12,2	0,9

Cases

Swedish Companies Registration Office

Use of AI to find patterns that indicate criminal activity in companies – sort out to human investigation

Swedish Land Registration Authority

Use of AI to analyse maps to improve geodata registration and decision making regarding land registration

Common tools and capabilities - first four deliverables

- AI guide
- AI technical tools and code
- Project library
- A trust model
- + More than ten assignments to share data to support AI and innovation

Uppdrag att främja offentlig förvaltnings förmåga att använda artificiell intelligens

Regeringen beslut

Regeringen uppdrar åt Arbetsförmedlingen, Bolagsverket, Myndigheten för digital förvaltning (Digg) och Skatteverket (myndigheterna) att enligt vad som anges under rubriken Närmare om uppdraget främja offentlig förvaltnings förmåga att använda artificiell intelligens (AI) i syfte att stärka Sveriges välfärd och konkurrenskraft. Digg ska samordna myndigheternas arbete.

Government assignment to four agencies to support the use of AI in public sector

The need for trust to solve societal challenges

Global challenges

Pandemics (Covid 19)

Climate crisis

Demographic changes

Increased polarization and societal instability

Decreasing confidence to the public sector

The Swedish Agency for Public
Management

"In order to be able to manage societal challenges, it is crucial that there is trust, both between citizens and the public institutions ..."

High trust and high confidence are crucial for our future as a competitive nation of knowledge, for our business and for our welfare

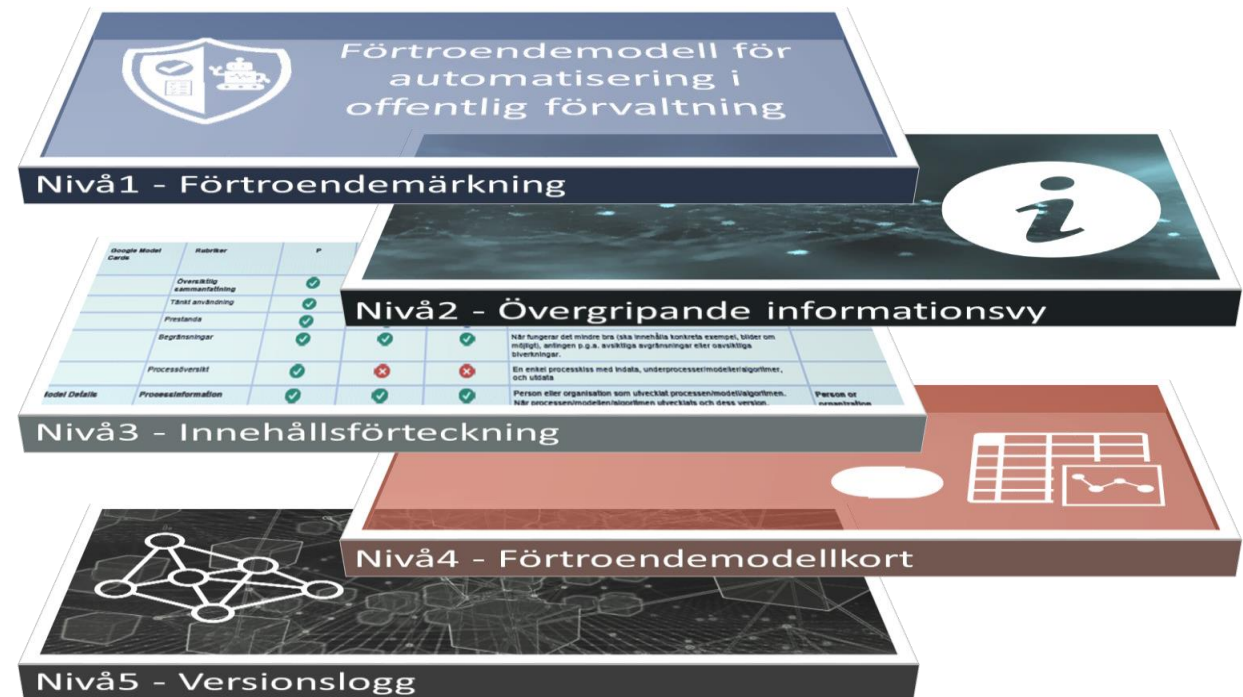
A trust model for automated decisions and processes using AI

A trust model for automated decisions and decision making was developed in a first iteration in 2020

The model contains several layers of information. From simple overview to detailed information.

- "CE"
- Information overview
- Index
- Model card
- Version log (hashed in to a blockchain to be tamper proof)

The model is now to be further developed so that it can be used as a **framework** in public administration



My takeaways

- Building on automated processes and work already done,
- AI Act, trust models and better understanding of AI,
- It is likely that we will see fully automated decision making processes using AI at large in a couple of years,
- This is necessary to keep a well functioning public administration
- But building trust is key.

Thank you

