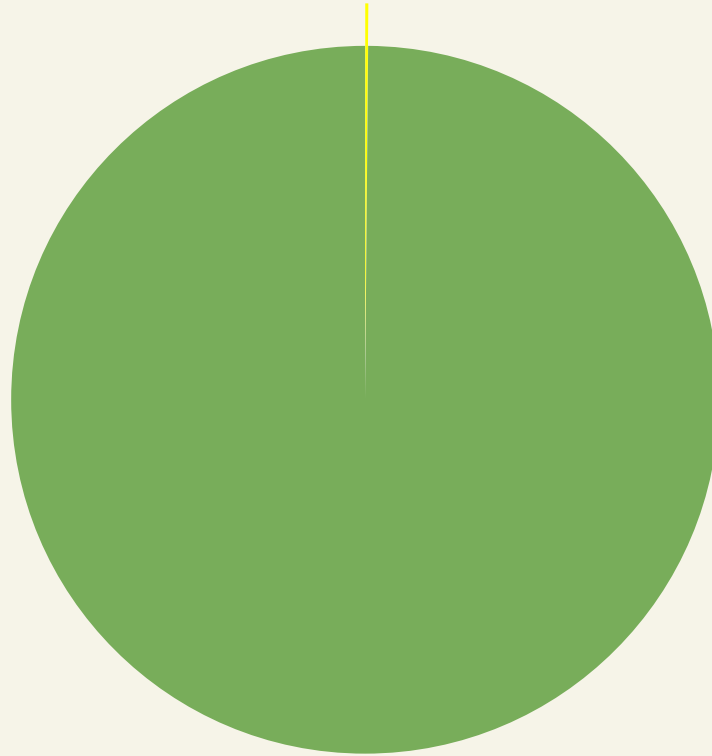




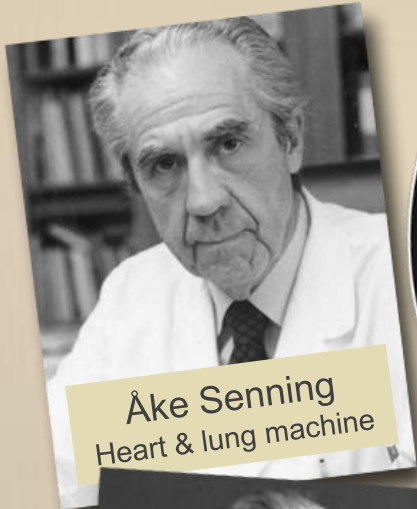
Innovations and ICT

Charlotte Brogren
Director General
VINNOVA

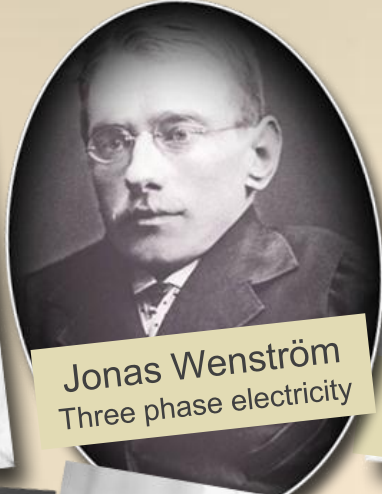
Sweden: 0,14% of the world's population



**20 cities in the world have a
larger population than Sweden**



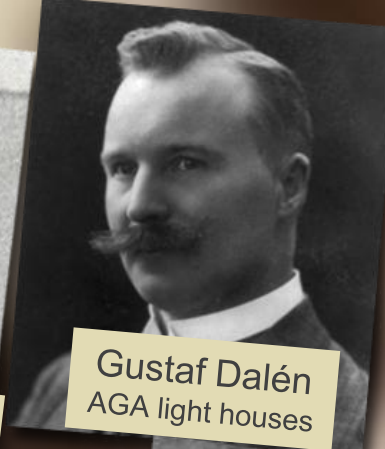
Åke Senning
Heart & lung machine



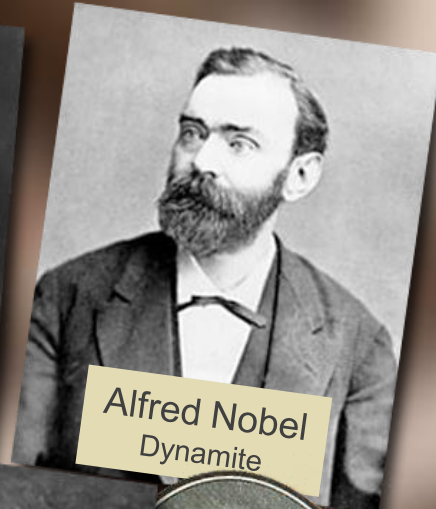
Jonas Wenström
Three phase electricity



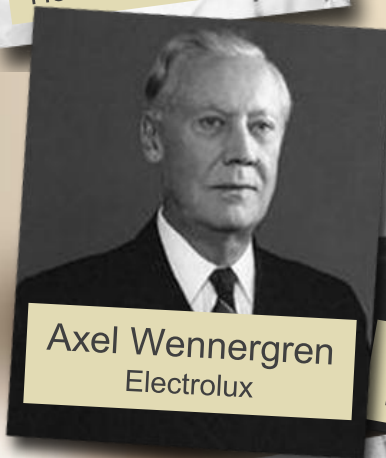
Baltzar von Platen
Refrigerator



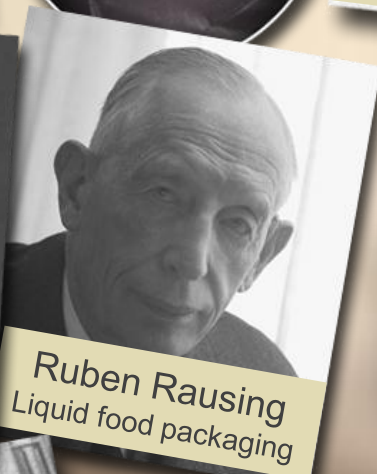
Gustaf Dalén
AGA light houses



Alfred Nobel
Dynamite



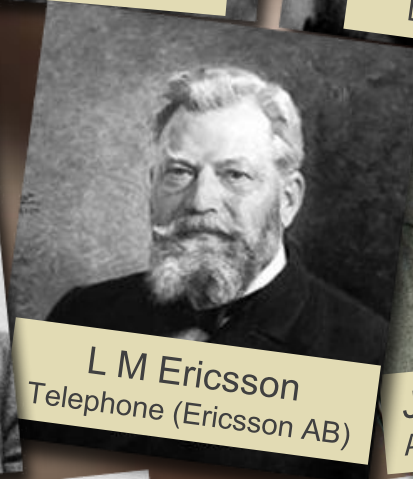
Axel Wennergren
Electrolux



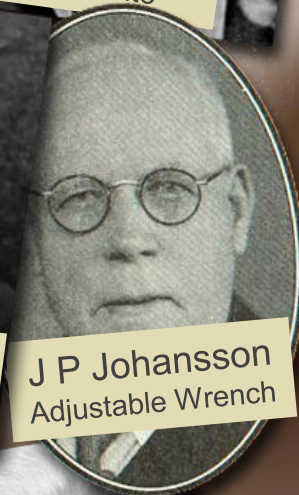
Ruben Rausing
Liquid food packaging



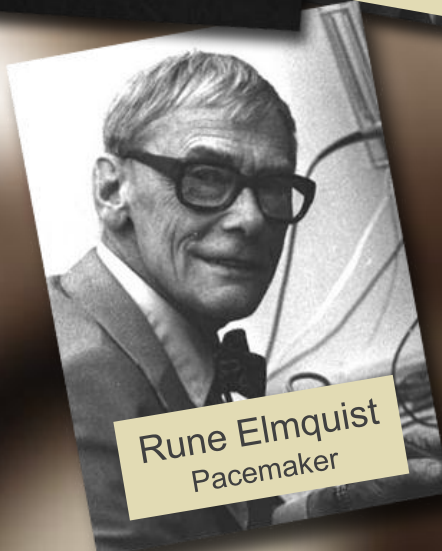
Gustaf DeLaval
Separator



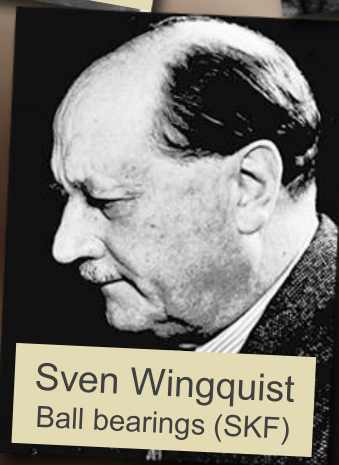
L M Ericsson
Telephone (Ericsson AB)



J P Johansson
Adjustable Wrench



Rune Elmquist
Pacemaker



Sven Wingquist
Ball bearings (SKF)



Erik Bratt
Saab35 "Draken" FighterJet



Carl Munters
Refrigerator

Global Innovation Index 2013

1. Switzerland

2. SWEDEN

3. UK

4. Netherlands

5. USA

Global Competitiveness Report 2012-2013

1. Switzerland

2. Singapore

3. Finland

4. SWEDEN

5. Netherlands

Innovation Union Scoreboard 2013

1. SWEDEN

2. Germany

3. Denmark

4. Finland

5. Netherlands



Does Sweden need an innovation policy?



Opposite to innovation?



Imitation!

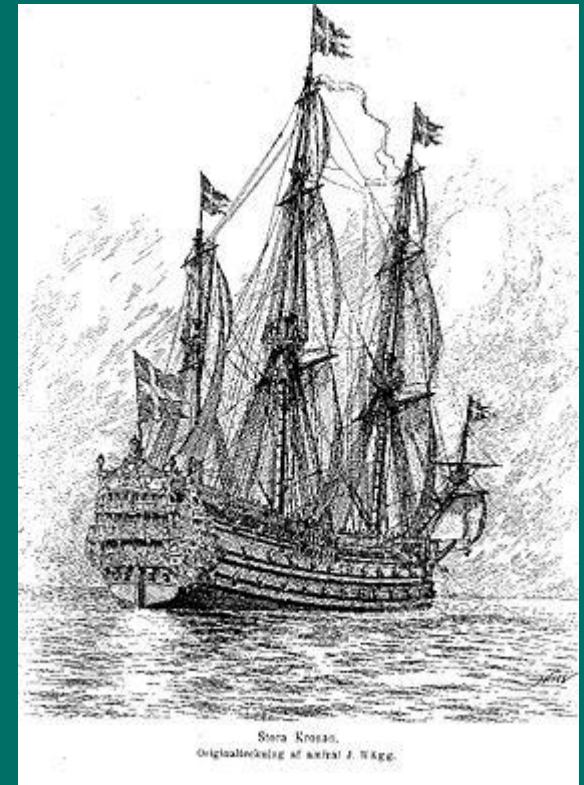


Imitate and compete with discounts

Historical perspective

1832

300 000 oaks were
planted to ensure
future availability of
material for the
Swedish navy



1975



The Commander in Cheif had to say no to delivery ..

....as there were no longer a need for oaks building ships!

1987

- Berlin wall
- CCCP in war in Afghanistan
- IBM was a hardware company
- Telephone was a place
- Big Brother was a person in a book
- Hilton was a Hotel

2002 - these companies didn't exist

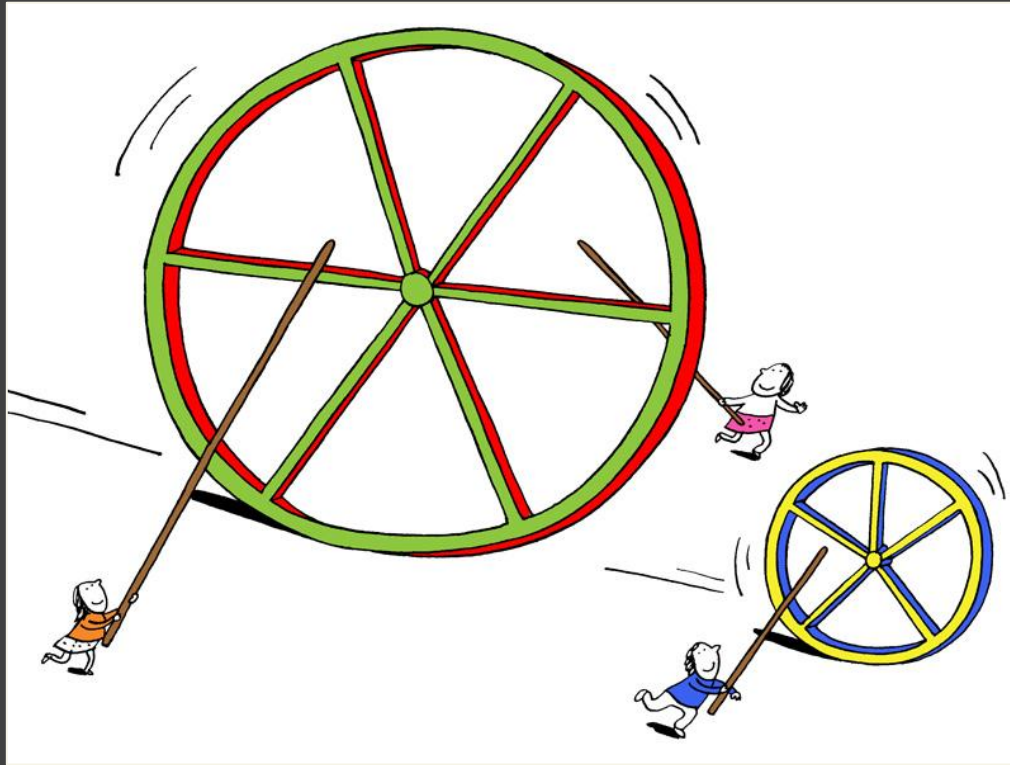




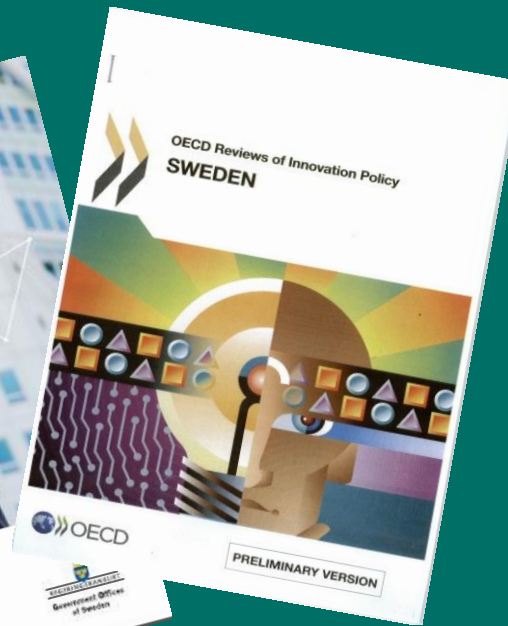
**Of the world's
500 largest
enterprises more
than 30% is gone
in 10 years**

Lack of renewal, Lack of innovation

Compete with smarter
products and services, adding
value



**Does Sweden need an
innovation policy?**



Swedish Research and Innovation Policy

VINNOVA – strengthening Sweden's innovativeness, aiding sustainable growth and benefiting society!

Sweden's Innovation Agency

Grand challenges

“European research must focus on the Grand Challenges of our time moving beyond current rigid thematic approaches. Responses to Grand Challenges should take the form of broad areas of issue-oriented research in relevant fields.”

The Lund declaration, 2009



opportunities

To address these challenges

You need to

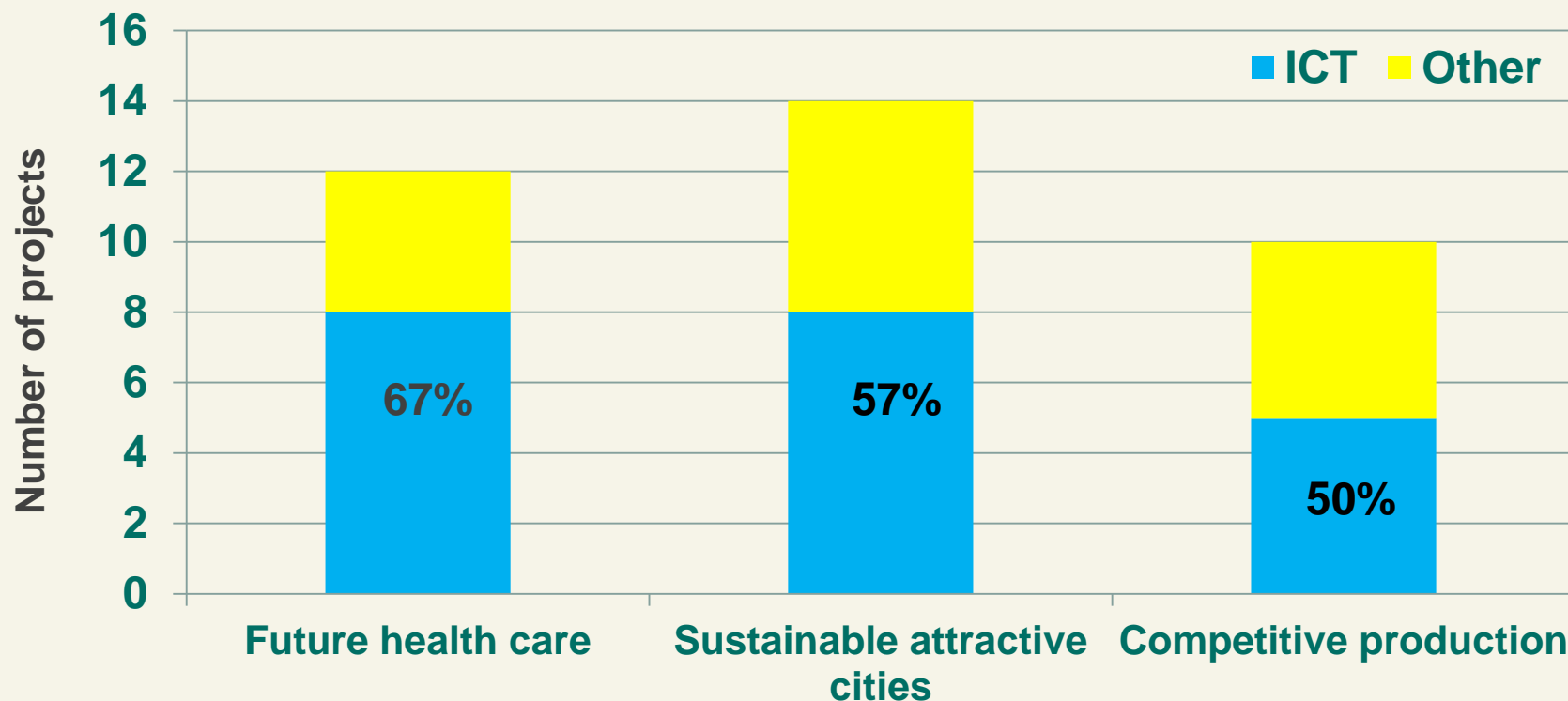
- Bring world class research from different disciplines together
- Combine skills from many sectors
- Apply known technologies into new applications
- Utilize the best expertise from all over the world

VINNOVA's program: **Challenge-driven innovation**

From technology and sectors to social challenges

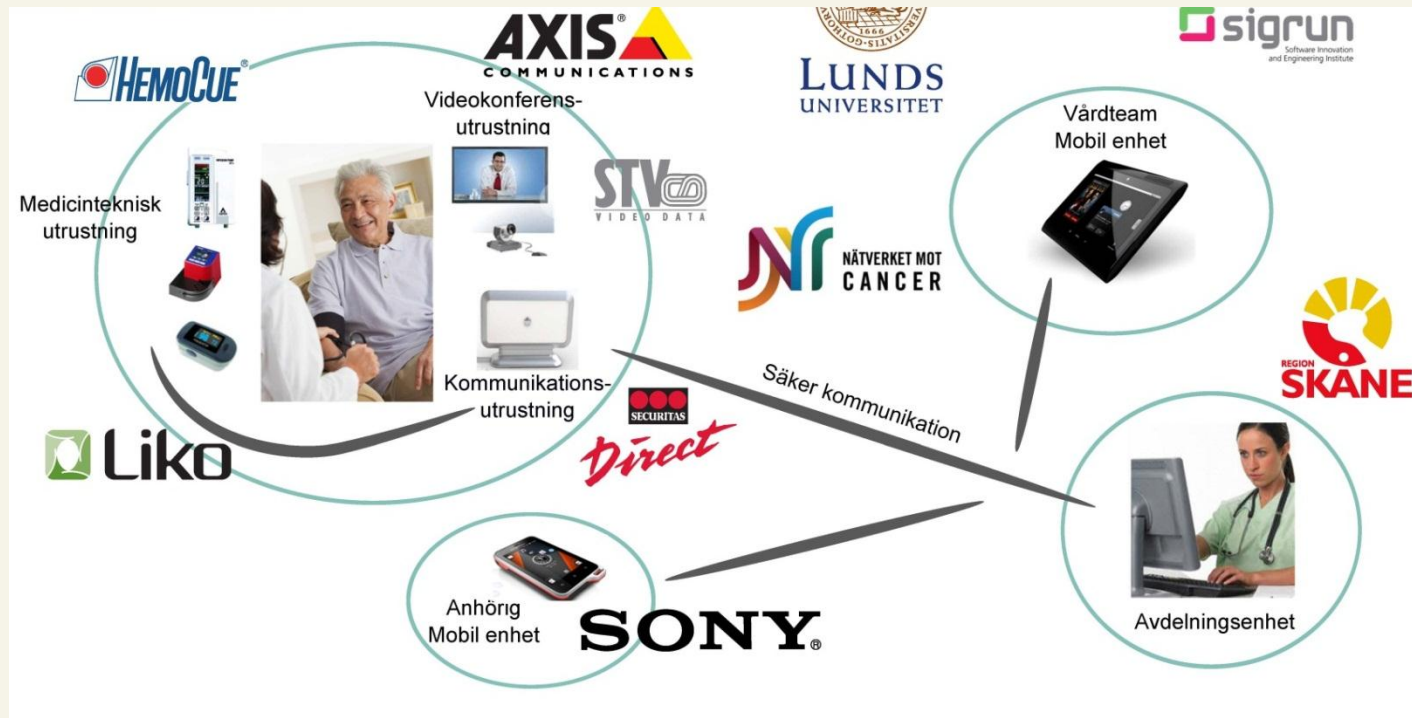


Challenge-driven Innovation results: ICT is the solution enabler



Some examples

ICT enabling advanced home care

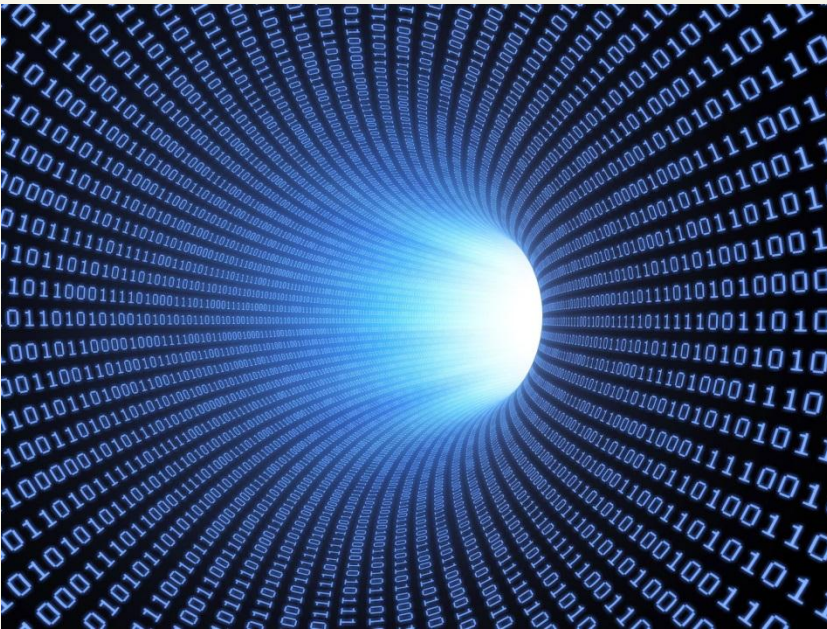


ICT enabling "patient" centric care and allowing new innovative solutions from SMEs ?



My Care Pathways – providing a new interactive approach in healthcare!

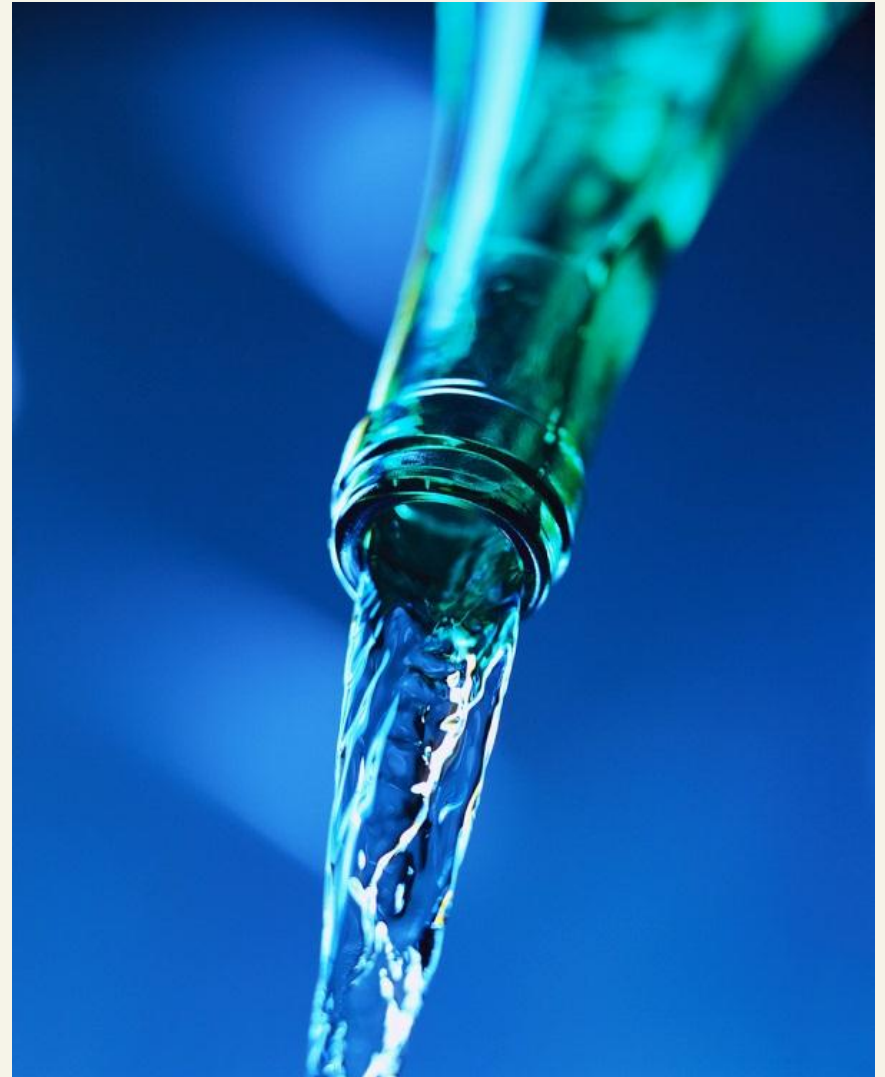
ICT enabling advanced manufacturing



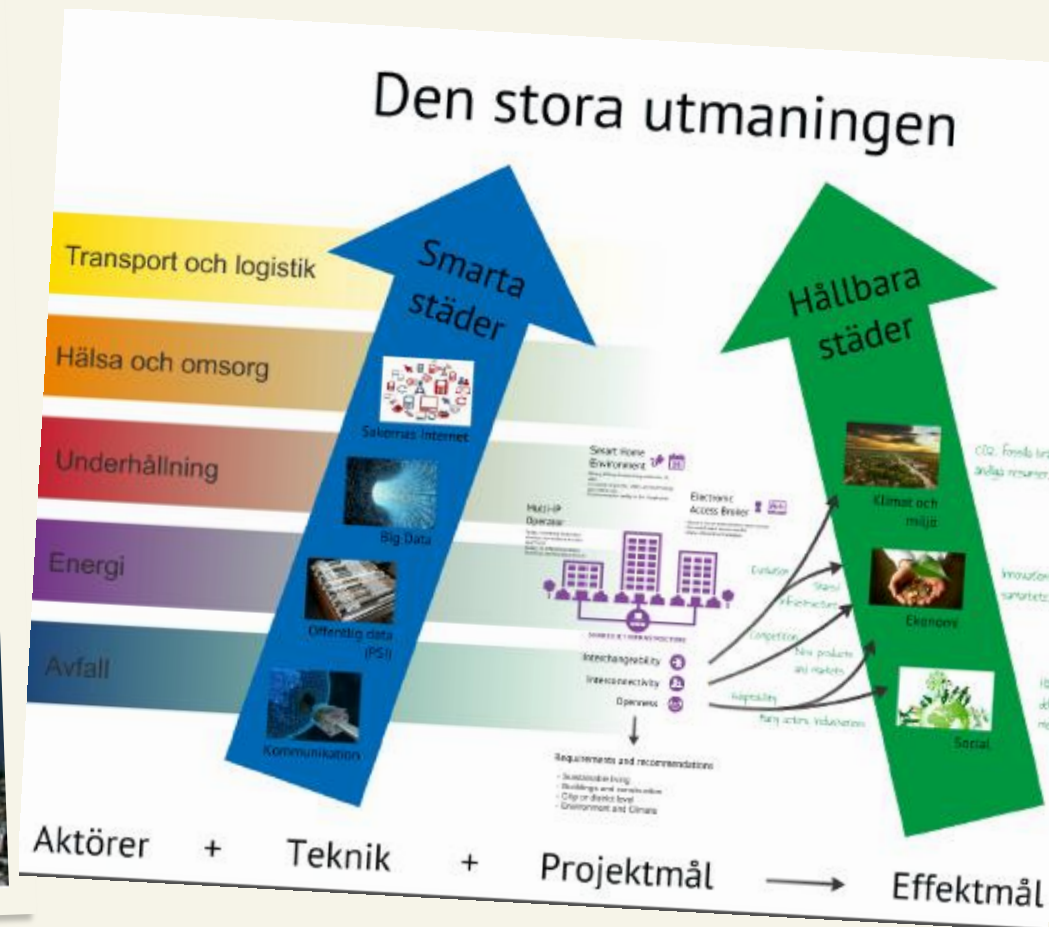
ICT enables operator of the Future



ICT enables online sensor system for resource- efficient water management



ICT Enables sustainable cities of the future



Stockholm Royal Seaport Innovation



- An arena for innovation, learning and collaboration
- Focus on sustainable urban development
- Solutions through R&D projects bringing together companies, academia and the City of Stockholm



ICT – the enabling technology

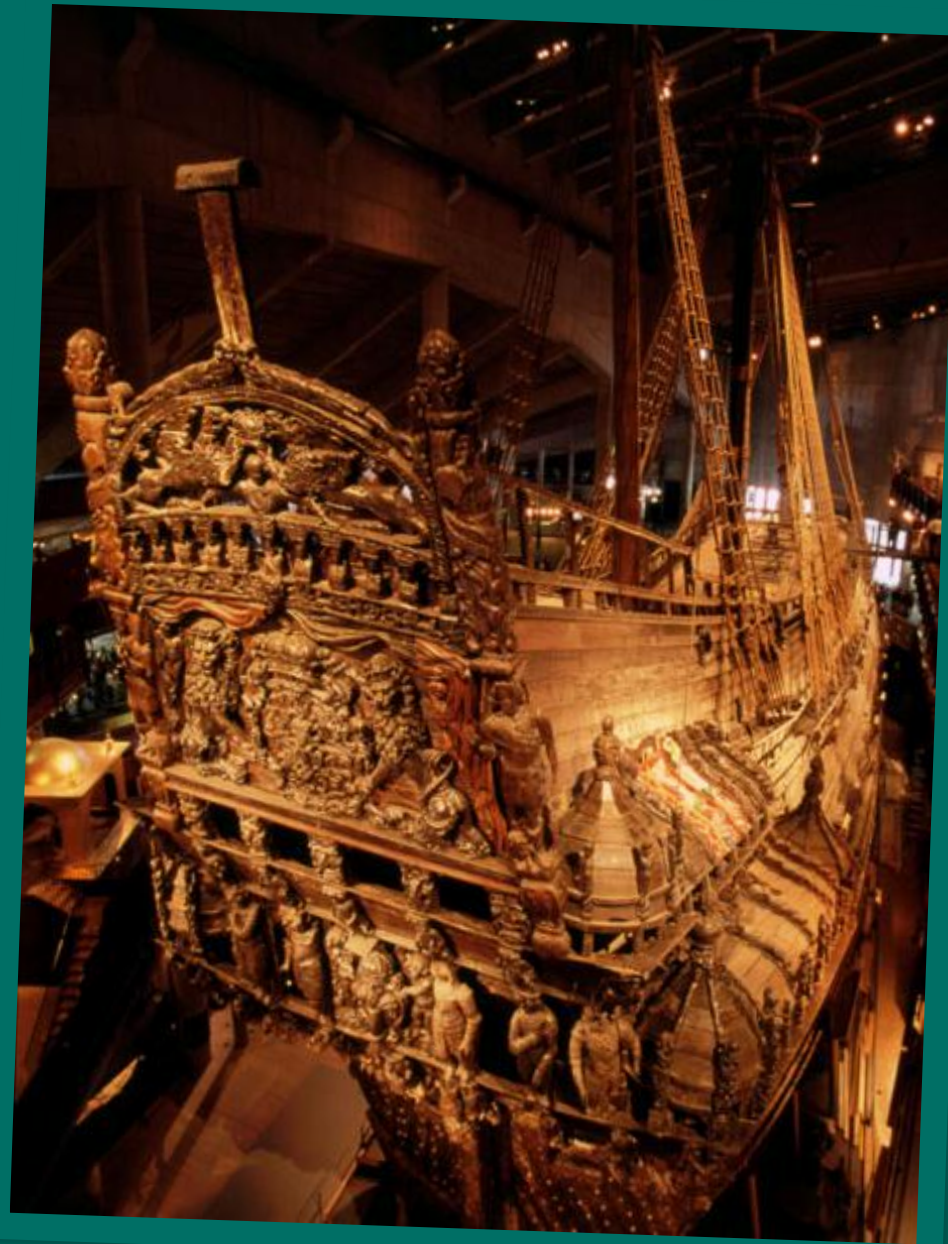
feb -03
apr -03

..but what about the oaks?



**Owned by
"Statens
Fastighetsverk"**

Used to renovate the Wasa ship





Whiskey barrels

Innovation

is about controlling
your destiny!

Sweden's innovation agency



**We strengthen Sweden's innovativeness, aiding
sustainable growth and benefiting society**

www.VINNOVA.se