Industry 4.0 Landscape

• The Mission
• About Industry 4.0
• The Map
• Select Industries, Companies & Actors
• Next Step
The Mission

Make a map featuring good examples of West Sweden actors driving Industry 4.0

"Is it possible to find 100 companies and organisations in West Sweden only?"

We want to promote both organizations enabling and implementing Industry 4.0
Keywords for National Policies – Industry 4.0

- *Industrie 4.0, Smart Factory*
- Advanced Manufacturing
- *Made in China 2025*
- *Internet Plus*
- *New Robot Strategy*
Industry 4.0

"The term "Industrie 4.0" originated in 2011 from a project in the high-tech strategy of the German government, which promotes the computerization of manufacturing.

"In essence, industry 4.0 is the trend towards automation and data exchange in manufacturing technologies and processes which include cyber-physical systems (CPS), the internet of things (IoT), industrial internet of things (IIOT), cloud computing, cognitive computing and artificial intelligence."

Wikipedia
<table>
<thead>
<tr>
<th>Revolution</th>
<th>Description</th>
<th>Time Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>The first industrial revolution</td>
<td>1760-1840</td>
</tr>
<tr>
<td>2.0</td>
<td>The second industrial revolution</td>
<td>1870-1914</td>
</tr>
<tr>
<td>3.0</td>
<td>The third industrial revolution</td>
<td>late 20th century</td>
</tr>
<tr>
<td>4.0</td>
<td>The fourth industrial revolution</td>
<td>ongoing</td>
</tr>
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</table>
Industry 4.0 – Technologies across the society

- Smart Cities
- Smart Healthcare
- Smart Agriculture
- Smart Logistics
- Smart Mobility
- Smart Objects
- Smart Institutions
- Smart Logistics
- Smart Agriculture
- Smart Healthcare
- Cloud & Edge Computing
- AI & Big Data
- Cyber Security
- Virtual Twins
- Industry 4.0 Smart Factory
- AR & VR
- IIOT
- Additive Manufacturing
- Robots & AGVs
- Cloud & Edge Computing
- AI & Big Data
- Cyber Security
- Virtual Twins
- Industry 4.0 Smart Factory
- AR & VR
- IIOT
- Additive Manufacturing
- Robots & AGVs
Collaboration arenas:
Stena Industrial Innovation Lab, SII-Lab
Smarta Fabriker – ”Smart Factories”

Välkommen till Smarta Fabriker - ett samarbete mellan skola och näringsliv och en plattform för att skapa kompetens och sprida kunskap om industriell digitalisering.

Klicka dig omkring på vår sida eller läs på bloggen för att lära dig mer om projektet och den smarta fabriken.
Collaboration Arenas: Assar Industrial Innovation Arena
# West Sweden Industry 4.0 inspirational map

<table>
<thead>
<tr>
<th>Smart Manufacturing</th>
<th>Health Tech</th>
<th>AgroTech</th>
<th>Technology Integrators</th>
<th>AGV</th>
</tr>
</thead>
<tbody>
<tr>
<td>RUAG</td>
<td>Wellspect</td>
<td>Green Tech Park</td>
<td>AVT</td>
<td>TOYOTA Material Handling</td>
</tr>
<tr>
<td>SKB</td>
<td>&amp; R&amp;D Centre</td>
<td></td>
<td>JERNBRO</td>
<td></td>
</tr>
<tr>
<td>Volvo</td>
<td>AstraZeneca</td>
<td></td>
<td>elektroautomatik</td>
<td></td>
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<tr>
<td>SKF</td>
<td>Dentsply Sirona</td>
<td></td>
<td>evomatic</td>
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<tr>
<td>Flexlink</td>
<td>Ljungarda</td>
<td></td>
<td>FRONT AUTOMATION</td>
<td></td>
</tr>
<tr>
<td>Stena Recycling</td>
<td>essity</td>
<td></td>
<td>AH Automation</td>
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</table>

<table>
<thead>
<tr>
<th>Predictive Maintenance &amp; AI</th>
<th>Robotics</th>
<th>Additive Manufacturing</th>
<th>Technology Partners</th>
<th>IIOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>EKINO</td>
<td>KUKA</td>
<td>ZYYX 3D Printer</td>
<td>AFRY</td>
<td>LumenRadio</td>
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<tr>
<td>GOOD SOLUTIONS</td>
<td></td>
<td></td>
<td>Prevas</td>
<td></td>
</tr>
<tr>
<td>TENFIFTY</td>
<td>Machine Intelligence Sweden</td>
<td></td>
<td>Acobia</td>
<td></td>
</tr>
<tr>
<td>VIKING ANALYTICS</td>
<td>REFIND Technologies</td>
<td>3D Printers</td>
<td>hiQ</td>
<td>Leissner</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Skaraborg</th>
<th>Gothenburg</th>
<th>Collaboration &amp; Arenas</th>
<th>Fyrbodal</th>
<th>Public Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTRANS</td>
<td>SMARTAFABRIK</td>
<td>mobilityXlab</td>
<td>RI.SE</td>
<td>Chalmers Ventures VentureWarf</td>
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<tr>
<td>SCIENCE PARK</td>
<td>Göteborgs Tekniska College</td>
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<td>P/TC</td>
<td>GU Ventures</td>
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<tr>
<td>CHALMERS</td>
<td>SII Lab</td>
<td>CampX</td>
<td>AI INNOVATION of Sweden</td>
<td>almi</td>
</tr>
<tr>
<td>IPS</td>
<td>FRAUNHOFER CHALMERS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Key Findings – Gothenburg

We have an industrial heart with a lot of ICT companies

Industry 4.0 is a team effort

Industry consists of companies both leading and following

Strong cluster collaboration

We are in the beginning

Largest companies in the Gothenburg Region

<table>
<thead>
<tr>
<th>Company</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volvo Lastvagnar AB</td>
<td>3,925</td>
</tr>
<tr>
<td>Chalmers Tekniska Högskola AB</td>
<td>3,125</td>
</tr>
<tr>
<td>SKF Sverige AB</td>
<td>2,800</td>
</tr>
<tr>
<td>Postnord Sverige AB</td>
<td>2,525</td>
</tr>
<tr>
<td>Volvo Information Technology AB</td>
<td>2,475</td>
</tr>
<tr>
<td>Ericsson AB</td>
<td>2,225</td>
</tr>
<tr>
<td>AstraZeneca AB</td>
<td>2,175</td>
</tr>
<tr>
<td>Samhall AB</td>
<td>1,575</td>
</tr>
<tr>
<td>SCA Hygiene Products AB</td>
<td>1,425</td>
</tr>
</tbody>
</table>

Source: Statistics Sweden
CONFERENCES & MEETING SPACES

SPREADING THE WORD

- **Advanced Engineering**, Åbymässan, (September 2-3, 2020)
- **Underhållsmässan**, Swedish Exhibition & Congress Center (March, 2022)
- **Trä & Teknik**, Swedish Exhibition & Congress Center (2020)
- **Scanautomatic**, Swedish Exhibition & Congress Center (October 6-8, 2020)
- **Processteknik**, Swedish Exhibition & Congress Center (October 6-8, 2020)
Areas of strength within ICT
Key tool – Cluster Mappings

Industry 4.0 in West Sweden (2020)
AR and VR in West Sweden (2019)
ICT Education in West Sweden (2019)
Microwave competencies in West Sweden (2019)
Big data, machine learning and AI in West Sweden (2018)
Cyber security in West Sweden (2018)
IoT in West Sweden (2017)
E-commerce in West Sweden (2017)

www.investingothenburg.com/target-industries/ict
Do you work in ICT?

- Artificial Intelligence
- Connectivity & Mobility
- Cyber- & Information Security
- Microwave & Antenna Technology
- Visualization & Gaming
- Digitalization

Great. We do too!
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