

# Swedish SWOT

## In focus

***“The Swedish innovation system around the adoption of ICT in the health sector, experience economy etc”***

## Method

- § **Carried out via a questionnaire**
- § **Sent out to appr. 20 individuals**
- § **Only 10 answers**
- § **5 from FOI**
- § **5 from industry and health sector**
- § **+ a few interviews**

# General findings

<p><b><i>Strengths</i></b></p> <ul style="list-style-type: none"><li>- Informal system; no hierarchies</li><li>- Wide spread of ICT usage</li><li>- Long tradition of usage of IKT in many sectors of society</li><li>- Knowledge of high level system development</li><li>- Infrastructure</li></ul>	<p><b><i>Weaknesses</i></b></p> <ul style="list-style-type: none"><li>-Decreasing interest for science and technology education</li><li>- Low salaries in R&amp;D</li><li>- Financing of early phases</li><li>- Unclear division of responsibility among agencies</li><li>-</li></ul>
<p><b><i>Opportunities</i></b></p> <ul style="list-style-type: none"><li>- Use infrastructure</li><li>- Pragmatic R&amp;D climate</li><li>- Early adopters</li></ul>	<p><b><i>Threats</i></b></p> <ul style="list-style-type: none"><li>-Small home market</li><li>- Financing</li></ul>

# Security

<p><b><i>Strengths</i></b></p> <ul style="list-style-type: none"><li>- Established big companies (Ericsson, Securitas, Defence Industry,...)</li><li>- Small population, large country -&gt; surveillance</li><li>- Many players; co-operation natural</li></ul>	<p><b><i>Weaknesses</i></b></p> <ul style="list-style-type: none"><li>- No experienced real threat</li><li>- Sweden is underrepresented in EU financed R&amp;D</li><li>- Small players</li></ul>
<p><b><i>Opportunities</i></b></p> <ul style="list-style-type: none"><li>- EU financing</li><li>- “24h service sector”</li><li>- Networked based defence</li><li>- Niche as tech lead for SMC, for which “big solutions” are not suitable</li></ul>	<p><b><i>Threats</i></b></p> <ul style="list-style-type: none"><li>- Other countries invest in security Sweden less interesting</li><li>- “Security as a need rather than an opportunity”</li><li>- International competition</li><li>- Small home market</li><li>- US dictates conditions</li></ul>

# Health

<p><b><i>Strengths</i></b></p> <ul style="list-style-type: none"> <li>- Niches in selected tech areas (sensors, bio-tech, IT security, ...)</li> <li>- Some excellent research environments</li> <li>- Even elderly are early adopters</li> <li>- Climate of innovation</li> <li>- Huge interest in ICT-health care</li> </ul>	<p><b><i>Weaknesses</i></b></p> <ul style="list-style-type: none"> <li>- Stovepipe like education</li> <li>- Conservatism; proof of concept</li> <li>- Weak demand; “no early buyers”; to many buyers</li> <li>- Weak integration with today’s IT-systems</li> <li>- “pedagogical skills”; need to describe the utility</li> </ul>
<p><b><i>Opportunities</i></b></p> <ul style="list-style-type: none"> <li>- Everybody agree resources limited -&gt; ICT could be part of solution</li> <li>- Put the end-user in focus</li> <li>- Create a single Nordic market</li> <li>- Nordic demonstrators</li> <li>- “Nordic view” of health care</li> <li>- Strong confederation in the area</li> </ul>	<p><b><i>Threats</i></b></p> <ul style="list-style-type: none"> <li>- No solution to the “division of responsibility”-problem</li> <li>- “Cultural divide” tech-health</li> <li>- Other run faster – defines standards</li> <li>- Think we are best</li> <li>- Security and integrity; must be solved</li> <li>- Need to find good business models</li> <li>- Development of law system</li> </ul>

# Production

<p><b><i>Strengths</i></b></p> <ul style="list-style-type: none"> <li>- Close co-operation industry-academia</li> <li>- strong R&amp;D base in production simulation</li> <li>- Particularly strong ICT knowledge in telecom and automobile industry</li> <li>-</li> </ul>	<p><b><i>Weaknesses</i></b></p> <ul style="list-style-type: none"> <li>- Difficulties in attracting students in relevant areas</li> <li>- Parts of producing industry weak ICT knowledge</li> <li>- Usage of ICT in late production phases; not in early conceptual phases</li> <li>- Weak support to SME's adoption of ICT</li> </ul>
<p><b><i>Opportunities</i></b></p> <ul style="list-style-type: none"> <li>- Some increased interest in production research from financing inst. can be observed</li> <li>- Smart ICT application gives us possibility to still have production in Sweden</li> <li>-</li> </ul>	<p><b><i>Threats</i></b></p> <ul style="list-style-type: none"> <li>-Risk that SME's are forced to close down; can't keep up with the R&amp;D cycle</li> <li>- No commercialisation can badly influence the research area.</li> </ul>