Three Layers of Resilience:
How to improve national, regional and corporate resilience

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What do we mean with resilience?

Capability to succeed in the environment that is dominated by uncertainty.
Small, open economy – a chip on waves…

RESILIENCE OF NATIONAL ECONOMY
# Three nations—three type of resilience

<table>
<thead>
<tr>
<th>Korea</th>
<th>Austria</th>
<th>Finland</th>
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<tbody>
<tr>
<td>♦ Fast in adaptation</td>
<td>♦ No large companies</td>
<td>♦ Homogenic society &gt; agreement of direction</td>
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<tr>
<td>♦ Economic development very fast, social system lower</td>
<td>♦ Many family owned sme businesses</td>
<td>♦ Commitment to institutions</td>
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<td>♦ System experienced technology disruptions</td>
<td>♦ Close ties to Germany, subcontracting to German companies</td>
<td>♦ Income equality, no polarization</td>
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<tr>
<td>♦ Geopolitical situation requires continuous preparedness to disruptions</td>
<td>♦ Tourism is the most important export sector, investments done within previous generations</td>
<td>♦ Technology based innovation</td>
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<tr>
<td>♦ Low trust culture</td>
<td>♦</td>
<td>♦ High quality education, with arts and sports</td>
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<tr>
<td>♦ Competition driven</td>
<td>♦</td>
<td>♦ Trust society</td>
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How to improve shock resilience

1. Invest in maintaining trust in the society
2. Security and resilience requirements for information networks
3. Take care of small networked production
4. Prepare to increase self-sufficiency in food production
5. Increase respect for every type of work
6. Promote innovation for a rainy-day
7. Tax incentives for energy self-sufficient housing
8. Tax incentives for urban local food
9. Create an ICT-ecosystem
10. Develop services that require little energy
11. Invest in sustainable well-being know-how
12. Finland a global IT-service center for public authorities
13. Invest in new rapidly exploitable knowledge combinations
14. Let the forest industry disappear
15. Build more nuclear power to hedge against price shocks
16. Commercialize forest into an investment product
17. Manage a single global service
18. Train workforce as the reserve for global companies
19. Switch to exchange economy with no currency
20. Establish a Nordic monetary union
21. Make Finland the center for Asian and Russian connections
22. Specialize in fast piloting
23. Exploit our neutral and apolitical reputation
24. Create Finnish Mittelstand to replace Nokia
25. Invest in trade outside the EU
Resilient nation – examples from Finland

- Absorption
- Awareness
- Agility
- Active learning
- Adaptation

Performance/Profit

- Government’s Futures Review
- Futures Committee of the Parliament

Project based government

- Social security system

- Education of multiskilled people
- New forms of employment contracts

Experiment culture

Hybrid innovations
Investments in global networking

Time
Playground of global drivers

REGIONAL RESILIENCE
What makes a regional economy resilient?

What kinds of policies are improving resilience of a region and its adaptation in the case of radical changes in the environment?

What should regions do in order to avoid sudden structural changes?

- Global drivers cause fast transitions; from manufacturing to services
- Public sector indebtedness is too high; austerity required
- Large multinational companies restructure
Network topology

Structure of regional economy – comparative analysis of three regions.
Resilient region – examples

- Absorption
- Awareness
- Agility
- Active learning
- Adaptation

Understanding of global drivers that have impact on the region

Increase intermediate usage – maximize local exchange

Favor small and medium size, entrepreneur owned companies

Dynamic layer of regional economy

Balanced diversified structure of sectors

Time
No survivors; succeed or die

CORPORATE RESILIENCE
How to succeed in the environment dominated by uncertainty

Three examples

- Lehman Brothers bankruptcy – probability 0,0000000000000000000007
- Nuclear industry in Europe and Japan
- Nokia
Critical nodes of operations

What if Customers rapidly move to Broadband?

- Standard Bodies
- Technological Changes
- Changes in Product/Solutions Roadmap
- Business Case
- Approval of the plan
- Negotiations
- Sales
- Customer request
- Pilot Customer needs
- Customize the solution
- Detailed solution specifications
- Joint Planning
- Choice of sub-contractors
- Pilot Implementation
- SUB-CONTRACTOR
- Customers moving to Broadband
Resilient company – examples

- Absorption
- Awareness
- Agility
- Adaptation

Performance/Profit

- Anticipatory strategy, What if... considerations
- Participation of standardization organizations
- Redundancy in the supply chain, key resources
- Diverse client segments, driven by different drivers
- Multipurpose production units

Active learning

- Benchmarking
- Use of client resources
- Protected super fast processes
- Pragmatic instead of planning orientation

Time
CONCLUSIONS: When you make decisions...

**NO**
- Detailed, long term action plans
- Centralization
- Focusing
- Large organizations/systems
- Specialization
- Control
- Long investment intensive innovation
- Efficient education

Back to normal

**YES**
- Anticipatory, what if... planning
- Distributed structure
- Diversification
- Networks of small units
- Multiple roles
- Trust, empowerment
- Experiments, hybrids, fast failures
- Multiskilled portfolios of individuals

Active renewal
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THANK YOU!