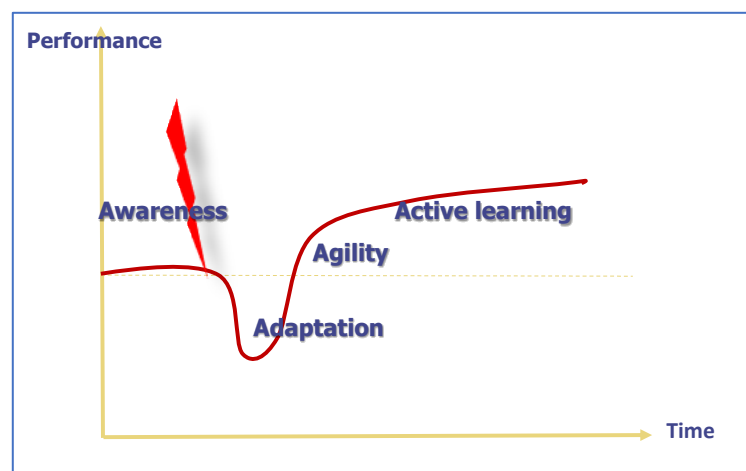


Resilience and the Coronavirus Pandemic

The era of efficiency seems to be over. We are entering a world dominated by uncertainties. Some of these uncertainties are quantifiable, so we are able to conduct risk calculations and if rigorously conducted, we can manage the trade-offs between risks and related opportunities. The challenge of the Coronavirus pandemic is the events that are unfolding are so unique – the closest point of reference is the deep recession of 1930's. And the intertwined interruption of a global pandemic and recession has kicked off many of the processes that may lead to permanent changes in the global structures of power and resources. The cold fact of the situation is that when it is very difficult to predict what will happen next week, how do we prepare for potential futures and the changes that will be introduced to societal systems? Conducting detailed analysis does not help in this situation of high uncertainty, so the best option is to build resilience.

What do we mean by resilience? Resilience of economic systems or organizations consists of four parameters, four A's: **awareness** of uncertainties, **adaptation** to the shock or surprise (the first two A's are referring to resilience as defined in the engineering context), **agility** to utilize the opportunities that are emerging from the shock situation and from **active learning**, that uses a shock as a trigger for improvement of operations or structures. Resilience also refers either to capabilities or performance in the shock situation. In our context we are speaking about a capability to succeed in the middle of surprises or shocks.



Awareness

The Coronavirus crisis reveals some of the typical features of shocks. Even though there was awareness that a pandemic may occur in the future, the perception of probability of a global pandemic was very small. Virologists and medical experts warned about the danger several times. (<https://www.bbc.com/future/article/20200325-covid-19-the-history-of-pandemics>) The latest warning was presented in October 2019 at “Event 201 – A Global Pandemic Exercise” hosted by John’s Hopkins and the Bill and Melinda Gates Foundation. So we were aware, but we did not prepare. At the government level and in national healthcare institutions some preparations were undertaken. However, when the fight over PPE’s started it became obvious the preparations were not enough. Awareness is not enough if it does not lead to preparedness.

Adaptation

Adaptation is not a dimension that you can plan for in the middle of a crisis. Redundancy can be built into processes and resources in advance, so if one method of production or source of resources is affected, there is an alternative. Redundancy is not cost-efficient in most cases, so strong evidence or awareness of potential disruptions is needed to justify investing in it. A good example of regulation that is building resilience is the rule that every new house in Finland must have two sources of heating. Winters are simply too cold to test different ways of adaptation if the only heating system fails.

The coronavirus pandemic has shown that some people, groups and organizations are able to adapt and reorganize (self-organize) their operations. The producer of evening gowns pivots to produce face masks, gourmet restaurants sell take-away dinners and taxi drivers start to deliver them. But we have also seen cases when adaptation does not happen, regulation or party politics prevent governments from assisting companies and unemployed individuals fast enough and the chain of bankruptcies and violent demonstrations emerges.

Agility

Adaptation may be the way to survive during either a V-shaped or U-shaped recovery curve of the pandemic driven recession. But that is not enough for those who want to benefit from the exceptional circumstances. Every change creates opportunities for someone. In the Coronavirus environment, those who are able to create a new business during the lockdown may be those who succeed when remote working is more a rule than an exception. For example, a choir called Aventura was not able to perform a concert, so they initiated a project, where they collected 1120 video recordings of a well-known song. They got contributions from 12 countries and their recording has been watched close to 20 000 times in five days. Their project is now internationally recognized. This type of agility requires agility of thinking, fast reaction and courage to do something that has not been done before.

Active Analysis

The last of the elements of resilience, active analysis of the crisis and learning is still to be seen. The temptation to return to 'normal' is strong, but the world around us will not be the same again.

ADD ONE OF THE BOXES BELOW.



12 economic policy principles for improvement of resilience

- 1. Awareness improvement:
 - Follow up the recent fragilities of economic and financial system
 - Close interaction with global organizations
 - Sensitiveness for early signs of change of market dynamics
- 2. Adaptation improvement:
 - Trust building in the society
 - Diversified structures, networked production of goods and services
 - Distributed, low investment intensity production, knowledge intensive products and services
- 3. Agility improvement:
 - Support for those that take the risk to use opened opportunities
 - Support for experiments instead of existing businesses and structures
 - Exceptions in regulatory environment when needed
- 4. Active learning for improvement of procedures
 - Courage to analyze past failures
 - Fast implementation of the best practices developed during crisis
 - Fast changes to the regulatory and institutional environment that support change



12 policy principles for improvement of resilience

- 1. Awareness improvement:
 - Systematic foresight and shock analysis
 - Benchmarking of crisis situations on other countries
 - Sensitiveness for early signs of change
- 2. Adaptation improvement:
 - Trust building in the society
 - Diversified structures, networked production of goods and services
 - Redundancy of critical resources, procedures and systems
- 3. Agility improvement:
 - Close interaction with global systems, organizations
 - Support for those that take the risk to use opened opportunities
 - Support for experiments instead of existing businesses and structures
- 4. Active learning for improvement of procedures
 - Courage to analyze past failures
 - Fast implementation of the best practices developed during crisis
 - Fast changes to the regulatory and institutional environment that support change



12 means for improvement of resilience

- 1. Awareness improvement:
 - Scenario planning
 - Rehearsals of crisis management
 - Sensitiveness for early signs of change
- 2. Adaptation improvement:
 - Trust building in the society or in the organization
 - Providing power to those that are in the frontline (self-organizing)
 - Redundancy of resources, procedures and systems
- 3. Agility improvement:
 - Close interaction with operating environment, markets, customers
 - Diversity of capabilities, thinking patterns and procedures
 - Freedom to take an action and freedom to fail
- 4. Active learning for improvement of procedures
 - Courage to analyze past failures
 - Fast implementation of the best practices developed during crisis
 - Measurement of change