Executive Summary

Technological disruptions reshape our relationship to the world. The printing press centuries ago, IT not so long ago and now Artificial Intelligence, Genetics and Robotics change the way we live, think and perceive our society. It is therefore natural that companies or public institutions are nowadays subject to disruptions. The intent of this book is precisely to study these transformations.

What do the city of Detroit, the National Gendarmerie, Nokia or La Poste in France have in common? The port of Hong Kong and Air France? Are there any similarities between Norwegian start-ups and SMEs in Shenzhen? Why do governments in America, Asia or Europe, and private companies follow the same trends by co-developing technological hubs? Our globalized ecosystem makes possible such analysis. The methodology in this book is very experiential and based on observations and interviews conducted in France, Germany, Finland, Estonia, Norway, Sweden, United States, Canada, and China. The authors tried to understand how technological disruptions impact the way companies work. The reason is that companies hold a central place in these transformations by both being a subject and an object of transformation when they challenge their own business model. From evolution to revolution, there is sometimes only one small leap.

During our meetings around the world, we identified two main recurring topics: how companies face the emergency of transforming themselves because of technological disruptions. Then, how deep their transformation has to be, from evolution to revolution. Some companies are indeed facing such strong disruption that they first work to survive. On the other hand, with favorable ecosystems or immature technologies, some companies know they need to transform themselves but without any kind of emergency. Some of them even get the chance to anticipate change before it happens.

We decided to work on four scenarios in the book:

- **Urgent Revolutions**: in this chapter, we study organizations whose business model collapsed because of technological breakthroughs and therefore fight to survive. So, they build defensive strategies (parallels can be drawn between Nokia and the city of Detroit; Nokia is stopping its mobile branch while Detroit is trying to find new ways to attract people to rebuild its local economy). They also adopt sometimes offensive strategies to consolidate new models (La Poste develops new sources of income such as personal service or digital services, Posten Norge refocuses its activity on e-commerce, Schneider Electric increases its revenues by offering its services on a platform.)

- **Urgent Evolutions**: these are organizations that live under considerable time or economic pressures, but don't have to transform their business model. In this scenario, technologies are often not yet fully mature and companies try to accelerate their transformation while there is still time. In this chapter, we study Air France who uses digital technologies to differentiate its customer service, the National Gendarmerie who uses new technologies to protect citizens with modern security services or Valiant, Siemens and Thales, that use or share their expertise to act before disruptions. For example, they build better collaborative ecosystems by building labs that work on scaling up new technologies and new solutions.
- **Non-urgent Evolutions**: these are often organizations that have anticipated transformation so they can face technological disruption without imperative emergency. Their transformation is generally anticipated, prepared, and explained to the stakeholders. Examples from companies such as RTE in France, Equinor in Norway, other large worldwide groups like Siemens or Fiat Chrysler Automobiles will illustrate this chapter.
- **Non-urgent Revolutions**: these are organizations, mainly public institutions, that disrupt their business model without being forced to do so. It is rather more an awareness of the limits of a system than a competitive pressure and it's usually a long-term process. In this chapter, we will study the administration of Estonia rebuilt from scratch at the fall of the U.S.S.R, the city of Shenzhen that switched between a fishing village and a megalopolis in 20 years, and GovTech companies who disrupt how States work.

At first sight, these comparisons don't look that obvious. But, we manage to identify good practices for both evolution and revolution scenarios. For example, it usually starts with a real business intelligence strategy, then deep changes at the corporate strategy level and creation of open internal ecosystems and empowerment of managers and employees. Successful transformations are frequently the result of a good awareness of managers and a real strategy to gain employee trust. Basically, what matters most is the ability to initiate transformation and it often depends on specific culture (corporate culture or local culture). For instance, the Swedes and Norwegians show great resilience and benefit from a very attractive State aid system (protect people, not jobs). The United States has a real entrepreneurial mindset, even in the most difficult situation like the fall of the city of Detroit. This book also intends to highlight these cultural differences.

In this book, we mainly focus on business model transformations. We thought it was an absolute necessity to try to understand «why» companies transform themselves rather than giving details on implementation. When the DNA of a company is challenged, finding appropriate solutions requires a deep understanding of the issues. Our empirical approach only proposes food for thoughts.

This book is a follow-up of previous FNEP publications. The 2020 mission will focus more on the human impact of these transformation and publish their results in 2021.