A Post-Crisis National Innovation Model

The Case of Iceland

By Patrick Crehan of CKA

and

Jørn Bang Andersen, Nordic innovation expert

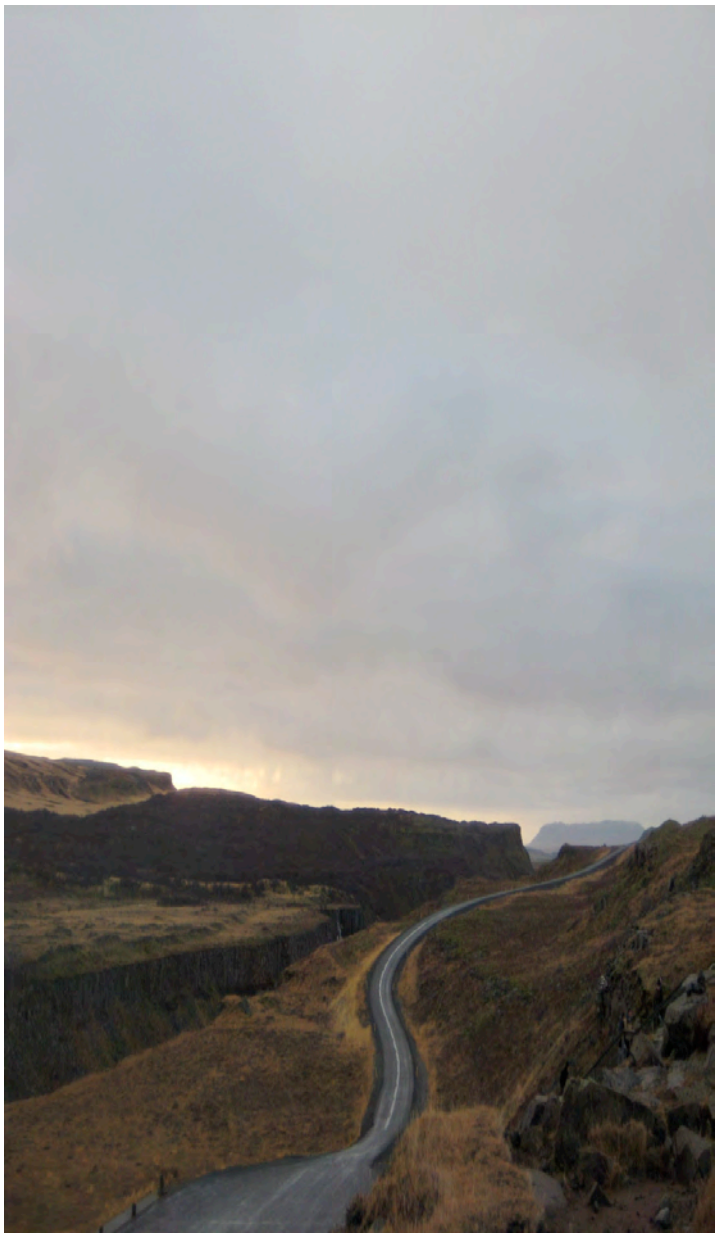
The old model based on National Innovation Systems, with its focus on public institutions and public money for research programmes, has become too costly in the aftermath of the global financial crisis.

The Post-Crisis Innovation Model (PCIM)

A new model for creating growth is currently being implemented in Iceland. The model is a post-crisis national innovation model. It marks a departure from previous models which put public sector organizations and public research programmes at the centre of national innovation and growth policies. It has attracted considerable attention in the Nordic business press. Recent features in Mandag Morgen, the Nordic CEO magazine and Aftenposten are part of a debate as to whether this approach should also be tried in Denmark and Norway. In the wake of the recent financial crisis, many other countries feel an urgent need to rethink their approach to national growth and innovation policy, and to the role that the state can play.

In 2009, Nordic innovation expert Jørn Bang Andersen discussed with Hallgrímur Jónasson, CEO of RANNIS, the National Research Council of Iceland, the merits of bringing in an outside perspective to provide suggestions for a post-crisis innovation action plan for Iceland. Jónasson agreed that this would be a good idea and Andersen advised that such a plan should satisfy at least three basic constraints:

- It should cost no additional tax-payer's money to implement
- It should aim at having a substantial and immediate impact on industry
- It should have a high positive impact on the value of Iceland's brand, and enhance its image abroad as a country worthy of foreign direct investment.



To take on the challenge, Andersen mobilized an international team of innovation and management experts. The team included Patrick Crehan of CKA, who developed the overall Post-Crisis Innovation Model or PCIM based on growth-platform capabilities, and Rob C. Wolcott of the Kellogg Innovation Network.

When Andersen and Crehan delivered their final recommendations, the room in Reykjavík fell silent. The main client from RANNIS and his colleagues from Invest in Iceland, and the national export promotion council, looked at each other for a while and quietly said 'that was not what we expected. We may need a little time to digest this'. RANNIS and Iceland have since adopted their recommendations and are now busy with their implementation.

Improving innovation starts by management engaging on issues related to how they expected their organization to grow. Simply throwing money at research will not lead to growth.

Though radically different from mainstream innovation policy approaches, the PCIM is highly complementary to what most governments already do. It addresses issues which are generally overlooked despite their importance. It can be adapted not only to the needs of national or regional governments, but to those of cities and sectors as well.

The approach relies on six fundamental principles for thinking about innovation and what needs to be done to improve it. These principles include the idea that innovation is primarily the responsibility of management, that innovation should be driven by growth strategy, and that the ability to innovate is an organizational capability rather than an individual skill. Implicit in this approach is the idea that a failure to innovate is not a failure of science or engineering, it is ultimately a failure of management to make the right decisions about innovation and to ensure that innovation is supported with the right systems, processes and resources. Improving innovation starts by engaging management, and not by simply throwing extra money at research.

Six Basic Principles - Why Management and Innovation Capabilities are More Important Than Ever Before

The six principles on which the PCIM is based are explained in more detail in a paper which can be obtained from CKA. They can be summarized as follows:

1. Innovation should be driven by **growth** strategy. Growth can be both quantitative and qualitative in nature.
2. Innovation requires **marketing** as well as R&D. This is a reference to the modern concept of marketing, which is about discovering, creating and understanding new markets and new needs, not just advertising and sales.
3. Innovation requires **total innovation** not just new ideas for products, processes and services.
4. The innovation system is the value chain or value network of the organization.
5. The ability to innovate is an organizational **capability.**
6. Innovation is primarily the **responsibility** of management. It is not something they can afford to delegate. The temptation to do so is real and the job is made all the more difficult due to increasingly rapid changes in the overall business environment.

The PCIM focuses squarely on the strategic capabilities of organizations, capabilities which determine not only how well they innovate, but the extent to which they do the right kind of innovation.

This is very different from mainstream approaches to national innovation policy, which ignore the capabilities of organizations, treating them as black boxes and focusing almost exclusively on increasing investments in research and technology. Research and technology investments should be directly driven by innovation needs. In turn innovation should be driven by growth strategy. If this chain is broken, the organization will drift and the best engineering or science in the world will not save it from oblivion.

Global Reality-Check

The starting point for implementing the PCIM in Iceland was a **reality-check** based on an analysis of global innovation related trends, and how they would likely affect the national or local economy. The reality-check is strictly business-oriented and focuses mainly on competitive threats and market opportunities.

Organizations need to understand the nature of competition and the source of future growth. Competition is pressure to reduce costs, improve quality or provide better services. Growth can be qualitative or quantitative. These concepts apply equally to public and private sector organizations. They need to periodically rethink their business and how they expect to grow in future. They need to understand the role that innovation will play in achieving such growth. They need to ask themselves if they are well organized to make it all happen. These considerations should profoundly influence the nature of national innovation systems.

Yet, few nations have looked into the existing portfolio of innovation and research programmes to re-assess them in view of the new business reality. Although the biggest shock to the overall business environment has been the recent financial crisis, this has come against the background of rapid progress in science and technology, a general push for sustainability and the fast growth of emerging economies.

The reality for most companies has been the loss of export markets, deep cost-cutting and the reformulation of entirely new growth strategies. Unless, national governments update their inventory of innovation support measures to align them with the real business environment, their growth strategies are likely to fail.

Industry Beacons – Growth Platforms and Strategic Capabilities

The PCIM has a number of layers, and for the sake of clarity only some of the Icelandic case is explained in this context. In the reality-check for Iceland, Andersen and Crehan focused on two issues that seem destined to change the structure of global industry, mega-trends that no company can afford to ignore. These are **emerging market competition** and **opportunities at the bottom of the pyramid**. In Iceland this created the context for conversations with around 20 industry leaders who were asked how they saw prospects for their own industry, opportunities for future growth, the role that innovation would play in achieving such growth and the challenges they expected to face in making this happen.

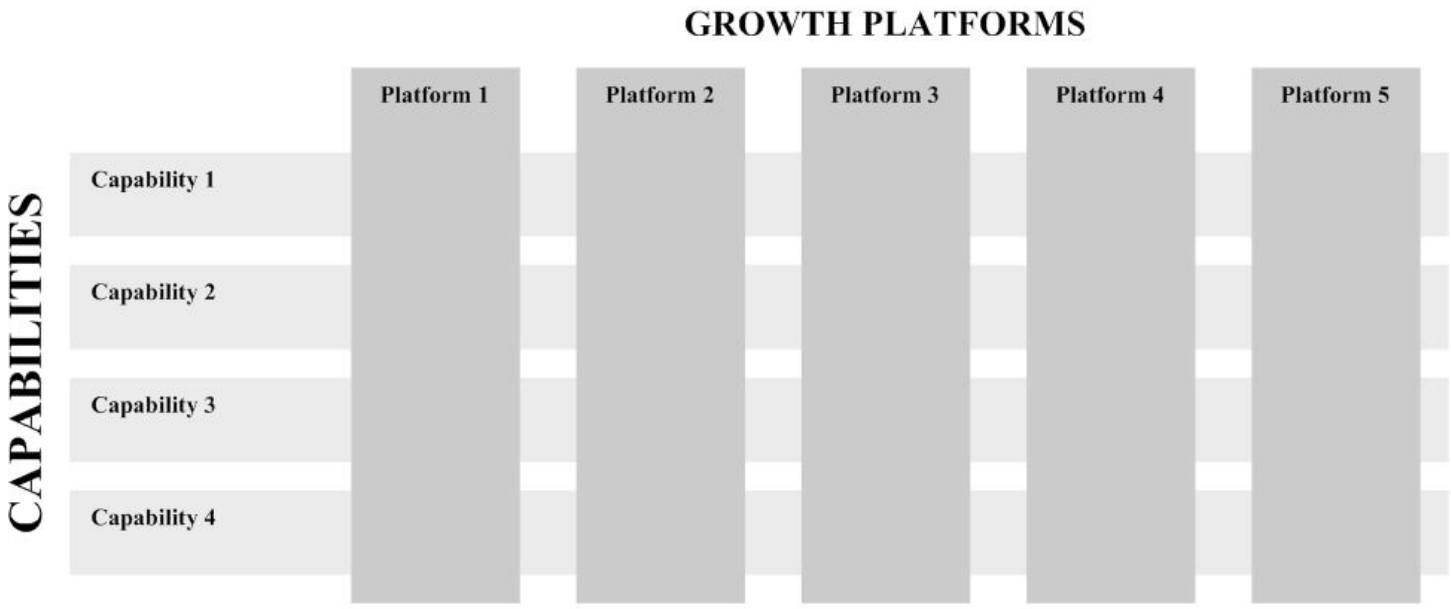
These interviews and discussions were part of a process to identify **industry beacons**, key-players to be associated with larger groups of companies to form industrial eco-systems referred to in this context as **growth platforms**.

Growth platforms are characterized by the existence of beacons, by the presence of value-chain partners and companies from adjacent sectors as well as the real possibility or need for collaboration and mobility among members.

The starting point for identifying growth platform is an understanding of business dynamics, not public sector organizations such as universities and research institutes. These can be added later if appropriate.

The next step is to identify the **strategic capabilities** that will enable members of each growth platform to innovate and grow. The results are summarized in a table that looks something like the one below.

Companies need to understand the nature of the competition they face and opportunities for future growth. They need to periodically rethink their business and how they expect to grow in the future. Then they need to understand the role that innovation will play in achieving such growth. National innovation policies and government support measures should reflect this aspect of the reality of the business environment.



The final step for Iceland was to outline measures and specific actions to systematically develop these strategic capabilities. Such actions and measures are platform level initiatives to be undertaken with industry, and where necessary with supporting institutions from the national innovation system.

For Iceland, five growth platforms were identified, as well as five strategic capabilities that more or less apply to all platforms. A range of specific actions and measures were proposed to help develop the strategic capabilities of each platform in a systematic way.

It was a ‘Eureka moment’ for the team when Crehan realized that tourism played an enabling role in many sectors of the economy, and that it had further untapped roles to play in the Icelandic economy.

Iceland is not a country for mass tourism. However, it hosts 12 international music festivals a year, as well as fan-fests for games such as EVE-Online, it is used for photo-shoots by fashion houses such as Vogue, and Iceland provides the location for movies such as the James Bond action adventure ‘Die Another Day’.

Icelandic Air provides an excellent service, and has been an unrecognized asset for several growth platforms. Iceland’s tourism industry caters to many niches of the economy and many of these are interlinked. It became clear that opportunities exist for cross-marketing and collaboration, which should not be squandered. For these reasons tourism stood out in the PCIM plan for Iceland.

Needless to say, in other countries other factors are likely to stand out as strategic national capabilities.

An important lesson from Iceland Is that the PCIM approach can bring into play groups, sectors and other factors currently at the fringe of the innovation debate, yet destined to play a more important role in the future. Such factors are usually overlooked in the traditional National Innovation System approach, especially during a crisis, but they have space to emerge as important players in the PCIM.

To get a quote for guidance and assistance in running a PCIM initiative please contact CKA.

CKA is a Brussels based Foresight, management innovation and research consulting firm. More information can be obtained from its website at www.cka.be or by writing to Patrick Crehan at Patrick.Crehan@cka.be.

Information on PCIM may also be obtained from Jørn Bang Andersen at www.jornbangandersen.com or by email at hansahouse@gmail.com