

How to increase your ROI by measuring and managing your innovation

Studies have shown that companies' return on innovation (ROI) or hit rate is somewhere between 2-10%. That is another way of saying that around 90% of all innovation efforts are never commercialised or used in general. *Jørn Bang Andersen*, senior advisor to the Nordic Innovation Centre (NICe), presents a NICe case study on possible ways to dramatically change that.

InnoTools – Measured and Managed Innovation in Companies A Nordic Innovation Center Project

Studies have shown that companies' return on innovation (ROI) or hit rate is somewhere between 2-10%. That is another way of saying that around 90% of all innovation efforts are never commercialised or used in general. If Nordic companies could raise the ROI with just 10-20% this would give them a significant competitive advantage in global competition. It seems, however, that innovation is still in its infancy as a management discipline, and it seems that if companies start approaching innovation in a more systematic way – e.g. through the application of measured and managed innovation they could increase their ROI at no or small additional costs.

Secondly, the Nordic nations top the global league in terms of public-and private investment in innovation. (Government, business expenditure on R&D combined GBERD). Productivity is the standard measure for a nation's well being, and productivity is largely driven by innovation – especially the adoption of new technologies incl. business models and organisational changes in the individual enterprise.

Because of better agricultural technology and production methods, for example, four U.S farmers could feed 10 people in 1900; now the same number of farmers can feed 388 people. Public innovation programmes have hitherto focused mostly on business framework conditions – for example supporting clusters, networks, science parks, technology transfer mechanisms etc.

However, consider two companies within the same industry and within the same Nordic country operating under the same business framework conditions. How do we explain that company A outperforms company B?

Business framework conditions are important, but more recent studies indicate that a company's innovation performance is ultimately a result of the company's internal capabilities and culture for risk and innovation.

We therefore looked for tools that could address the issues of measured and managed innovation, that could give us a better understanding of how public innovation programmes in the future can address innovation based on the needs of companies and not vice versa.

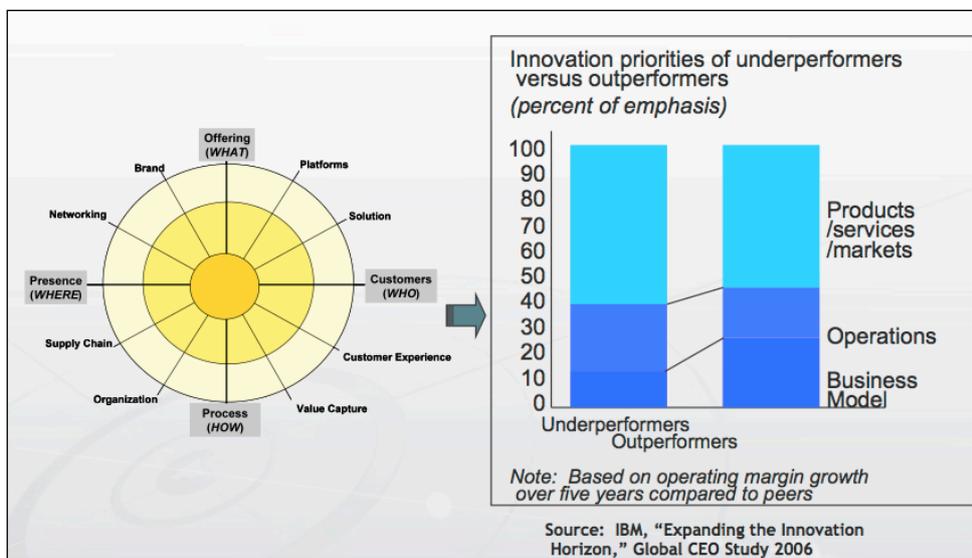
Why did we choose the Innovation Radar and Five Disciplines of Innovation in our Pilot Project?

In pursuit of launching a pilot project dealing with the issues of raising companies' ROI through measured and managed innovation we scanned the global market for articles and references for tools dealing with innovation in a structured organisational way. From this desk-research we singled out two tools, namely the Innovation Radar developed by (Mohanbir Sawhney, Robert C. Wolcott and Inigo Arroniz: 'The 12 Different Ways for Companies to

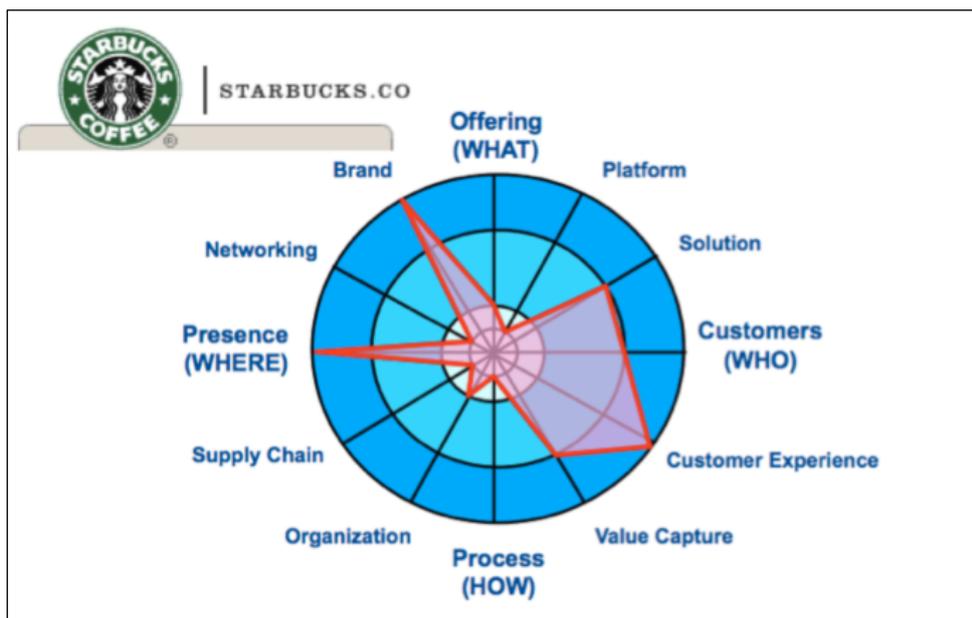
Tool 1: The Innovation Radar

The Innovation Radar was partly chosen because it had already been tested and been statistically documented among 40 companies in the US. More importantly the Innovation Radar was chosen because it gives a holistic view of innovation, and it supports the empirical evidence of companies that take a business model perspective on innovation outperforms companies' that focus more narrowly on only product or process innovation. Finally the Innovation Radar provides a tool for measured and managed innovation, and it is easy for a company to answer the on-line questionnaire on which the profiling is based.

Figure 1: The Innovation Radar



Stylized company innovation radar is shown below with the example of Starbucks.



Benefits of using the Innovation Radar

Visualize and Brainstorm: Explore dimensions of innovation in a systematic and holistic manner
Diagnose: Identify the gaps in innovation performance of firms/business systems
Benchmark: Benchmark the innovative capabilities of firms within and across industries
Design New Ventures: Design and track the development of complete business systems
Manage across the Portfolio: Enable a holistic view across the firm's innovation initiatives

Source: Rob. C. Wolcott: *Innovation Radar – Kellogg School of Management*

Tool 2: Five Disciplines of Innovation

The second tool selected for our pilot project InnoTools was SRI's Five Disciplines of Innovation, which is shown below.



Source: SRI: Curtis R. Carlson & William W. Wilmot, *Innovation: The Five Disciplines for Creating What Customers Want* – Random House, 2006

SRI's Five Disciplines of Innovation was chosen for some of the same reasons as the Innovation Radar: i.e. it had been tested and proven successful in many projects and received international acclamations. But most importantly, the tool puts strong focus on the Needs of customers in the way it works with individual innovation projects. Many innovation projects are biased towards the technical attributes of a product or service. Yet, by forcing people, teams or companies to work with the customer NEED per se of a new product or service, and make them convincingly develop their value proposition in both qualitative and quantitative terms, the Five Disciplines of Innovation shifts the traditional technical focus of innovation towards the business value proposition. As such the Five Disciplines of Innovation ultimately forces innovation projects to 'think more like a venture capitalist than an engineer'.

The Pilot Study

The pilot study was in essence very simple and comprised the following steps. A number of companies did the Innovation Radar questionnaire and had consequently a company innovation radar profile mapped. Each innovation radar profile was followed-up by a deep-dive workshop, where around 5-8 managers from the various company departments had their profile presented. In the workshops each company went through the exercise of:

- Presentation of the 12 dimensions of the Innovation Radar, each dimension illustrated with company examples from their industry in question.
- Presentation of the company's Innovation Radar profile and a discussion of the profile in view of their stated innovation strategy.
- Presentation of the answers to each dimension in view of the company's internal divergence and a discussion of possible reasons for the variation between departmental answers.
- Each company session was concluded with the companies doing a mapping of their 'preferred' future profile selecting maximum 2-4 radar dimensions where they wanted to differentiate from the competition within their industry. And the companies should identify an innovation project to work with in the future.
- Based on the selected innovation project SRI did a second workshop with each company. In this workshop SRI explained and applied the methodology of Five Disciplines of Innovation to the companies' selected innovation project.
- The pilot study was finalised with a workshop where all the companies' innovation radar profiles were presented and discussed by all the participating companies and a steering committee. At this workshop 2 specific projects were also developed within the framework of the Five Disciplines of Innovation.

Given that both innovation tools for measured and managed innovation have been developed in the US and mainly tested there, it was decided to make a test of their robustness in view of a Nordic setting. The test of application in a Nordic setting meant that 8 Nordic-Baltic companies of different size, from 7 different business cultures and from 8 different industries were selected for the pilot study.

In addition, a number of success criteria were stipulated for the pilot study. The main success criterion was that:

- At least 75% of the participating company managers will evaluate the tools at 3.5 or above on a scale from 1-5 (five being the highest score) and in view of the innovation tools' usefulness and in comparison with other innovation tools to the knowledge of the company managers.

Based on the evaluation among around 56 CEOs and senior managers from 7 countries and 8 companies both the Innovation Radar and the Five Disciplines of Innovation scored above 4.

The Next Step

NICE wants to use the results of the case study in a follow up dialogue with national Nordic stakeholders for innovation. Both the Innovation Radar and the Five Disciplines of Innovation proved to be very relevant and valuable tools according to the companies' own evaluation. This is also underlined by the fact, that 3 of the pilot companies have chosen to use the Innovation Radar as their company innovation strategy tool, and 2 companies have chosen to apply the Five Disciplines of Innovation in their future work with innovation projects.

A possible future full scale project might entail the following:

- Data series from around several companies over a couple of years can give valuable insight as to how individual companies differ from their national and Nordic competition in terms of profiles among the Innovation Radar's 12 dimensions,

- The Innovation Radar gives the recipient an immediate and easy way to understand that innovation is more than R&D or product or process development and it is easy to communicate across an organisation
- The InnoTools' project addressed an important and relatively new aspect of public innovation programmes; namely how to develop innovation capabilities within companies through public support mechanisms

What Results do we expect?

The following results from a full-scale follow up on the pilot study could be envisaged:

- Demonstrate improved ROI within the participating companies
- Documentation that structured work with innovation in terms of measured and managed approaches matters and can make a positive difference.
- 3 Innovation Radar profiles over 2 years of several Nordic-Baltic companies
- Several companies from the Nordic-Baltic energy-environment sector, which will constitute the first such innovation insight across an entire sector across 8 countries.
- Several companies from other industries such as foodstuffs, media will be profiled.
- Unique insight as to the company dimension of innovation allowing for developing potentially better public innovation support programmes
- International recognition of Nordic innovation policies as being at the forefront of working with 'the next generation of innovation support programmes and policies'.

How can this contribute to increased growth?

- We estimate that companies within the more or less same innovation budget could be able to increase their ROI from below 10% to around 20-30%.
- Nordic companies will be better at developing new successful business models that will increase their competitiveness and revenue streams.
- Demonstrate that structured innovation through measured and managed innovation can lead to more efficient public sector support programmes and policies for innovation. Just a smaller increase in the efficiency of such government programmes will have a positive impact on the overall economy in the Nordic countries.

How will we follow up and monitor the results of the project?

- We could track the results by making evaluations among all the participating companies and inter alia ask them to indicate their ROI at the beginning of the project and estimate their ROI after the first and second year of the project.
- A possible future full-scale project will seek support from national Nordic innovation agencies.
- The intention is moreover to link up with Nordic business schools and make the project finance studies based on the unique data from the full-scale innovation radar project.

Jørn Bang Andersen, senior advisor, NICE

Facts about Nordic Innovation Centre (NICe)

The Nordic Innovation Centre initiates and finances activities that enhance innovation. We cooperate primarily with small and medium sized and large companies in the Nordic region. We aim at developing a smoothly functioning Nordic region without national barriers. Nordic Innovation Centre is an institution under the Nordic Council of Ministers. The centre is located in Oslo, but has projects in all the Nordic and Baltic countries.

Jørn Bang Andersen



- Jørn Bang Andersen is currently senior advisor to the Nordic Innovation Centre on innovation and globalization.
- Prior to this he has worked as special advisor to the Ministry of Business and Industry on innovation and technology development, deputy director to the Ministry of Foreign Affairs of Denmark's unit invest in Denmark as marketing and business development manager and special advisor to the Trade Council of Denmark on the global innovation strategy.
- Internationally Andersen has worked for the European Commission on international business, trade and technology co-operation, responsible for notably China, India, Vietnam. Andersen has served as Denmark's government's senior advisor to Estonia and Latvia on their transition to market economies and EU memberships. Embedded in the Ministry of Economic Affairs in Estonia, Tallinn.
- Private sector engagements have inter alia been as founder of Hansa Consulting House and Nordic and East European Area Manager for Interlace (www.interlace-invent.com).
- Andersen received a MA in political science from Aarhus University, Denmark, and a MA in Western European Politics and International Economics from University of Essex as part of an Erasmus scholarship.
- Jørn B. Andersen has published books and articles on innovation and lectured on the issue in Denmark and internationally.