



Good Practices on Regional Research and Innovation Strategies for Smart Specialisation

New Factory

Tampere Region, Finland

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1 Basic Data of the Practice

1.1 Title of the practice

New Factory

New Factory is an innovation and business incubation center.

1.2 Precise theme/issue/policy tackled by the practice

- Clusters
- Innovation friendly business environments for SMEs
- Research infrastructures, centers of competence and science parks
- Universities
- Digital Agenda for Europe
- Key enabling technologies
- Cultural and creative industries
- Internationalisation
- Financial engineering instruments
- Innovative public procurement
- Green growth
- Social innovation

Process of regional change initiated:

- transition
- modernisation
- diversification
- radical foundation of a new domain

1.3 Geographical range of the practice

Tampere Region (between NUTS level 2 and 3)
Finland

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1.5 Sources of information

<http://newfactory.fi/>
<http://newfactory.fi/node/27> (presentation video)
http://newfactory.fi/sites/uusitehdas.fi/files/new_factory_brochure.pdf (brochure)
<https://www.facebook.com/uusitehdas.demola>
<https://www.facebook.com/uusitehdas.suuntaamo>
<https://www.facebook.com/protomo>

2 Introduction: Regional Smart Specialisation Background

The Tampere Region is considered as a knowledge hub zone in OECD categorization. The key operators in the innovation process that produce new information in Tampere are the multidisciplinary Tampere University; Tampere University of Technology, specializing in technology and architecture; VTT Technical Research Centre of Finland; research units within companies, the biggest of these being Nokia Research Centre; and the multidisciplinary Tampere University of Applied Sciences. Higher Education Institutions have some 40 000 students and several Centres of Excellence in research appointed by the Academy of Finland.

Work done the Tampere way is characterized by a practical attitude to challenges. In innovation work, this manifests itself in hassle-free co-operation that crosses boundaries between scientific disciplines, fields of business, and organizational units. The innovations born in the region typically combine in-depth scientific information and competence in diverse fields to form new products, methods, and services.

Typical for regional development in the Tampere region are strategic frameworks and quite long programming periods. Cluster-based development activities started as early as in the beginning of 1990's when Finland faced the vigorous economic crisis. So called Centre of Expertise Programme (OSKE) is a national development programme implemented in the regions. In OSKE-programme, Tampere Region has strong and focused business activities and research expertise in seven different fields: biotechnology, digibusiness, energy technology, health technology, intelligent machines, nanotechnology and ubiquitous computing. These activities are based on close cooperation between various research institutions, institutes of higher education, the business community and different financing organizations. They speed up the growth of industry by activating cooperation networks and providing financing as well as by launching and realizing different development projects.

Now we are looking for the ways of working to renew the cluster structures and to complete the regional innovation ecosystem by completely new components. Open innovation platforms cross the traditional cluster sector borders and create new concepts. New Factory has been established in Tampere to bring innovations to fruition. It is open to all industries and players: business, universities, the public sector and citizens. The factory comprises the Demola, Protomo, Suuntaamo and Starupstairs development environments. New Factory provides faster, more agile and efficient processes to implement customer-driven and customer-oriented product and service development projects and pilots with a low level of risk and costs. The aim is to generate lead markets, new business and jobs.

In September 2012 we launched the Tampere New Deal 2015 which is a preventative partnership concept (region, state, universities, TEKES, EU and private) to face the acute and forceful structural change situation. It was developed for the ICT –sector (Nokia case) but the concept will be able to scale for similar situation in other sectors crisis. Nokia's Bridge program, which is part of the concept, was set up in 2011 when it became clear that the strategy changes which were announced in February 2011, would result in major job losses. By the end of May 2012 around 1 500 ex-employees of the company in Finland had got help from the program. 70 % of them had found a new job or started a new education. 220 new enterprises were established. The program has four main areas: individual re-employment, support and coaching for entrepreneurship, training and university collaboration.

There are local business development centers, like Tredea Oy operating in the Tampere City area, owned by the cities and municipalities around the region support businesses in their own area. The main task of business development center is to plan and implement the cities' and the municipalities' business strategies, which set general guidelines for the local business and industrial structure. Open Tampere is the City's new business promoting programme in all fields of business, run by Tredea Oy. Business development center operates in co-operation with an extensive network of participants within the framework of a number of projects and initiatives.

3 Description of the Practice

3.1 Executive summary

New Factory, located in the historic factory district of Finlayson in Tampere, Finland, was established as a driver of the regeneration of the Tampere region and its appeal. The aptly named New Factory is just that – a novel, dynamic engine empowering businesses, universities, as well as the public sector to discover cost-effective means for effecting innovation. For national innovation strategies, New Factory emerges as a platform for experimental industrial policy, brought about through extensive regional cooperation.

New Factory is based on a concept of open, diversified, and communal modes of operation. Practical innovations and pilots generate not only wellbeing and vitality in the present, but business and jobs for the future. This is what will raise innovation in Tampere to a never before seen level.

The foundation for New Factory lies in the diversified expertise already found in the Tampere region. In fact, a key objective of New Factory is to promote the efficient application of the region's resources through a cross-pollination of expertise which will, in turn, create an inter-industry system of knowledge-intensive competence in the region. The project work carried out in connection with New Factory is aimed at developing the inter-industry synergy between e.g. technology, business, and the arts.

The New Factory project platform comprises operations that enhance innovation activities and, moreover, the acceleration of the business those activities create. The objective is to develop real-life products and services through cost-effective means, to improve outdated processes, and to respond agilely to developments in different industry branches through an open and social approach to innovation.

3.2 Key features of the practice

- Provides students, self-employed entrepreneurs, researchers and developers with an environment for open innovation;
- Multidisciplinary and international cooperation;
- Processes ideas into prototypes, pilot projects, products and services, new business and new jobs;
- Offers enterprises new talent, business ideas and concepts;
- Channels coaching and financing from enterprises in the Tampere region to students and entrepreneurs.

3.3 Detailed content of the practice

The New Factory development brand is a natural part of the development goals and tasks detailed in the projections devised for the Tampere Region. Through the development projects of New Factory, the need for increasing the appeal and competitiveness of the region has been addressed, and a focus has been placed on enterprise and innovation.

The development goals of the region have included enhancing structures that support innovation, advancing regional innovation systems, and creating nimble and easily adaptable platforms for innovation and enterprise. One of the key development goals is establishing the Tampere region as an optimal environment for the creation, adoption, and application of innovation. New Factory, as an epitome of open innovation, supports the achievement of these goals.

The function of New Factory is to facilitate the continued renewal and evolution of enterprise. Furthermore, New Factory serves in encouraging the development of an operating environment that is sensitive to innovation; conditions under which – with the help of a favourable combination of structures, platforms, and service concepts – innovative ideas can be tested and realized in a flexible way.

Moreover, the New Factory concept fosters scientific innovation activities, as the expertise from higher education gets paired up with the development projects provided by the corporate sector.

The four engine rooms – Demola, Protomo, Suuntaamo and StartupStairs – offer students, seasoned professionals, growth enterprises and all citizens open and easy access to the New Factory community. The same people can assume different roles such as developer, entrepreneur, advisor, user or sparring partner, and participate in the activities conducted in the different environments. The extensive community provides peer support and creates networks and collaborative relationships at no cost. In return, the community expects its members to be enterprising and willing to share ideas.

The engine rooms provide a quicker and more affordable platform for processing ideas and start-up companies. To turn ideas into concrete products or services, you need a demo, a prototype, user feedback and financing. New Factory is a one-stop-shop for all these and more. In this community, students are active participants who are encouraged to join demanding but highly rewarding projects to acquire co-operation and partnership skills. For students, participation in projects is a valuable asset in the job markets. For businesses, the community offers an effective, low-risk and low-cost process for carrying out customer-driven and customer-oriented product and service development projects.

Demola

Demola brings together students of different disciplines and businesses to develop products and services and to solve real-life problems. The student team developing an innovation will retain intellectual property rights to their work, and companies can acquire a licence to use it. Business partners have licensed up to 96 per cent of project deliverables for their use. Demola also gives birth to new businesses and to Protomo teams.

Protomo

Protomo offers a wide range of supporting services to business idea developers, seasoned professionals and young talent free of charge, including facilities, community support, supplementary know-how and expert sparring for new product and service development and market launch. Protomo provides a new path to entrepreneurship: you can bring in an idea for further development, combine ideas, or find a suitable team to join in.

Suuntaamo

Suuntaamo invites everyone to get involved in the testing of different products and services, and to offer development ideas. For businesses, Suuntaamo provides an easy channel for supplementary product or service development.

Startupstairs

The newest of the engine rooms in New Factory is Startupstairs, the engine room that provides all-round training and coaching for potential start-ups.

3.4 Bodies and stakeholders involved

New Factory is supported by the City of Tampere; Council of Tampere Region; the Centre for Economic Development, Transport and the Environment of Pirkanmaa; Tampere University of Technology; the University of Tampere; Tampere University of Applied Sciences; Tampere Chamber of Commerce; the Centre of Expertise Programme (OSKE); and the Tampere Region Economic Development Agency Tredea. Hermia Ltd, a local innovation company, is responsible for the Factory's engine rooms and their operations.

3.5 Timescale and maturity

New Factory has been under active development since 2008 when the first project under the concept was launched. New Factory has quickly stabilised its position as an innovation actor in the region, and had significantly widened its project themes. Especially Demola has been copied as a practise in Finland and other European countries as well.

3.6 Legal framework

Hermia Ltd, which is owned by City of Tampere and Tampere University of Technology, is responsible for the New Factory's engine rooms and their operations. New Factory is the open innovation unit of Hermia Ltd.

3.7 Financial framework

The projects of New Factory have received funding from ERDF, ESF, regional development funds of the Finnish government, City of Tampere as well as some private organisations. The functional operations are funded through projects and project funds. New Factory also funds its operations by selling innovation consultancy services and other services to local businesses. The portion of self-funding is continually increasing.

4 Monitoring and Evaluation

The concept of New Factory has raised tremendous interest both nationally and internationally. By way of example, Demola was presented the prestigious Innovation Award 2010 by the Assembly of European Regions (AER). In explaining their choice of Demola as the recipient, the jury cited the easy cooperation between the public and private sector promoted by Demola as well as the anticipated positive impact of its activities on future R&D. Indeed, cross-organizational collaboration is one of the cornerstones in making New Factory work and in successfully introducing a synergy and an interchange of ideas across fields of expertise to the innovation environment. In addition, Demola was singled out for the Best Summer Employer Award of 2011 in Finland and recently Demola won BSR Innovation Reward 2012.

The main indicators used to evaluate the functions of the practise are the number of people involved in activities, jobs created and the amount of funding their start-ups have received. The goals set for each year of operation have been reached every year and almost doubled. There have been factors that could not have been estimated when setting goals, e.g. Nokia lay offs and the number of start-up companies these people have set up, which have affected the outcomes.

The achievements of the whole New Factory can be summarised as:

- Over 400 projects;
- About 3000 people have been actively taken part in activities;
- About 35% of students involved are foreign students;
- About 60 new companies have been formed;
- About 400 new jobs have been created;
- Cooperation with over 100 businesses; and
- Start-up companies receiving about 10 m € of funding altogether.

Monitoring how well the start-ups do after they leave New Factory, how well products sell etc. is very difficult. At the moment there is no systematic way of doing this or the resources to do it. This is, however, something they are looking into doing in a systematic way. The best feedback and monitoring how well they have succeeded are, of course, those customer companies that come back for more cooperation.

The New Factory concept is under regular evaluation and is being developed and improved continuously.

5 Lessons Learnt

The most valuable lesson learnt is the fact that you can start creating innovative ways of working and cooperating with very different partners with very little money having a good focus in “doing” and the activities itself. The cooperating partners need to contribute their time and effort more than money, to create new project ideas and cooperative platforms.

You also need to find the right people to work together. It is more important to have the connections and interaction between the right individuals than having old fixed connections at organisational level. When you start cooperating and working together, it is easier to get more people interested and involved. It is easier to start from students, progress to getting professors involved, moving on to engagement at the organisational level.

It is important to let the students work together with real companies, dealing with real everyday issues. The right balance between business and benefit to the students, between business and academic world, stills needs to be kept in mind.

It is beneficial to start thinking about the sustainable model, which can be achieved after the project funding has ended, right from the beginning. There needs to be a plan from the start how to fund the operations in the long run, and how the transformation will be handled.

For New Factory the “all the way” international cooperation has been self-evident from the beginning. It has made it easy for the international students to get involved as well, when most of the work and activities are done in English. This has also been one of the factors why Demola –function has been duplicated also internationally. However, in some regions this might not be the case due to the level of language skills. But the innovative cooperation without barriers between organisations and clusters can well be started without the international factor.