

National Technology Programmes as a Tool to Increase R&D activity in Real Estate Management and Services - Case Rembrand

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Abstract

The productivity increase in the real-estate industry has not been able to match the development of most other industries. The explanation put forward for this underperformance has been the lack of adequate allocation of resources to R&D that has led to suboptimal levels of innovation.

One general way of promoting change and integration of the industry is to develop the ownership function to become a skilful and a perceptive intermediate between the various service providers (including the construction sector) and the end-user.

In the future, new technologies will equally likely be created from a service concept that consists of a unique combination of both services and physical products. Thus the concept of technology develops in line with the general evolution, where products are becoming increasingly customer oriented and tailored.

In an effort to speed up this process a five-year R&D programme called Rembrand was initiated by the National technology Agency in Finland. The purpose of the Rembrand (Real Estate Management BRAND) technology program, with a volume of 20 Meuro, is to promote a functional integration of the fragmented real estate and construction industry in Finland. Competitive advantages will arise from the efficiency gains and the creation of new business opportunities that are the outcome the integration of the various sub-fields of this business sector. The integration will take place through the transformation of the activities into a service and customer oriented business environment.

In this paper, the structure of Rembrand program, focussing on increasing the R&D efforts necessary for this fundamental change, is described. The main challenges for the success of such a large project are analysed and the intermediate results of the R&D projects sponsored by programme are discussed.

Key words: Research Policy, R&D, customer orientation,...

Background

As in most countries, the real estate sector forms the main part (70 per cent) of the Finnish national resources. It is a field that employs more than 20 per cent of the work force and therefore touches the most part of the population. The yearly turnover of this cluster is considerable.

Efficient use of these assets is of vital importance. In an open economy, built environment competes with both national and international investment alternatives for the available capital. Only by ensuring that the assets are put to efficient use, their competitiveness can be guaranteed. In the future, all sectors of the Real Estate Cluster, including the infrastructure, such as roads and railways, will be exposed to competition and to the requirement of creating adequate return on the investment.

Finland developed its economy after the second world war with a strategy, that placed its main focus on investing heavily in a restricted number of industrial sectors. This focus on (over-)investment and re-building the country has, to a large extent, also steered the development of the Real Estate sector. In an economy where the creation of the infrastructure is considered to be a strategic area for the country, not much room was left for independent market-based development. The public policy interventions were more the rule than the exception during the previous decades in the Finnish real estate sector. During the last ten years the globalisation of the financial sector and the integration of the European economies have however changed the economic climate radically. Today real estate business can be conducted in a sound and open business environment.

The real-estate industry is running the risk of lagging behind in the global competition. The productivity increase in the sector has not been able to match the development of most other industries. The explanation put forward for this underperformance has been the lack of adequate allocation of resources to R&D that has led to suboptimal levels of innovation.

Explanatory factors for the low levels of R&D spending has been sought in the fragmentation of the industry and a long tradition of regulatory intervention. The absence of a business climate has weakened the incentives for change and renewal, especially in the ownership sub-sector of the industry.

One general way of promoting change and integration of the industry is to develop the ownership function to become a skilful and a perceptive intermediate between the various service providers (including the construction sector) and the end-user.

Ownership has thus to be transformed from a passive possessor of assets into an active, customer oriented business unit that unites the various sub-processes into a service-business concept that adds value to the end user's core business.

As the technical expertise and the research tradition in Finland are apparently not problems as such, the gap is to be found in the lack of competence to identify and, above all, to respond adequately to the real needs of the customer.

Since global customers will not adjust their demands to outside influences in the form of e.g. traditions in a particular country, the Finnish Real Estate Cluster, will have to meet the ever increasing challenge of making its products more customer oriented. In addition to making products more tailored, this specifically implies that the service component of real estate products has to be acknowledged and focussed on.

As more and more of the Finnish wealth originates from high-tech sectors where much of the investments are immaterial, we begin to realise that the notion of technology has broadened to a concept in which the fundament of a technology does not necessarily originate from a physical product.

Even in the most generic definitions of technology it is realized that a technology is not just an 'artefact' or collection of artefacts i.e. physical items like machinery, but also includes the knowledge and skill which are required to make use of the artefacts. The basic technology equation (artefact+skill+knowledge) emphasises that technology is not just the physical product but the bundle of all three components.

In the future, new technologies will equally likely be created from a service concept that consists of a unique combination of both services and physical products. Thus the concept of technology develops in line with the general evolution, where products are becoming increasingly customer oriented and tailored.

The mission of Tekes

Tekes, the National Technology Agency is the main financing organisation for R&D in Finland. Tekes provides funding and expert services for R&D projects and promotes national and international networking. Foreign companies conducting R&D activities in Finland are also welcome to Tekes' customers.

Tekes' primary objective is to promote the competitiveness of Finnish industry and the service sector by technological means. Activities aim to diversify production structures, increase production and exports, and create a foundation for employment and social well-being.

Technology programmes are initiated in strategic areas, which are considered vital to the future of Finnish industry. The programmes strengthen the competitiveness of industry, promote research, and enhance Cupertino between companies, research organisations and the public sector. Programme operations emphasise the versatile development and utilisation of international and regional technological Cupertino.

Technology programmes are used to promote development in specific sectors of technology or industry, and to pass on results of the research work to business in an efficient way.

Programmes have proved to be an effective form of Cupertino and networking for companies and the research sector.

During 2000, a total of about 60 extensive national technology programmes are under way.

In 1999, Tekes provided FIM 1 100 million to financing technology programmes.

Technology programmes for developing innovative products and processes are an essential part of the Finnish innovation system known for producing success stories like NOKIA. These globally unique programmes are characterised by close Cupertino between industry, universities and research institutes. They also form a basis for international Cupertino.

The strategic goal of the Rembrand Technology Programme is to accelerate the creation of a unified Real Estate Cluster, comprising networked sectors of the entire real estate and construction industry.

With the end-user in focus, the real estate sector will become a more adaptive and collaborating service industry, striving to fulfil the needs of the clients efficiently and competitively.

Rembrand - A Real Estate Management Technology Programme

Rembrand - A Real Estate Management Technology Programme to promote the Finnish real estate and construction sector by focusing on the services it provides.

Finland makes a major effort to develop world-class know-how in Real Estate Management and Services. The Rembrand Technology Programme to develop new technologies and concepts in the Real Estate Industry was launched in May 1999. The project is financed by the National Technology Agency Tekes, and co-ordinated by the Finnish Association of Building Owners and Construction Clients (RAKLI). The programme duration is from 1999 to 2003. Its total funding is FIM 125 million (appr. 20 million euro), half funded by industry and half by Tekes.

The ultimate aim of the Rembrand technology programme is to create a unified real estate cluster consisting of networked sectors of the entire real estate and construction industry. Only by putting the end-user in front of all processes, the nature of the real estate industry will change

towards a more adaptive and unified structure, where the needs of the clients can be efficiently and competitively met.

The objectives of the Rembrand Programme can be stated as:

- ?? to raise the standards of functional quality of services offered by the Finnish real estate sector to the same level as in the leading countries in the world
- ?? to increase and diversify market services in the real estate sector
- ?? to create the ability to export real estate know-how

The structural change necessary to adapt the industry to this new global setting has barely started. This industrial change to adapt to a global and open business environment is the focus of the current technology program. According to Rembrand Programme, the current needs for a change can be identified as:

- ?? the trend for financial and product markets to become more international
- ?? the stabilisation of the macroeconomy and the value of money in the EU
- ?? changes brought about by population age structure and migration
- ?? the requirements of sustainable development
- ?? the effects of information technology on the operating environment and the potential it offers for boosting operational efficiency
- ?? differentiation and specialisation of real estate service in the ownership, investment and user processes

Rembrand brings the end-user to the front

The focus of the current development needs concerning real estate management and services can be divided into six different focus areas:

- ?? Internationally competitive service concepts that rely on partnerships and networks
- ?? Transparent real estate markets and transparent organisational cultures in real estate functions
- ?? Efficient use of capital and knowledge to support the core business of the end-user
- ?? Life-cycle Cupertino agreements to functionally integrate the real estate cluster
- ?? The quality of the real estate is seen as one of the key features in core business competitiveness.
- ?? Integrated education and R&D to enhance the speed of technology diffusion.

All six focus areas are bound together by the common theme of Service Business and Customer Focus. Only recently has the concept of a unified and integrated Real Estate cluster emerged in

Finland. Previously, and to some extent presently, the notion has been that for example building activities are separate from maintenance and property management. The concept of life-cycle management has been widely accepted but not yet very extensively implemented in practice. The challenge in the future will be the ability to increase the flexibility of the business strategies to adapt to both the large structural environmental and technology changes.

Several projects have already been launched where real estate companies develop their know-how in bringing their customers added value. One of them is a collective project where new forms of customer feedback and interaction are developed among real estate companies, construction companies and building material companies. Knowing your customer is as important in the real estate field as in any other business. The challenge in the future is to develop concepts where real estate companies can collect customer feedback on the fly in real time. Traditional customer surveys are simply too tedious and slow to provide the necessary information about your clients in the fast changing world of today.

Projects

Focus Area 1: Service Concepts

Internationally competitive service concepts that rely on partnerships and networks

BRAND STRATEGIES IN REAL ESTATE SECTOR

The real estate sector involves the performance of three separate tasks: operation, ownership and the production of real estate services, which are all core businesses in their own right. In earlier times these tasks were performed within the same organisation. Nowadays, however, there is a desire to improve the expertise, efficiency and profitability of all property-related business functions by means of specialisation. Specialisation for core business brings demand to use brand strategies also in real estate sector

Focus Area 2: Real Estate Markets

Transparent real estate markets and transparent organisational cultures in real estate functions

Project:

Environmental Indicators for the Real Estate and Construction Industry.

The aim of the project is to examine the connection between the management of environmental issues and the economic performance of the companies. The objectives of the research are to develop a set of environmental indicators that support company operations by integrating the environmental factors into the company's management and accountancy systems by helping to

transform environmental aspects into factors that are taken into account in decision-making, to create a basis for both environmental benchmarking and environmental reporting systems for the real estate and construction industry in Finland. The project is implemented in co-operation with KPMG and five pilot organisations. The project is one of the pilot projects of Progress-program (Profitable Green Development in Real Estate Business) co-ordinated by Rakli (The Finnish Association of Building Owners and Construction Clients). The participating pilot organisations are Aleksia Plc., Helsinki City Real Estate Department, State Real Property Agency, SOK and Kesko Oyj. Some specialists in environmental issues in construction and real estate management (e.g. Motiva) are also participating. In addition, a monitoring team for the project is built including ten environmentally oriented companies of the sector to ensure that the results obtained will be widely distributed and made use of the whole real estate and construction sector in Finland. The project will be completed in August 2000. For more information, please contact liisa.raunemaa@kti.fi

Focus Area 3: Real Estate Business

Efficient use of capital and knowledge to support the core business of the end-user

GEOGRAPHICAL INFORMATION SERVICE FOR FACILITIES MANAGEMENT

Increasing the use of the public registers and other geographical information material for the data acquisition and decision-making of the real property private sector.

The development project aims at promoting the use of the geographical information collected at the public administration for the data acquisition and decision-making of the real property enterprises. This will be accomplished by providing a service environment where the users themselves can make the required analyses or map presentations. The needs of the private sector for the geographical information, the demands for the operational and informative contents of an information service system based on open data transfer, and the options for the technical solutions will have to be defined. A prototype of the geographical information user interface meeting the set requirements and a pilot version of the finished product will be created on the grounds of these definitions.

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Focus Area 4 : Life Cycle Collaboration

Life-cycle Cupertino agreements to functionally integrate the real estate cluster into a whole

Project example

DEVELOPMENT OF BUSINESS AND HOUSING LEASES

The project aims to develop the real estate business culture in Finland. Since leases are the most important contracts in real estate business, it is natural that an important part of the development will be done by developing business and housing leases into a more customer oriented, productive, transparent and international direction. This new leasing culture will strongly affect to real estate and building business and will create opportunities for developing new facilities, services and financial solutions needed in successful business and housing leases. Duration of the project is 1.10.1999 - 31.12.2001. The results will be tested during the project and the results will be in general use in the end of year 2001. The project will be accomplished with a wide network of building owners and occupants. In charge of the project is Helena Kinnunen from the Finnish Association of Building Owners and Construction Clients, tel. 09 - 4767 5711, e-mail helena.kinnunen@rakli.fi.

Focus Area 5: New home and office concepts

The quality of the real estate is seen as one of the key features in core business competitiveness

Project example

Measuring customer satisfaction in the building and real estate sectors

Project's main objectives are to promote customer orientation in the real estate and building sectors and to create a user-friendly and standardised system for collecting, utilising and benchmarking customer feedback. In the project, customer relations are identified for the whole property lifecycle, factors affecting customer satisfaction are studied and the most suitable methods for collecting customer feedback are presented. 38 sector's leading Finnish companies are participating in the project representing widely building and real estate sectors. This is a joint project of Tampere University of Technology and KTI and will be carried out in two phases in 1999-2000. For more information, please contact: hanna.kaleva@kti.fi

Focus Area 6: Integrated education and R&D to enhance the speed of technology diffusion

Project Example

Using Franchising to increase the transfer of knowledge in Real Estate Sector

A project in which 20 firms ranging from small firms to some of the largest companies in the field were studied in order to investigate whether their business expansion could be done using a franchising concept. The project found that about a third of the companies involved could immediately pursue this concept. The project was done by the Swedish School of Economics in Vaasa and the franchising consulting firm Francon. For more information contact Bjorn West; bowest@wasa.shh.fi.