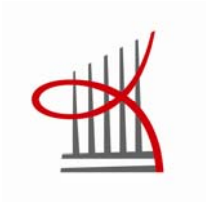

Developing an International Network for Demola's Open Innovation Environment

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Bachelor's Thesis
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Bachelor's of Business Administration
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Title of Thesis:	Developing an International Network for Demola's Open Innovation Environment	
Title in Finnish:	Kansainvälisen verkoston rakentaminen osana Demolan avointa innovaatioympäristöä	
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Supervisor:	Matti Haverila	Number of Pages: 62 p. + Appendix 33 p.

Abstract

Demola is an open innovation service located in Tampere, Finland. The service offers companies the chance to work with multi-disciplinary student teams to conduct innovation projects with the goal of creating a working demo or concept in the end. This thesis describes the basic working model of Demola, and the ways, which it can be modified to be extended to international markets.

The literature review and analysis sections of the thesis examine three topics: open innovation theory, strategic alliance theory and finally value network creation theory. The thesis also utilizes a benchmarking study conducted within Demola to examine the standing of innovation centers throughout Europe. Materials, reports, interviews with staff, observations of working methods and team meetings were also employed.

Demola has consistently produced good project results. Extending the Demola model into international operations seeks to strengthen these results, as well as creating economic impacts in the Tampere region. In addition, the plan created from the results of this thesis will seek to raise the reputation and image of Tampere and Demola as innovation leaders and service providers.

Keywords: Demola, Open Innovation, Network Development, Value Creation Network, Strategic Alliance

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Tiivistelmä

Demola on tamperelainen innovaatiokeskittymä / innovaatioalusta, joka tarjoaa yrityksille mahdollisuuksia työskennellä opiskelijatyöryhmien kanssa. Yhteistyö tuottaa innovatiivisia projekteja, joiden lopputuotteena on konsepti tai demo. Tämä opinnäytetyö kuvaa Demolan toimintamallin ja tapoja, joilla malli voidaan mukauttaa osaksi kansainvälistä toimintaa.

Kirjallisuuskatsauksessa ja sen pohjalta tehdyssä analyysiosiossa keskityn tutkimaan seuraavaa kolmea teoriaa: avoimen innovaation teoriaa, strategisen liittoutuman teoriaa sekä teoriaa arvoverkostojen rakentamisesta. Analyysissa olen hyödyntänyt tekemääni benchmark-kartoitusta Euroopan innovaatiokeskuksista. Materiaalit, raportit, haastattelut, työmetodien tarkkailu ja opiskelijatyöryhmien kokoukset ovat keskeinen osa aineistoa.

Demola tuottaa jatkuvasti hyviä projektituloksia. Toiminnan laajentaminen kansainväliseksi palvelee tulosten vahvistamista ja Tampereen seudun liiketoiminnan edistämistä edelleen. Tässä opinnäytetyössä esitelty suunnitelma pyrkii toiminnan kehittämistavoitteiden lisäksi parantamaan Tampereen ja Demolan tunnettuutta ja imagoa johtavana innovaatiokeskittymänä.

Avainsanat: Demola, Open Innovation, Network Development, Value Creation Network, Strategic Alliance

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1 Introduction

Problem statement

The issue of question in this research is how to utilize international collaboration to add value to the operations and services of Demola, an open innovation platform in Tampere, Finland. The questions to be answer within this research are:

1. What are the key characteristics of the Demola model?
2. What are the possible collaboration models based on theory and practical application?
3. Who would be potential partners for Demola?
4. What is required to implement the collaboration with selected partner organizations?
5. What is the value and impact created by the implementation?

Data set

Information for this thesis has been gathered from a number of sources during the spring of 2010. I was employed by Demola during this period to conduct a benchmarking study of open innovation centers. During this time, information was gathered through conversations with the management of Demola, observations of the working methods employed, interviews with the managers of potential partners and from internal reports and data.

Goals of study

The end result of this study is to evaluate the strengths and weaknesses of Demola, and determine the most optimal direction for its international expansion. The thesis will propose an action plan for the short term and long term actions necessary to implement the expansion.

Structure of thesis

The theoretical portion of this thesis examines the relevant portions of Open Innovation theory, Strategic Alliance theory and Value Creation Network theory. Using this background as a starting point, the thesis examines the structure and operating methods of Demola in its current incarnation. Following this, the Demola environment is analyzed and a series of recommendations are proposed to establish an international network, which will be integrated into Demola's activities.

Limitations

This thesis will not seek to present a complete analysis or criticism of theories. In addition, this work will not be a thorough analysis of current Demola working models. Finally, the thesis will not seek to explore the complete needs or interests of Demola's potential partners, but rather limiting the interest in this area to the reasons for collaborating in Demola related activities.

2 Theoretical Framework

2.1 Open Innovation Theory

2.1.1 The Closed Innovation Paradigm

In the beginning of the twentieth century, highly vertically integrated innovation structures were the only game in town. Research and development (R&D) activities were seen as something, which were the core intellectual property of the company, and should be protected at all costs. This manner of functioning was productive in the environment of the day, and allowed companies with highly developed R&D department to thrive in the marketplace.

Chesbrough (2003) explains that the centralized research lab is seen as a core piece of business functionality. Intellectual Property claiming and patenting is seen as a means of protection rather than a means of capturing value. Because of these factors, knowledge and innovation were centralized in the largest labs, which had the resources to progress further with them. Knowledge work was largely cut off from the university system, governmental bodies and smaller enterprises, which were not able to compete with the same levels of spending.

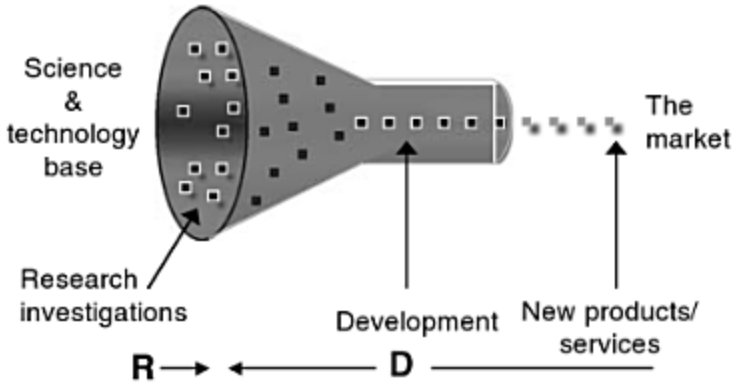

Figure 2.1: Closed Innovation model. (Chesbrough. Open Innovation: Researching a new paradigm 2006)

This highly vertical manner of operating led to a great number of discoveries and innovations within company structures. “Provided that the company keeps a flow of new ideas into its R&D pipeline, it will turn many of these ideas into new products and capture the value from these ideas. This flow will allow the company to reinvest in further research, which in turn will lead to future profitable products.” (Chesbrough 2003, 30) This loop made the system sustainable for an extended period and profitable at the same time.

Using closed innovation systems, there can be a disconnect between the research functions, which are key to creating new ideas for products and services, and the development functions, which are responsible for turning those ideas into profitable and worthwhile products. With the separation between the research function and the development function, it was possible for a backlog of innovations to be created in the lab and remain unused for long periods of time. This phenomenon gives competitors unnecessary advantages in the marketplace and wastes research allocations. The differences that Chesbrough (2003, 33) points out in the orientation between the two types of organizations are illustrated below.

Research Organizations

- Cost Center
- Discovery: Why?
- Hard to predict
- Hard to schedule
- Create possibilities
- Identify problems and how to think about them

Development Organization

- Profit Center
- Execution: How?
- Hit targets
- Hit schedules
- Minimize risk
- Solve problems within constraints

While these methods can still be viable for some areas, such as the pharmaceutical industry, there are a number of erosion factors affecting them: the increasing availability and mobility of skilled workers, the growing of venture capital markets, external options for ideas sitting on the shelf, and finally the increasing capability of external suppliers. These factors combined have chipped away at closed innovation systems in many

industries. These factors have forced firms to realize that they will lose advantages through leakage if they are unable or unwilling to embrace a more open manner of innovation operations.

With all knowledge being held within protective walls, it was inevitable that there would be a number of leaks in the system. Chesbrough (2003) describes the frustration felt by researchers and business minded innovators because of the thick levels of bureaucracy needed to make progress, and that many abandoned ship, along with a large amount of accumulated experience and knowledge. In these cases, the leaks would result in new companies, profiting from the knowledge the originally funding corporations where unable to tap into effectively.

2.1.2 Open Innovation Paradigm

The Open Innovation philosophy embraces the concept that there are more intelligent people in the world who do not work for you than those who do. This could be seen as a troubling fact for a company's Research and Development activities. However, when properly understood and taken into account, it can mean a company can make great leaps and bounds in innovation, which are facilitated from and shared with outside sources.

A major shift in the landscape happened when the relationships between universities in the United States and Corporations started to develop a deeper connection. Government funding for R&D projects had increased steadily in the first half of the twentieth century, building a system of state and private universities, which were innovation minded and locally based, able to respond to local and regional needs.

Schartinger et al (2002) have identified four categories of knowledge interaction that occurs between universities and industry.

- Joint research (including joint publishing)
- Contract research - consulting, financing of university research assistants by firms

- Mobility - staff movement between universities and firms, joint supervision of students
- Training - co-operation in education, training of firm staff at universities, lecturing by industry staff

Perkmann and Walsh (2007) found that generally, industries such as pharmaceuticals, biomedical and chemical industries, which are interested in scientific breakthroughs, favor collaborative research, contract research and consulting. In comparison, industries that are based more on incremental improvements such as mechanical engineering or software development prefer research services.

Open innovation thrives on connections between organizations, and those between universities and companies are some of the most crucial. When young and rising researchers see the advantages gained through hard work in an open innovation world, they are drawn to the opportunities presented by the new methods, and to the firms, which are open to collaboration with researchers and start-ups.

Kitagawa and Wigren (2010) have identified two distinct forms of interactions between universities and industry. These include mainstream/routine interactions such as sharing research knowledge, consultation, sharing facilities, instruments, contract research and academic consulting. In other words, things that lead to incremental problem solving. The second form falls under research inspired innovation, or new product development, sometimes through patenting and spin-offs.

There are other key players and factors that are essential to make open innovation possible. Simard and West (2006) discuss additional key players such as venture capital firms and focal firms. Venture capital firms are naturally involved in knowledge transfer because of there investment in local start-ups and spin off operations. They have an ingrained knowledge of the needs and areas for opportunities existing between different actors, and the most efficient means of meeting those needs.

Focal firms are those firms that are willing and able to consistently create breeding ground for new ideas and start up ventures. Having a leading firm with resources dedicated to innovation activities attracts activity to the area, and ensures that there will be a steady supply of knowledgeable workers.

Edquist & Zabala (2009) illustrate the four main factors playing a determining role in the development of innovation processes that exist within an innovation system:

- Provision of knowledge inputs to the innovation process
- Demand-side activities
- Provision of constituents of the innovation system
- Support services for innovating firms.

In addition to the above discussed organizations, government policy and local development firms can play a key role in developing an areas innovation activity. Government policy can make the environment of operation much friendlier to open innovation activities.

Development agencies tend to play the role of developing and implementing actions based on national, regional, or local government intentions. Development agencies have the potential to be the most effective player in the mix because they are playing from a neutral position, and have the intention of creating activity and development, not solely profits.

Chesbrough (2003, 53) lays out the new rationale, which companies have adopted as part of their internal R&D functions:

- To identify, understand, select from, and connect to the wealth of available external knowledge
- To fill in the missing pieces of knowledge not being externally developed
- To integrate internal and external knowledge to form more complex combinations of knowledge, to create new systems and architectures

- To generate additional revenues and profits from selling research outputs to other firms for use in their own systems.

In practice, from a company point of view, open innovation is largely about managing intellectual property rights, and using them as a tool, rather than a protective device. Licenses can be a means of bringing knowledge into a company, which has been developed elsewhere, so that it can be further customized and developed in internal labs.

West and Gallagher (2006) point out the three main challenges faced in the integration of internal and external innovation. The first is maximization. Firms now require a wide range of approaches to handle the returns to internal innovation, such as outbound licensing of intellectual property (IP), patent pooling and technology give-away as means of demand stimulation. Following maximization is incorporation, which entails scouting of relevant technologies, creating the capacity to absorb new approaches and changing political willingness within the organization. The final challenge is to motivate the creation of external sources of innovation in a manner beneficial to the company while protecting IP access from competitors.

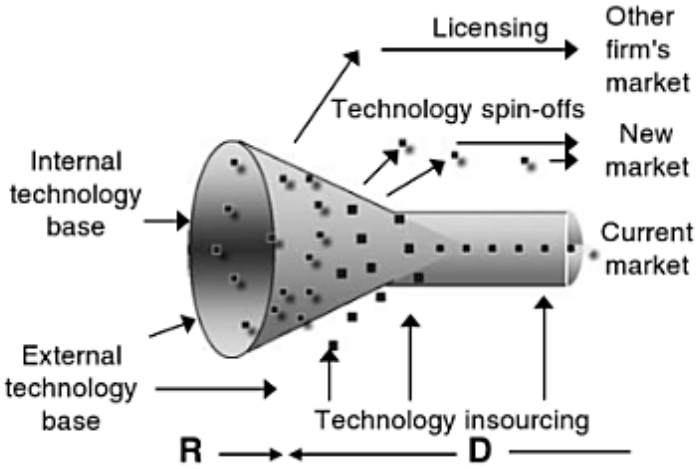

Figure 2.2: An Open Innovation paradigm (Chesbrough Open Innovation: Researching a new paradigm 2006)

Licenses can also be an effective means of capitalizing on knowledge, which has been developed to a point, but for one reason or other doesn't fit the priorities of a firm’s R&D

operations. By licensing out technology to other organizations, the company can retain and take advantage of a portion of its value through external means.

When discussing the conversion of innovation to profits, Henkel (2006) discusses the presumptions of firms. “It presupposes that exclusivity is desirable for the innovator. It thus focuses on protection of innovations, while what actually matters is the appropriation of profits from innovation.” Being open with information can lead to new avenues of profit and new levels of efficiency during creation processes.

From a theoretical point of view, the ideal open innovation corporation looks externally first in order to determine the path its internal research and development activities should take. Along the path of innovation, it will craft a balance between internally created innovations and externally garnered additions to it. In this way, the firm is not completely dependent on outside sources, which could leave it falling behind the tide. As well, they are not trapped in self-imposed exile, which can occur when a company only focuses on the internal aspects of innovation research.

This external view makes inter-organizational networks a key working component of open innovation. Vanhaverbeke (2005, 209) points out the natural progression of networks in an Open Innovation company and the importance of formal and informal ties. “The former are agreements based on a formal contract. They are planned channels for knowledge exchange between organizations. However, formal contracts bring people from different firms together who, in turn, establish informal networks. Similarly, existing informal networks lead to more formal arrangements to cooperate.” He also points out that networks are a mix of varying factors including geographical proximity, wide or deep ties, and explorative or exploitative ties, which must all be balanced in order to achieve long and meaningful co-operations.

Large companies can find it difficult to judge the proper entry mode of a new product into a new market. “While companies have well developed processes for testing new technologies in a variety of ways in their current business, they usually lack processes for

trying out early technologies in a variety of different markets that might become a new business" (Chesbrough 2003, 13)

Start ups and small venture investments offer larger corporations the chance to test markets with a lower level of risk and involvement. Having a strong and vibrant venture capital market gives a low risk means for new firms to develop, test, and market cutting edge technology in an effective and efficient manner.

Moving a company towards open innovation requires a serious review of the strategy employed. "Shifting the focus from ownership to the concept of openness requires a reconsideration of the processes that underlie value creation and value capture." (Chesbrough & Appleyard 2007, 5) Defining those processes and creating the greatest amount of value for your organization takes on a new aspect. The question becomes, which of our processes can deliver greater value when they are shared.

2.2 Value Creation Network Analysis

Value creation network analysis is a tool used to examine the interplay between partner organizations. The core aim of the analysis is to find the interactions, both financial and non-financial give the most value to parties and the risk associated with each of these exchanges, and to optimize those interactions most likely to give the greatest benefit return to all parties involved.

The idea is to identify both the tangible and intangible exchanges of the organization and, which of these gives the greatest return to all involved parties with the least amount of risk. Exchanges take two forms. The first are tangible exchanges, or those that can be defined in contract or explicitly agreed in formal agreements. These formal exchanges are the easiest to identify and are usually the express reasons a participant wishes to enter into a partnership.

However, there are a large number of exchanges or valuable side effects, benefits and knowledge growth, which can have just as large or even grander effects on the participants. These are the intangible exchanges that occur through operations. While intangibles can be very valuable, and if desired, can be converted into tangible interactions, it can take a formal analysis to raise them up to be recognized. One of the aims after the evaluation is complete should be to find avenues to formalize and improve these intangibles and develop them to the point that they can be turned into tangible forms of exchange where appropriate.

The things exchanged between parties, whether tangible or intangible, are normally referred to a “deliverables.” When it may seem contextually inappropriate to refer to these as deliverables, an alternative term may be “contribution.”

Allee (2008) states that there are three basic questions asked during the evaluation process:

1. Exchange analysis: What is the overall pattern of exchanges and value creation in the system as a whole? How healthy is the network and how well is it converting value?
2. Impact analysis: What impact does each value input have on the roles involved in terms of value realization?
3. Value creation analysis: What is the best way to create, extend, and leverage value, either through adding value, extending value to other roles, or converting one type of value to another?

Alle (2008) explains that the initial exchange analysis phase of the evaluation involves examining the interactions between all parties involved in operations. Normally this is done by creating a visual map where all involved parties, referred to in the analysis as roles, are laid out. Roles can be defined in a number of ways. For example, roles can be different departments within the same company or an assortment of companies, institutions, governmental bodies, etc. Roles can be filled by those parties that are not

explicitly involved in the transactions, but are receiving intangible benefits as a result of the business being conducted.

The process starts by laying out all of the tangible, contractually based interactions occurring between the roles. There is usually a strong focus on funding or revenue based transactions at this stage. Ideally, this type of evaluation will cause the beginning of a conversation between involved parties, ending in adjustment of behaviors into a manner better facilitating the interactions for both sides.

The methodology of value network analysis is based around visualizing the ecosystem of interactions and the hidden value, which can be drawn out from those interactions. Through the visualization techniques, it is possible to find new ways to monetize or convert interactions into tangible value. Using a dynamic whole systems perspective allows the analyzer to see the interactions giving the most value and combinations from a number of players that can be multiplied to create new opportunities. This is largely effective when examining ways to convert non-financial assets such as intellectual capital into more tangible forms.

After the larger picture is mapped out during the first stage of the analysis, there are two further steps to complete the analysis. The first is to evaluate the impact each deliverable has on the each party involved in the transaction. This is done by laying out each transaction in a table and systematically reviewing the activities involved, tangible and intangible impacts, and the cost/risk vs. benefits ratio. The second step is to take a deeper look into the value created for each party by each transaction. This is done by laying out each transaction in table form, and examining the value enhancements, cost/risk, and benefits of each.

Value creation network analysis can offer a valuable method for proving future standing in a way that pure financial or business reporting may not be capable of. Through value network analysis, one can show that there are valuable relationships and connections, which can be utilized to create new business or financial benefits. This aspect can be

crucial in the early stages of a business, when the business model is laid out for interested parties. As a portion of a business plan, a value network analysis can confirm future possibilities for profitability where standard planning and reporting practices may not give as complete of a picture.

In the age of complex business processes, tools that have been used to analyze business value creation, such as value chain or value added, can be seen as too limited for proper analysis, due to their linear and mechanical nature. It is necessary in a business world where activities are so interdependent and complex to have a tool to view relationships involved in collaborations in a fluid and dynamic manner. When properly understood, business relationships can be utilized to support an organization at all levels; operational, tactical and strategic.

The analysis is not limited to external relationships. When properly utilized, value creation network analysis can be applied to internal relationships within an organization. Different teams or units within the same organization can evaluate the benefits they give to each other, and work to strengthen those that are most valuable or can create new means of cooperating with outside partners. This also gives a valuable insight into the risks shared between departments and can help to negate or minimize them.

Value network analysis is becoming an essential skill for operations finding they are dependent on the smooth and efficient exchange of knowledge. “As more and more products and services depend on the exchange of knowledge and information, knowledge and intangibles become mediums of exchange or currencies in their own right.” (Allee 2000, 6) This is largely attributable to the improved management of operational functions and interactions resulting after a thorough analysis. The end goal of internal examination of this manner is to improve work-flow matters and communication. When these types of improvements are fully implemented into an organization, it allows for a more realized set of interactions with partners and stakeholders.

When talking about innovation activities and open innovation environments, the intangible connections between organizations become even more crucial. Usually intangible actions are those that foster trust and understanding between parties, which is central for open innovation, where information sharing and openness can mean the difference between a successful project and a failed endeavor. Open innovation needs to have open channels and free exchanges to be successful. It is also essential to avoid rigid structures that slow the process down, which is why intangible connections become crucial to the actors involved.

2.3 Strategic Alliance Theory

2.3.1 Introduction

There is a long established concept that organizations joining together for a joint purpose are able to create greater results together than either could separately. Especially when working in the realm of international business, it is often preferable to ally your organization with other like minded institutions when seeking to expand operations into new areas or to enhance current offerings.

Combining forces allows each entity to concentrate on what they do best, and to draw greater value out of the combination of those activities. There is a range of options for the level of interdependence desired in joint ventures. The most common are illustrated below.

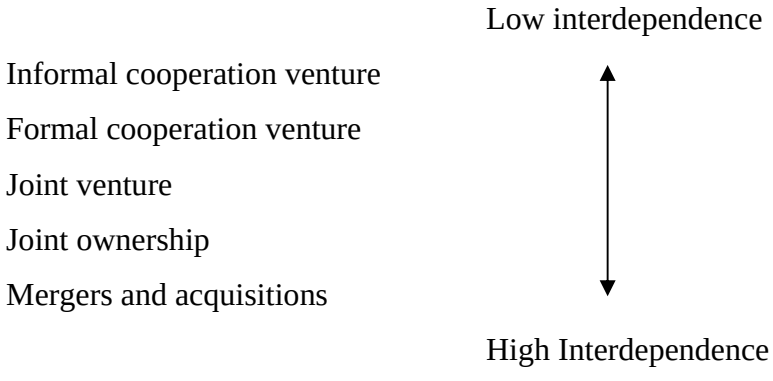

Figure 2.3 Strategic alliances by degree of interdependence (Lorange & Roos 1992, 4)

Dittrich and Duysters (2007) have examined the two types of alliances normally undertaken in high-tech fields, exploration and exploitation. Exploratory alliances often manifest themselves in one-time projects or are slow to grow into deeper relationships. In an exploratory alliance, it is common for companies not in the same industry or area to unite in order to benefit from a bridge of two networks of firms. These alliances are characterized by weak ties, with commitment and resources input not equal from all involved.

On the other hand, an exploitation alliance is designed to take advantage of similarities in the two firms, and usually can be seen to have stronger ties and dedication to the network. Normally the aim will be to strengthen and expand upon existing products or knowledge with partners who have similar but not competing interests. The level of integration in this type of alliance leads to bigger commitment levels and longer term relationships. An exploitation alliance can also allow all partners involved the ability to respond faster to changing needs and conditions.

2.3.2 Motives

When forming an alliance, it is crucial that the motives of both organizations involved are in sync. Each partner must be as open as possible about their motives for entering into a partnership agreement. Child and Faulkner (1998, 67) list the seven most common motives for entering into an alliance:

1. Risk reduction
2. Achievement of economies of scale and/or rationalization
3. Technology exchanges
4. Co-opting or blocking competition
5. Overcoming government-mandated trade or investment barriers
6. Facilitating initial international expansion of inexperienced firms
7. Vertical quasi-integration advantages of linking the complementary contributions of the partners in a ‘value chain’

It is an important topic of discussion when considering an alliance to ensure that the motives are similar, or at least not contradictory. While the motives from each side do not need to be the same, and are most likely not, it is important that each party be aware of what the other wants, and whether they are properly able to provide the missing need.

2.3.3 Forming

Gerdes (2003, 61) has narrowed down the process to five basic steps to consider during the planning and forming of a partnership:

1. Stating the objectives for the alliance group.
2. Identifying and assigning values to a potential partner.
3. Assessing and assigning risk associated with a potential partner.
4. Determining potential revenue derived from a partner.
5. Stating means of measuring the partnerships.

According to Lorange and Roos (1992, 50) there are two key phases in the forming process. In the first, the firm must ensure that it has the proper support and consent of the key stakeholders. To get to this point, the firm must be able to point out a need to be filled through the match, and a valid and apparent strategic match with the firm in question.

Once this stage has been passed, the more intense second phase can begin, in which negotiations are completed with the new partner company. In this phase, the organizers must make sure that all affected departments within the organization are onboard for the new partnership, and have input their needs and wishes for the agreement.

The level of formality is dependent on the particular needs of the partners in the agreement. Contracts should be drawn up in most cases. In others, informal portions of the agreement are possible, which can give value to each partner. These can be formalized after experience has shown the best manner to proceed in.

2.3.4 Management

Even the best alliance in the world can quickly fall apart if it is not properly managed. Great care should be taken in the formation and evaluation phases of forming an alliance so that the groundwork is solid. But that is only the first step. Constant and considered communication methods must be established to maintain the integrity of the alliance.

Child and Faulkner (1998, 168-169) list four key roles to be filled in order to properly sustain an alliance: the decision maker, the internal integrator, the external integrator, and the information manager. More than one of these roles can be conducted by the same individual, depending on the situation. However, all are crucial pieces to guarantee that the partnership being established will be long lasting and have impact on the value that an organization creates.

2.3.5 Contextual issues

Issues of cultural difference will be important to consider. Each organization involved in the alliance has established its own set of working practices and traditions, which are sometimes difficult to quantify for outsiders. These working differences can also be multiplied by national culture difference between team members. Culture determines many things about the working habits of individuals.

By addressing cultural differences early and devising means to effectively deal with them, it is possible to turn differences that could be difficult and lead to delays and ineffective working practices into valuable assets for the alliance. This is especially important in innovation project work where the team dynamic is important to achieve quality results.

In the context of Demola, it will be important to have each location utilizing the strengths they naturally possess from the area in which they operate. This will allow the strengths, which can be drawn from local cultural difference, and those strengths to be distributed throughout the network.

3 The Demola Environment

3.1 Formation

The Demola project began in late 2008 in Tampere, Finland as a cooperative effort between Hermia Oy, industry partners such as Nokia and governmental agencies such as ELY keskus, City of Tampere and Pirkanmaan Liitto. It was developed around the perceived need for a neutral ground open innovation environment where the most active members of the community would have the resources and support to connect and create meaningful projects to promote growth and development in the region.

The idea came from a need that was seen in industry. Innovation activities in the area were stuck in old patterns and deeply internalized. Hermia developed the idea along with industry partners, most notably Nokia. The partners laid out dedicated resources for the project. Universities in the region played an integral part in the planning of resources and reaching out to students.

3.2 The Demola Model

Demola is at its core a neutral ground in the Tampere area where innovation projects are conducted in cooperation with area companies, universities and public sector players. The operational model is simple. Companies provide a project description. Demola assembles a team of talented students from the region. The students work independently but with guidance and advice from a company adviser and facilitation services from Demola. The end goal of each project is to produce a prototype or other results, which can be put to use in practical business applications.

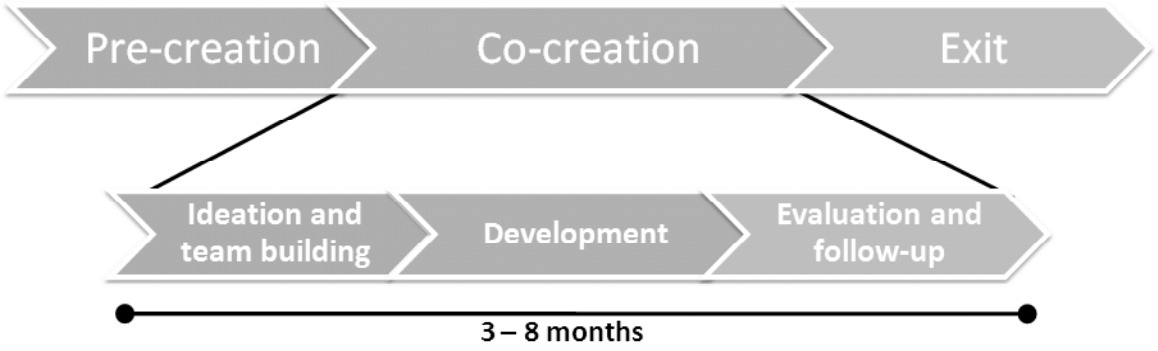

Figure 3.1 Demola innovation project timeline

Demola has a somewhat unique policy, in which the students retain all intellectual property rights to the results of the project. The company partner can purchase a license for the results at the end of the project, if desired. Demola also offers advise and channels for students to convert the project into a start-up company or further develop the concepts through sister services such as Protomo, a business incubator for innovative entrepreneurs.

Utilizing a strategy of uniting students and companies to work together on concrete projects has been very successful. Factors influencing the success of Demola are the fact that the operations are region wide, consist of neutral players, and operate with a high level of cost efficiency.

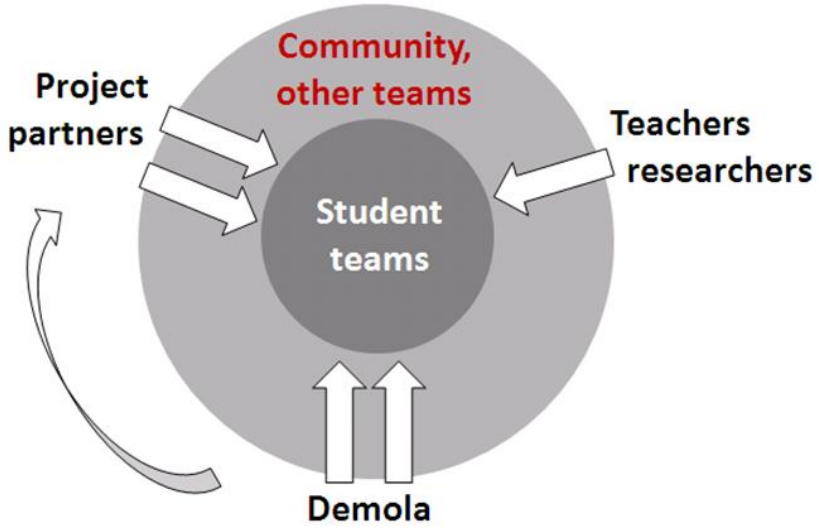

Figure 3.2 Demola community interaction model

One of the keys to Demola's development was to adopt some best practices from established innovation centers while creating new work methods and policies, which would create concrete results at a much lower cost level. Finding premises in the old Finlayson factory solidified the open and free environment Demola was striving for. The factory environment is a continuing evolution and will add new innovation and development systems in the future.

The Demola model is scalable and transferable to other regions. A major goal of Demola is to foster entrepreneurial spirit in the region by providing clear paths to company creation. Another aim is to establish and strengthen meaningful relationships between companies in the region and the universities.

The New Factory initiative will be one of the funding means for the future of Demola. Demola will be one of the key figureheads for the new program, which will be an expanding and open environment for regional and business development programs.

The main costs of the project are the premises, services and salaries. This budget is quite modest for the level of operations achieved when compared with the nearest competitors. Funding is provided by ELY keskus, City of Tampere, Pirkanmaan Liitto and private industry partners. Funding from private industry partners is not a specific charge for participation, but rather support for the platform and the potential that it holds. The project has been run on a very cost effective basis, which is one of the core objectives of Demola.

3.3 Student Participation

Student ownership of the results leads to higher dedication and can result in a number of entrepreneurial endeavors. The value earned by the students and the potential for future business development has proven to be a drawing factor to attract active, qualified and ambitious students from the Tampere region into the Demola environment.

In addition to normally operated Demola projects, there have been two Innosummer campaigns, in which students are employed on a full time basis for the entire summer break from university. This allows students the chance to work on more long term and intense projects and output a much more polished and refined prototype in the end.

3.4 Issues Addressed by Demola

Demola has answered many regional concerns, including:

- Expertise in the area isolated in Universities.
- Need for activating links between academic and business interests.
- The need for demo-driven research.
- High level of risk in first stages of development.
- Need for a plug and play system to stimulate interactions and innovation.

The issues mentioned can create an environment where innovation is stifled and excessively expensive. These issues must be confronted for the region and businesses within it to stay competitive and relevant in global markets. Unfortunately, universities and businesses have a lack of communication and meaningful channels for interaction between them. The high cost of traditional innovation methods are prohibitive and potential breakthrough technology and systems are left unexplored. Demola is a new instrument contributing to refreshing industrial structures, change and is a new input function for culture and testing.

3.5 Target groups

Demola has become a regional player, creating links between a variety of organizations that have had positive results and have created a number of jobs. The specific target groups that Demola serves include:

- Companies in the Tampere region – SME's to Multi-nationals
- Students – 35,000 students from the 3 Universities in Tampere
- Public sector
- Research organizations

Nokia has been one of the largest supporters of Demola from the beginning. In addition to Nokia, Demola has run projects with 25 other companies throughout the region and country. While the focus of most projects to this point have involved information and communication technology (ICT) and media research, Demola is expanding all the time the areas that it provides services in. For example, social innovations and social entrepreneurship are a growing area of interest.

Participating in projects that have a common good aspect involved with them opens opportunities to participate on a deeper level than before with public sector organizations as well as projects that may not have such a clear-cut business case approach from the beginning.

Research organizations have been taking an increasing role in providing projects to Demola. Taking opportunities from projects that have the intention of creating concepts or business models has given the chance for students to work on projects more theoretically based in nature within Demola.

3.6 Results

In the first year, the goal was to complete 30 projects with solid results. In addition, a number of projects should result in continuing development projects or spin-off company creation.

By creating an open community where innovation is fostered, Demola has had a number of effects. Giving opportunities for students to work on real projects for companies draws out underused resources from Universities and gives companies the chance to tap into them.

Bringing down the risk and cost of innovation allows companies to tackle projects that would have been abandoned, wasting opportunities. Student owned project outputs result in increased loyalty and dedication on their part.

More than 400 students have been active in projects – Of those, 30% are international students and 72% responded that they are seriously considering entrepreneurship as a career option.

- 77 projects have been completed – Of these, 95% of the results have been licensed by companies.
- 25 project partners
- More than 25 new jobs have been created as a direct result of projects
- 3 new companies will be established from projects

Demola helps to strengthen Tampere Region's brand as an innovative and high-tech business centre and attracts attention from outside interests. New programs and methods have been utilized in the three area universities because of the presence of Demola.

This initiative has created a platform designed to be sustainable and long-lasting, giving the Tampere region a greater consolidation of resources and a base for positive competition. Through the project work of Demola, jobs are being created, which should be a continuing phenomena. Companies are being created through the results of projects.

The environment Demola has enabled brought together an ideal combination of resources from all sectors of the region. The most active members of all communities, universities, companies and public sector are able to mesh in new and exciting ways because of Demola's facilitation activities. Without solid backing by all players, it would not have been as successful of a project. The tools of Demola allow each of the sectors to be flexible and agile in regards to their innovation activities. Having a plug and play system cuts down on wasted resources and makes all players more likely to participate fully.

The number and quality of the projects have exceeded the initial objectives. The quality results have led to a number of expected and unforeseen value creation avenues. The solid reputation built in the community has opened links to a wide variety of companies who wish to be Demola partners. This has opened doors into new areas of development, including social innovation and entrepreneurship. The activity following project completion has been quite satisfactory. Entrepreneurial spirit has been visibly increased within the community and has led to further development of projects after the initial completion.

These positive influences have helped to lead to other projects being created. The first being Protomo, a precursor to a business incubator, which gives entrepreneurs who have a business idea that needs to be tested and refined before true business development can begin. Protomo also helps to give entrepreneurs the time and resources to explore the core business idea.

Suuntaamo has also developed in the same area, and is a tool designed to bring innovation activities and development to the population of the Tampere region. Innovations that are created in Demola and Protomo as well as other partner organizations can be tested and examined in Suuntaamo.

3.7 Further Development

These three tools together have led to the development of a larger concept project entitled the New Factory. The New Factory will be a collection of initiatives located in the Finlayson Factory area sharing common goals of economic development, innovation, job creation and entrepreneurial support. The three pillars of Demola, Protomo and Suuntaamo are the beginning tools in the New Factory and others will be developed as needs in the region are recognized and addressed.

While Demola is a small scale experiment, it has succeeded on a larger level. The novelty of the idea has led to a wave of interest, carrying the entire project on to very positive

results. All of the key factors in the project have started a conversation among key players in the region about new types of innovation activities. The efficiency and steady growth approach of the project have allowed Demola to grow as a stable and sustainable part of the Tampere region business community.

The Demola project has already led into expansion projects to handle the outcomes of projects. For example the Protomo project utilizes similar working methods, but for entrepreneurs rather than students. Discussion and information dissemination is already happening with other Finnish regions as well as internationally. Suuntaamo is a tool, which has been developed in large part to test and prepare innovations developed in Demola and Protomo for the marketplace.

There have been a number of positive impacts on more than 400 students who have participated in projects, the staff and faculty of the three universities in Tampere, the sizable group of partner companies. Other local players and public sector organizations have been active in the project, and the participation of all will be strengthened and supported to help solidify and strengthen the standing of Demola in the Tampere area community.

The project aims to make lasting impacts by being the foundation for new features in the culture and business environment and crafting a new innovation paradigm in the region with the potential to create global impact.

Sustainability has been a huge priority from the start. In this context, the most important thing to be done to ensure the stability of the project is to create long lasting relationships with partners and institutions in the area. The strategy of taking projects that would result in concrete outputs is also critical to sustainability. These projects show the impact this type of environment and platform can produce, and ensure commitment from all parties.

4 The Benchmark Study

During the beginning of 2010, as part of this thesis, I conducted a benchmarking study to review the established innovation centers and universities with innovative leanings, mostly in Europe, which could be potential best practice sample cases, future partners or affiliates for Demola.

When a candidate organization was seen to fit the initial criteria laid out below, a data sheet was created with detailed information about projects, history, focus, etc. These data sheets where reviewed by the Demola team, and the most interesting candidates were set aside for contact and further study. From this study, a list of potential international partners for Demola was created. (Appendix 4)

4.1 Criteria

There were a number of criteria that were considered during the evaluation of different organizations in the study. They included:

- Location
- Proximity to Tampere and transportation routes available
- Innovation activities in the area
- Orientation as research organization or demo-driven innovation facility
- Size of organization

Location was an important factor for deciding on potential candidates. The core of the search was conducted in Europe. However, other locations where taken into consideration. For one, the United States is a leader in the innovation field, and there are many example cases to be learned from.

As a side criterion to location, the proximity to Tampere and available transportation routes factored heavily into the search. Because ideally there will be a good deal of travel

back and forth between partner sites, the cost and ease of transportation will be important to operations. While travel from Helsinki is an option, locations directly connected to Tampere were given additional points.

Areas with a good deal of innovation activity in them were one of the first narrowing factors. In Europe especially, there are a number of areas that have dedicated a good deal of resources and political capital to become leading sites of innovation. Usually, this stems from a strong industry presence in the area, coupled with a good university system, which is able to collaborate with industry.

Demola is very specific about the need for demo-driven research. Because of this, organizations with similar leanings were highly prized in the benchmark study. In order to secure a good relationship in the future, it is necessary to have a similar focus with projects that are undertaken. In the same vein, the size of the organization was taken into consideration. To facilitate a smoother integration, it is important that one organization is not in an overpowering position.

4.2 Results

After a careful review of the areas located throughout Europe, it was decided that the Demola staff would initiate contact with the locations with the most potential for collaboration in the near future. The targeted areas were; Stuttgart, Germany; Lund, Sweden; London, U.K.; Lancaster, U.K.; Budapest, Hungary; and Cluj Napoca, Romania. In addition to myself, Demola staff members Petri Räsänen and Ville Kairamo visited these locations both as a study trip and to identify those locations with the most potential as partners for Demola and the New Factory initiative in the future.

Additional contacts discovered during the study will be contacted as the Demola extension project continues. The initially contacted institutions will act as a test bed for pilot projects. If these tests are successful, they will be expanded to other regions.

While Finland may not have the most fully developed innovation systems when compared with other countries, there are many advantages that it holds. A number of high tech industries have a thorough footing in Finland. The government has taken a number of steps, and has committed to continue in the future, which encourage growth and development in innovation activities. Finland holds a reputation as an innovative and design oriented country. Past industrial investments have left Finland with a good infrastructure, now waiting for renewed use. These factors are among a growing list that creates the possibility for Finland to be a growing player in innovation activities.

There is a growing desire globally to encourage national growth of industry through innovation practices. It is now known that an effective means of creating new leaps in innovation is to combine strengths with others who have complementary interests. Due to strong governmental support, industry dedication and established desire for innovative services, Finland and specifically Tampere are in a position to be a facilitator for a great deal of cross-border co-operations and projects.

4.3 Potential Partners

After a week of meetings, it was decided that the most immediate connections to be built will be with the Mobile Radicals group from Lancaster University and Budapest University of Technology and Economics, Innovation and Knowledge Centre of Information Technology in Budapest. Both locations have a dedicated and modern leader personality, a good and stable program that is able to supply resources, and an established connection with Nokia, which is one of Demola's strongest project partners. In addition to these two sites, we also decided to continue negotiations with MFG in Stuttgart, Germany to establish a channel for exchange of graduate students.

MFG is a valuable relationship for Demola to maintain. In the initial stages of collaboration, the development company is able to utilize its local connections to supply and partially finance the exchange of a number of talented graduate students through established scholarship means. Furthermore, there is a desire within the company to create similar activities to Demola in Stuttgart. MFG is in a good position to quickly create

motion in that direction, utilizing the already established expertise in knowledge platforms, strategy development, technology transfer, coaching, and entrepreneurship programs.

These three collaborations will provide a great deal of traffic of exchange students. Initially Demola will take in a good deal of students from these locations. As time progresses, and project collaboration is able to be deepened, it is possible that students from Demola will travel to partner locations to conduct project work also.

5 Strategic Alliance Analysis

The below analysis is based around the 5 step process to forming an alliance laid out by Gerdes in Navigating the Partnership Maze (2003). It is not meant to be an analysis of the potential partners themselves, as such has been conducted as part of the benchmark study. Rather, it is an analysis of the steps that need to be considered moving forward with implementation.

The organizations where these forms of collaboration can take place are varied. The most obvious candidates are universities and companies that have an interest in innovation activities. However, there are a number of intermediary organizations that would have a vested interest in developing innovation activities in their area.

In practice, a development agency located in an area with a strong industry presence and governmental backing of development and innovation activities has the greatest potential for creating a deep collaboration with long lasting results. There are aspects of international expansion that Demola will not be able to control on its own, and having a local development agency as a partner is the most logical means of keeping matters balance, ensuring that each player in the network is receiving a fair amount of value for the efforts they are contributing. These types of alliances also offer greater possibilities for funding applications.

A portion of the success of Demola rests in the fact that it is a neutral ground environment where players from the area can feel secure conducting projects with others. Having a similar sense of neutrality in international operations will be important to not tilt the scales to much either in the direction of industry or academic interests, thereby changing the operation of the model. This becomes important when discussing longer term collaborations such as extended project collaboration and location development.

5.1 Objectives for the alliance

There are a number of objectives for the alliances being formed.

- Enhance the quality of project results in Demola.
- Expand network of partner companies and creating value.
- Enhance economic impacts and brand in the Tampere Region.
- Expand project offerings to local students.
- Improve contacts and opportunities gained through Demola.

Ideally, infusing a wider mix of candidates into the user pool of Demola will result in higher quality team formation from the beginning. The core values of open innovation show that the greater the pool of influence, the greater the potential for combining knowledge and research. Bringing in international students who are dedicated solely to Demola projects for the duration of their stay in Finland is a new element, which local students are not always able to match fully due to the fact that most projects are conducted on a part-time basis.

The success of Demola largely depends on the availability of quality projects conducted within the environment. Creating a network of international partners expands the possibilities of attracting partner companies to participate. Partnering with foreign universities opens a path to the network of companies that university has worked with in the past. Having a resource partner in other countries also allows Demola to offer new products to it current project partners in Finland.

Demola is an enhancement engine for the industries of the Tampere region. Expanding its network to international areas will eventually open paths for investment in the region and possibilities for local project partners who wish to test markets abroad in a cost efficient manner. Drawing talented and experienced students to the area and giving them opportunities to meet with local companies has the potential of leading to positive recruitment options in Tampere.

Forging connections with new companies abroad will lead to new project work in the Demola environment. This expanded project base will allow local students to gain valuable experience conducting projects for international companies. These are very good marks for the students' CVs and work prospects. Also, this influx of new project topics offers a wider variety of thesis options for Demola participants.

5.2 Identifying and assigning values to potential partners

There are a variety of partners that we are pursuing at the moment. The first among these are universities in other countries. These partners hold a great deal of value for Demola in that they hold a ready supply of talented students who are willing and able to contribute to project work within the Demola environment. The benefits can only be realized if Demola ensures proper recruitment through constant communication with the universities, communicating needs and opportunities. This benefit goes straight to the core of open innovation, opening a wider knowledge bank to solve an existing problem.

In addition to providing a rich exchange of students, both to and from Tampere, university partners represent at great deal more value. The universities that Demola will cooperate have a history and focus on collaboration with companies, both local and international. Collaborating with these universities opens a number of doors to business communities, which Demola might otherwise be cut off from.

Having international partner companies is a valuable proposition for Demola. Because Demola is a facilitator, the wider the net of contacts, the better it is able to serve its stakeholders and partners. A greater number of partner companies increases the ability of Demola to offer opportunities to students both local and international.

Locating a collaborator that is willing and in a good position to help establish a remote Demola location holds great potential for all involved. The ability to operate with a remote partner, which utilizes matching operating methods and procedures exponentially expands

the opportunities that Demola can provide. This collaborative partner could come from a number of areas, from universities to development companies.

5.3 Assessing and assigning risk associated with potential partners

There are risks associated with creating cooperative collaborations between any two organizations from different countries and cultures. An important factor is that Demola is essentially an experiment in itself, and each step in the internationalization is treated as a pilot project. This is for two reasons, to mitigate risks and to grow slowly enough to analyze each project and make improvements where needed.

There is a risk with student exchanges that the traffic conducted will not produce any valid results. This is possible if Demola fails to offer legitimate project work for the incoming students, or if the talent of students is insufficient to be productive team members.

The stage of expansion where Demola will conduct joint projects leads to higher risks. A higher level of funding is needed to support joint project production. Splitting resources into two separate locations requires supporting efforts to ensure that communication and normal group work is possible. Travel expenses, partner company costs and time constraints make joint projects much riskier than standard Demola projects.

While the cultural mix of teams is one of the most highly prized benefits of the international extension of Demola’s network, it does not come without its own pitfalls that must be compensated for through team facilitation and team building exercises.

5.4 Determining potential revenue derived from partners

Because Demola is a facilitator, the question of revenue is different than it would be when evaluating a strategic alliance for a traditional business. The revenue streams most immediately raised will be the fees paid for licenses in internationally based projects. These fees are paid to the students involved in the project.

The benefits and financial incentives for Demola to expand its network include:

- Profile raising activities
- Increased number and diversity of projects available
- Marketing possibilities
- Opportunities to apply for additional funds
- Networking

Because so much of the social capital that Demola holds is based on trust, reputation and profile, it is important for Demola to be consistent throughout its operations, thereby making participants comfortable with committing time and resources to the environment. Having an active part in international activities helps to raise up awareness of Demola and the model it employs, as well as opening new doors for further projects.

With a multidisciplinary principle at its core, it only follows logic that Demola should expand the range of project topics it handles. To do this, it is optimal to expand the available pool of partner companies beyond the local region to tap into larger resource pools along with areas of development and investment.

The potential revenue for Demola partner companies is a different question. The increased activity and enhanced talent pool give a strong possibility for more fully realized projects, which can have profit potential for the company with some integration to current service and product offerings. Working with students and partners from different cultures can be a valuable means of gathering reactions and perceptions in potential markets.

Creating a contact bridge for our local project partners to a network of international universities and companies could have long lasting impacts. Ideally, Demola becomes a mediator and matchmaker between our disparate collaborators, thereby creating new activity and revenue streams between them. This would be the first step in moving activities created by the Demola network from Tampere-centric to a more fully integrated group of collaborators.

5.5 Means of measuring the partnerships

The initial stages of the collaborations will largely deal with student exchanges and expertise exchanges. While these are the smaller scales pieces of the intended collaboration, they offer a great opportunity to measure the expectations and satisfaction of the partner organizations.

Team and individual coaching is a key piece of the Demola model, so a direct route to take the measure of visiting participants already exists. Beyond this, a feedback questionnaire will be developed and given to all students before they complete their term with Demola. Input from these feedback channels will be used to improve the quality of services offered.

At the point where project topics start to manifest from the network of international partners, it will be crucial to measure the first few test cases to evaluate the effectiveness of the operation. Possibly the most important aspect to review will be the communication efficiency. Because either parts of teams may be located in remote locations, or the project partner may be in another country than the project operation, some of the basic Demola methods of guidance and discussion will be altered. Interviews with the participants will be used to determine faults in the system and areas for improvement.

Regular meetings, either in person or through telecommunication means, are needed between Demola staff and the leading figures of our partner organizations. Because the landscape of innovation activities is ever-changing, regular communication is needed between the staffs to measure the effectiveness of activities.

The measuring of feedback and implementing changes based on the information received will require a staff member with sufficient time and resources. A staff member from Demola will be dedicated both to negotiations with partners, researching and looking for new partners, maintaining the connections and conducting follow-up after projects are complete. Travelling between partner sites will be necessary to evaluate the progress of projects conducted abroad, student exchanges from Demola, and maintain relationships.

6 Value Creation Network Analysis

The value that Demola is able to offer and provide to its partners comes in a variety of forms. By growing a network of international partners, Demola hopes to enhance the value it creates now, and to discover new avenues of value creation for the future. The below analysis is based around research material in Appendices 1-3.

6.1 Communication channels

Once the connections between institutions are established, the most immediate means of value creation include communication back and forth between the partners. From Demola's point of view, it is important for projects to be undertaken rather quickly after the project proposals are added to the website. Creating and up-keeping a steady flow of information through the channels presented to the student users is the easiest means of creating the traffic flow within the environment that is essential for continuing success and activity.

It is not only a question of pushing information though. The pull of information into Demola from its partners is especially important to the maintenance of current knowledge of needs and desires of partner organizations. For example, the types of students available from local and international university partners must be known. Reading the trends and flows of student and program interests allows Demola to stay ahead of the curve and propose new areas of interest to partner companies.

In the same vein, it is imperative that Demola has a firm grasp on the upcoming needs and interests of partner companies. This fore-knowledge offers opportunities to prepare community members for coming needs. University recruitment and training sessions can be conducted to keep the community up to date on industry trends and needs.

Communication within the community is a natural byproduct of coaching and guidance activities. This allows the staff of Demola to ensure that projects are moving forward naturally and lend aid where necessary.

Efforts to create cross-team communication within the Demola ecosystem have been developed over time, and will be strengthened on an ongoing basis. These efforts include weekly community gatherings where successes, problems, issues, upcoming events and trainings are discussed.

In addition, a growing aspect of assisting fellow teams is being integrated into normal operations. For example, for the Innosummer 2010 campaign, a contractual obligation to spend 10% of working hours in the assistance of another team was implemented. This was done to avoid separation and isolation of teams and to enhance project results by spreading successful aspects of each project to others.

The strength of the communication channels within the Demola ecosystem stem from the fact that Demola is in the center of its three key constituencies; project partners, universities and students. There is a great deal of valuable information and knowledge passed back and forth within the channels created by Demola. Without these channels, it would be difficult for each individual party to create the same sort of activity as is possible through Demola.

As an example, university professors who are involved in high-tech areas of study usually need to spend time and energy on maintaining a network of contacts with companies. This is in order to offer current information and opportunities to their students. Plechero (2009, 10) points out that despite the crucial role universities play in innovation and networking with companies, research has shown that the majority of these contacts are informal and established directly with professors.

With an intermediary such as Demola offering its services, it is possible for universities to tap into a wider network of opportunities and direct students to the areas where they can

learn the most and are most needed, shifting the maintenance of relationships to where it can be conducted more efficiently. These services allow development to happen in Demola and for the university to better meet the needs of the region and the players involved as well.

6.2 Matchmaking and recruiting

Recruiting is an expensive proposition for modern companies. Searching for and finding qualified individuals either from the current workforce or the university system can take a good deal of time and resources. Included in traditional recruiting is the danger of hiring the wrong individual for the particular job. Previous experience with a candidate is a sure way to avoid this danger.

Committing to a project within the Demola environment gives companies the opportunity to actively participate with students who have the skills and desire to work in a specific area of expertise. This gives the company time to evaluate each student participating and the results they are able to produce. Inevitably, this should lead to companies discovering individuals whom they would like to employ in the future, and hopefully to successful recruitment into the company. This informal observation and evaluation time would be very difficult without an environment such as Demola.

In other cases, it is possible that Demola can find a match between a company and a student or graduate who wish to develop the ideas grown in a Demola project into a spin-off or start-up business. It is a valuable proposition to recruit a student into a spin-off rather than one of the company’s own employees leaving to form their own start-up dealing with the same technology.

Demola also gives students the chance to learn from hands-on experience and research the needs and directions of the current business climate. Even without direct matchmaking intentions, Demola can assist in introducing students to companies and concepts that will hopefully lead to future recruitment.

6.3 Coaching/learning

The coaching and learning through information exchanging and testing that occurs within Demola has effects on all parties involved. Students have the opportunity to interact directly with company representatives on a weekly basis, thereby gaining valuable insight into the needs and wants of the business community. Companies have the chance to interact with students and gage the level of talent and interest in the coming work force.

Project work opportunities provided by Demola also give universities the added benefit of placements for students in situations that offer hands-on learning opportunities, which would be costly and time consuming for them to arrange themselves. These ties are a benefit to the university and let them focus on academic pursuits and outsource practical learning activities.

Efforts are being initiated to strengthen the ties that lead students in programs at local universities directly to Demola. This allows Demola to form structures and programs to formalize the educational aspects of project work in the environment. Creating processes for these interactions allows us to strengthen the value proposition to both students and the universities.

6.4 Utilizing results / follow-through

The established channels of follow-through in Demola seek to ensure that projects conducted within the system have a means of continuation if they are seen to be valuable enough to justify continuing investment. The prototypes and demos created in Demola projects would be a waste of time if there were not channels designed to utilize those results and put them into action with a solid business case behind them.

Follow-through can come in a number of ways. Firstly, the partner company can choose to purchase the license for the results, and continue development within its' own systems. However, as an extension of its services, Demola can offer possibilities including the

creation of a Protomo team to develop the idea into a working business case able to find funding and support, offer continuing development through further projects, or give advice and offer services based on experiences of previous project follow-through.

All of these result utilizing opportunities elevate Demola above a place where student projects are conducted to the point of being an economic engine working to develop business activities in the Tampere region and beyond. The value therefore created for all partners involved can more readily be realized and taken advantage of.

Strengthening ties to continuation channels that already exist is a way to ensure the value created for Demola’s company partners and be able to offer value for the continuation of project results by combining interested partners who are already involved in the Demola environment.

7 Collaboration Models

There are a great number of ways the exchanges between innovation organizations could be conducted. Through consideration after the study trip in June 2010, it was decided that the methods with the best potential for success and immediate benefits would include:

- Student exchanges
- Project Collaboration
- Remote location development
- Expertise exchanges

By design, the expansion of Demola operations into international fields has been calculated and built over time. The choosing of potential partners has been narrowed down to those that will have the ability and vested interest to create operational level collaborative programs.

7.1 Student exchanges

Student exchanges are a natural first step in the process of creating a network of innovative minded organizations. It is the most cost efficient testing ground to make sure the cultures of the two organizations involved are compatible and that expectations are similar. There are a number of resources readily available for this type of exchange. Most of these do not require exorbitant amounts of time or effort to attain. Bringing together the most active and interested students from the partner organization with the environment and students already involved in Demola is a simple way to create solid project results in a short time period and inspire champion voices for Demola when the visiting students travel back to their home organizations.

Within Europe, Erasmus exchanges offer a large amount of resources available for students who are conducting research projects either for credits or as part of a thesis project. There are also national, regional and university level scholarships, which are options for finding

funding to support international students wishing to take part in Demola activities. The added benefit of using ready scholarship and grant structures is that the applicants must be qualified for the exchange by default, and the screening process is largely handled before they reach the Demola application process in most cases.

Adding students from a foreign culture into the mix of Demola teams and projects has been a priority from the beginning of operations. In most Demola projects, the working language is English. Approximately 30% of participating students have been from a country other than Finland. Largely, these students have already been on exchange or completing a degree program in the Tampere area and have discovered Demola while studying.

Time resources will be necessary to assist exchange students with the entry process, finding accommodations for their stay and acclamation to the Demola working environment. More personalized guidance and coaching may also be necessary during the project operating period. The exchanges will also necessitate paperwork and contact maintenance with the student’s home organization.

Issues of compensation will also need to be worked out on a case by case basis. Because exchange students will most likely be tied to a project full time, and their local counterparts will be balancing project work with other responsibilities, the compensation paid for licenses at project completion will need to be balanced to reflect the amount of hours each member has contributed to the project.

The resulting mix of cultures and differing viewpoints has been considered an asset in the projects that have included foreigners. The formalization of the exchange process should give greater impact to this factor because it will combine the benefits of foreigners working in the Demola environment with improved recruitment practices, attracting the most involved and qualified students who are specifically interested in Demola projects.

Student exchanges offer a number of opportunities for growth and enhancement of the value Demola is able to create, larger scale projects are more likely to create lasting effects and improve the structures.

7.2 Project collaboration

Project collaboration can take a number of forms. The forms of project collaboration that hold the most potential for Demola include:

- Project for foreign company hosted in Demola
- Project with split team in remote locations
- Project conducted in multiple locations independently with comparison of results
- Participating in or hosting competition
- Special program implementation

To this point, Demola has mostly undertaken projects for companies that have operations in the Tampere region. Hosting a project for a foreign company, most likely affiliated with a partner organization that we have established, will have a great number of effects. Chief among the benefits are an enhancement to the profile and reputation of Demola, increased business relations in the region, and possibilities for new knowledge combinations in the future.

Conducting a project, which consists of a team in split locations is a more complicated proposition. In order to run a pilot project, the right project will be needed. Because innovation projects conducted in Demola are so engrained in teamwork, a project that has a focus that is able to be logically split and explored in separate parts is needed. The means for communication are available with ease in the Demola premises, and must also be established in the other location.

Because open innovation is about creating combinations of knowledge that can lead to a number of breakthroughs, conducting a project in multiple locations, in which teams

operate independently has a great amount of potential. The idea is to have the exact same project topic, and to conduct a full research project in two or more locations. The teams will have a bit of communication in the beginning, but will not compare results until both projects are ended and teams have a prototype or outcome that can be compared and contrasted in a joint session. Ideally, the results could either be combined by the partner company purchasing a license, or by constructing a further development project, which would combine the best features of each solution and push the project along.

Competitions

There are a number of innovation competitions throughout Europe and the world. Generally, a competition gives teams a limited amount of time to craft an innovation around a specific theme or topic. Having a limited time frame and the chance to win prize money for a successful product gives students the motivation to quickly create a strong working team and produce a working product that can be submitted.

The benefits of participating and competing in innovation competitions are numerous, but the most apparent include the profile lift that comes from being the inspiring actor in an active competition, networking and communication opportunities with other like minded organizations involved, and the chance to inspire a winning contribution out of the local innovation environment.

A competition can be funded by combining an amount of resources from a group of interested parties to offer as a prize for the winning contributions. Most competitions hold an award ceremony designed to add prestige to the event. This sort of competition activity is a means of marketing Demola as an active member of the international innovation scene. Also, competitions can be a source of recruitment for Demola to find young talent interested in creating new products or services.

Special Program Implementation

Outside of normal Demola projects, Demola has had a good deal of success creating short term, intense programs with positive results. The Innosummer program is a good example

of this. In Innosummer, students are employed full time for the duration of a summer. The nature of an exchange with Demola from an international location lends itself naturally to this full time work model, as the students are only participating in Demola activities.

After testing the most effective means of managing student exchanges within the ecosystem of Demola, developing specific programs in order to best utilize the talents of students from a number of different areas would be very valuable. Having intense programs, in which students have the time and resources to fully commit themselves to an innovation project without outside encumbrances, is a valuable proposition and a strong product that Demola is able to offer to its partner companies.

A potential combination of established methods and new aims would be to create an “InnoWinter” campaign. Similarly to the InnoSummer program, students would be working within an innovation project as an employee. The program would be conducted during normal semester time. Therefore, students would be joining the program as an internship, thesis project, in addition to part-time employment, thereby giving additional incentives compared to InnoSummer, which is designed to be conducted through summer jobs for students. One recruitment method discussed would be to participate in a competition with a wide base of participants, and offer the chance to work on an innovation project within Demola as part of the prize package.

7.3 Remote location development

Having a stable location abroad to collaborate with would make the services Demola offers strong and applicable to a wider audience. There are two leading options for this expansion proposition. They are to link with a similar organization abroad with the agreement of resource and project sharing, or to establish a Demola branded branch in a remote location.

The first of these two options is more likely to be presented first. Making a strong, yet flexible commitment with an innovation organization abroad would afford the opportunity to utilize resources and facilities that already have a track record of success. For example,

it would be possible to create an agreement with an organization that would allow us to exchange students, project topics from partners, and resources in general. This would be possible with a variety of organizations, even if the core values do not match exactly those of Demola.

A long term goal for Demola's international collaborations is to find a partner that would afford us the opportunity to create an international location utilizing the Demola name, brand and operating procedures. Such a location would allow Demola to develop a more stable method of conducting international projects while attracting companies to become project partners on a much wider scale.

The unique operating methods and intellectual property rights ownership methods may make it difficult to find the proper atmosphere for such a proposition to be possible. The organization responsible for the running of the remote Demola would need to be in sync with the values and procedures at the core of the Demola model. There is a danger of diluting the brand of Demola if the methods in a remote branch are allowed to differ greatly from the original concept. To mitigate this risk, there must be a solid line drawn between the locations that are to be branded as Demola locations, and those that will be partner locations.

It would be optimal to have a series of 3-4 Demola branches located throughout Europe after 2-3 years, with an established system for exchanges between local participating universities and companies. Proper data and IT infrastructure would allow for smooth communication between teams working on shared projects in different locations. With established and consistent methods of operation, projects ideas from partner companies could be directed to the operational site with the resources to best serve the needs of the customer, with support and exchanges between other locations.

The key component when evaluating the possibility of establishing a remote Demola location would be the services and resources available in the area. In order to support the

activities that Demola conducts, it is necessary to have the proper mix of universities and businesses in the area, with an innovative and open approach.

It is important to keep in mind that Demola does not want to create an exact copy of Demola Finland in a remote location, but rather create a unique service organization able to tap into the resources and potential partner companies of the area to build the most effect innovation organization possible, while utilizing the best practices and network of Demola. This allows each keystone in the network to be a powerhouse within its home region, and able to contribute to and take advantage of the larger network available.

A key strength of Demola is the unique mix of resources and spirit that has been created by combining the three area universities together for a common purpose. Having Demola as a neutral meeting ground has eliminated some of the competitive feelings that normally exist between universities in the same city while fostering projects, which would not be possible otherwise. This would be an ideal combination for a remote location Demola as well.

New funding would be required for the beginning of the remote locations. Ideally, the partnering company that is working with Demola to establish the new branch would have contacts and the ability to apply for local and regional funding in the target location. Having cross-border participation within the EU opens many opportunities for larger scale funding from EU programs. Local funding is most likely the preferred option because the founding company can work much closer with local financers to develop services and approaches within the remote Demola location, which meet the needs of the region while fulfilling the larger goals of international cooperation.

7.4 Expertise Exchanges

While Demola is focused on creating concrete results for projects, it is at its core a learning and growth environment. It is also designed to be flexible and change to meet the ever-variable landscape of innovation work. For these reasons, it is very valuable for the

environment as a whole to participate in an exchange of ideas and discussion with experts from international arenas.

As an example, during our visit to Lancaster University, we also visited the Imagination Lancaster program. Imagination Lancaster has an interesting multi-disciplinary innovation doctoral program. While further collaboration with the program will wait until we have run pilot projects with the selected partners, the program conducts interesting 1-day seminars called Imagination Labs.

The Imagination Labs are a great example of the type of expertise exchanges that are possible. The group uses design logic and thinking to examine the challenges facing a company or group. Rachel Cooper (2010), the Co-Director of Imagination Lancaster said "The results are surprising when a group detaches themselves from daily routines for a day to view their tasks from a design perspective." This type of exchange is a short term means of knowledge transfer with the potential for long term impacts.

In addition, it would be beneficial for Demola to ally itself with institutions, which have had success in integrating educational aspects into innovation activities. Design London, part of the Royal College of Art and Imperial College London has a split focus of design centered education and concrete project production. This strategy has allowed them to attract interested parties with workshops and training sessions, and direct that interest into design innovation and research projects (Runcie 2010).

When conducting the concluding study trip for the benchmarking study, the Demola team visited CIRCLE, the Center for Innovation, Research and Competence in the Learning Economy in Lund University, Sweden. This is a healthy relationship for Demola to be involved in because CIRCLE is an academic research institute focusing solely on innovation activities. Current research projects include "effects on small and medium size enterprises from Vinnova Programs" and "organizational change for innovation and institutional entrepreneurship in health-care systems."

While the end targets of CIRCLE and Demola are very different things, the information sharing possible between two such organizations could prove to be invaluable to both. It is important for Demola to keep up-to-date on the perceived impacts of innovation and specifically open innovation activities, in order to better evolve to meet the needs of its clients.

Expertise exchanges will fall into two categories. The first is system support exchanges, or those that help Demola grow as a service provider or improve knowledge about the systems we implement, such as the examples of CIRCLE or Imagination Lancaster. The second form falls under the category of project work support. This category includes training and workshops for students involved in projects and Demola activities.

The project work support expertise exchanges will be jump-started with a series of training sessions conducted in cooperation with Forum Nokia and other partners. The series will be tested in Tampere and then modified for extension to other partner organizations. Forum Nokia would be a good partner to extend co-operation with into the competitions and other training/networking outlets.

7.5 Implementation

The above discussed initiatives and methods of collaboration should have a positive effect on the growth and formation of the Demola environment. In order to take the international network of Demola to the next level, it is necessary to move beyond the point where it is necessary to individually craft a connection between new partners through a long and drawn out negotiation process.

One way to streamline connection building between partners is to productize the services we are offering. By formalizing the processes and functions Demola is offering to its partners, we will be able to offer services as a product to newcomers. The desire to create these products comes from a number of sources.

The staff of Demola wishes to create a network, which is initially focused on Tampere-centric activities. The purpose of this is to strengthen the systems and procedures that are employed and to test the addition of international elements into them. However, when the network is strong enough, the intention is to foster interactions and connections between organizations in the network, which have perhaps had only peripheral communication in the past.

As an example of the above, there are many possibilities when considering that we could connect a strong partner organization such as Tampere University of Technology with a foreign university or company that has been involved in Demola's international network. Such connections may not fit directly into Demola activities, but there are side effects from these connections of value to the entire network. Demola needs to be in the position which it can offer the expertise which has been accumulated over a few years of operation from a consulting point of view, thereby giving the ability to share results and value throughout the network when appropriate and guide interactions between network members.

Ideally Demola in Tampere will maintain the status and reputation as a leader in innovation activities through continuous development of programs and connections. By sustaining the image of leader throughout the network, and staying one step ahead in the development of tools and programs, Demola has the potential to hold the position of facilitator and service provider for all involved.

7.6 Future Steps

As pilot projects, Demola is initiating student exchanges with MFG in Stuttgart, Germany as well as Lancaster University and Budapest University of Technology and Economics. The most immediate steps to be taken in fall 2010 will be to establish exchange opportunities for five to six students through MFG in Stuttgart.

A communication channel has already been established where Demola sends information about new project proposals and topics as they become available, and MFG collects and

sends CV's of students who are interested in an extended exchange period with Demola. It will be important to strengthen this communication and ensure that it is continued on an ongoing basis.

This simple communication channel applies to all student exchange programs being established. It is important for interested students to have a clear picture of the types of projects available at the moment, and for Demola to be aware of interested students and the skills they represent. This flow creates the possibility to match students to projects in the most efficient manner possible.

Because of the operating methods of Demola, in most cases it is not possible to match students with projects by direct application process. The flow of project work means that when a team is ready to be formed, the project is started. Adding students traveling from afar to this equation is complicated. The flow process should proceed that students are brought into the environment, given a short time period to get acquainted with the space and working methods, and then tied to a project, which is available at the moment and matches their expertise and skill set.

To make transitions easier for exchange students, Demola will assist the students in creating an agreement with the student housing authority (TOAS) in Tampere to find available student housing. Depending on the timing of exchanges, the application process for housing may be simple, and coincide with the normal housing application periods. In times when the exchange period does not match normal semesters, additional assistance from Demola will be required.

In addition to student exchanges, joint projects will be developed in the near future. The most likely candidates for this type of collaborative project are those sharing a common partner company with us. The most obvious answer is to consult with Nokia about establishing a joint project either with Budapest University of Technology and Economics or Lancaster University.

The ideas for the pilot joint project can be found from Demola's upcoming projects, the projects lined up at a partner institution, or from the partner company in question. During fall 2010, a number of possible projects will be examined, and based on a demanding set of criteria Demola will choose those to be developed. The most promising candidates will be selected for further development.

Action Points for the first six months of implementation include the following:

- Pilot student exchanges with all selected partners
- Pilot competition participation
- Project hosted in Demola sponsored from abroad
- Training/knowledge exchange activities
- Initiate discussions with Budapest and MFG in Stuttgart about innovation center establishment
- Initiate discussions about project collaboration between all partners
- Establish service procedures for exchange students in Tampere
- Investigate long term means of funding exchanges

7.7 Milestones

When identifying and targeting a new potential partner organization, the Demola team will evaluate the speed and intensity most appropriate for trying to build connections. Below are the milestones, which have been agreed upon for each target organization.

Fall 2010

MFG, Stuttgart – Securing 2 student exchanges through established scholarship means. Beginning discussions about joint project opportunities and the development of their innovation center.

Budapest University of Technology and Economics - 3 student exchanges. Continuing discussions about establishing an innovation center within the university.

Lancaster University - 3 student exchanges. Conversations about further co-operation.

Spring 2011

MFG, Stuttgart - 5 student exchanges, plus holding meetings with the universities of Stuttgart to deepen connections to specific programs. 1-2 joint projects.

Budapest University of Technology and Economics - 10 student exchanges to Tampere plus creating an action plan for our participation in the creation of Budapest open innovation center. 1-2 joint projects.

Lancaster University - 5-10 student exchanges + expertise exchange, 1-2 joint projects.

Copenhagen Nokia contacts - Site visit and beginning introductions plus conversations about collaboration

Totals at summer 2011 checkpoint - 20 - 25 student exchanges, 1 - 2 joint projects with each partner

7.8 Resources Required

As an engine for business development and growth in the Tampere area, the international expansion of Demola is a logical progression. Up to this point, Demola has been fortunate enough to be able to operate using a mix of regional funds and private funding. Because the focus of growth has been centered and focused within the region, this has been a logical mix of funding and has allowed for steady and targeted growth.

With the expansion to cross-border collaborations, it may make sense for a wider funding net to be cast. Collaborating with organizations in other European Union countries opens a number of new EU funding possibilities, if desired. This type of funding will likely be a solution to the larger expansion needs in the future, such as extended project collaboration and remote location development.

When discussing collaboration with fellow development companies, regional and national funds from the local partner can become available to the Demola network, which would otherwise be unreachable. Much as in the case of Demola's initial funding, it may be optimal to pursue these particular funding types in order to most closely match the needs and desired outputs of the local partner without the dilution, which naturally comes when projects apply for larger funding means.

The coordination of the expansion into international operations will be funded through similar means as the original Demola project. An example work package required for the management and organization is laid out below.

Objectives

Develop the model for an international network for Demola consisting of universities, development agencies and businesses abroad with aligning innovation interests. Managing student exchanges and joint projects within Demola.

Formalize processes for communication and exchanges between network partners. Traveling to partner organizations to solidify commitments and visit secondary partners in the network. Coordinating arrangements necessary to facilitate the execution of exchange and project activities. Developing programs to ensure the continuation of exchange activities the funding base for them in the future.

Requirements over 3 year period

50.000 € - Coordinating employee, 1 employee 50% time commitment
15.000 € - Travel, 2-3 trips by 2 employees first year, 1-2 trips per years 2 and 3
5.000 € - Services, Contract development, web services development, consultation

Total - 70.000 €

8 Conclusions

Demola is a growing open innovation center in Tampere, Finland. Utilizing a principal of bringing students from the Tampere region together with leading business players to conduction innovation projects has had a great deal of success in its first two years of operation.

Demola collects project ideas from companies, and turns those ideas into project proposals. Demola then offers those project opportunities to students, primarily from the University of Tampere, Technical University of Tampere, and Tampere University of Applied Sciences. All projects have the goal of creating concrete results, which can be shown and utilized in a number of ways.

The collaboration models making the most sense for Demola in the coming years include conducting student exchanges, project collaboration, remote location development and expertise exchanges. Taking an approach of steady growth with international operations will allow Demola to incorporate effective portions of the implementation plan and correct for those, which are not as efficient.

Student exchanges and expertise exchanges constitute the first wave of the implementation of international co-operation. They are first because they constitute a smaller level of commitment and are a good test-bed to build trust for deeper connections. Student exchanges allow Demola to tap in to new areas of expertise and expand cultural perspectives represented in project results.

Similarly, expertise exchanges are designed to expand the base of knowledge and expertise within the environment. The two types of exchanges are system based exchanges, which are designed to improve the methods and systems employed by Demola to conduct projects and activities within the Demola ecosystem as well as project based exchanges, which are designed to provide training and knowledge dissemination necessary for students to successfully complete Demola projects.

The next step after establishing exchanges of varying kinds will be to identify project topics, which would be candidates for joint project collaboration work between Demola and international partners such as universities, development agencies or industry players. This is done in order to expand the project topic offerings available in Demola, interactions within the Tampere region and entrepreneurial opportunities for students.

Taking a longer term point of view, Demola will seek to establish remote locations carrying the Demola brand and operating methods in an international environment. Establishing an institution with such deep levels of connection will offer the opportunity to make new and exciting connections between the expertise existing in each individual region. This creation requires a partner organization in the remote location, which has the connection necessary in the area and the dedication to carry through the creation.

The first round of potential partner organizations was visited during June 2010 by the Demola team. From those visited, a short-list of organizations with the most immediate likeliness for successful collaboration was created. They include:

- University of Lancaster - Mobile Radicals and Imagination Lancaster
- Budapest University of Technology and Economics
- MFG - Stuttgart

There are a number of organizations, which Demola is in preliminary discussions with in the regions of Copenhagen, Cluj Napoca and Lund.

The implementation of collaboration requires dedicated resources for the establishment and maintenance of relationships. Visiting locations is very important to the proper establishment of exchange activities. Not only does Demola need to visit the partner organizations, but also university program heads, decision makers and industry players in the area. It is important that Demola be introduced and be present in the minds of the core players in chosen partner regions.

In Tampere, a large amount of time resources are necessary to provide services to the incoming exchange students, coordinate programs and continue development of projects, including selling services to partners. Financial resources are necessary to facilitate participation in profile activities, events and competitions.

The extension into internationalization is a natural one for Demola. 30% of student participants have been from a country other than Finland. Opening Demola projects to international exchanges allows us to tap into new areas of expertise and increase the open nature of the environment as a whole. This is a positive impact for all players involved in the environment and should help to create economic impact in the Tampere region.

There is a great deal of value created by the interactions between Demola and its international partners. Demola will seek to formulize these interactions so that rather than having a scattershot or one-off approach to project building, there will be established structures, which can be sold as services to interested parties. The greatest value proposition that can be seen as a long term goal is the point where activities within the Demola network move from the point of being Tampere-centric or directly led by Demola in Tampere to creating synergy, opportunities, and project collaboration between remote partners in the network, which can then be facilitated and guided by Demola.

The value created by the extension of Demola activities into the international realm will ideally create a number of economics impacts between the regions, spur innovation discoveries within partner companies, and boost the reputation and image of Tampere as a leader in innovation thinking and activity.

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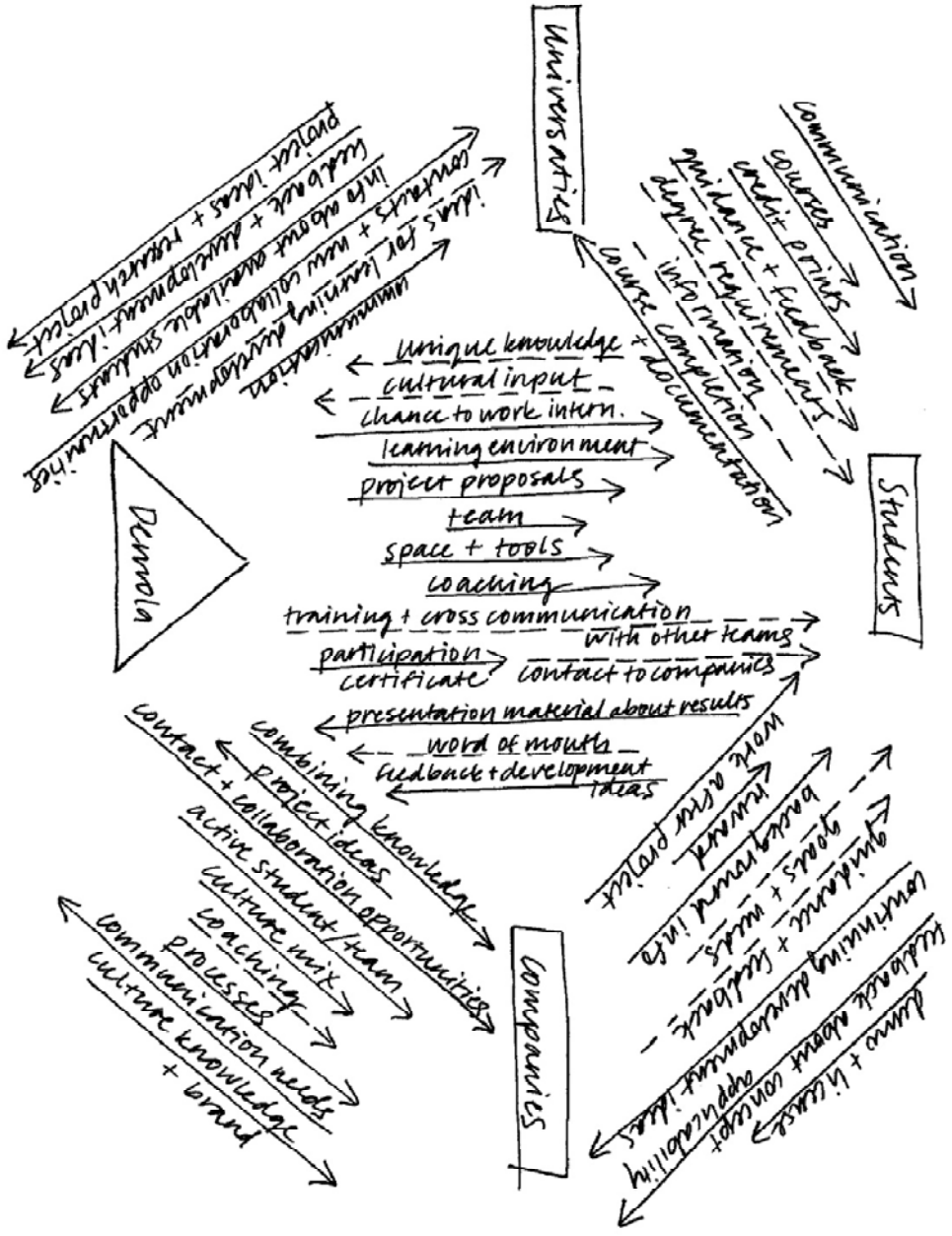
Appendices

Appendix 1- Value Network Analysis: Network Mapping



Appendix 2 - Value Creation Analysis

Demola

Transactions		Value Creation		
		What do we do to add value to this output?		
Deliverable: What we output	Goes To	Value Enhancements or Value Added	Cost/risk	Benefit
Communication	Universities	Reveals new opportunities for collaboration for departments and students	L	M
Contacts and new collaboration opportunities for students and departments	Universities	Developing new contacts in a variety of areas to expand opportunities to more progams and students and to enhance those areas which are already a speciality	M	H
Ideas for learning development	Universities	Developing new progams and processes to give avenues for learning development	M	H
Chance to work internationally	Students	Give opportunity to work and gain experience with international company while obeserving conditions of foreign market	M	M
Learning environment	Students	Enhancing learning process through coaching and follow-through tracking of student progress. Practical learning opportunity.	H	M
Project Proposals	Students	Through careful selection, give opportunities for solid project work with interesting companies	L	H
Team	Students	Choosing qualified individuals who will constitute the best possible team and produce the best results	L	H
Space and tools	Students	Improve space and tools available as needed. Active working environment.	H	H
Coaching	Students	Individualized coaching based on needs. Tracking progress through project work.	H	M
Training, cross communication w/other teams	Students	Improved skills and knowledge for students. Building network of contacts.	M	H
Participation certificate	Students	Proof of participation. Reputation and value for CV.	L	M
Contact to companies in Finland	Students	Chance to build contact network and general knowledge of business environment. Event hosting. Presentation opportunities.	M	M

Combining knowledge	Partner companies	Unexpected project results and insights.	M	H
Contact and collaboration opportunities	Partner companies	Event hosting. Formalized forumns to meet potential collaborators. Joining distant members of Demola network.	M	H
Active students/team	Partner companies	Constant recruiting and information dissemination activities. Improving project follow-up.	M	H
Culture mix	Partner companies	Expand network to new areas geographically and academically producing better teams and results.	H	H
Processes	Partner companies	Unique opportunities to utilize underused and potential IP.	L	M
Culture knowledge/ brand	Partner companies	Disseminating positive results. Marketing activities. Adding new dimensions to company products.	M	M

Universities

Transactions		Value Creation		
		What do we do to add value to this output?		
Deliverable: What we output	Goes To	Value Enhancements or Value Added	Cost/risk	Benefit
Info about available students	Demola	Communication channels. Matchmaking projects to university programs and students. Knowledge about suitable and interested students.	L	H
Feedback and devolopment ideas	Demola	Develop programs which tie to university programs more effectively and offer students better opportunities to participate.	L	M
Project ideas and research projects	Demola	Projects created. Offering wider range of projects.	M	M
Communication	Students	Information about projects. Encouragement to join. Targeted marketing.	M	H
Courses	Students	Frame for project and channel for participation.	M	H
Credit points	Students	Supports studies and completion of degree requirements.	L	M
Guidance and feedback	Students	Supports project realization. Supports fulfillment of completion requirements.	M	M
Degree requirements	Students	Frame for projects.	L	L
Information	Students	Supporting project completion. Academic support.	M	H

Students

Transactions		Value Creation		
		What do we do to add value to this output?		
Deliverable: What we output	Goes To	Value Enhancements or Value Added	Cost/risk	Benefit
Presentation material about results	Demola	Create detailed presentation material about project results and outcomes. Publicity and dissemination.	M	M
Word of mouth	Demola	Discuss Demola with peers and other interested parties leading to more interest.	L	M
Feedback and Development ideas	Demola	Give improvement ideas as seen from participant interaction. Share info on needs and wants for project work and tools.	L	M
Cultural input	Demola	Participate in Demola community events and team building training sessions. Utilizing difference in project work.	M	M
Unique Knowledge	Demola	Project work participation. Cross team communication.	M	H
Information	University	Create reports and feedback to interested parties in home institution. Communicating needs.	M	M
Course completion and results documentation	University	Participate in interesting and challenging projects as a means of meeting project course requirements. Suggesting thesis topics and intership opportunities.	M	H
Demo and License	Company	Valuable ongoing development opportunities for company or start-up/spin-off creation options.	M	H
Feedback regarding concept applicability	Company	Testing viability of concepts through practical application and testing.	M	M
Continuing development ideas	Company	Working with company representative, giving feedback on project and ideas. Providing information about interests and expertise available.	L	M

Partner Companies

Transactions		Value Creation		
		What do we do to add value to this output?		
Deliverable: What we output	Goes To	Value Enhancements or Value Added	Cost/risk	Benefit
Project ideas	Demola	Refining proposals and ideas to fit available expertise and interest.	L	H
Communication - needs	Demola	Matching needs with those able to serve them.	M	H
Guidance and feedback	Students	Managing communications and follow-up procedures.	M	M
Goals and needs information	Students	Guiding project to meet and exceed needs. Recruit talent to meet needs.	M	H
Background info	Students	Offering tools and team to utilize available information.	L	M
Reward	Students	Follow through with project continuation options.	L	M
Work after project	Students	Foster communication between students and partner companies. Discuss continuation of project results.	M	H

Appendix 3 - Impact Analysis

Demola

Transactions			Impact Analysis				
		What activities does the input generate	Does it have positive or negative impact on costs and tangibles	Does it have positive or negative impact on intangible assets?	What is the overall cost/risk for this input	What is the overall benefit for this input
Deliverable: What we receive	Comes from	Activities	Tangible impact	Intangible impact	Cost/risk	Benefit
Project ideas and research projects	Universities	Project proposals, group formations	project work	stronger communication, reputation	M	M
Feedback and development ideas	Universities	review of methods, comparison of feedback	improvement of project results, future ideas	practical knowledge of co-operation	L	M
Info about available students	Universities	team formations, recruitment, marketing	quality of recruitment, project selection	possible selection of project topics tipped to most available groups	L	M
Unique knowledge	International students	project work, information sharing in the team	improvement of project outputs	increases the appeal of Demola environment	M	H

Cultural input	International students	Events. Community building	improvement of team diversity	Culture clashes/ working differences.	M	M
Feedback and development ideas	International students	review of methods, comparison of feedback	improvement of project results, future ideas	practical knowledge of team dynamics	L	M
Word of mouth	International students	marketing, social media	expanded network and new connections	Buzz.	H	H
Presentation material about results	International students	Marketing material, showcases	Reputation and standing. Success cases.	Student work time. CV/job seeking material for students	L	M
Project ideas	Partner companies	Projects starting	Projects available.	Wider network of partners. Traffic.	H	H
Communication - needs	Partner companies	Program creation. Coaching.	Leads projects results. Training for students.	Knowledge of industry needs.	M	H

Transactions		Impact Analysis				
		What activies does the input generate	Does it have positive or negative impact on costs and tangibles	Does it have positive or negative impact on intangible assets?	What is the overall cost/risk for this input	What is the overall benefit for this input
Deliverable: What we receive	Comes from	Activities	Tangible impact	Intangible impact	Cost/risk	Benefit
Communication	Demola	Decision about cooperation. Communication to students.	Time resources.	Demola awareness and knowledge	L	M
Ideas for learning development	Demola	Conversations about new course ideas and projects	Time resources.	Increases teaching effectiveness. Development possibilities	M	M
Contacts and new collaboration opportunities for students and departments	Demola	Conversations about possibilities. Planning model for cooperation.	Time resources.	Supports the creation of cooperation.	M	M
Information	Students	Further development	Knowledge transfer.		L	M
Course completion and results documentation	Students	Documentation. Completion approval.	Time resources.		M	L

Students

Transactions			Impact Analysis			
		What activities does the input generate	Does it have positive or negative impact on costs and tangibles	Does it have positive or negative impact on intangible assets?	What is the overall cost/risk for this input	What is the overall benefit for this input
Deliverable: What we receive	Comes from	Activities	Tangible impact	Intangible impact	Cost/risk	Benefit
Chance to work internationally	Demola	Project work. Interaction in Demola environment	New contact network	Experience growth. Own costs incurred.	M	H
Learning environments	Demola	Credits. Project work.	Course completion. Learning opportunities.	More difficult learning opportunities.	L	M
Project proposals	Demola	Ability to start project, brainstorming	Worthwhile topics, reduced time searching for work topic	Challenges. Business opportunities. Making topics possible for students.	L	H
Team	Demola	Interaction. Project tasks	Project beginning. Time savings in team building	Possibility for cooperation in multi-discplinary team. Future contacts.	M	H
Space and tools	Demola	Allocation decisions	Reduces expenses.	Place to innovate. Interaction	L	M
Coaching	Demola	Project task. Evaluation.	Increased effectiveness.	Supports learning. Increases knowledge and inspiration. Follow-through improvement.	M	H

Training, cross communication with other teams	Demola	Learning growth. Information sharing. Follow-up conversations	Takes time to participate. Best practices knowledge. Effectiveness.	Cooperation between participants. Increases knowledge. Better results	M	H
Participation certification	Demola	Work certificate as proof of participation.	Job search process. Employment. CV items.	More respect. Better future work possibilities.	L	H
Contact to Finnish companies	Demola	Recruitment. Events. Follow-up conversations	Employment.	Knowledge sharing.	H	H
Communication	University	Information on available projects and options		More info about participation activites	L	M
Courses	University	Project opportunities	Compulsory tasks.	Participation possibility. Danger of motivation weakening.	M	M
Credit points	University	Documentation and courses completed.	Degree requirements fulfilled.	Participation opportunities. Supports studies	M	M
Guidance and feedback	University	Learning Growth. Mid-project checkup.	Time resources.	Supports learning and project completion.	M	M

Degree requirements	University	Documentation. Degree earning.		Makes credit approval possible.	M	L
Information	University	Project selection	Project resources.	Improved results	L	H
Guidance and feedback	Company	Project completion and refinement. Analysis	Effectiveness. Knowledge sharing.	Supports project. Expertise, ideas, inspiration.	M	H
Goals and needs	Company	Learning opportunity. Insight into industry.	Time commitment.	Knowledge of development issues and background info.	H	H
Background info	Company	Project information. Coaching.	Reduces time needed		L	M
Reward	Company	Financial incentive. License purchase.	Financial incentive.	Inspiration for better results.	L	M
Work after project	Company	Recruitment. Further project development.			H	M

Partner Companies

Transactions			Impact Analysis			
		What activies does the input generate	Does it have positive or negative impact on costs and tangibles	Does it have positive or negative impact on intangible assets?	What is the overall cost/risk for this input	What is the overall benefit for this input
Deliverable: What we receive	Comes from	Activities	Tangible impact	Intangible impact	Cost/risk	Benefit
Combining knowledge	Demola	Project tasks. Special programs.	Time and resources spent recruiting exchange students.	New skills available for projects	H	H
Contacts and collaborative opportunities	Demola	Project startup and meeting.	Project possibility.	Connection to best students	M	H
Active students and teams	Demola	Project startup. Demo creation.	Improved results.	Reputation.	M	H
Culture mix	Demola			Improved mix of skills and inputs	M	H
Coaching	Demola	Project team guidance.	Reduces time in project management and extra arrangements.	Correct team direction.	M	H

Processes	Demola	Project startup. Instruction and coaching. Licensing.	Decreases negotiation time.	Increase effectiveness of project instruction and cooperation	L	M
Demo and License	Students	License purchase. Fee determination. Demo presentation. Continuing Development.	Fee payment.	Tools for development and presentations. Follow-up opportunities.	M	H
Feedback about concept applicability	Students	Analyzing feedback	Time resources.	Best practices knowledge.	M	M
Continuing development ideas	Students	Idea analysis. Application of ideas.	Time resources.	Consept possibilities development.	L	M

Appendix 4 - Demola Benchmarking Project Report 2010

England

Design London – Royal College of Art – Innovation Technology and Incubator

Design London aims to create an 'innovation triangle' between design (Royal College of Art), engineering and technology (Imperial College Faculty of Engineering) and the business of innovation (Imperial College Business School).

Cambridge Open Innovation Network

A project funded as part of the EPSRC Cambridge Integrated Knowledge Centre (CIKC) to investigate the skills required to implement open innovation, with particular emphasis on the role of universities as partners.

University of Cambridge - Cambridge Centre for Process Excellence and Innovation

The Centre for Process Excellence and Innovation (CPEI) is a research centre that brings together industry and academic partners to explore solutions on how to create sustainable competitive advantage through process and product innovation.

Venturelab

Incubation center, which seeks to invest in around 5 start-ups per year, while being open to all Venturelab members. All members and companies have a business mentor to guide them through the establishment process.

Mobile Radicals

The Mobile Radicals are a free form collection of dedicated mobile researchers based principally within the InfoLab21 at Lancaster University. They are experts in the creation of novel mobile entertainment and playful experiences, mobile games research, web 2.0 and where 2.0 applications, and the theories associated with applied triviality. This site provides for the wider dissemination of their activities.

United States

MIT media lab

High tech research in a variety of life improving topics with the aim of improving life and mobility. Highly funded by and tied to corporate entities.

CITRIS – The Center for Information Technology Research in the Interest of Society

Conducts and encourages research by combining students from 4 Universities with Corporate researchers in IT related topics. Private/Public partnership. The research is mostly conducted in the company premises, with faculty and students from universities being supported by the Center. Areas of research include Art, Technology and Culture, Delivery of Health Care, Energy and Environment, Intelligent Infrastructure, and Technology for Emerging Economies.

SRI International

The company conducts client-sponsored research for governments, companies, foundations and organizations. Divisions include Engineering and Systems, Policy, Information and Computing Sciences Division, Biosciences, and Physical Sciences. Also creates new ventures when appropriate.

The Funded Founder Institute

4 month long training program for entrepreneurs who have founded their own businesses. Acting similarly to an incubator, the institute provides guidance and evaluation of the beginning business. During the process, businesses are introduced to venture capital firms with the opportunity to present their plans and apply for funding. Could be potential partner for Up and Start.

H-STAR

H-STAR pursues its mission in a number of ways, all built on the power of collaboration: interdisciplinary grants, contracts, and other funding opportunities. They bring together faculty to work collaboratively on projects — from within the university and in collaboration with faculty at other universities around the world. They also organize events

such as lectures, small seminars, workshops and conferences. Also have sub-divisions in Media-X and the Stanford Center for Innovations in Learning. Hermia already has ties to H-Star from previous projects.

Stanford Center for Innovations in Learning

Conducts scholarly research to advance the science, technology and practice of learning and teaching. Projects center around the methods of learning, and developing tools to aide the process.

Media X

Media X is Stanford University's catalyst for industry and academic research partnerships on the impact of information and technology on society. Research from Media X has been widely applied to how people use technology, how to better design technology to make it more usable (and more competitive in the marketplace), how technology affects people's lives, and the innovative use of advanced communication technologies in research, education, art, business, commerce, entertainment, communication, national security, and other walks of life.

Stanford Humanities Lab

The Stanford Humanities Lab (SHL) is a loosely structured, self-supporting research collaborator built around the work of its faculty leaders. It serves as a platform for trans-disciplinary/post-disciplinary study dedicated to exploring innovative scenarios for the future of knowledge production and reproduction in the arts and humanities.

SCANCOR

Through cooperation among Scandinavian business schools and universities, SCANCOR hopes to promote an international perspective in research and education, as well as to strengthen ties among Scandinavian researchers and encourage joint research projects.

Dschool

Operate in interdisciplinary research and innovation projects with a design perspective always present. Product prototypes, service design and environments are Dschool's specialty. Very prototyping and design as solution oriented. Heavily involved with other innovation organizations within Stanford.

Sweden

KK Stiftelsen

Government Fund with the mission to support innovation by fostering Co-creation between research institutions and businesses.

STING Stockholm Innovation and Growth

Business Incubator with strong ties to venture capital. STING incubates companies with a strong innovation aspect and an interest to create an export based business.

Vinnova

Research and Innovation for sustainable growth. Vinnova promotes sustainable growth by funding needs-driven research and developing effective innovation systems.

Lund University - LU Innovation

LU Innovation is a foundation of Lund University with the mission of encouraging researchers to move innovations created in the University into commercialization by assisting with business advice, patents, law, financing, administration, marketing cooperate with incubators for environment services.

Lund also hosts Forskarpatent, which specializes in the commercialization of new innovations created within the Swedish University system.

LUAB is a holding company owned by the university which funds research and innovation based businesses and helps them to commercialize the idea.

Drivhuset

Drivhuset was established to encourage students to consider entrepreneurship as a career option. They create environments which are conductive to innovation as well as connecting students and businesses to create possibilities for growth.

Futurum Creative Center

Encourages and supports entrepreneurship through seminars, workshops and guidance activities.

Ideon Science Park - Ideon Innovation

A modern incubator in the heart of Ideon Science Park. Ideon Innovation prides itself on a strict entry criteria and preconditions. There is room for 30 companies in the incubator at one time. The incubator benefits from the services and great variety of companies which exist in the area of Lund, and Lund University. Also houses expertise centers such as Teknopol.

MINC Incubator

Working in Design, Digital Media and ICT, MINC is a networking incubator for high tech start-ups. MINC has three divisions: Incubator, workspace, and meetings. There are different options as to whether the company needs physical resources, or coaching and service assistance.

Innovationsbron Syd

Business Development center mostly owned by the Swedish government. The operation is aimed at facilitating the growth of new ventures which need help in the preliminary stages, before commercial players become involved. They also support a network of incubators throughout the country.

ALMI

The mission of ALMI is to subsidize the shortcomings of the free-market system. This is done through loans and grants to start-up companies. In addition to financial services, a number of programs are available for entrepreneurs to train innovative business owners in basic operation skills. The biggest asset of the organization is its network, and the ability to create needed connections for entrepreneurs.

Center for Collaborative Innovation – University of Borås

(a) Design and evaluate innovative community information and knowledge environments focusing on stakeholder interests; (b) Develop new knowledge with respect to the interplay among social and organizational practices, community information and knowledge environments, and technology; (c) Develop new research and development practices to reduce failure in the innovation process; and (d) Create and evaluate pioneering partnerships with organizations external to the university leading to new models of collaboration between society, the private sector and university.

Connect Skåne

Mentoring and springboard facility for the Skåne area. Provides networking and information sharing functions to members.

Innovator Skåne AB

Supports innovation project from the employees of Skåne region. One mission is to support collaborations which will help businesses in the Skåne region prosper.

Krinova Science Park

Business park area with focus on innovation in Human resources, Food, and Environment. Focus on networking members and outside forces in a structured manner.

Öresund IT

Networking and support network for research and growth in the Öresund area. Interesting partner for networking purposes.

France

FING

Expert network with the aim of encouraging innovation in digital services and uses. Members include; large and small corporations, public agencies and local authorities, research labs, universities, clusters and partner NGOs. Most activities are carried out through events and workshops.

Paca labs

A program to foster innovation in the PACA region through SME prototyping and Living Lab concepts. Seeks to create cooperation between industry, public authorities, universities and start-ups.

Silicon Sentier

Industry cluster organization for young companies and organizations. Host to a number of networking functions such as Barcamps, MobileMonday and FLOSS. The organization also offers some co-working space opportunities.

Netherlands

Brainport Eindhoven

Brainport Eindhoven is an innovation intensive area which houses both heavy industry and ICT based innovation activities.

High Tech Campus Eindhoven

An 'ecosystem' of high-tech R&D companies that operate in related fields.
Areas of research include:

- Smart environments - Networks that are able to interact intelligently with humans and that can make autonomous decisions
- Microsystems medicine - Microelectronic systems in medical environments, on the interface of molecular biology and Microsystems

- Personal health & wellbeing - Consumer products that fulfill needs for a healthier lifestyle and better quality of life
- Personal entertainment - Digital and other consumer products that fulfill a person's need for amusement and a better quality of life

HIP Europe – High Tech Innovation Platform Europe

Networking and expertise sharing network for innovative companies. Could be interesting for partner-finding operations.

Eindhoven University of Technology

Technische Universiteit Eindhoven (TU/e) focuses on fundamental/strategic technological research, which is relevant for industrial or other applications. It contributes to the strong competitive position of industry and addresses problems in society.

CTIT (Centre for Telematics and Information Technology)

Part of the University of Twente, it is one the largest academic ICT research institutes in the Netherlands. Over 445 researchers actively participate in the research programme; the 2008 budget was to 28 M-€. CTIT closely cooperates with many public and private organizations, and is part of the Netherlands Institute for Research on ICT (NIRICT), a cooperation of the three technical universities in the Netherlands (Delft, Eindhoven and Twente).

Denmark

Innovation Center Denmark

Silicon Valley, Munchen and Shanghai locations. Creates link between innovation players in key regions with Denmark

Baltic Sea Solutions

Bass is an intermediary in innovation projects. Specializing in applying for EU, regional, governmental and private funds for projects as well as international partnership building. The area of interest for projects mostly centers around sustainability and environmental

issues. Values include Innovation and progression, concept breaking, international collaboration, and knowledge-sharing.

DASTI – Danish Agency for Science, Technology and Innovation

Government agency designed to facilitate the growth and dissemination of innovation. Areas of concentration include ICT and environmental issues.

Technical University of Denmark

DTU has the goal to be one of the top research institutions in the world, and the leader in a number of areas. There are a number of small divisions interested in innovative research, DTU Symbion being key among them. Symbion invests in new, research based companies in the area, with the aim of producing commercialized prototypes.

Germany

MFG

Innovation Agency for ICT and Media. Specializing in network building and very interested in creating partnerships with international organizations.

HTW Berlin -Polytechnic University

Heavily involved with research project with a number of collaborative partners in the area. Also run an Entrepreneur and start-up support center.

Singapore

Nanyang Polytechnic – Center for IT Innovation

A platform to provide an impetus towards several key objectives. Objectives are focused on CITI as a launch pad for major industrial collaborations and cutting edge R & D projects. Works closely with the Media Development Authority.

Romania

Evozon

Software company specializing in mobile solutions. Recommended by partners. Close ties to local universities.

Neusoft Romania

Mobile and software producer. Recommended by partners. Existing ties to Finland and Tampere.

Technical University of Cluj-Napoca

Babes-Bolyai University of Cluj-Napoca

Both are technical universities with project work focus. TUT connection. Existing contacts and projects with Nokia. Interesting signal processing operations. Interested in collaborating with Demola quickly.

Art and Design University of Cluj-Napoca

Priority on Art and Design projects for company partners. Close ties to other universities in Cluj-Napoca.

Social Innovation

Center for Social Innovation - Toronto, CA

Operating as a business incubator for non-profits and social entrepreneurs. Large spaces and an active community building approach are their focus.

Appendix 5 - Demola Summer Tour Travel Report

Participants - Petri Räsänen, Ville Kairamo, Bernard Garvey

During the week of June 14th, 2010, Petri Räsänen, Ville Kairamo and Bernard Garvey undertook a trip representing Demola and New Factory activities in general in a number of European locations.

Lund

Ideon Science Park
Mats Dunmar - Project and Business Coach, Ideon Innovation

Innovation incubator which is located within the Ideon Science Park in Lund, Sweden. Interesting meeting for benchmarking our incubator activities. Ideon Innovation has been operating for years in the park, and pride themselves on the strict entry requirements. Strict timeline limits, education programs and media training programs are keystones of the program. Collaboration in the near future is not likely, but productive contact to keep.

CIRCLE - Centre for Innovation, Research and Competence in the Learning Economy
Magnus Nilsson, PhD - Thomas Hellström

LUIS Lund University Innovation System
Helena Ljusberg

Combined meeting with these to academic programs within Lund University. CIRCLE produces academic based project revolving around innovation methods. LUIS is interested in transferring and commercializing innovations created in the university. Again, no collaboration very likely in the near future, but good contacts to maintain for expertise exchange purposes.

London

Design London - Imperial College London
Carolyn Runcie

Design Innovation center. Design London creates design based innovation projects with a real outcome or prototype aimed for in the end of each project. The most directly interesting topic of conversation for us was the methods of including education and courses

in the innovation program. It would be valuable to observe and study their methods for this. While Carolyn was interested in collaboration, their was a good deal of hesitation due to budgetary concerns and Design London's need to soon become self-sufficient.

Lancaster

Imagination Lancaster
Rachel Cooper and Stuart Walker, Co-Directors of Imagination Lancaster.

Very interested in collaboration. Most interesting features include; Imagination Labs, which are 1 day events bridging universities and industry for visualization practices, Highwire, a doctoral training centre in multidisciplinary innovation research, and research initiatives which intend to have real-world results. Social and greater-good aspects included into almost all projects.

Infolab21
Steve Riches

The knowledge business center is active in giving students the opportunity to work on projects for real companies. A number of internships are supplied through the center. There are also channels where active students can be placed in an incubator for business ideas.

Create
Joe Buglass

Create is affiliated with the Lancaster University Student Union. The organization has had off and on funding through EU and other sources. The core purpose of the group is to give students the boost and advice they need to start their own companies or organizations. Joe was interested in affiliating himself with Demola, but it was necessary to check with other parties.

Mobile Radicals
Paul Coulton

Paul is involved with a very motivated group of students who are working in hands-on projects as part of master's program. The mindsets in the program match very well with the Demoa model. Paul is very open to creating connections between his group and Demola. It was agreed that the optimal starting point of collaboration would be to start with student exchanges. This could begin with Erasmus program exchange students in order to utilize the quickest and easiest funding resource while looking into other means for the future. The Innosummer timetable works well with the programs schedule for next

summer. Joint project work is possible and suggested as a means of operating by Paul, utilizing teleconferencing to join teams. One concern would be the need to have clear separation of work if master's thesis students are involved. We discussed creating a "Dream Team" model to begin with, taking the best and brightest to ensure solid project results. Paul has strong ties with Forum Nokia.

Budapest

Budapest University of Technology and Economics
Dr. Hassan Charaf
László Bacsa

Hassan is leading the program of Electrical Engineering and Informatics. He is very interested in setting up exchanges for his students for exchange credits and thesis projects. Along with Paul at Lancaster, this is the most immediate action item for establishing exchanges. Strong ties to Nokia make it a natural match.

László is in charge of project development in the areas of Innovation and Marketing. He is very interested in the model of Demola, and was proposing that the University could develop a "Demola.hu" service. The Rector of the University also joined us and was enthusiastic about collaboration.

Student exchanges can begin as soon as a suitable student and project connection are found. Further discussion needed about establishing local presence. The University was concerned about the students retaining all IPR from the projects, and felt that it would be necessary for the University to share a portion on the rights.

Cluj Napoca

Technical University of Cluj-Napoca
Corneliu Rusu

Babes-Bolyai University of Cluj-Napoca
Lucia Rusu

The husband and wife combo were representing both Technical Universities in Cluj-Napoca. They are interested in a number of forms of cooperation with Demola. We need to further formulate our approach to these institutions before moving forward with collaboration. The will is most likely present and the players are familiar with Tampere and Nokia operations.

Art and Design University
Radu Solovastru

Radu joined the initial meeting with Corneliu and Lucia. He is the Rector of the Art and Design University. Project work for companies is a priority for them, so some kind of collaboration with Demola would benefit them, but the model and means were not clear. If we choose to move forward, we would need to propose a viable means of exchange or project collaboration.

WScomm
Marius Sîrbu

Marius was also included in the first meeting in Cluj. He is the executive director of WScomm, a wireless solutions firm. He will soon be working with Corneilu at the University also. Has interest in collaborating from both the University and Company side. Possible interest in being Demola partner company and submitting projects. We need further planning to finalize our philosophy on which way the interactions should go.

Evozon
Gabi Cretu and Robert Masic

Software development Services firm in Cluj. We held a nice discussion about the business environment in Romania and Cluj specifically. Evozon is a growing company in the services market. They are dealing exclusively outside or Romania at the moment. They showed interest in the model of Demola, and have strong ties with the local universities, but couldn't see a working model that would be suitable at the time. We also did not have a clear answer for this at the moment.

Neusoft Romania (formerly Sesca)
Rares Grecu

Meeting with Rares was very education from a cultural perspective. We discussed a great many things about Romanian business culture and university life. He gave many pointers and tips about Romanian work habits and student topics. Neusoft is a growing software producer with ties to Finland already existing. Future collaboration may be possible, but there is no clear path at the moment.

Overview

The trip was very valuable to see the types of innovation activities which are occurring around Europe. The most immediate action points are to take steps towards securing

student exchanges with Lancaster University and the Budapest University of Technology and Economics. These two schools are the most energetic, excited and motivated to establish exchanges. They both have close ties with Nokia, so there may be some easy synergy in the future for collaborative projects.

Beyond the piloting of exchanges, we will begin considering the cases for establishing Demola locations abroad and whether it would be feasible or valuable to proceed. We will also evaluate the relationship which Demola could have with foreign companies and the most efficient manner of managing them.

In addition to Demola specific relations, it will be considered how these organizations could fit into the New Factory concept as a whole.