

Incubation for Public Innovation IOI

Strengthening universities' strategic collaboration with the surrounding society



Project report

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A Project Description in 30 Seconds

The project Incubation for Public Innovation will:

- Organise resources and tools in a Business Generator for co-creation of public innovations in the fields of food, health care, environment and education.
- Have researchers follow this process.

So that:

- Relevant stakeholders and public service providers are attracted to co-create incubator business objects (IBO).
- Students get to practice innovation work in training/internship VFU Innovation (new module).
- Research-based knowledge can be developed and feedback learning during the project to create new knowledge as the results are analysed.

In order to:

- Establish a **Business Generator** (new component) dedicated for public innovation.
- Create capacity, knowledge and skills of public sector business design.
- Give ECTS credits and grade students with entrepreneurial mind-sets and skills.
- Learn, on the basis of data from this project, and previous incubator research, whether new models and approaches are needed.

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The Projects' Activity Objectives & Performance Objectives

Activity objectives

- Research based (CBS) continuous learning from pilot cases processed
- Process 20 identified macro challenges into 10 design briefs of which 4 will be turned into commercial IBO:s (Incubator Business Objects)
- Involve 20 students in VFU Innovation assignments in the BG
- Involve 15 case actors to participate in any part of the case process
- Case exchanges between HKR Innovation and MAH Innovation
- Create a common framework for operating VFU Innovation together with BTH

Performance objectives

- CBS publication – lessons learned
- Stakeholder acknowledgement of systematic and shared approach to the co-creation innovation process
- Stakeholder acknowledgement of advisor business design skills for public sector incubation regarding co-creation and legal agreements
- Formal business agreements with case actors
- Pooling of business designers for public innovation between HKR, MAH and Krinova
- Established mutual education program manager teams between BTH/HKR
- Approved course curriculum by HKR & BTH of VFU Innovation as a course option for students

Research Perspective (I)

Supporting Public Innovation

Central to a Scandinavian approach to the welfare state and the active, public role for stimulating and facilitating innovation (Bason, 2010), in this project we have also approached the task from such a view. Researching this pilot effort to build an incubator for public innovation is thus not only a study of how it could be done, but also an inquiry into the role of public support for an innovative public sector (cf. Mazzucato, 2014; Ansell and Torfing, 2014; Osborne and Brown, 2013). Current societal challenges are creating pressure for the public sector to increase effectiveness and deliver better services. Many agree that the relationship between people and the public sector in general and public services in particular should be radically reshaped. (Manzini and Staszowski 2013)

There has been a recent move away from new public management based approaches to public innovation (Bason, 2010). Generally this means a move towards a more collaborative (Ansell and Torfing, 2014) and symbiotic process (Mazzucato, 2014). Hartley (2013) shows there are both great overlaps between public and private innovation, and distinct differences. Notably, incentive to learn from others is less clear in the public sector where new knowledge is not an obvious driver of competitive capacity. In conclusion, research also points to the need to develop more local-specific models and approaches to innovation-support in public organisations. Beyond the triple-helix model of collaboration (Etzkowits and Leydesdorff, 2000) public innovation needs support from a local organisation that can provide the solution to the incentive problem, and feed innovation processes with organisational support. Whereas incubators have provided this support for business start-ups, developing an incubator-model for public innovation is new and timely.

Research Perspective (II)

Studying Social/Open Innovation Networks / Ecosystems

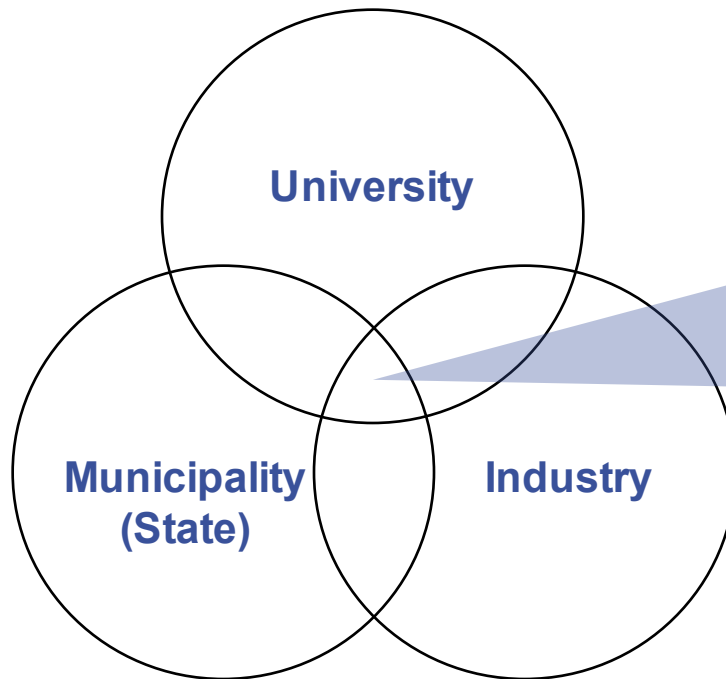
An interesting phenomenon is emerging worldwide: more and more people are organizing to solve daily problems together and are collaborating with each other to live more socially cohesive and sustainable lives. Social innovations are fragile and highly localized entities (Manzoni and Staszowski 2013, i).

Key to all creativity is heterogeneity. If innovation processes are increasingly organised in open constellations, in networks and in temporary platforms that can draw on crowds for the purpose of channelling expertise into the work, this is because it is an efficient organisational form for drawing creativity from heterogeneity. . Incubators can be an effective way organise a set of processes that channel support to start-up initiatives. The Innovation arena model and processes for doing this is in this project applied to public innovation projects (Alexandersson, 2015). Finding out how to organise these open constellations and what methods to use in facilitating innovation process initiation is a key task for this project and thus also a key interest for the research following this project.

Studying the Innovation arena´s Spider Function in the Open Innovation Ecosystem

Previous research has identified that a key for a hybrid/blended/mixed value offer to materialise in complex constellations involving multiple stakeholders (public as well as private) is a 'spider' role, at the centre of the open organisation, that drives the process (Harryson, 2008). Such a resource does not need to be a person (Schumpeter, 1947), but rather a function provided by the open organisation (such as an incubator; Hjorth, 2013) to understand the needs to the various stakeholders and overview the various instruments used for pulling an innovation process forward. Krinova holds such instruments and have experienced personnel that can provide this spider function.

Research Perspective: Triple Helix Model of Innovation

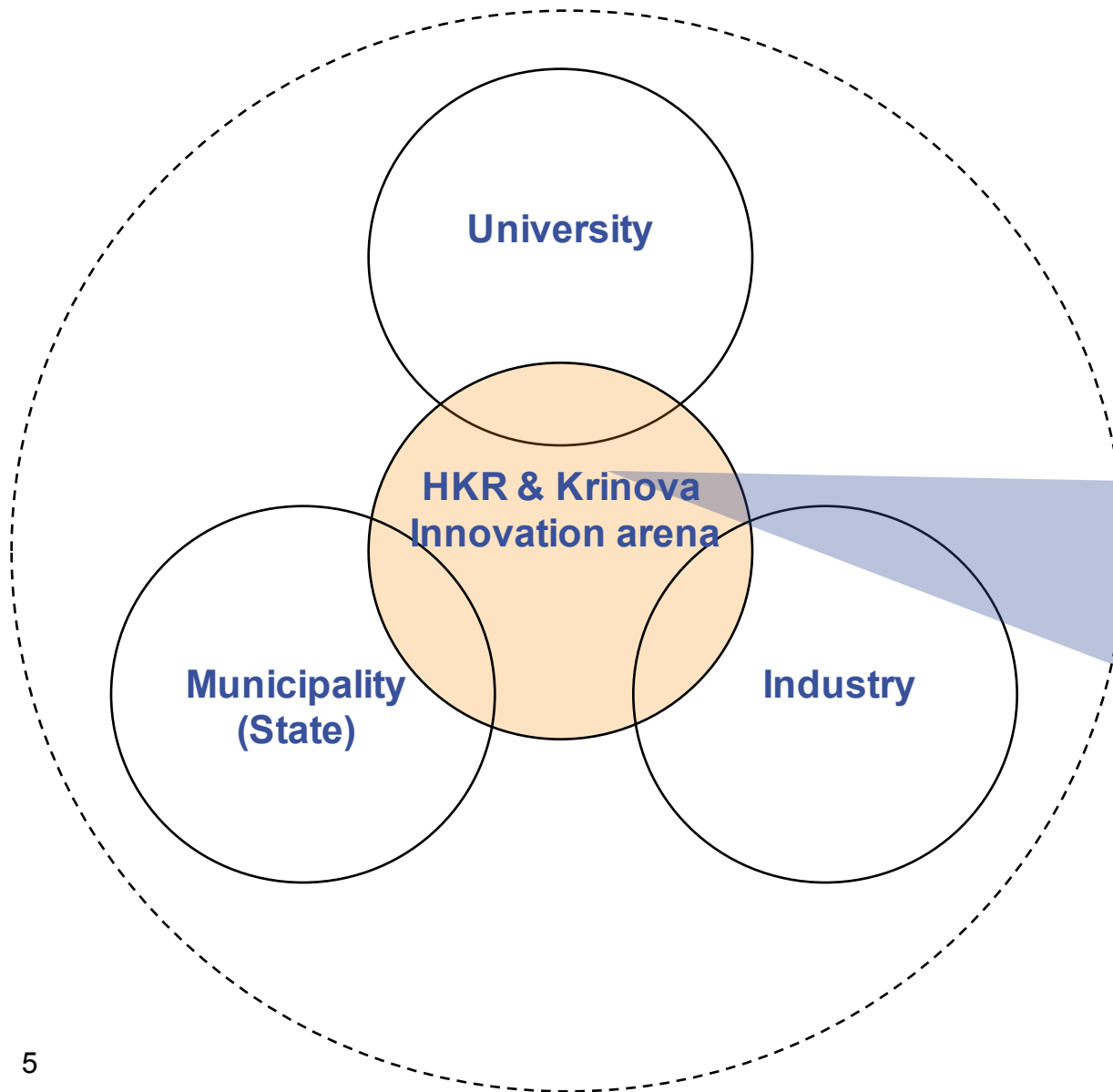


The Triple Helix Model initially describes tri-lateral networks and hybrid organisations in the intersection of university – industry – state relations towards an innovation ecosystem.

Etzkowitz, H and Leydesdorff, L. (2000) explain the current research system in its social contexts and the resulting dynamics of innovation.

Krino has been referring to the Triple Helix Structure of Innovation. Even though the focus of the model is not public innovation, it displays the overlay of communications and negotiations between the institutional stakeholders.

Research Perspective: Public Innovation Ecosystem as a Triple Helix System + Role of Innovation Arena (Spider)



The Triple Helix model applies also in the case of public innovation. What is different, however, is that we target public challenges and seek to find solutions to those. The result can be solutions for the public sector to incorporate, but it can also be the basis for a business start-up (in the case when the public lacks capacity to incorporate the solution into the existing organisation in some form.)

In any case, the major challenge is to find a model and tools that can provide motivation and enhance communication enough for innovation processes to develop with enough tenacity for concrete results to happen. A 'spider' is here a key function. This, we believe, also requires institutional entrepreneurship.

Research Perspective (III)

Studying Institutional Entrepreneurship as the Mode of Incubating Public Innovation

Identifying challenges that can work as seeds for innovating new solutions (representing new value offers to users) is something efficiently done on knowledge-sharing arenas. (Vuori and Okkonen, 2012). Here expert users and expert producers can meet and exchange experiences, knowledge, and contacts. Setting up an Incubator for Public Innovation will include the establishment of such efficient knowledge-sharing arenas, and the spider-function will require a supportive context to work. This context we describe as a form of institutional entrepreneurship, meaning the leadership of the open organisation (incubator and its networks) needs to itself act entrepreneurially to provide conditions from within which opportunities for the spider-function might emerge. The Innovation arena's role is thus double: 1) to act as a spider in connecting the key parts of the triple helix model, the actors that need to come together for innovation to happen; and 2) to create organisational conditions (which is entrepreneurship) for this spider-function to effectively do its job. The latter includes both an internal organisational capacity (model and tools) to set up supportive processes, and a network and level of trust in the external organisational landscape.

Overall, the purpose with CBS' study of this project is to feedback learning during the project, and to create new knowledge as the results are analysed. The latter is partly done in this report and partly 'live' in workshops.

BACKGROUND

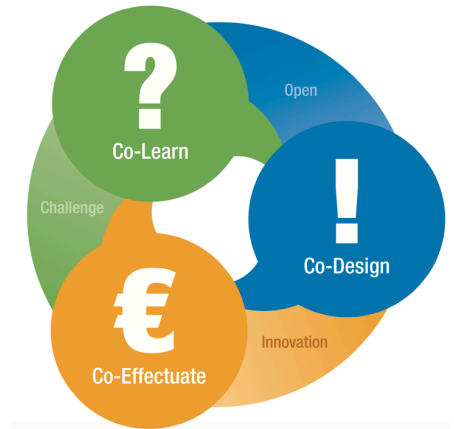
Project Stakeholders

Project Partners

Major partners in the project has been Kristianstad University, Krinova Incubator & Science Park, Malmö University and Blekinge University as collaborator.

They share the expectations in activity and performance objectives as stated on slide 3.

- VFU Innovation as student options
- Business design skills for public sector incubation
- Incubation tools and methods adopted for public sector incubation (new incubation components)
- Shared resources of business designers



Research Note:

On a meta-level, Copenhagen Business School has been conducting research on the project, in an interactive and dialogical manner, and therewith created space for reflective learning of the project management team.

In this report, the CBS perspective is either in a blue box on single slides or on extra slides with corresponding logo.

BACKGROUND

HKR Collaboration

Overall Project Objectives

The overall objective of this project is to enhance and strengthen Kristianstad University collaboration with external partners.

A major challenge is experienced in running efficient innovation projects within public and community organizations. This project has addressed this challenge and the objective to enhance Kristianstad University collaboration by testing new methods and tools and re-organising the innovation process to better fit the demands of public and community organisations and university.

HKR baseline collaboration as a project starting point:

- HKR research profession areas collaborate with academia, public sector
- HKR VFU practice within profession areas collaborate with local public sector & private companies
- HKR Innovation collaborate within the open innovation arena – Krinova, public sector & private companies and IKS, Innovationskontor Syd

The aim is to systematically organise collaborations and lift theses up on a strategic level” between university, the public sector and industry.

Research Note:

A dilemma in public innovation processes is that incentives we normally attribute to market potential or customer needs might be vague or missing. Stakeholders are thus often stake-havers that have precisely not grasped ownership of the challenge.

This placed additional burdens on the spider-function and necessitated what we have come to describe as providing institutional entrepreneurship support.

The use of students, as in the Innovation arena model, is a key solution to this problem. Incentives are then tied to possible job-markets and to study progress.

BACKGROUND

HKR & Krinova Innovation Arena Philosophy

Throughout the last four years our mutual innovation arena has been built by learnings from a wide array of innovation projects. The major learnings done are extracted into 3 insights which are the backbone of our innovation philosophy and a starting for the project at hand:

1. **Co-Creation** (Medskapande): Business designers are acting as institutional entrepreneurs and are creating innovation space for the involved entrepreneurs and are actively participating in the value creation in the projects rather than being reactive advisors.
1. **Iterative Learning Processes with Business Designers:** Innovation projects are iterative learnings and co-creation activities need to be designed dependent of the available insights and entrepreneurial competences. It is the responsibility of the business designers to create areas (or space) for creativity allowing value creation and value capturing in suitable business models.
1. **Organisation for Maximised Value Creation:** Open innovation as well as accelerator tracks are included, together with incubation, into the innovation arena for maximized value creation output through real collaboration between incubatee teams, existing companies, researchers, public organisation officials and students.

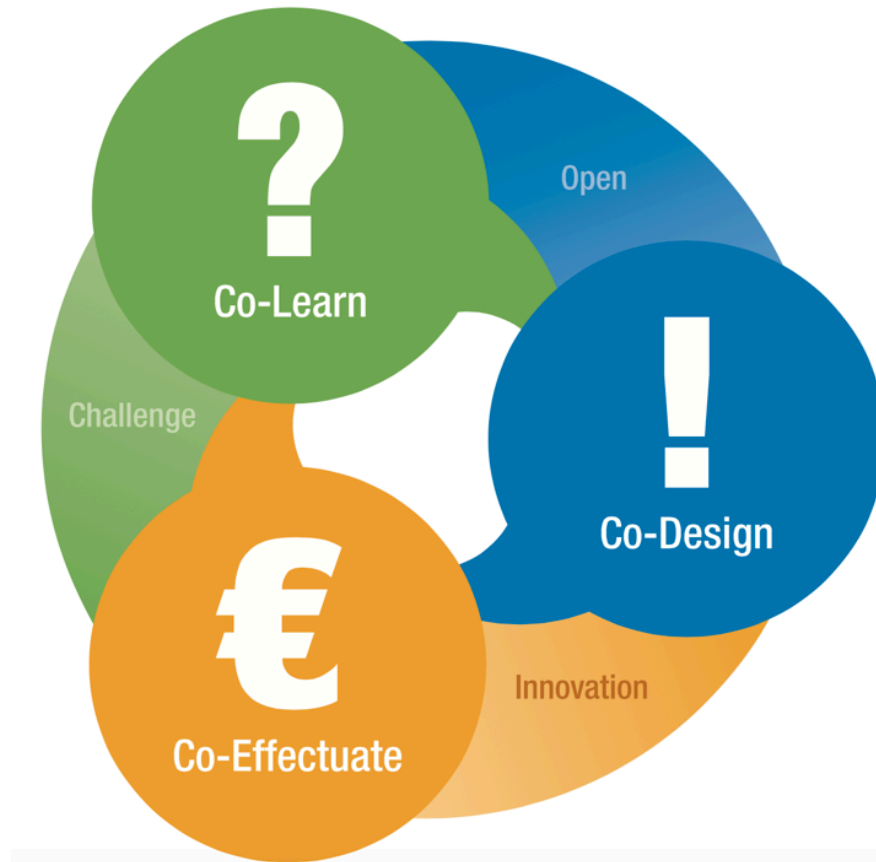
BACKGROUND

Innovation Ecosystem

Innovation is a continuous and iterative process driven by the urge of change and is divided into three major phases.

This system has been developed by HKR & Krinova and underlies the project at hand.

1. Co – Learn
2. Co – Design
3. Co – Effectuate



BACKGROUND

HKR & Krinova Innovation Arena in the Innovation Ecosystem

A mutual initiative between Högskolan Kristianstad and Krinova Incubator & Science Park

Krinova and Kristianstad University has taken a mutual initiative to create an innovation arena within the innovation ecosystem. An arena where challenges and possibilities continuously are defined within the framework of Food, Health and Environment.

How the Innovation Arena Works

The Innovation arena business designers co-create new development projects, we offer models and rules for cooperation to a open, successful challenge driven innovation process. There is an on-going systematic work for understanding in these processes (co-learn) on the Innovation Arena, where our rules is to create opportunities for contact and meetings between competences from different private and public organisations. In other words open innovation is the key and the starting point.

In the co-design phase we prototype concepts, products, services and organisations together with the local industry. The aim is to create cooperation in project in order to solve challenges. We initiate and establish unexpected cooperation by creating new organisations for testing and development. This means that we work proactively in two stages before commercialisation (co-effectuate). This is a normal start of an innovation supported by an incubator and science park. Krinova has the a co-creation and entrepreneurial role to create growth potential in development projects and new businesses.

BACKGROUND

HKR & Krinova Innovation Arena in the Innovation Ecosystem

A mutual initiative between Högskolan Kristianstad and Krinova Incubator & Science Park

How the Innovation Arena Works , continued.

Innovation nodes like science parks and incubators are usually tightly incorporated with a university near by to promote the creation and development of knowledge-intensive growth. Outside the metropolitan regions and the universities connected environments, the emphasis is on contributing to the height of the innovation capacity of existing enterprises in the region. Support for the growth and competitiveness through a local innovative entrepreneurship is key. Krinova is operating in a region with a high share of agricultural and food enterprises (green industries). With the creation of our innovation arena we have manage to find a tool for our target group in the region, both the excising industry and new businesses.

Research Note:

The ecosystem approach to supporting innovation has emerged as a recent way to handle critique of earlier approaches' lack of contextual sensitivity and historical and cultural anchoring (Isenberg, 2011). The open organisation approach that characterise the providing of an arena for knowledge sharing and identification and articulation of challenges, used by Krinova, seems to be resonant with such an approach. Krinova focuses generally on areas of expertise that are locally grounded (where there is a history and culture of handling things and people), such as food and water. This naturally contextualises the incubator in domains of expertise where there are rich networks available and where resources are more likely to be found. This also makes an incubator into a natural key contributor to strengthening the wide entrepreneurial ecosystem in the region.

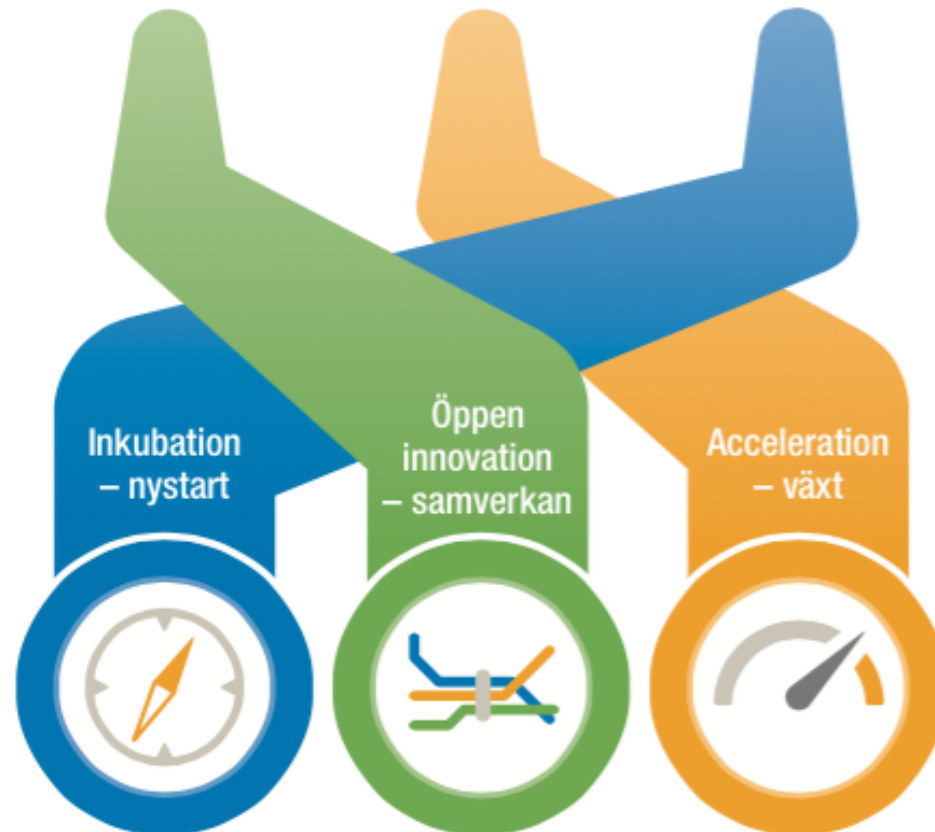
BACKGROUND

HKR & Krinova Innovation Arena Tracks

The Innovation Arena consists of three tracks

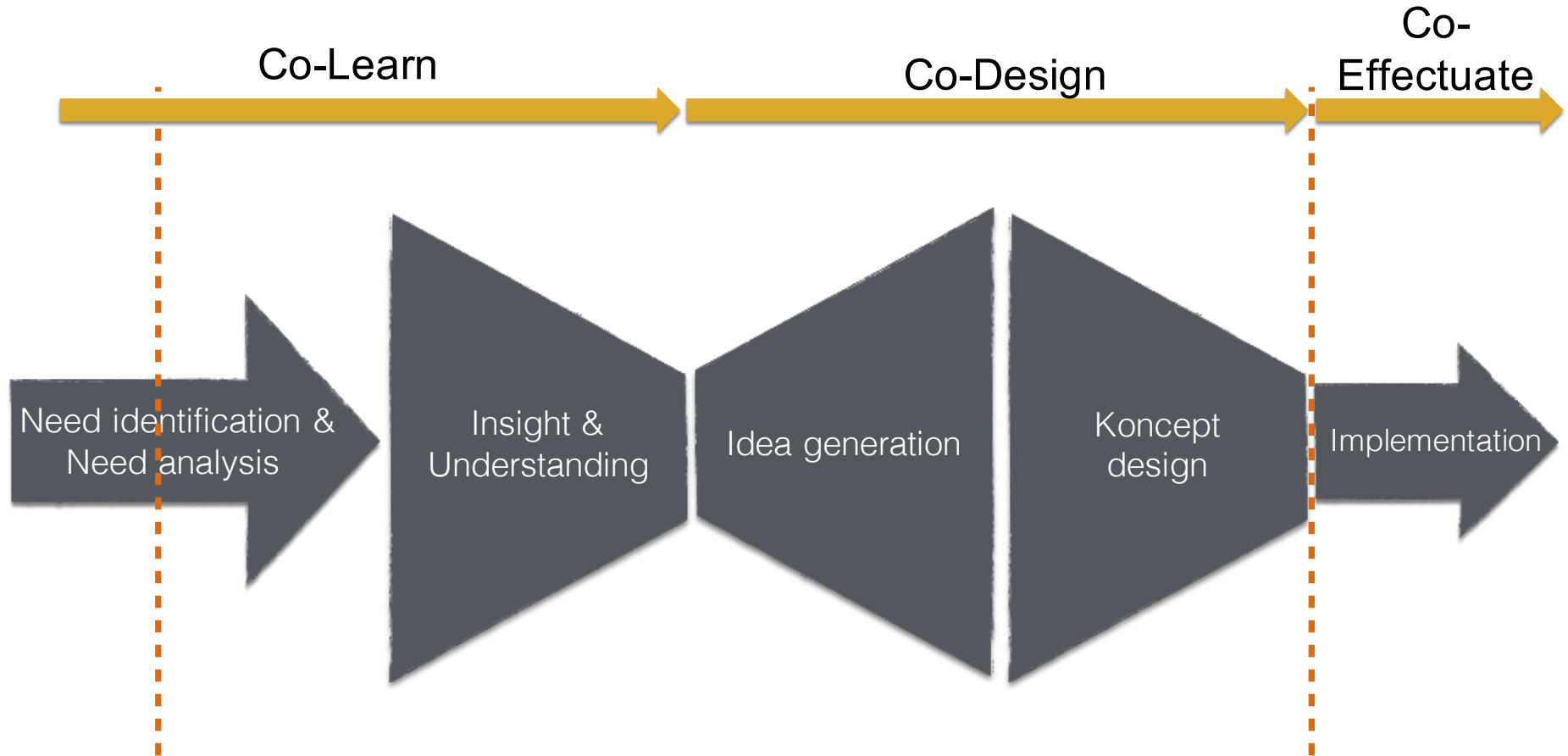
1. Incubation - Start-up
2. Open Innovation Collaboration
3. Acceleration – Growth

All three tracks have been relevant for the project work with the application cases (IBOs) in the project at hand.



BACKGROUND

HKR & Krinova Innovation Arena Process



BACKGROUND

VFU (verksamhetsförlagd utbildning) - Structure

VFU has been a major tool in the project at hand and shall be described in the following:

All Kristianstad University, HKR, education programs include at least 5 weeks of VFU. The major part of the students study health, teaching or environment which means that their future work will be within public or community organisations. The VFU courses are held in collaboration with these organisations.

In most of the VFU courses the main objective for the students are to practise their knowledge and competence in their future work environment. They always work under supervision of a field supervisor.

In addition to acquiring professional skills at their VFU the students are an useful source of applying "fresh and vital" eyes and thoughts on the organisations innovation ability as well as challenging existing ways of doing things.

Research Note:

The VFU (including TOY) tool and method represents an interesting and innovative solution to the problem of incentive and motivation in public innovation projects (Altshuler, 1997). We have come to develop a distinction between stake-havers and stakeholders. The point is that the former has not yet grasped the stake at hand and thus not become –holders. Such claiming of ownership cannot rely on market mechanism since public organisations often operate outside a normal market or in quasi-market situations. The incentive to drive the problem, and the motivation for doing so has to move over to a third person. Not the incubator business designers and coaches, not the public partner representative, but the student. The student has a natural incentive to drive the process and see it succeed. This will strengthen the student's attractiveness as a potential employee, it will strengthen the students study results (as the VFU is part of curricula) and it will provide an important component to the student's CV.

BACKGROUND

VFU (verksamhetsförlagd utbildning) - Structure

As many as 75% of the students at HKR will have their future workplaces within the public sector. They will work in many different professions ranging from economics, nursing teaching, biomedicine analysts, digital designers, software developers, dentistry, biologists, gastronomists, dietians, HR – officers, environmentalists and landscape architects. In total HKR have 13000 students, 48 education programs.

VFU has been part of the education programs, nursing and teaching , for several decades as a means of the students to get experience from their future professions. Public schools and public health has been regarded as a part of the education and still today the schools and the health organisations get paid from HKR to supervise the students. This is an economic incentive which is not the case in any other education program.

At HKR scientists are conducting research on VFU with the means to achieve learnings to improve the VFU – model and to academically prove the VFU didactics.

Research Note:

The idea to extend the VFU to include other professional education programs than those historically anchored in higher education – teacher colleges and nursing schools – resonates well with the build-up of an entrepreneurial ecosystem that solved the problem of weak motivation and incentive for public sector employees to engage in and commit to innovation processes. It illustrates not only an ecosystem approach (Isenberg, 2011), but brings the institutional entrepreneurship aspect beyond the top management's role as facilitator, to also think of a symbiotic ecosystem for innovation (Mazzucato, 2014). Symbiotic system would mean public investment in innovation would lead to more private investments and more long-term investment horizons.

BACKGROUND

VFU Innovation

What is the objective with VFU Innovation?

The objective with VFU Innovation is to use students as a collaborative resource for regional development and innovation within public organisations. And furthermore to increase the students competitiveness on their future job market by developing their executional and entrepreneurial skills.

VFU Innovation will challenge the students' creativity and experience thru real innovation tasks. VFU Innovation will give the students and the public sector/industry a platform for integration between education and labour market.

Yet another objective with VFU Innovation is to establish a common framework together with Blekinge University, BTH, for operating the VFU Innovation through mutual teams of VFU course managers at both universities.

Research Note:

There are numerous approaches to entrepreneurship education (Fayolle, 2007a; 2007b) where education about, in or for entrepreneurship often is used to distinguish aims. 'For' entrepreneurship means business start-up is in focus. 'About' is more traditional academic focus on text and analysis. 'In' represents training by often exposing students to sharp- or live-cases. VFU could well be considered as an example of education 'in' entrepreneurship. VFU exposes students to concrete contexts and connects them with experienced practitioners. Importantly, it also gives them an experience of value for their learning and competence development (Johannisson, 2005; Hjorth, 2011).

BACKGROUND

VFU Innovation

Difference between VFU and VFU Innovation

In regular VFU the student get to practise professional skills. In VFU Innovation the student get to practise professional and entrepreneurial skills.

The major difference is thru the outcome of the VFU for the public organisation when in VFU Innovation value thru innovation is created. Co-operating in a VFU Innovation the public organisation also will benefit from the business designers acting as organisational entrepreneurs creating innovation space within the organisation.

Research Note:

The rather complex stakeholder system involved in the organisation and facilitation of innovation in the public realm and the lack of a clear incentive makes the student into a key actor. Whilst not always part of the identification of the innovation challenge, when the process is running, the student emerges as key driver of the process, with a clear incentive to try to succeed. Students, together with business designers get to deliver the 'entrepreneurial function' collectively. The success of this hinges to some extent on the set-up of a room for creation where the new can find opportunities to emerge.

BACKGROUND

ToY - model

TOY Introduction

Kristianstad University & Krinova Innovation arena developed and introduced an innovation process model year 2013. It is also based in the innovation arena philosophy, see page 9.

To increase the level of creativity and better explore the disruptive innovation potential of the challenge young less experienced persons are invited as entrepreneurs into the development teams.

The ToY – model is optimized to deliver a target group verified concept offering with well defined value delivering product/service functions. A concept which is the necessary component to build a successful business within public or private sector.

Research Note:

The ToY model, which is basically a role given to students working in a Krinova-supported innovation process model, exemplifies a robust solution to the overarching dilemma in public innovation: motivation. We understand the ToY model as a successful, sustainable solution to find incentive and drive for the public innovation process to progress towards a completion. Such a completion provides as much value for the ToY-people as it does for the external stake-havers to the extent these have become stakeholders in the process.

Background

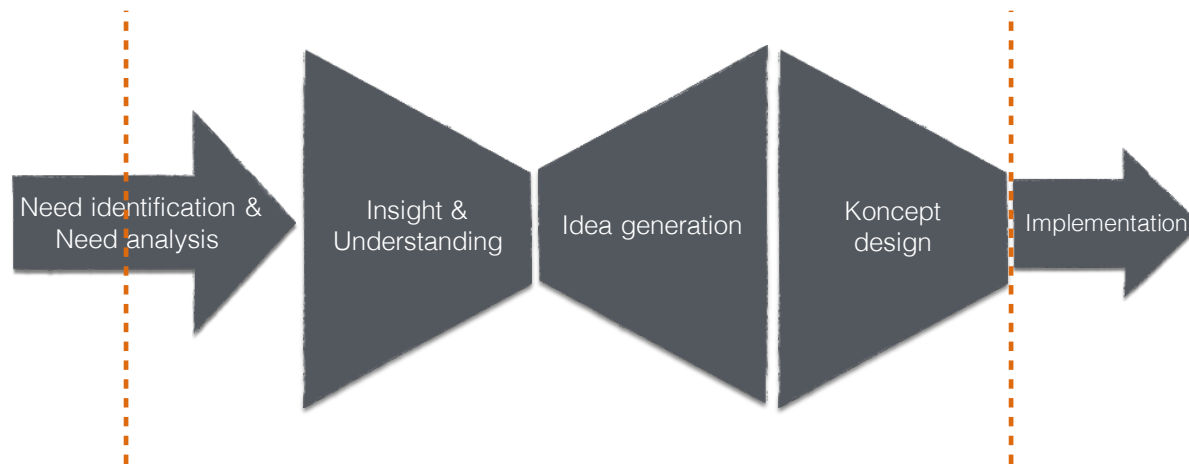
Introduction of ToY – Model into Public Innovation Projects

The ToY – Model

The ToY model is created of a set of rules

- The Innovation arena process must be used.
- The project team must be composed of persons with different professions and educational background
- The project team must be composed of recently graduated younger inexperienced persons.
- The team must be coached by a team of skilled business designers
- The team must agree to 100% project employment during the complete project time

The ToY – model was introduced into the project in parallel with the VFU Innovation.



Students in

Students out

BACKGROUND

Innovation Arena Tools

Tools that have been used throughout the project

VFU and TOY have been major models of use in the IOI project cases (IBOs). Apart from these university-anchored tools, Krinova's Innovation Arena, has been applying their incubation tools. Those are internally structured along the internal tools types: Overview, Setting Goals, Economy, Marketing Investigations, Value Proposition development, Competitor Analysis, Customer Investigation, Creativity, Presentation, Pitching, Coaching, Product Analysis, Meeting Planning, Profitability, Funding

Specific tools that have been used in the IOI project and that are familiar to the business designers: Business Model Coaching (along Osterwalder's business model canvas), Idea Generation, Concept Development, Need Analysis, Focus Groups, NABC (Need - Approach - Benefit – Competition; adapted from Stanford Research Institute), MVP (Minimum Viable Product; coined by Frank Robinson and applied by Eric Ries "The Lean Startup"), Intellectual Asset Inventory, Fundraising Advice , "Super Meeting"

Research Note:

Many of these tools are familiar to any organisation, operating in a competitive environment, which has innovation on their agenda. The challenge with using these tools here is that this project – Incubation for Public Innovation – has meant that the tools have had to be adjusted to fit the conditions for public innovation. E.g. a business model canvas is precisely a tool for business partners. When the public is a partner in such an innovation process, the tool has to be adjusted accordingly. This was a hurdle in the project and a lot of the learnings centre on how to adapt to a new way of using the tools. The models – VFU and ToY – has shown to be flexible enough to allow for this to happen. However, it has challenged the business coaches/ business designers to re-think their roles.

Research Perspective

The Concept of Incubation

Indeed, incubation is a concept that focuses on providing a supportive milieu for starting a new business or organising an innovation process (Kuratko and Sabatine, 1989). In public innovation it is different since the market with its customers and competitors is not there to provide incentives and drive the process. This has implications for how to organise this support. It also has implications for how to drive it (incentive wise) and how to lead it (Osborne and Brown, 2013; Ansell and Torfing, 2014). To incubate is a concept that describes a bird sitting on an egg to keep it warm and bring it to hatching. The Latin *incubare* means in- (upon) + cubare (to lie), i.e., to lie upon. We make a short note about this here as this study indicates the model that was described by the concept 'incubator' and 'incubation' (flourished in the 1980s) has perhaps seen its better days. Incubation is perhaps a model that fitted the industrial economy well, but since *the dawn of post industrialism* (Austin and Devin, 2003; Chesbrough, 2003; Baldwin and von Hippel, 2011) the conditions for organising innovation support has changed. Now, a networked society (the accelerated interconnectedness of the world, as exemplified in the globalisation of capital and integration of the Asian economies into the world market) makes possible a more intense knowledge sharing. Such sharing, as Chesbrough (2003) has shown, requires new models for organising innovation support. Incubators, of some form, still seem promising for achieving this, but needs themselves to be renewed (Hjorth, 2013; Alexandersson, 2015). The model and tools, and design of processes exemplified by Krinova have indeed tackled this need for renewal in an interesting way.

PROJECT EXECUTION

Overview: What have we been doing? Why?

Application projects

To acquire multiple sources of learning we have in parallel been running 14 different application projects. (application project being a innovation or development project addressing a challenge raised within a public service organisation)

Different activities and actions planned and performed as part of the process in the application projects has been evaluated in which way they have contributed to the progress of the application project. The result of an evaluation is expressed as a learning.

Innovation process

The overall innovation process used in all application projects is the HKR & Krinova Innovation Arena Process see page 14. The process is based on Human Centered Design from IDEO. Krinova has modified it to be suitable when working with students regarding innovation projects. The Innovation arena process is based on three phases, the first insights, where the students are forced to find new insights about the task at hand, the point is that the students shouldn't be biased against the industry or public sector. The students then go over to a phase of creativity where they start generating innovative ideas. The last phase is when the students connect the ideas and narrow them down to concepts that is based on the insights found in the first phase (see page 14).

PROJECT EXECUTION

Overview: What have we been doing? Why?

BTH Collaboration

Value creation within projects are increased by multiple cross-functional teams. To further enhance the value creation within the application projects we planned to combine teams of students from both BTH and HKR, thus widen the scope of possible professions within a team.

A secondary benefit to achieve was a VFU Innovation framework of collaboration between program managers at BTH and HKR. See page 17.

The creation of VFU Innovation as program courses at respectively university faced a set of challenges which needed to be addressed during the project.

- Expectation management
 - Clarity towards stakeholders
 - Clarity in processes
 - Common vision
- Cross – professional teams
- The balance between commitment to the companies and students' course requests (balancing the expectations in contract structures)
- Synchronization with education (course structure - requirements and content - and examination)
- Program manager commitment
- Strategic alignment with respectively university management

PROJECT EXECUTION

Overview: What have we been doing? Why?

BTH Collaboration cont.

The challenges was meant to be addressed by testing 3 different models managed by a team of Education program managers

- One common VFU innovation course for multi disciplinary student team
- Each student attend a VFU Innovation course. Multi disciplinary team of 2-4 students with different VFU professions.
- Each pilot case consists of one or several VFU Innovation assignments

Team members at each university initiated activities to address the identified mutual challenges.

PROJECT EXECUTION

Overview: What have we been doing? Why?

MAH collaboration

Collaboration with MAH was planned to further increase the value creation in IBO:s by sharing aquired business designer skills. Sharing of skills was meant to be created by composing teams of business designers from the two universities.

Project Execution

Creation of VFU Innovation program courses

Challenges

Program Managers

With the program managers the HKR/Krinova team engaged in a dialogue in order to get the right mandate to continue our work with the responsible lecturers. Here the team communicated the goals of the entire Incubator for Public Innovation project and what benefits this kind of VFU could give the students at their program.

Reflections: A challenge here was that some of the program managers wanted their students to be out in companies so they can shadow a person with a similar role as the one they are educating themselves to. So they can get the “insights” of their future job. A similar challenge was also that the program managers wanted to have to connections with the companies in order to get more than one VFU and that something we couldn't provide with these applications projects.

Research Note:

Institutional entrepreneurship is needed for the spider-function to effectively be carried out. And one can indeed say that the organisational conditions for the triple helix function is a question of institutional entrepreneurship, and that the spider is the function that drives the other 2 parts into the Triple. Students provide a 4th component (see page 33). This is an in-between role, not completely separate from the university, but semi-autonomous and therefore also individually motivating in a career perspective. Then the spider function can focus less on motivation, but need still to stay on the communication task.

Project Execution

Creation of VFU Innovation program courses

Challenges

VFU Course Manager

With the program managers the HKR/Krinova team coordinated the VFU-Innovation project so it would fit the curriculum. The team also assisted in the connection between the lecture and the researcher (or business) in the cases when this was needed. Business Designers, acted as a bridge that would do much of the adjustment so every would work when presenting it to the students.

Reflections: Here time is a factor, the HKR/Krinova team have to coordinate the VFU-Innovation project with the curriculum of the VFU course and that is very time consuming. The time frame to sell VFU Innovation project is limited due to the fact that the VFU only runs once a year at most programs. One thing the team also learn is that the program managers are less likely to work with the adjustment of the VFU Innovation in to the curriculum because they already have a large workload, and that is considering that the team of Business Designers do most of the work in this phase.

Project Execution

Creation of VFU Innovation program courses

Challenges

Students

With the students the HKR/Krinova team tried a very hands on approach both attending pre-VFU-classes where the students could meet companies. There we tried to sell the VFU-Innovation projects. We also market the VFU-Innovation projects on campus. And finally we used direct contact via email.

Reflections: When the VFU Innovation wouldn't give them a direct connection to a company that would give them a greater chance for getting hired after graduation they weren't interested. A reflection is also when the team managed to get students to do a VFU-Innovation our challenge where to get them to continue their work when the VFU-period was done. The students communicate that they want to work with real project, which is a great point for future work with VFU-Innovation.

Research Note:

Key to Krinova's and HKR's model for solving the problem with natural incentive and motivation for the original nodes in the triple helix model is the use of VFU and TOY and thus of students. Students emerge as the 4th node in the system since they are only temporarily part of the HKR node and can bring the project results with them, either in the form of an employment, as a hand-on experience, or as a merit that strengthens their CV and future employability. The students' role has to be backed up by institutional entrepreneurship and business designers need to make use of the students to anchor the project in the collaborating organisation's innovation efforts.

Project Execution

Creation of VFU Innovation program courses

Challenges

Overall Learnings on the creation of VFU Innovation program courses

The challenges met have both academic stakeholders and private/public stakeholders

Challenges towards academic stakeholders

Kristianstad University has a long tradition of educating nurses and teachers. Typically, in Sweden, both healthcare and schools has been managed and run by the state and communities. It has traditionally not been run by private companies and therefore not been considered as workplaces where entrepreneurial skills are needed or even wanted.

There has been and still are opinions among the staff at Kristianstad University that entrepreneurial skills should not be taught to students. Even though, during the last 2 years, the university management are pushing to include entrepreneurial skills into course curriculums.

Developing new course curriculums and implement them takes between 12 and 18 months at both Kristianstad University and BTH this was the reason why the HKR/Krinova team tried to include VFU Innovation into the regular VFU course curriculum. The benefits of acquiring entrepreneurial skills therefore couldn't be stressed enough in the both oral and written information to the students. And still some of the program as well as course managers haven't accepted the fact that entrepreneurial skills should be taught.

Basically the same experiences where done by the BTH team.

Project Execution

Creation of VFU Innovation program courses

Challenges

Overall Learnings on the creation of VFU Innovation program courses

Challenges towards public/private sector

The challenges towards the private/public sector couldn't fully be addressed in the application projects using the VFU Innovation model.

ToY seemed to be an alternative ...

Research Note:

Changing the HKR-organisation so that it better fits the requirements for operating in an 'institutional entrepreneurship' mode takes a lot of time. This has to do with organisational politics and convincing a lot of internal stakeholders that working with external partners in an ambition to both solve concrete innovation challenges and to education students in entrepreneurship is rewarding also for them.

Project Execution

Introduction of ToY – model

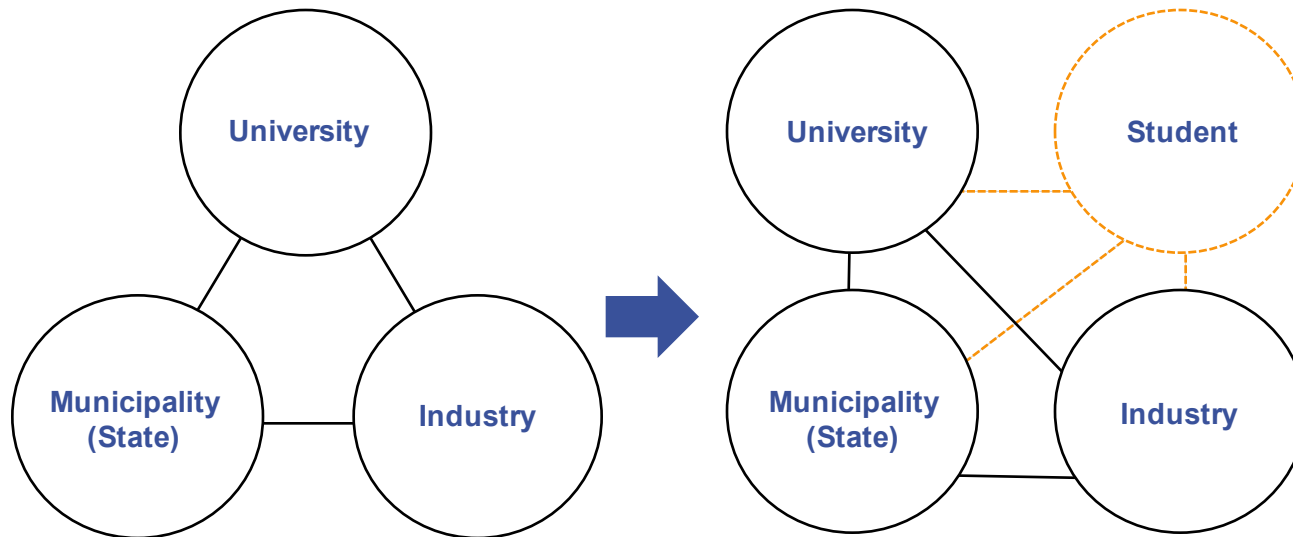
Due to the inability of creating VFU Innovation program courses within the timeframe of the project the HKR/Krinova choose to initiate application projects using the ToY – model, see page 20.

Using the ToY – model it was possible to address the public/private sector challenges and to be able to foresee the fulfilment of the project activity and performance objectives, see page 1.

Research Perspective

Students as Potential 4th Nodes in “Triple” Helix

The student can potentially take over a stabilising function in the “triple” helix system (quadruple with the student role) that becomes more of a symbiotic, innovation eco-system with the natural drive towards success that is provided by the student role.



The student is important precisely as it is not a fully independent 4th role, but one that is partly in academia and partly in either municipality or industry (depending on preferred career choice.) This makes them naturally motivated, and partly into communicative vessels. The latter, however, is still central to the spider function as 4 makes a more complex communicative set-up than three.

Research Perspective

Reflections on VFU and ToY as Tools Towards Incubating Public Innovation

We would see VFU and ToY both as a tool rather than a model - a tool that fits into the Innovation arena model for supporting innovation processes in public contexts. We would emphasise the potential of involving students in the innovation processes.

Though setting up VFU/TOY in the university sub-system has been a challenge for itself and thereby required much of attention and effort throughout the project execution.

Especially the establishment of an effective and efficient VFU component involves many internal stakeholders: program managers, researchers, lecturers, students and the innovation team. All interests have to be aligned in terms of content, structure and timing.

Beyond this internal challenge - depending on the origins of the IBO (research-based, industry-based, public-based) – the VFU/TOY outcome has to be suitable/compatible to be collaboratively carried further towards public innovation.

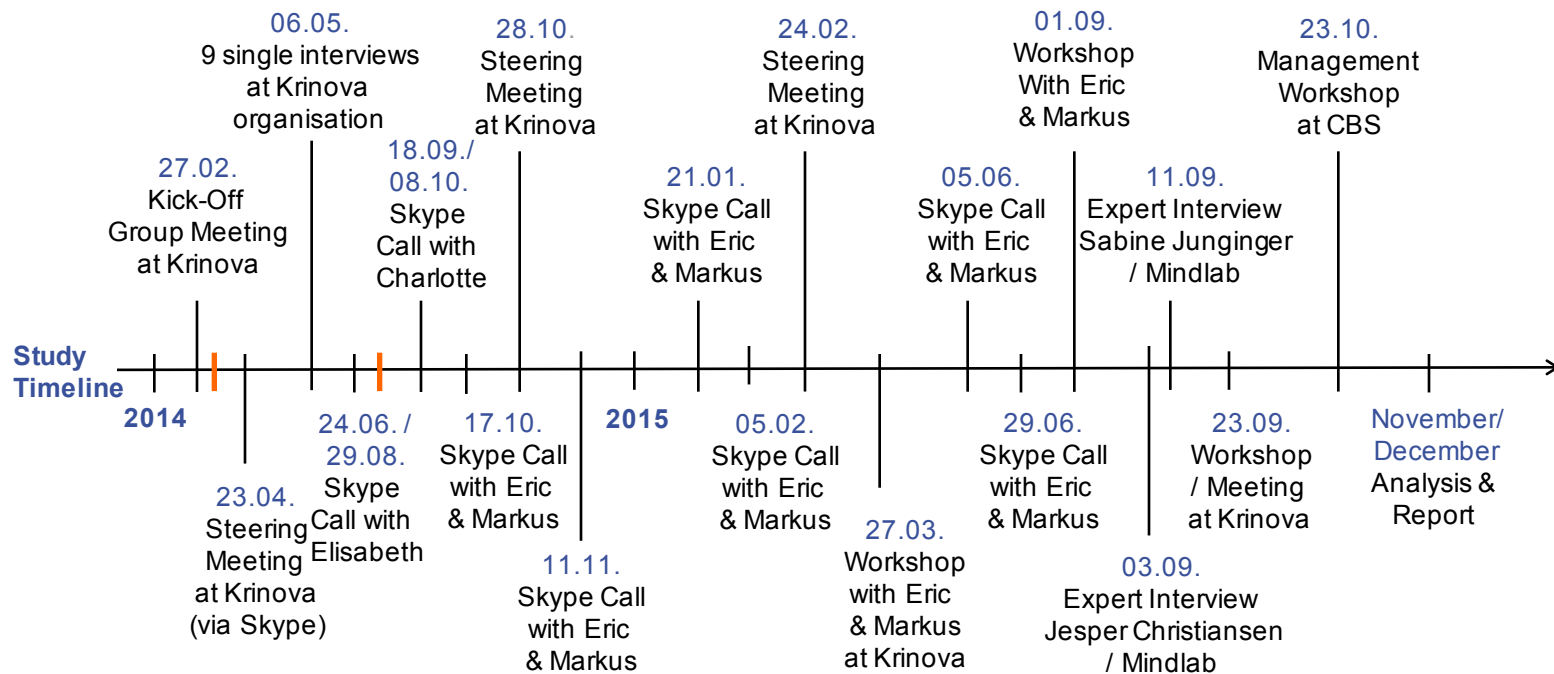
The project's experiences of the business designers have revealed that the ToY project has more potential as a tool for bringing public innovation forward. The integration into casework was more flowing, time-frame more compressed, lesser alignment efforts needed; the collaboration of graduates and business designers was effective, the motivation of the graduate students higher.

Especially for the IBO's originated in research, one of the important tasks of business designers is to incubate the IBO towards human-centeredness. How can we convert the identified challenge into a human-centred problem? (See example IBO Healthcare Reception “taking a project without a need doesn't work”) Here Krinova has built a variety of very helpful design-inspired methods and tools and student project – if VFU or TOY – are promising to conduct research here.

Research Perspective

Reflections on Project Execution

Execution should be considered in the context of the organisational challenges that has characterised Krinova and HKR's work with staffing the project. This has included a number of transitions between project manager, which has presented additional difficulties. To get a grasp of the chronology of the project, please find a timeline below:



Specific Exercises

SWOT Analysis

IBO Diaries

IBO Recap

IOI Process Modelling

Change of IOI Project Management

Research Perspective

Reflections on Project Execution

Execution has also been studied closely via interviews with various people throughout the execution phase. Please find a list of those interviews as CBS appendix.

It seems that the internal focus has been stronger than the external one in the HKR/Krinova work with executing this project. We believe the system for delivering motivation and clear incentives into the processes was solved in a clever and innovative manner by developing the VFU and ToY tools. These tools fitted well into Krinova's general model for supporting incubated cases. What was a bit thinner is tools for external stakeholder interaction. The risk we see is that the project becomes 'owned' by the students, given their motivation and incentive to work with it. Business designers and business coaches from Krinova's support system would need to develop additional tools for keeping also project-organisations engaged and committed to the project. This is an additional risk with failing to engage the external stakeholders, and this is related to the likelihood and willingness to make use of (if applicable, commercialize) the results. This is indeed a challenge recognised in the literature on public innovation (Ansell and Torfing, 2014; Obsourne and Brown, 2013).

Project Execution – Application Projects Short Descriptions

Application project	Short description
DUNÄT	Research project at Kristianstad University a toll for healthcare personnel to determine risk of malnutrition in patients post operation.
Pregnancy App in Botswana	Many women die in the Botswana countryside due to lack of information regarding pregnancy. This is an app to solve that problem.
A more efficient eldercare	The eldercare is in need of improvement and become more efficient. Students at Kristianstad University aims to create a effective solution for the eldercare in Sweden.
Digital information to patients	This is a project that aims to solve the question; hos we can save time and money for the healthcare system by making patient information digital.
Permission for companies	This projects aims to solve a problem for municipalities, how they can create an easy and safe system for administration of permission for companies in a municipality.
PI Math Bakery	The PI Math Bakery has created a simple, effective and scalable way to help children to better understand mathematics.
Fluid Balance meter	Elderly people do not drink enough water which results in them taking up a hospital bed. This is a project design to solve the problem with dehydration when no other healthcare is needed.
Clear/Fram	A joint partnership between the industry, Kristianstad University and Kristianstad Municipality to create a water lab with joint agreements.

Project Execution – Application Projects

Application project	Short description
IT support for chronic illness	Research from Kristianstad University shows that chronic illness creates a sense of less life quality. Better health will give the healthcare lower cost. This project is a IT platform that's aiming to do just that.
Digital Library	A project from Malmö City Library (Malmö Municipality) with the aim of creating a digital center for reading and learning available for all citizens in Malmö.
TOY Health care reception	Kristianstad University initiated the project within healthcare segment with the idea; helping citizens with what the researchers/students know. What can the University do for the society and municipality?
TOY Pedagogic tools for environmental knowledge	A project with the aim of creating a pedagogic tool to answer the question: How might we increase the environmental knowledge and willingness to act amongst youngsters with the aid of new technology?
TOY Home Hub	A project that created new concepts from existing technology given by the two companies Beijer Electronics and Jowax.
TOY UP'n KAMM	This project was initiated to create a platform for young unemployed people with entrepreneurial skills. So they can team up around ideas without a champion and create new ventures.

Background

This application project is based on research from Kristianstad University. A researcher at Kristianstad University has developed a tool/education program for healthcare personnel to determine the risk of malnutrition in patients post-operation.

Execution

The collaboration between the researcher and the business designers started out with a need analysis. The analysis resulted in the knowledge that this research is taking the next step and is now focused on malnutrition in the eldercare, more specifically elders that are being home-nursed. The research is now focused on a self-assessment system. The researcher needed students to study the need in the eldercare system.

Together with the researcher, the business designers created a thesis assignment within the framework of VFU Innovation. Then the business designers started working with the marketing of the assignment towards the students at Kristianstad University.

Status: Unfortunately, no students showed interest and it ended.

Learnings

Working in these kinds of cases, there is a delicacy of alignment between researchers' needs and student needs, incentives, or interests. It's important for a business designer to have the skill of bridging this gap and creating a common ground between the goals of the researcher and the goals of the students.

Time also becomes a great factor in a case like this; the researcher and the business designer have limited time to create the task for the students before the window of opportunity is gone and thus have to wait another year before the next VFU course or thesis writing.

There is also a challenge of connecting with the program managers so the task fits the curriculum and thus can be incorporated in the VFU or thesis course.

A final learning is also the timing of when, as a business designer, to step in to a research project. It has to be understandable for the students and thus the business designer needs the skillset to "translate" the researcher's work into student-friendly language.

Result

A design brief that involved 4 case actors. Business designer skills when working with researcher/students/program managers. Learning regarding framework for VFU-Innovation.

Pregnancy app in Botswana

Background

This application project comes from a Swedish company; TGC com AB, who is a provider of a service called “MinHälsobok”, a service where costumers can track their health and use it in communication with the Swedish healthcare. Many women die in the Botswana countryside due to lack of information and old traditions. This application project has an aim to minimizing the deaths connected to pregnancy in Botswana through the use of a service similar to the Swedish “MinHälsobok”.

Execution

The company TGC com AB wanted the business designers to find a partner and establish a receiver (of the service) in Botswana. Survey the market and culture and behavior of future mothers in Botswana.

The business designers did a need analysis together with the company and then set up a VFU-innovation case designed for the students at Kristianstad University. The business designers works both with the company and the students to set up a VFU Innovation assignment.

Status: Unfortunately now students showed interest. Without students the company hasn't pursued this opportunity.

Learnings

A big learning is that the business designers needs to be a part of the project every step of the way, to safeguard it and drive it forward. Because in the end the company didn't have the recourses to start the project, there where no one to champion the case. And that's when the business designers need to take a more active role.

The fit with students didn't work even though they where students of international marketing. The business designers never managed to connect the task that the company wanted done with the course curriculum of their VFU courses.

Regarding the students they never fell for the project. This is a result of mainly one thing, the VFU-innovation wouldn't, in this case, give them a greater chance for getting hired after graduation.

Result

A design brief that involved 3 case actors. Business designer skills regarding business to University. Learning for the framework regarding VFU-Innovation.

A More Efficient Eldercare

Background

This application project came to the business designers as a drop-in VFU Innovation. The students had an idea of what they wanted to do as a VFU-Innovation, they wanted to optimize and make a more efficient eldercare for elders still living home and not on a retiring home. Their idea was to develop a system that could track the nurses movement through a GPS and combine that with patient information and needs. This would enable the nurses to free up time and deliver more quality at the same time as it would help handing over work to deputy nurses.

Execution

Together with the students the business designers started out doing a need analysis which resulted in a “checklist” of that the students needed to do during their VFU Innovation. As the “innovation rocket” is showing they needed to start with gathering insights from the eldercare. The business designers helped create the right questions and set up contacts within the eldercare in Kristianstad municipality.

After the insights were collected the business designers help with sorting out values that could be added in the application. The students then designed a concept.

Status: During the time of their VFU Innovation the students developed a concept for an app that would create more efficient routing and information sharing for the eldercare.

Learnings

There are a lot of similarities to a “normal IBO” (a normal company in the incubator at Krinova) the students had the drive like entrepreneurs and were very self going with made our job more “normal” in case of being a business designer.

The business designers role is important regarding mobilization and the connections in to the healthcare system. Learning's is the unwillingness to change in the healthcare system (public sector). The business designer needs to take on the role of a champion towards the healthcare and that creates problems regarding ownership with the students.

One final learning is the students motivation after the VFU-innovation is done. Here the business designer need to motivate better or take ownership and champion the project.

In this case when the students came to the business designer with their VFU, all the difficulties with coordination between, researcher, program manager and students disappeared. And the business designers could focus on guiding the students through the VFU-Innovations process.

Result

A design brief that involved 4 case actors and 4 students doing VFU-Innovation/ToY-project. A piece of the framework regarding VFU-Innovation, where the students enter with their own idea.

Digital Information to patients

Background

This application project is based on two doctors that discovered there were a lot of patients who wanted to know if their bandage was all right or if they healed as supposed. The question was “What if we could come up with an easy app that the patients could use by themselves from home?”. And the underlying need that the researchers wanted help with was to create a system that would save time and money for the healthcare system by making the information to patients digital.

Execution

Together with the doctors the business designers started out doing a need analysis which highlighted the need for a sustainable non-profit business model and the difficulties with implementation in the Swedish healthcare.

The business designers helped create suggestions on different business models and set up so that the doctors still could work as doctors and not entrepreneurs. The business designers also coached regarding pitching towards the healthcare and Region Skåne.

The business designers also helped out with contacts for further founding and intellectual property assessment.

Status: The doctors now keep on developing the app independently from the healthcare.

Learnings

Initial success for the exponents of the project is crucial for the long term motivation and relation with the entrepreneurs trying to work with the public sector, in this case the healthcare. The business designers need to safeguard the project and protect the entrepreneurs from the resistance to change in the public sector. The business designer thus need to champion the new possibilities with the entrepreneurs.

The real challenge is to find the right receiver and the right business model.

It is important to have a good relationship with key persons/gatekeepers within the public sector in order for the business designer to safeguard the project and help it move further.

Result

A design brief that involved 3 case actors. Acknowledgement of business designer skills regarding implementation” business to public sector”.

Permission for companies

Background

This application project from Kristianstad municipality where their business coordinator where overrun by applications for permission to companies. This problem exists in different forms in every municipally in Sweden. The goal was to develop a scalable and sellable solution for other municipalities to help them be more efficient and not so depending on one person. Mapping out the system and pinpoint often used combination was part of the solution.

Execution

The business designers helped the business coordinator whit in Kristianstad municipality with the concept development and prototyping for the municipality so that the business coordinator could “sell” the solution to her superiors in the organization.

Status: The prototype is now taken in use in Kristianstad, and the business coordinator now develops the solution independently.

Learnings

It is important for the business designer to co-create and define the need/context within the municipality. The challenge for the business designer is to align the process with the goals of the public sector. The business designer also need to help the champion in the municipality to create a platform for development and change.

Result

A design brief that involved 2 case actors. Acknowledgement of a co-creation innovation process within one public sector organization.

PI Math Bakery

Background

This application project comes from a company in the Krinova incubator. The entrepreneur at hand had developed a application helping children in school getting better at math. *“How can we create a simple, effective and scalable way to help kids understand mathematics?”*. The entrepreneur had heard of the Innovation Arena/Incubation for Public Innovation and wanted help to develop his project.

Execution

The business designer and the entrepreneur co-designed the development process needed to reach a MVP, Minimal Viable Product.

The business designer also helped out with a plan for securing funding for the survival of this project.

Status: The entrepreneur is still working with the project within the framework of Incubation for Public Innovation.

Learnings

It is important for the business designer help generate initial success, especially when the project is championed by one person.

The business designer need to co-create and define the need/context together with the entrepreneur and if possible the municipality so the project have the right context to work in. It's also important for the business designer to have good knowledge of founding in public sector. This is crucial to the survival of the project and also in finding a receiver in the municipality.

Result

A design brief that involved 4 case actors.

Fluid Balance Meter

Background

Elderly people do not drink enough water which results in them taking up a hospital bed. This is a application from Kristianstad University project, design to solve the problem with dehydration and elders taking up beds when no other healthcare is needed.

Execution

This is a application project where the previous project managers met with the stakeholders in the project. The business designers did numerous attempts to start the project but no stakeholder did respond.

Status: The project has been terminated, no further work is done.

Learnings

Almost no response from the stakeholder. Probably due to the lack off continuation/change of project leaders and a learning from that is the importance of stability towards the public sector and the researcher. The business designers need to safeguard the relations in the project and this is something we didn't manage in this particular case.

Result

A design brief that involved 3 case actors. Learning regarding a failed co-creation innovation process and the skills for a business designer.

CLEAR/FRAM

Background

The application project has its heritage from two researchers at Kristianstad University and it's a collaborations between, Kristianstad municipality, the industry and Kristianstad University. The technology development from the industry together with the researchers and and Kristianstad Vattenrike is a good place to test and experiment to discover new innovations in the field of cleaning wastewater from pharmaceutical waste.

Execution

The role of Krinova was to negotiate an agreement so all parties could work together, to enable access to the municipality's purifier system, help both the municipality and the researchers to raise funds for the project and also be a personal coach to make sure all parties stayed in the project during the project time. This project resulted in a water lab.

Status: This application project resulted in a laboratory for research on new filters to clean waste water with pharmaceutical waste. It has also resulted in the framework of how to structure agreements between the industry, researchers and municipalities.

Learnings

Kristianstad University is not used to have collaboration project between industry and researchers and it has been very hard to get the project supported from HRK. Not in the top management, but on a operational level, which lacks a lot of knowledge on for instance legislation and how to go about this. For some reason they have not trusted Krinova and their own organisations HKR Innovation on this. The project with external finance had risen a lot of jealousy amongst colleagues at HKR as they do not understand the mechanisms of receiving external funding for action research and innovation projects. The innovation project itself has proven to be strong. But it has almost been killed more times than can be counted due to jealousy and ignorance.

Krinova had to build a new lab as the application project couldn't get access to the labs at Kristianstad University.

Result

A design brief that involved 5 case actors, created a framework for a formal business agreement between case actors. Stakeholders acknowledgement of business designer skill from public incubation regarding co-creation and legal agreement.

IT Support for Chronic Illness

Background

This is an application project from researchers at Kristianstad University with the aim to solve a problem in the healthcare. The major need is to help patients to make better every day decisions on matters related to their illness. This is expected to be achieved by an IT supported platform, introduced and qualified by scientific research.

Execution

What the business designers did was to arrange focus groups with patients and nurses to enable the researcher at Kristianstad University to get more data and further develop the concept.

Status: The result from the focus groups has enabled the researchers to continue their work.

Learnings

The major challenge is to overcome the extremely timely process of achieving scientifically proven results to be used for development of the IT supported decision tool demanded by the health authorities and health regulations. IT supported decision tools marketed directly to the patient on the consumer market are introduced multiple times every year.

Only during the time elapsed when the scientists analyzed the data from their focus groups 3 new tools were introduced.

Major learning is that it is extremely necessary at an early stage in the innovation project to identify stakeholders and competitors in the commercialization phase of the service/product implementation.

Result

A design brief that involved 2 case actors. Acknowledgement of business designer skills towards public sector (University).

Digital Library

Background

This application project is a collaboration project between Kristianstad University and Malmö University. It started with a digital prototype that was made by Malmö City Library. It was a digital platform for gathering knowledge connected to the library, not only the books but also the competences.

Execution

The business designers held need analysis meeting together with the library and the business developer from Malmö University. The need analysis resulted in a task for the library, there they needed to collect more information and also secure the right legitimacy in the organisation.

Malmö University should connect them with the right researchers and app-developers to take the prototype further.

Status: At this stage the library is now trying to develop this without the business designers and business developers from Malmö University and Kristianstad University/Krinova.

Learning

The business designer needs to safeguard the project and help the champions from the public organization to get the right mandate from their own organisation, the public sector. The business designer also need to take on the role of a facilitator and get all the stakeholder in the same room in order to drive the project further.

The importance of watching the application project as autonomy projects without champions so that the business designer can set up the project in a way that stakeholders can move in and out and thus change champion.

Result

A design brief that involved 4 case actors. Case exchange between Kristianstad University Innovation and Malmö University Innovation and Development. This included pooling of business designers from Krinova Kristianstad University and Malmö University.

ToY Project: Healthcare Reception

Background

This is an application project at Kristianstad University. The program managers of the Healthcare program at university came to Krinova with an idea of creating a “clinic” where citizens of Kristianstad municipality could use the knowledge from healthcare education at the University. The idea was to give citizens healthcare, health advice from nursing students etc.

Execution

The business designers initiated a 10 week ToY process with the base in the “innovation rocket”. The business designers helped hire four students that worked in 10 weeks with gathering valuable information from benchmarking, interviews etc. The business designers helped the students create the base for the information gathering.

The business designers then helped the students, with the information, develop the concept for the clinic, the Healthcare Reception. This project resulted in a concept ready for launching by Kristianstad University.

Status: Kristianstad University is working with the concept generated by the students to create the Healthcare Reception.

Learning

This was the first case where the business designers used students in a ToY process. And using students showed Krinova and Kristianstad University what students could deliver over a 10 week span of a ToY process. They produced good results. What we learned from the implementation is that the inside-out approach doesn't work in this case. The business designers can't say that this is true for all projects in public sector, but here the University started with a bird in hand principle but what the University had was not what the sounding society needed. Even though the students produced a good result the University didn't have the means to incorporate this result and create the healthcare reception the society needed.

The business designers did struggle with connecting and align all the different stakeholders in the University. They didn't manage to be a good enough networkers and enablers. But setting that aside, this was Krinova and Kristianstad University first ToY project and though ToY the business designers found an efficient way of incorporating students in to innovations projects for the public sector.

Result

A design brief that involved 3 case actors and 4 students doing VFU-Innovation/ToY-project. The first test of the VFU-Innovation/ToY-process. Checking how the model worked.

ToY Project: Pedagogic tools for environmental knowledge

Background

This is an application project from Kristianstad University. The researcher was focused on the need for a better, more informative pedagogic tool for entrepreneurship and environmental knowledge. The question was; *How might one increase the environmental knowledge and willingness to act amongst youngsters with the aid of new technology and the nature resources within the municipality?* Together with the municipality, the researcher at Kristianstad University and The Water Realm, a joint application project was created with the use of a ToY project.

Execution

The business designers helped hire four students that worked in 10 weeks with gathering valuable information from benchmarking, interviews etc. The business designers helped the students create the base for the information gathering.

The business designers then helped the students, with the information, develop the concept of Kristianstad+, a digital pedagogic tool focusing on three steps for learning.

Status: The concept triggered other possible business ideas, fertilized by the Innovation Arena at Krinova and in a newly started network for aspiring entrepreneurs is creating a company around the concept.

Learning

Public officials have usually not a very good understanding of the necessity to perform well in early innovation process stages. It is important to overcome the urge from the public organization to have a ready solution. The business designer needs to safeguard the process and let the student be creative.

The early, chaotic in-sighting and idea generation phase of the project can be perceived as threatening and it is therefore important with a trustful relation with gatekeepers in the municipality.

Result

A design brief that involved 5 case actors and 3 students doing VFU-Innovation/ToY-project. Additions to the framework and skills. Co-creation between municipality and the university in the innovation process. Acknowledgement of a shared innovation process.

ToY Project: Home Hub

Background

This is an application project from the industry. The two companies Beijer Electronics and Jowax had a new technology at hand and they wanted to know what they could do with it. They wanted students to research the possibilities with the question *How can this new technology help us develop the healthcare and safety in our future homes?*

Execution

The business designers helped hire four students that worked in 10 weeks with gathering valuable information from benchmarking, interviews etc. The business designers helped the students create the base for the information gathering.

The business designers then helped the students, with the information, develop a range of new concepts. For example, a mobile home alarm, wearable technology that senses which family members that are home, a bed that prevents bedsores etc.

Status: The concepts were handed over to Beijer Electronics and Jowax for further development.

Learning

Newly graduated students are a tremendous asset for developing new concepts, especially when it comes to new technology. The project needs to be safeguarded by the business designer, in order to hold the reins back who otherwise can, by their mere presence, limit the process.

It is therefore important to clarify the steps taken continually so the stakeholders don't feel neglected.

Result

A design brief that involved 4 case actors and 3 students doing VFU-Innovation/ToY-project. Business designer skills regarding students/public sector/industry. Acknowledgement of a shared innovation process.

Project execution

Application projects Result Summary

Application project	Result
DUNÄT	A design brief that involved 4 case actors. Business designer skills when working with researcher/students/program managers. Learning regarding framework for VFU-Innovation.
Pregnancy App in Botswana	A design brief that involved 3 case actors. Business designer skills regarding business to University. Learning for the framework regarding VFU-Innovation.
A more efficient eldercare	A design brief that involved 4 case actors and 4 students doing VFU-Innovation/ToY-project. A piece of the framework regarding VFU-Innovation, where the students enters with their own idea.
Digital information to patients	A design brief that involved 3 case actors. Acknowledgement of business designer skills regarding implementation” business to public sector”.
Permission for companies	A design brief that involved 2 case actors. Acknowledgement of a co-creation innovation process within one public sector organization.
PI Math Bakery	A design brief that involved 4 case actors.
Fluid Balance meter	A design brief that involved 3 case actors. Learning regarding a failed co-creation innovation process and the skills for a business designer.
Clear/Fram	A design brief that Involved 5 case actors, created a framework for a formal business agreement between case actors. Stakeholders acknowledgement of business designer skill fro public incubation regarding co-creation and legal agreement.

Project execution

Application projects

Application project	Result
IT support for chronic illness	A design brief that involved 2 case actors. Acknowledgement of business designer skills towards public sector (University).
Digital Library	A design brief that involved 4 case actors. Case exchange between Kristianstad University Innovation and Malmö University Innovation and Development. This included pooling of business designers from Krinova Kristianstad University and Malmö University.
TOY Health care reception	A design brief that involved 3 case actors and 4 students doing VFU-Innovation/ToY-project. The first test of the VFU-Innovation/ToY-process. Checking how the model worked.
TOY Pedagogic tools for environmental knowledge	A design brief that involved 5 case actors and 3 students doing VFU-Innovation/ToY-project. Additions to the framework and skills. Co-creation between municipality and the university in the innovation process. Acknowledgement of a shared innovation process.
TOY Home Hub	A design brief that involved 4 case actors and 3 students doing VFU-Innovation/ToY-project. Business designer skills regarding students/public sector/industry. Acknowledgement of a shared innovation process.
TOY UP'n KAMM	A design brief that involved 3 case actors and 3 students doing VFU-Innovation/ToY-project

Research Perspective

As a Summary: Reflections Build on the Project Learnings (I)

The role of the business designer becomes central in public incubation processes. More so, we believe, since the stakeholder complexity is often greater (with University politics as a challenge) and stakeholder motivation and incentives to engage is less clear. The business designer thus has to perform in several roles in order to fulfil the spider function (communication task) and the entrepreneurial function (driving inventions to innovations).

At the start, it is difficult for the business designer to know when the time is right for bringing a project into the incubation process. This is not unique to public incubation (Alexandersson, 2015; Hjorth, 2013) but is often solved with various forms of pre-screening, pre-incubation, and 'audition'-mechanisms.

The project has emphasised the importance of finding ways to balance researcher and student needs. It seems most natural for business designers to identify and bridge this gap. It becomes particularly important in order for a collaborative third party to be interested and committed to the process. The student represents a useful middle-ground between research and practice, but requires back-up (sponsoring, politically not the least) from the business designer.

As with the Pregnancy in Botswana app-project, when student incentives to work for the success of the project is not there, the project as a whole struggles with motivating the partners to make an effort. This seems like a natural checkpoint to use in the entrance of each project into an incubation phase – is there student motivation strong enough?

Research Perspective

As a Summary: Reflections Build on the Project Learnings (II)

It is rather clear from the cases that the business designer needs to function in many roles: internally as coach and advisor and mentor to the students, but also externally as someone that can articulate the challenge and motivate the external challenge owner to engage in the process. At times this set of roles would together constitute what Schumpeter refers to as the entrepreneurial function, which is often fulfilled through a team or collectively in some form (Schumpeter, 1949). In this sense, driving innovation processes in also symbiotic innovation ecosystems is much like driving corporate entrepreneurship projects in the context of an established organisation. There is a need for champions and sponsors that can drive and protect the project (Kanter, 1983). The complexity of the public organisation does not lower the need for a sponsor and champion. The champion can surely be one of the business designer's roles. The sponsor, however, needs to be one from the partner organisation, since this person often has to defend the project from internal critics. The champion can help the sponsor to legitimize the project in her/his own organisation.

Research Perspective

As a Summary: Reflections Build on the Project Learnings (III)

Seems also that political sensitivity and skill is highly recommendable for a business designer playing several roles in public incubation. There are many stakeholders that need to be kept warm and engaged in order for motivation to remain present. The importance of an early success cannot therefore be over-emphasised. This creates a motivating exemplar that can help focus the collective effort towards a goal.

Business designers also has an important role as maintaining relationships and trust amongst stakeholders. There are too many obstacles in most incubation processes for those to progress without an active work towards achieving continuity and focus. (cf. Ansell and Torfing, 2014).

Developing tools for handling the organisational politics of academia would also benefit the tempo of progress in the incubation processes. Negative political game-playing seems to have slowed down some projects considerably.

It is well-known from the literature on corporate entrepreneurship (Burgelman, 1983; Kanter, 1983; Zahra, 1991) and this is also part of open innovation processes (Chasbrough, 2003). This indicates that business designers would need to map stakeholders several times throughout the process and apply a communications strategy that balances needs and account for tensions that might prevent progress.

Stakeholder mapping and communication seem to be so much of a challenge that one could consider to develop a dedicated tool or approach to this challenge. Without knowing the playground in this respect, the business designer's possibilities to handle the complexity of the process seems significantly lower. Throughout the process it is important to deliver spider-qualities into the incubation process, to clarify expectations, articulate the steps and stages of the process, and identify 'small wins' and describe their significance.

IV. Results & Overall Learnings

Learnings of different Perspectives

- Student
- University Officials and Researchers
- Public Sector

Identified new roles and skills of business designers

Identified new tools

Identified specific needs for a incubation process targeted towards public innovation

Summary of Learnings (Overall Project) + Response to Objectives

Summary of Application Project Learnings – Students

Working with Student Groups

First and foremost we have learned that working with students in these kind of project can be a tremendous asset for the development of new solutions or concepts. But the project very much needs to be protected by the business designer in order to hold the stakeholders back so they don't intervene in the innovation process. Their presence will limit the process and affect the students' creativity. Therefore the communication both with the students and the stakeholders are important to safeguard the project. The business designer also need to help the project (students) with the mobilization towards the public sector, the business designer need to have the connection and network in the public sector so bridges can be made between the application project and the public sector.

When it comes to the application project where the students didn't apply we have learned that time becomes a great factor in a case like this, the business designer has limited time to create the task for the students before the window of opportunity is gone and thus have to wait another year before the next VFU course or thesis writing. This does that the business designer needs to be good at "selling" the application project and thus there is a need that the business designer can speak the same language as the students. There are a couple of challenges with this and the main one is that the application project needs to have a direct connection to a skill or an experience connected with their future work.

Summary of Application Project Learnings – Students

Working with Student Groups

One of the final learning is the student's motivation, we have seen that towards the end of a project students some times start to lack motivation. This happens if they have other schoolwork during the project and then the business designer needs to take ownership and champion the project and thus once again safeguard the project but this time “from” the students themselves.

Research Note:

There is a clear point with working with students more strategically in a symbiotic ecosystem for entrepreneurship in the form of a public innovation incubator. The student provide a natural bridge between academia and practice; solve the problem of public organisation's less clear motivation and incentive to engage and drive the process; and provides a number of options for results of the incubation project to be taken further (employment, start-u, or intrapreneurship).

Summary of Application Project Learnings – University Stakeholders

Work with University Officials and Researchers

Working in these kind of application projects there is a delicacy of alignment between researchers need and student needs, incentive or interests. It's important for a business designer to have the skill of bridging this gap and create a common ground between the goals of the researcher and the goals of the students or other stakeholders at the university. A final learning here is also the timing of when, as a business designer, to step in to a research project. It has to be understandable for the students and thus the business designer needs the skillset to “translate” the researchers work in to student friendly language.

Research Note:

Working with universities is a great challenge today. Faculty has a strong pressure to publish (Willmott, 2011) meaning that teaching and research/publishing places outreach and the bringing of ideas into practice under severe pressure. This obviously makes the University hub of the Triple Helix model halt. However, the other hubs do not enjoy clear and strong motivation either. Therefore, a spider function seems crucial (Harryson, 2008) and the student role provides an additional solution. As we have seen, it has implications for the business designer that, together with the incubator's management team, need to provide a form of institutional entrepreneurship, a collectively performed function that maintains the entrepreneurial quality of the ecosystem (Isenberg, 2011; Mazzucato, 2014). This would mean the symbiotic rather than parasitic (Ibid.) quality of the ecosystem is maintained. That, in turn, increases the likelihood for a more collaborative and focused process, which means more inventions (new ideas, potential value-adding solutions) would become innovations (actual value manifest for a user). The process in-between invention and innovation is precisely the organisation-creation time which we define as the time of entrepreneurship (Hjorth, 2014).

Summary of Application Project Learnings – Public Sector

Managing Public Sector Innovation

Projects created in the public sector could be a bit tricky; we have seen cases (e.g. Digital library) that when an official from the public sector has an idea and don't really have the mandate to work with it from the organization. That soon generates a lack of motivation with the official and the business designer needs to take a more active role and "set up" stakeholders within the organization and work with mobilization in order to gain legitimacy for the project. Communication becomes a key so the stakeholders feel involved and motivated. Initial small steps of success for the stakeholders are important for the continued work.

In the application projects the business designers met a lack of interest for innovation or a statement that some other parts of the organisation are responsible for the innovation. Innovation is not a part of the organisation culture and definitely not a necessity to be included in the everyday work of the officials. Very few officials have dedicated time for innovation work. Few or none incentives for innovation exists seen from the employee perspective.

Major learning is that it is extremely necessary at an early stage in the innovation project to identify stakeholders and competitors of the service/product implementation. And then we are back on the fact that the business designer needs to be a networker and help providing contacts for the implementation, especially if the implementation is towards the public sector. Be prepared for resistant to change. It is important to keep trying new possibilities. The real challenge is to find the right receiver and the right business model and thus it's important for the business designer to have a good relationship with key persons/gatekeepers within the public sector.

Summary of Application Project Learnings – Public Sector

Managing Public Sector innovation contd.

Learnings might be concluded into,

- By nature, the fact that public organisations are politically led and have a legislative framework needs to be taken into consideration when innovating.
- Multiple project partner set-ups craves,
 - Lobbying
 - Common understanding of project rules and foreground agreements.
- Public organizations have less or no experience (are rather inexperienced) of challenge driven innovation in collaboration with multiple partners.
 - Thus they have no "styrdokument" or management skills to execute innovation projects.
 - They have only internally communication tools, i.e. intranet.
 - When not having the experience of innovation projects neither the organization nor the employees have any understanding of concept development and prototyping being important methods creating value.

This leads to;

- When investments, change or development is needed it is very often the purchasing department given the task to buy a product or a service needed to fulfill the demands of the change or investment. It is very seldom a "function" being purchased.
- They never buy a concept to be implemented
- They never buy a "prototype" to be tested and refined.

Research Perspective

Particularly in the public (state) sub-system, the business designers need to slowly and iteratively **trigger a collaborative innovation culture**. This may happen by making stakeholders experience successes and benefits from opening-up. However, this takes time, as you can see from the mindlab Journey Map.

(Mindlab started with service innovation projects with concrete outcomes on a smaller scale; then moved towards creating a platform for scaling up to organisational and policy re-design: systemic innovation (because ownership of project outcome requires a different organisational thinking); now: on central reform agendas because suddenly people were able to relate the innovation process with policy making.)

It has been experienced by the Krinova team, that innovation took over the role of a “side project” in the everyday workings of respective potential actors in the IBOs.

Innovating the public sector is like changing a wheel on a flying plane: you have everyday responsibilities running and legal mandate to provide current services according to current law, while you are trying to re-invent the policy making processes, invent new laws that then enable new kinds of product/service development processes so organisations can change and deliver the kind of services (Interview Junginger, 2015)

The business designers referred to the public innovation culture as “old school”: performing according to set goals, targets; being “innovation-lazy”. *In general a number of smaller projects unfold into greater systemic transformation potential (as the core of public innovation). It is about getting a foot into the door of central reforms or strategic development (“How radical can we be?”)*

It is important to point out that one cannot ‘other’ the other the way the business designers tend to do in this quote. It is the role of institutional entrepreneurship to provide the conditions for the spider function to work. It cannot work if business designers don’t understand the motivational problem and specific conditions for innovation in the public sector. But it also does only work if the business designer understands that this is precisely why they are needed.

Research Perspective

Business designers need **knowledge on respective legislative and political situations** of the IBO.

We often forget that public innovation happens in a political context (...) and should be driven by political decision making (...) in the end it is all about enabling the political in better ways. (Interview J. Christiansen, 2015) This strengthens the need for business coaches to understand the change of context for innovation, and what follows in terms of role for them to play.

This is crucial in order to foresee the innovation potential / in order to “place” it at the right time on the public agenda - towards a dynamic, iterative and aligned work program that fits with the goals and agendas of the ministries and municipality + internal criteria of selection and strategic learning goals. (Interview J. Christiansen, 2015)

In each IBO's incubation activities it has become clear that a **specific local knowledge** in the incubated **public area**, for instance about the medical care -, education service - or water supply system, is needed. This confirms that innovation, also in a public context, is precisely contextual.

An early stage participation of the public, letting them articulate own problems and ideas, is important. In the longer run it crucial to get access to the inner workings of the public sector organisations - here the municipality – and to work *towards a situation where people in the organisation can begin to recognise their own opportunities for creating their own products. In that way you develop organisational capacities and capabilities.* (Interview S. Junginger, 2015)

Identified New Roles and Skills of Business Designers

Roles and Skills

It can be concluded when analyzing the application project learnings that the incubation or the innovation process doesn't differ from the Innovation arena process. The major difference is seen when concluding which roles the business designers need to take in the the different innovation phases and which skills they need to use to bring value into the IBO.

Acting Roles of a Business Designer

An important overall role is the co-creator. The co-creator role, specifically in public innovation, need continuously and persistent in a iterative manner trigger a collaborative innovation culture. To do so the business designer need legitimacy and credibility among public officials which only can be captured by knowledge on respective legislative and political situations of the IBO.

Other roles are mentor, facilitator, translator, networker, entrepreneur, catalyst (towards agenda setting and lobbying), motivator, negotiator (towards agreements (how) to work together), fundraiser among others more traditional business designer roles.

Identified New Roles and Skills of Business Designers

Skills of a Business Designer

Business Designers skills needed are determined by the need of the innovation project but it can be concluded that some specific overall skills are needed to bring value to an innovation project within the public sector.

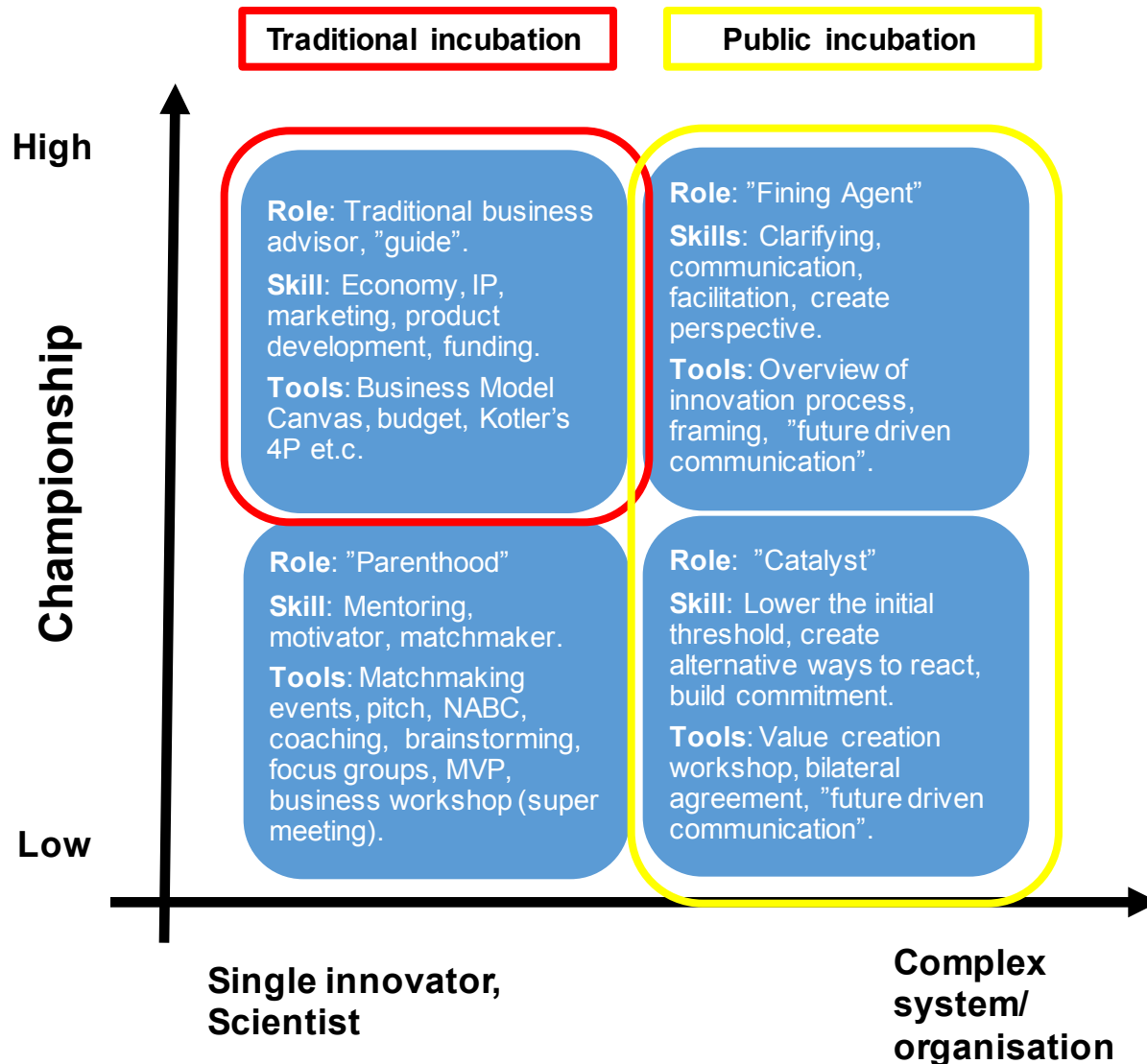
These are

- Analytical - the business designer needs to know what means should be used in order to influence the chain of events
- Organizational – understanding of organisational psychology and ability to "see the other logic" and change of attitude from "What´s in it for me?" to "What can we create together?"
- Communicative - facilitate involvement and shared ownership by all partners
- Political

A second set of skills very important are

- Entrepreneurial skills when acting in the co-creator role.
- A high mentoring and educational ability when coaching in tangible development steps

Identified New Roles and Skills of Business Designers



Research Perspective

Roles that emerged from the Reflections

Mediator / Broker / Facilitator (“keep them all happy”) / Translator / Networker / Coordinator / Forecaster (towards foreseeing innovation and realization potential) / Pioneer / Entrepreneur (taking over ownership) / Initiator (towards agenda setting and lobbying) / Motivator / Persuader / Negotiator (towards agreements (how) to work together) / Fundraiser

This variety of roles according to contextual conditions is important for the business designer to effectively perform the spider function. Incubator management can and should support this by providing the organizational- and communicational conditions (through institutional entrepreneurship) for these shifts to happen.

Required Business Designer’s Skills: Analytical, Organizational, Communicative and Political

Analytical: need to be able to map the complex stakeholder set-up, to see where stake-having rather than stake-holding is a potential risk

Organizational: identify resources and relate them; connect people and facilitate knowledge sharing by organizing arenas for such

Communicative: see to that, like a bumble bee, all parts are fertilized and provided with vital input that is generated in the system; balancing and sharing of needs and knowledge's is key

Political: sensitivity before unproductive tensions in the project; anticipate the need to communicate results; anticipate the need to provide arenas for knowledge sharing; re-map the stakeholder landscape when needed

Research Perspective

Challenges towards collaborative innovation ecosystem culture

There are clearly barriers visible towards establishing collaboration between the stakeholders of the innovation sub-systems, i.e. convincing stakeholder to “co-learn”, “co-design” and “co-effectuate”. This has been very present in the project activities, as the mainly executed tasks have been to establish communication, build relationships, mobilize, motivate and negotiate. These are initial infrastructure-building activities. Members of the incubation team (here as business designers) only need to be well connected but also seem need a strong negotiating power, to build agreements that aim at win-win situations.

For building innovation ecosystems and handling the lack of incentives, connection to relevant ambassadors/gatekeepers in respective sub-systems (that might carry the change and convince from within) is crucial. They need to be identified, continuously involved and supported, in order to get access into the “machine rooms” of relevant organisations. (see Interview with J. Christiansen, 2015)

Applying a Designerly Mind-set

Human-centred / Critical / Collaborative / Optimistic / Experimental (“To Embrace chaos and trust the process”) / regarding the incubation process: oscillating between divergent and convergent thinking modes (see modelling) (see IDEO DTforED Toolkit 2012)

This mind-set largely corresponds to an entrepreneurial mind-set and thereby meets the initial “owner-less” conditions in some IBO’s.

Over the past decade not only private firms but also public organisations have been regarding design as an approach that is central to innovation. Terms such as design thinking, service design, co-design, human centred design and strategic design are starting to gain prevalence in a growing number of countries, and at all levels of the public sector. (Manzini and Staszowski 2013)

Identified New Tools

When working in the different application projects business designers have used the regular set-up of tools of the innovation arena. See page 21.

The projects being targeted towards public sector craved modifications in the use of the tools. Analysing the way of using the tools has led to a definition of modified and/or new tools.

- **Value creation workshop:** Invitation of stakeholders for a common workshop in order to define the user need. What is the common ground? What is the "real" need? Who owns what and what matters to whom? Building co-dependent relationship in the value network.
- **Bilateral agreement:** an interdependent design of innovation challenge that 1) make sure that the project aims to a challenge that is creating new opportunities, and 2) make sure the challenge comprises all stakeholders in order to create commitment and co-dependency of success.
- **Overview of the innovation process:** To safely guide the stakeholders in the innovation ecosystem and Innovation arena process/design thinking model and to illuminate the current state and to establish the next step.
- **Framing:** To tweak and mangle the challenge, the need and surrounding context so that the stakeholder at hand are able to see the project from another perspective in order to enable further commitment and development.
- **Future driven communication:** A communication tool for challenge driven projects in public sector, that consists of three parts that can be used in any order: A) *Determine success*, B) *Human centered confirmation* and C) *Goal oriented feedback*.

Identified New Tools

Future driven communication

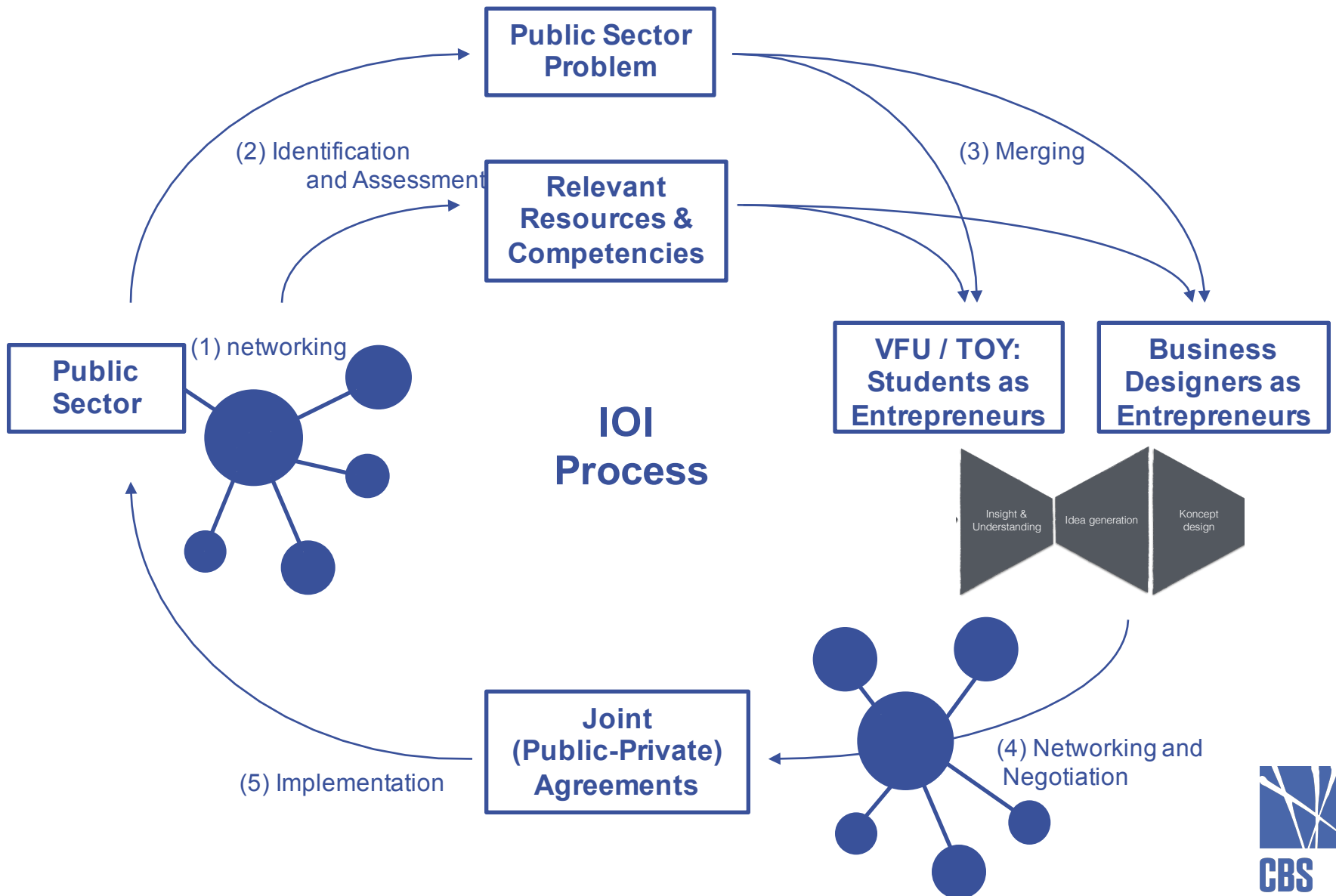
A communication tool for challenge driven projects in public sector, that consists of three parts that can be used in any order: A) *Determine success*, B) *Human centered confirmation* and C) *Goal oriented feedback*.

Determine success is the use of open questions focused on the stakeholders interest, such as: What are you looking to achieve after our work together? If everything were to go really well with this project, where would you be after it? How would you judge this project to be a success? If you were to look back in twelve months time, what would have to have happened for you to think this project had been a success? What disaster will befall your organization if you can't get this sorted now? How will you feel if you can get this right? How do you measure if the project is doing well? Does this project help to improve your organization in any way? What keeps you up at night?

Human centered confirmation is the act of giving feedback during the project, to follow up the events and keep the earlier questions and answers in mind and connect the information to them. A good formula for this is to phrase the information in a statement like "This is a good thing for you because..." and then relate to the previous defined success for the stakeholder.

Goal oriented feedback then is to give feedback according to the set goals, that is associated with the previous established signs of success. As soon as you have a result that can be related to the project, it is a good idea to follow up the stakeholder in a way that enable the person to get internal and/or external credit. This is done by connecting to the previous determined success, by framing the result in clarifying pictures or stories that can easily be remembered or talked about. This could be done in various ways to manifest the use and necessity for the project to take place from the beginning, thus reinforce the legitimacy of the project and the hard work associated to it.

IOI – Incubation for Public Innovation - Process Model



IOI Process Model (I)

This process model is based on reflections of the business designers after having incubated the 14 pilot cases. The IOI project has been an infrastructure project towards a collaborative innovation ecosystem. Due to the new challenges of converting an idea or challenge, relevant for the public sector, into an “incubation-able” IBO, the pre-incubation phase (1)-(3) has been one major point of reflection with CBS in this project.

(1) Networking: Business designers need to be connected to relevant regional actors and public sector institutions, in order to be aware of (political) discourses and challenges – to be “in the loop”. Here Krinova and HKR can rely on their locally very strong knowledge, experiences and established network.

(2) Identification and Assessment: As a result of continuous networking, business designers are able to identify public sector problems and assess their innovation potential

The question “Does it make sense to incubate (now)? / Is there a need?” (example Digital Library) should be critically assessed in beginning of every incubation endeavor. The establishment of an extended filtering-process (as the starting point of the pre-incubation) has been a major reflection point when modeling the process together with the business designer. As a situation and potential analysis, such a “filter” should investigate into and assess aspects like (i) status of laws and regulations, (ii) industry sector peculiarities, (iii) entrepreneurial motivation, (iv) competencies needed.

Generally, the incubation of a case should start whenever innovation potential seems promising (see filter). This calls for a kind of sensitive and informed “broker” role. (Ideas, challenges, research etc. may be fed into a databank as a source to continuously gain overview and feed the process.)

IOI Process Model (II)

- (4) Merging: In case innovation potential can be identified, the public sector problem and relevant resources and competencies should be merged in order to – as a next step – either be incubated as a VFU/TOY project or by the business designers.

For the incubation team it is important to actively and with long wind push IBO's forward (act as entrepreneurs), "stay on the ball and communicate". However, the succession of an idea, challenge or IBO can and should not be enforced by business designers. If cases become too slow moving, it may make sense to define criteria for allowing options to either exit or postponement.

Every project to be incubated distinguishes according to the initiating starting point and actors involved (composition of industry, state, university), scale and scope, target, process etc. Krinnova's familiar incubation tools and methods are applied and modified to answer public sector peculiarities over time. This happens through the growing incubation experience of public IBOs. For scaling solutions, it is useful to ask "What is contextual/local knowledge? What is generic and generalizable knowledge?" (see Interview J. Christiansen)

In their incubating practice Krinnova has particularly been using design rhetorics (project managers as "business designers"), mindset (user-centered, collaborative, iterative) and methods (including user research and involvement as well as ideation and experimentation). (see page 70ff.)

- (5) Networking and Negotiation: Joint (public-private) agreements are supposed to carry the public sector solutions towards realization. In order to build joint partnerships, Krinnova and HKR need to take up regional networking and apply knowledge and tools around creating joint agreements between different public and private organisations. The multi-stakeholder communication not only entails the alignment of many different interest, but also requires constant adjustments of system-specific language (public sector (municipalities, hospitals etc.), academia or the industry).
- (4) Implementation: The joint public-private partnerships carry out public sector solutions. Here the challenge lies in accompanying change processes and facilitating the creation of an open and collaborative public sector innovation culture.

Summary of Learnings

The project of developing an incubator for public innovation has, in sum, generated the following learnings from a research perspective:

1. Public innovation needs to be operating in an ecosystem for policy support for entrepreneurship and innovation that includes an active role for public agencies (see Isenberg, 2011; Bason, 2010). This we find is consistent with a welfare state history where the state has indeed an active role to play. What seems new in supporting innovation is that a more proactive and driving role needs to be embraced in order for this to work. Rather than simply provide support to those that have ideas, this project shows that idea-generation and drive/motivation in the process also are included in the domain of public support.
2. Krinova has developed a series of models and tools that have been modified and adapted to local conditions for innovation- and entrepreneurship support. That is a good basis for starting the incubator for public innovation. This work has meant additional adaptation and adjustment. Perhaps mainly on the side of the business coach/business designer roles. Those roles have had to become more active, networking and driving. This, when the business coach/designer function as a spider, has meant that the incubator management team has been able to function as an institutional entrepreneur in the support-system: to focus on providing the general conditions for stake-havers to become stake-holders in the process; to create organisation where it is lacking.

Summary of Learnings, continued.

The project of developing an incubator for public innovation has, in sum, generated the following learnings from a research perspective:

3. The use of students in the process has also exemplified a solution tailor-made for public innovation to work. Central to the hurdles for public innovation is the motivations complexity: why should the stake-havers engage and become stake-holders? Students, in the semi-autonomous role – in-between the University and a career – have a natural drive to progress projects to finalisation. This provides new opportunities for them, and therefore a natural motivation to push onwards.
4. Great emphasis needs to be placed upon communication between the University, the Incubator, the Student teams, the Business coaches/designers, and the external collaborators. HKR and Krinova has solved this through a number of intermediary roles that belong in part both to the University and Krinova. In addition, Krinova seems to have nurtured their role as institutional entrepreneurs and thus established the conditions for an entrepreneurial ecosystem, conducive to innovation, to develop in the local environment. This, we recognise, takes a long time and requires performance that generate legitimacy and social capital in business- and public sector communities. A governance model for a science park and incubator is one instrument to achieve this. The science park and incubator board of directors is a key element in this governance model, where social capital can be generated.

Response to Activity Objectives

Activity objectives

- Research based (CBS) continuous learning from pilot cases processed
 - workshops and Skype meetings throughout the entire project period (see slide 83)
- Process 20 identified macro challenges into 10 design briefs of which 4 will be turned into commercial IBO:s (Incubator Business Objects)
 - 14 challenges identified, 10 design briefs, 5 commercial products/services
- Involve 20 students in VFU Innovation assignments in the BG
 - 17 students involved in ToY - projects
- Involve 15 case actors to participate in any part of the case process
 - +40 case actors have been involved
- Case exchanges between HKR Innovation and MAH Innovation
 - One case in collaboration
- Create a common framework for operating VFU Innovation together with BTH
 - Due to lengthy implementation process of new courses at each university it was not possible within the project timeframe to establish common VFU Courses

Response to Performance Objectives

Performance objectives

- CBS publication – lessons learned
 - Research comments in the report + publication to come (2016)
- Stakeholder acknowledgement of systematic and shared approach to the co-creation innovation process
 - This have been proved specifically in the collaboration between HKR, Krinova, Kristianstad community, Handelskammaren Syd and private companies Beijer Communications, Jowax and Malmbergs AB.
 - We must consider the innovation arena process being successful because we have already assigned new innovation assignments for 2016 with public organisations.
- Stakeholder acknowledgement of advisor business design skills for public sector incubation regarding co-creation and legal agreements
 - See above
- Formal business agreements with case actors
 - Formal business agreements a signed with both public and private actors
- Pooling of business designers for public innovation between HKR, MAH and Krinova
 - The accomplished learnings and recognition of business designer skills will be shared by business designers at MAH and BTH during workshops 2016.
- Established mutual education program manager teams between BTH/HKR
 - Collaboration objectives couldn't be fulfilled within time frame due to reorganisation at BTH Innovation
- Approved course curriculum by HKR & BTH of VFU Innovation as a course option for students
 - Work are under way to finalize VFU course curriculum at HKR for autumn 2016 and spring 2017

CBS Appendix

Research Methods

Study Timeline

List of Interviews

List of Empirical Material

Research Method

Brief description of how we have worked

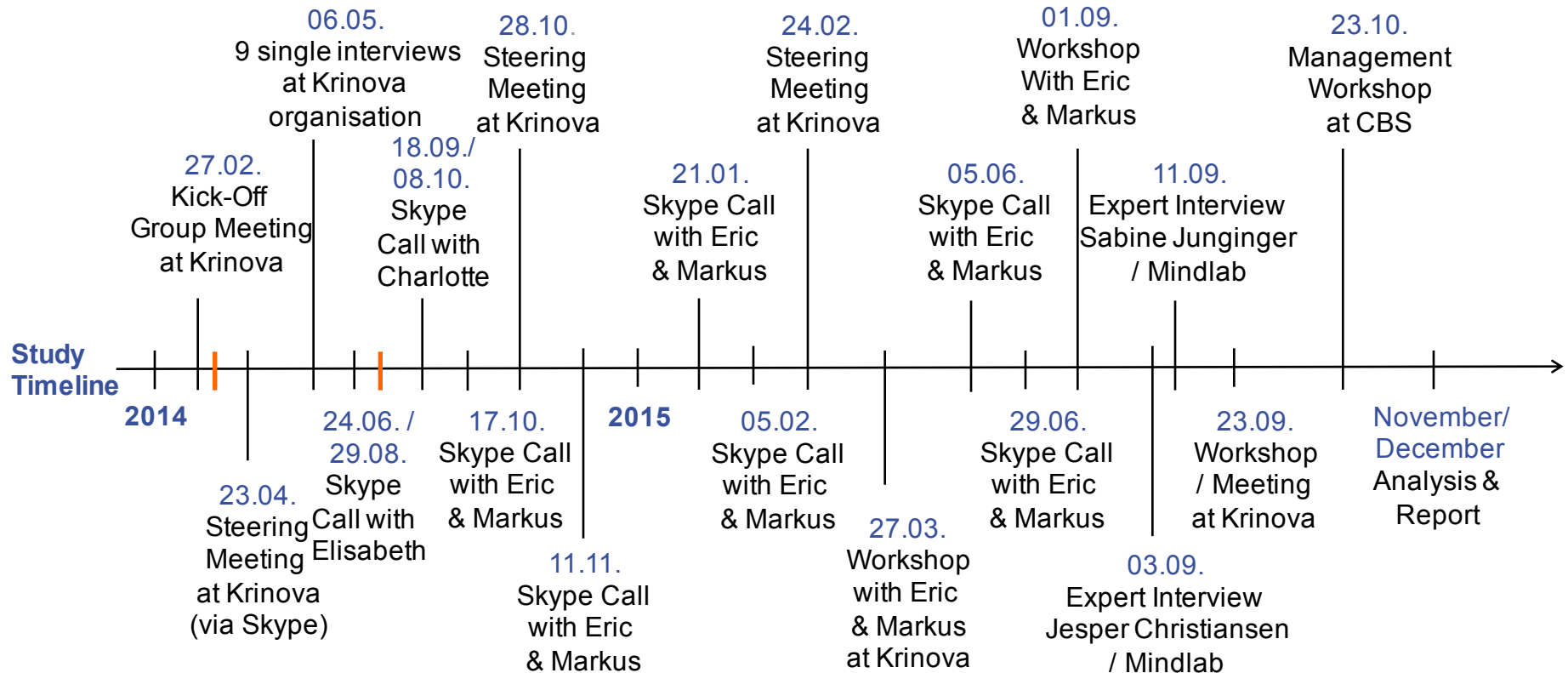
On the background of previous incubator studies. Entrepreneurship researchers.

Have used a dialogical approach and interacted with the HKR/Krinova team throughout. This has meant participation, analysis on a continuous basis and dialogue meetings with the project team from Krinova/HKR.

As empirical material, CBS has used: ethnographic style field notes and observations; interviews, live and Skype; secondary material as produced by HKR/Krinova; and experiences from project team meetings (including presentations and discussion at those)

In this report we add analysis and reflection with the purpose to distill learnings and, from a research perspective, provide input and recommendations to what models and tools, roles and strategies that can strengthen the future development of incubation for public innovation. This also means we find this 'pilot' interesting and fruitful enough so as to recommend that it is indeed needed (as a supplement to regular incubators) and that specific, tailor-made tools, models, and approaches are needed. Not all new ones, but modifications of existing ones. The business designer role in particular becomes more demanding on the communications- and stake-holder management sides in particular.

Study Timeline



Specific Exercises

SWOT Analysis

IBO Diaries

IBO Recap

IOI Process Modelling

Change of IOI Project Management



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CBS: Researching Incubation for Public Innovation

- CBS is researching the process by which HKR together with relevant private and public partners creates a new incubation model within the regional public innovation infrastructure
- CBS provides research-based analyses and feedback to HKR and partners so as to strengthen and accelerate the learning process
- Analysis and feedback are conducted in a dialogical framework – in conversation with Krinova and partners
- Feedback will be continuous and on-demand AND provided in workshops where collective learning is incited by knowledge from CBS research analysis
- Knowledge-creation is identified, summarized and fed back in written, *iterative* form to enhance learning particularly in regards to greater precision in concepts and models developed in the project

A partnership between Högskolan Kristianstad, Malmö Högskola, Copenhagen Business School, Blekinge Tekniska Högskola and Krinova Incubator & Science Park.

