Commercializing IPR: the license track

January 20th 2010

Today’s purpose

Showing the differences in basic conditions between projects suitable for a license agreement and for forming a start-up company.

Give you an introduction to how you commercialize IPR using license agreements

Key areas to be addressed:

- How to choose between commercialization tracks, i.e. license deals and start-up companies
- How to make a strategy for commercializing IPR via license agreements
- How to evaluate an invention and prepare it for sale
- How to find and get into contact with licensees
- How to estimate the value of IPR
- How to negotiate and implement the deal

Approach:

- Practical introduction to the subject areas with case example
- Analysis of your own course cases

Schedule

13:10-13:30	**Choosing between commercialization tracks** • Indicators for a license track • Indicators for a start-up track
13:30-14:15	**Commercialization of university IPR: Process and analysis** ▪ How does the process work – & the timeline ▪ Models for analysis and value proposition
14:15-15:00	**The Licensing track: Who to contact – and how?** ▪ How to find licensees and contact persons ▪ Preparing for the deal, including valuation
15:00-15:30	**Case work** ▪ Applying the above to your cases
15:30-16:00	**The deal** • Negotiation • Closing • Technology transfer & Follow-up

tto a/s, a catalyst for making money on new technology

tto a/s

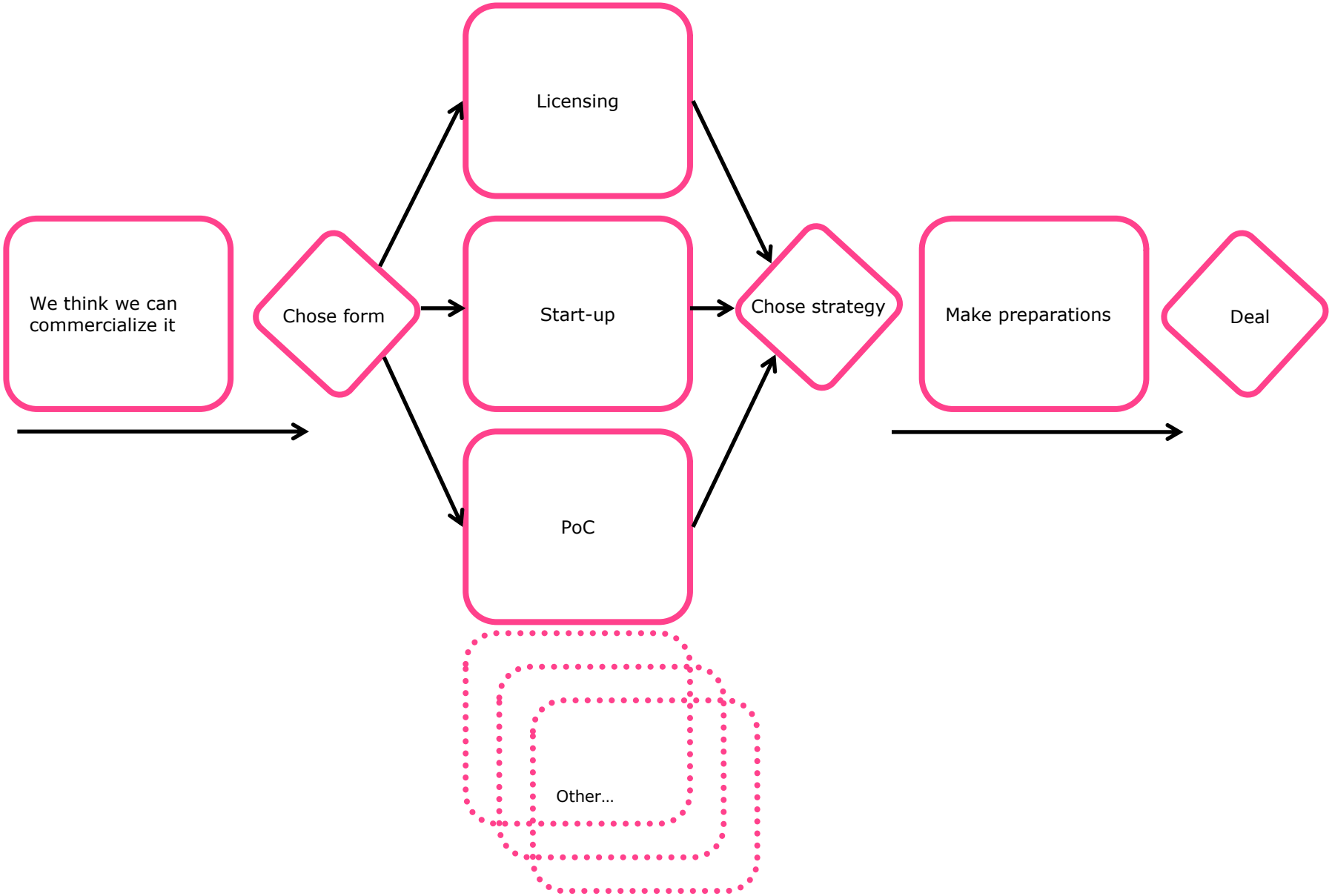
- tto a/s is a consultancy company specialized in commercialization of emerging technologies
- We have a strong focus within the areas of clean technologies and life science
- We create value for our customers by;
  - Commercialize new technologies – create economic value in the market
  - Build strategic partnerships for collaboration, sales and licensing
  - Systematically discover new business opportunities
  - Assist in technology transactions with due diligence and valuation
- We have solid experience with technology driven business development from working with European companies and universities
- We have a track-record of more than a 100 projects
- To strengthen technological and IPR competencies, tto a/s partnered with Plougmann & Vingtoft in 2008
- For more information, please visit: www.tto.dk

Recap of last weeks lecture on license agreements

- What is a license agreement?
- How are they normally structured?
- What are the pro’s and con’s of using license agreements as tools for commercialization?

CHOOSING BETWEEN COMMERCIALIZATION TRACKS

Different commercial strategies – many ways to Rome



License versus start-up

Licensing may be appropriate if:

- There are significant barriers to a new company entering the market
- The marketplace comprises a small number of large companies
- It is a niche technology
- There is a single patent
- The technology is near market and requires little further development and investment
- A company is linked with the research either as a sponsor or interested observer
- The technology fits an existing company's IPR/product portfolio
- Licensing is a common strategy within the industry sector

License versus start-up

A start-up company may be appropriate if:

- Entry to the market by a new company is relatively easy with few significant barriers
- The marketplace is fragmented with a lot of small companies
- The technology has many applications
- There is a portfolio of patents
- Further investment is required in the technology and associated infrastructure in order to reach the market
- There is a group of founders motivated to start a company
- It is likely that investment funds can be raised for a company
- There is a financial exit route for investors, including the university

License versus start-up

Venture Capitalists think about:

- Disruptive technologies
- 1 B$ markets
- Sales price > 25 x costs (or at least many)
- Market > 25 x investment

Licensees (can) have:

- NIH (not invented here) syndrome
- Difficulties handling too disruptive technologies
- Exclusive access to market – ”owning” the customer
- Ability to bring it to market

DK experience: License or start-up

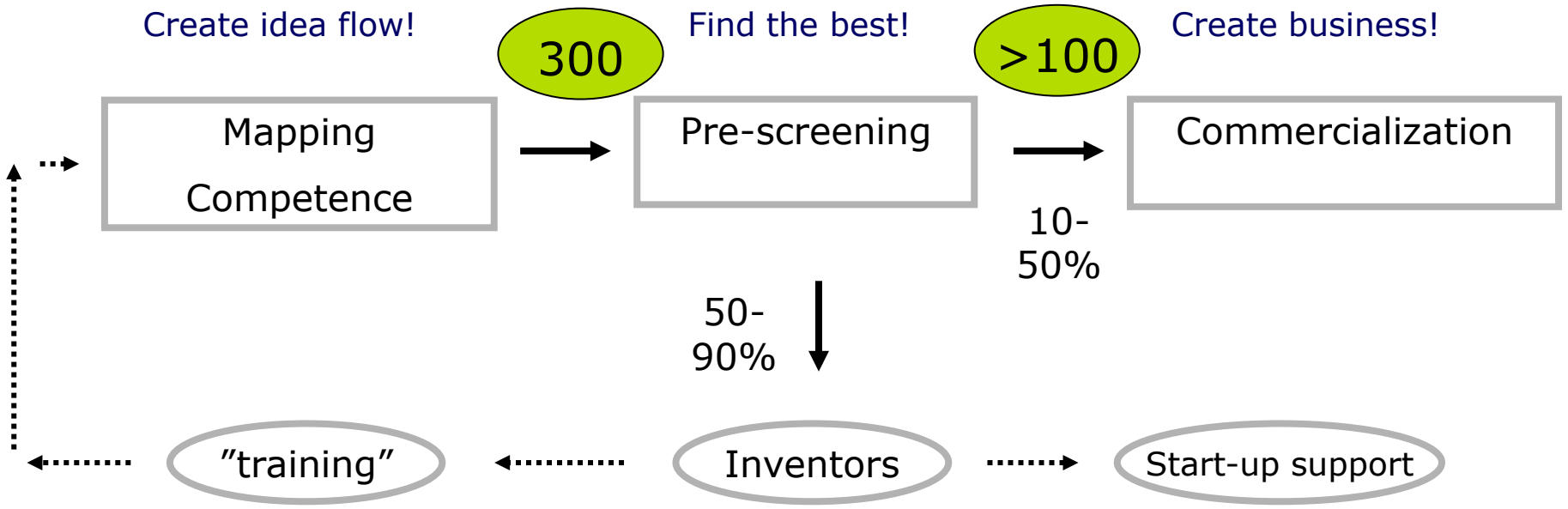
- Emphasis on start-ups – political reasons
- Support for start-ups
- Only Proof-of-Concept money for licensing
- Start-ups are not successful
  - IPR can get lost

How does the process work – & the timeline

COMMERCIALIZATION OF UNIVERSITY IPR: PROCESS AND ANALYSIS

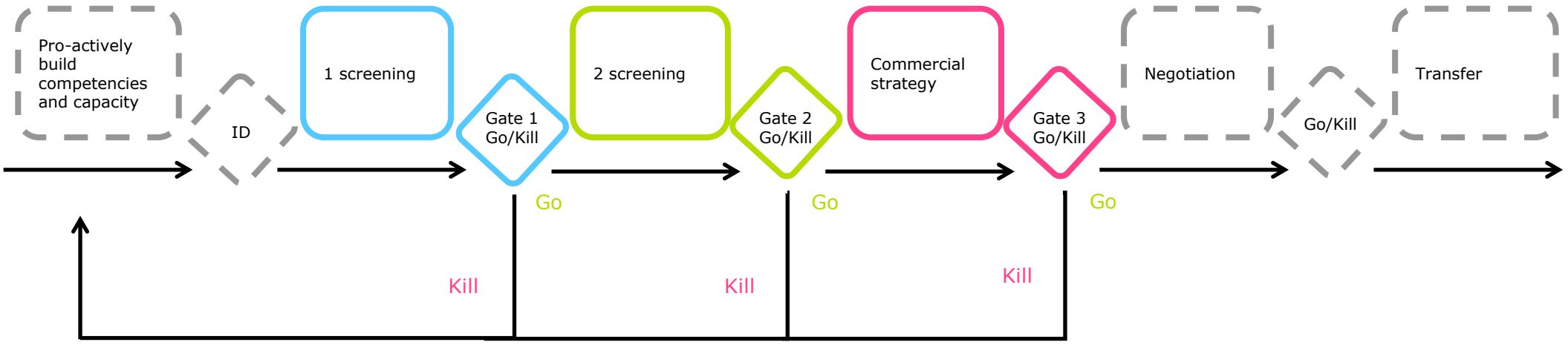
The commercialization process is challenging

- Commercialization starts with the university
  - First right of refusal (Y/N):
    - Yes ⇨ University drives process
    - No ⇨ You drive the process



The extended tech transfer process is a stage-gate process

- Analyze
- Reduce risk

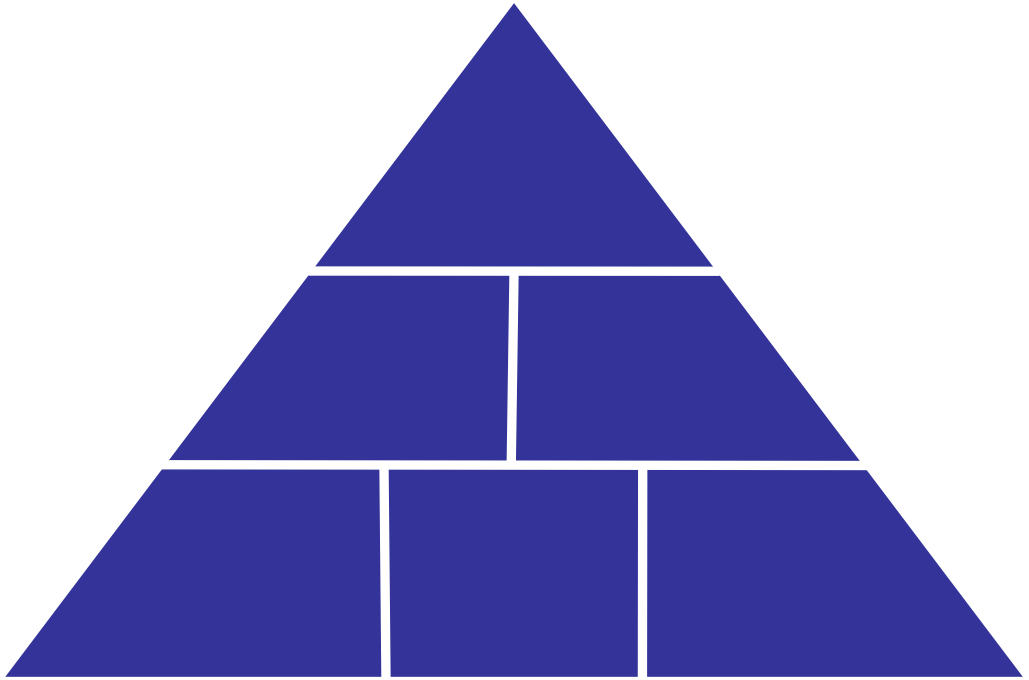


Useful models for evaluating your case

COMMERCIALIZATION OF UNIVERSITY IPR: PROCESS AND ANALYSIS

The first challenge is to understand the potential and formulate a value proposition

- The TTO triangle concept for the analysis
- The NABC model for the value proposition



An invention from the real world – KU-LIFE

The technology is a high precision seeder used for creating highly accurate 1-dimensional spacing and 2-dimensional patterns

The invention is based on a mechatronic principle that places the seed in the soil with zero-ground speed, thereby assuring a highly even crop or plant spacing due to reduction of seed displacement.

It adds the possibility of having variable seed spacing while maintaining the zero-ground speed effect. The method is an improvement in relation to optimising crop growth conditions while at the same time supporting the use of mechanical weeding methods.

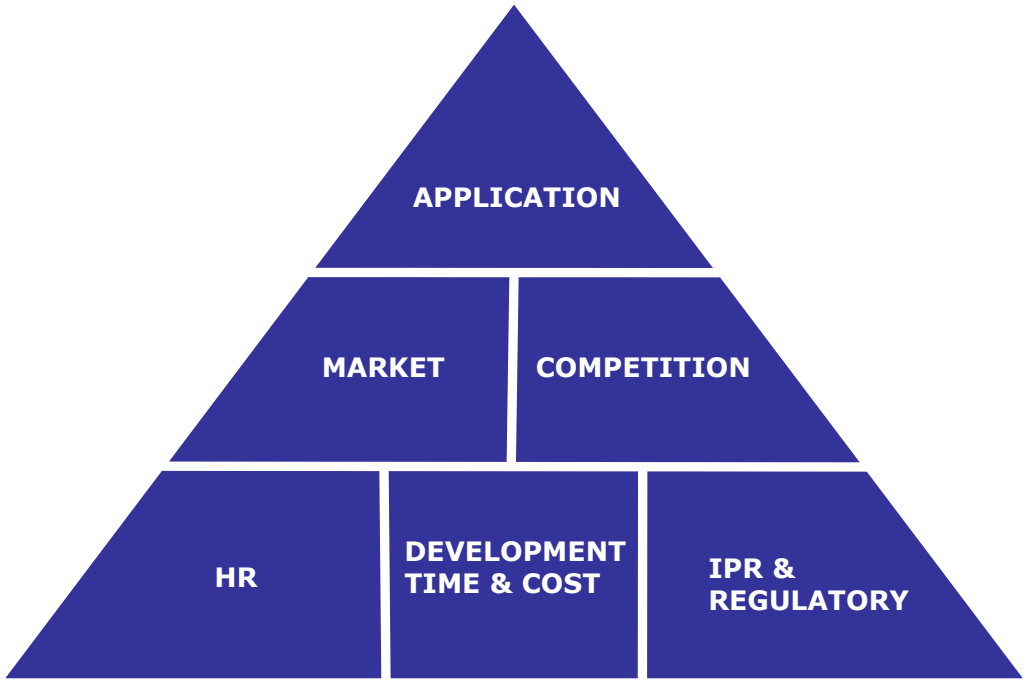
The technology is compatible with existing machines on the market and is ideal in combination with fully automated machines.

The TTO triangle

The TTO commercialization triangle contains the factors that we regard as important for the successful commercialization of new technology.

The triangle has been developed and tested on a basis of more than 100 projects and has proven to be a robust framework.

TTO combines a deep understanding of both technology and markets to apply relevant parameters that suit the individual technology.



Application is about the end users perspective

Is there more than one application of the technology (platform)?

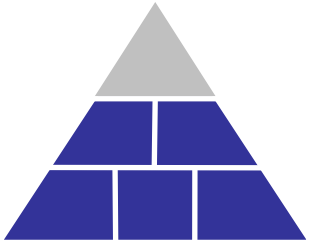
Can we define the end user need in terms of specific characteristics of the solution?

What is the end user need situation:

- Clear need, bad solution today
- Clear need, no solution today
- Possible need, but end user unclear/uncertain

What is the end user willing to pay?

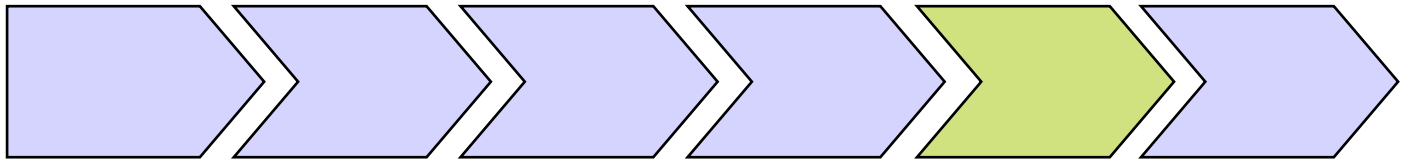
A bad solution in the market is better than no solution – shorter path to market!



Seeder: Positions the seeds accurately – instead of at random

Market analysis is superficial and focused on value chain

Does the technology fit the existing value chain?



Buyer of technology

- Who "owns" these customers today?
- Are they interested?
- What market size are we looking into (roughly)?

Drivers

- What is driving this market in our favor?
- Which threats do we see? Will the market vanish due to known circumstances?

Seeder: The invention is an add-on to existing seeders - so buyers are known

Which competition are we looking into – when we hit the market

Present solutions

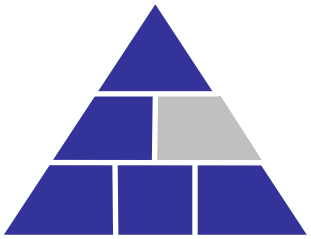
Present solutions are “really shitty”, and seem to hold little potential for improvement

Future solutions

We have reasons to believe no other solution is underway

We have reasons to believe that we are looking at fierce competition, but the specific end-user needs will be better served with our solution

We have no special capabilities



Seeder: Current solutions show mechanical problems which are handled by the current invention

HR & IPR/regulatory

Human resources

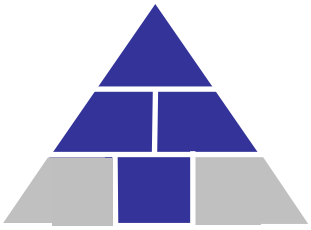
The researchers have unique skills, have experience with tech transfer, and are enthusiastic about following the project through

IPR

Can the technology be protected? And how is the IPR landscape?

Regulatory

The regulatory system has taken the necessary steps to open the market



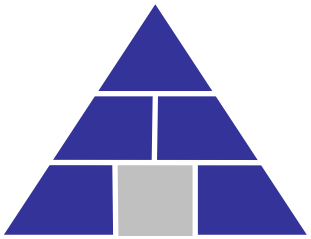
Seeder: The invention has been patented with several patent applications. Regulatory aspects are not an issue.

Development time and costs

Required development

- The required development before the buyer will invest is limited and the funds are available (from buyer or other sources e.g. PoC)
- The time scale is shorter or comparable to the time horizon for competing methods

- For VC's: The costs associated with taking the product to market is at least 25 times smaller than the market



Seeder: The prototype is compatible with the leading machines on the market. Optimizing the electronics is the main issue – maximum 1 year.

The value proposition model

Developed at SRI International, www.sri.com

Simple framework that analyze 4 parameters and summarize them in a value proposition;

- Need
- Approach
- Benefit
- Competition

In tto's opinion it is a good way of summarizing the results from the evaluation

Furthermore, it is useful in presenting the invention to outsiders as well as introducing the invention to team members

Value proposition

Describing the value proposition needs input in relation to four areas (sri.com);

- Need
  - Identify the marketplace **N**eed for your product or service
- Approach
  - Define the “golden nugget” or the unique advantage of your **A**pproach
- Benefit
  - Outline the **B**enefits to the customer, partners in the market ecosystem
- Competition
  - Pinpoint the **C**ompetition and systematically compare your approach to competitive products or services

Example of a value proposition - The seeder

A value proposition for the seeder could be;

Need: Optimizing yield is a main industry driver and robotics in farming is the future

Approach: We fit a new feature to existing seeder machines

Benefit: High precision leads to increased yield which leads to increased profitability

Competition: Current solutions a mainly mechanical with no electronics for “live” quality assurance which decreases yield.

How to find licensees and contact persons

THE LICENSE TRACK: WHO TO CONTACT – AND HOW?

How to find licensees and contact persons

How to find partners

- You can use events to promote your technology
  - No one has succeeded convincingly
  - IPTEC in Nice/Cannes
  - ASTP & AUTM
  - Exhibitions like BIO, etc.
  - National events is an option

- You can use promotional web-sites
  - The existing examples are not yet convincing
  - Techtrans.dk – national platform

- You can use networks
  - Innovation Relay Centres
  - National platforms – DK Network for Tech Trans

- In the end it is a contact sport that requires preparation
  - People-to-people

How to find licensees and contact persons

How to find partners

- In tto, we use data mining
  - IPR
  - Scientific literature
  - Market reports
  - Consult with the researchers

- The potential partners are then evaluated
  - Technical/scientific fit
  - Commercial fit
  - Organizational fit
  - Strategic fit

- Once we know why we want to contact them, we get on the phone or meet them

In the Seeder case, we did all of the above

How to find licensees and contact persons

Who to contact

- You want to get an internal sponsor
  - And as high up in the system as possible
- You want to be in dialogue with the decision makers, or at least know who they are and if they are informed about your offer
- Business development is often the place to go.
  - Although research could be more accessible to you, it might not be the right place to be (only as sponsors)
- It is important that you go for more than one partner.
  - It is time consuming
  - It can be used as a negotiation tool
  - Success rates can be low

In the Seeder project, we dealt with a specialist having insight in the area as sponsor and the R&D director as decision maker. Simply because external business development is not common in the industry.

How to find licensees and contact persons

How to contact potential licensees

- You want to address their needs and communicate specifically to them
  - Short and concise
  - Make it non-confidential – at least in the beginning
  - Don’t make it too technical unless you know they can use the information
  - Show them that you understand their market and need

- Understand their evaluation process and assure that they have the information they need. But sign a CDA, NDA, etc. if necessary!

We used a business opportunity in the Seeder project. Once interest was shown by a partner, we signed an NDA and met with them.

Preparing for the deal, including valuation

THE LICENSE TRACK: WHO TO CONTACT – AND HOW?

Preparing for the deal, including valuation

Valuation – what is it?

- A ”gestimate” of the value of your project, not the overall market
- Not an exact science!
- Potentially a time-consuming and not very value adding tool, unless you or your partners really need the information

Preparing for the deal, including valuation

How is it done?

You basically have three methods:

- Build a business model
  - This is a very good model
  - It is a lot of work
  - Future net cash flows, discounting etc.

- Work by analogy – license agreement
  - This is fairly straightforward – although lawyers like to make it look very complicated
  - Statistics is around to give you guidelines
  - Model agreements available (e.g. Lambert)

- Shouting competition
  - Loosing model

Preparing for the deal, including valuation

How is it done?

- Build a business model
  - Cost based models
    - Not very convincing to a buyer
    - Useful for finding ownership shares
  - Market based models
    - Discounted cash flow, Net Present Value
    - Can be customized to the buyer
  - Option based models
    - Excellent when uncertainty is high
    - Encompasses multiple scenarios

In the seeder project we made a DCF model. We used the buyers financial statement to estimate their market share and revenue in the specific field. Basically, we told them what they would earn from buying the project.

Preparing for the deal, including valuation

What is the importance of making your own valuation?

- Although it is basically qualified guessing, it is still better than no numbers
- In negotiations, it is key to have arguments
- It is your main way of building confidence when you are under pressure
- It forces you to think;
  - About the partners' fit
  - About your strategy
  - About the smartest way of building up value in your project

Applying the above to your cases

CASE WORK

Applying the above to your cases

In your groups;

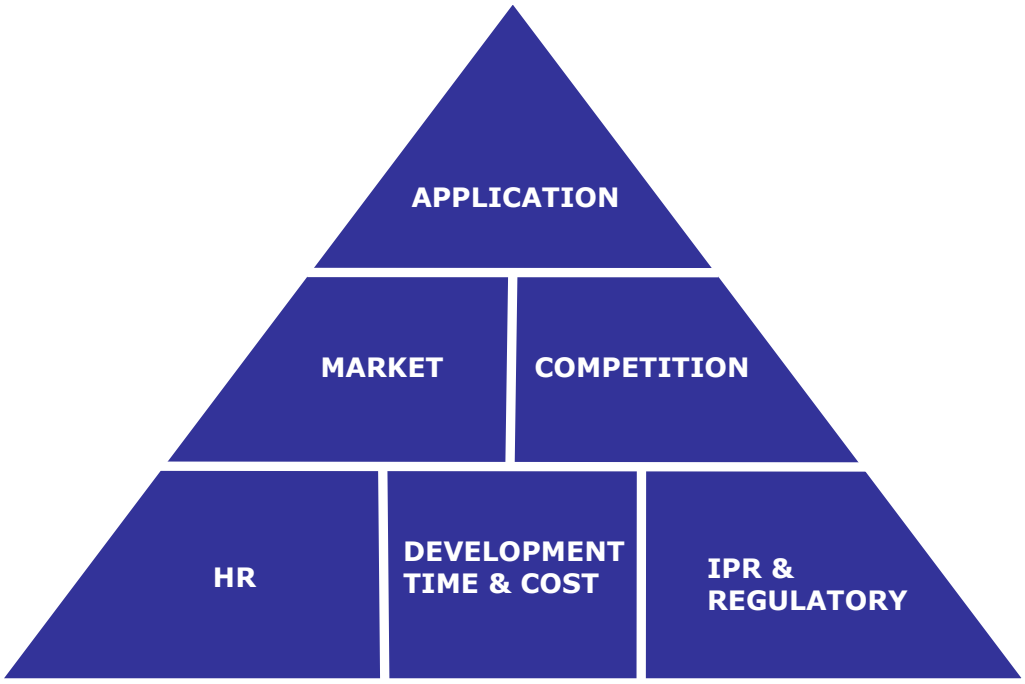
- Sketch the main parameters/ issues you need to resolve in the strategic analysis
- Initiate thoughts of your value proposition
- What could your commercial track be?

Time frame: 30 minutes.

We will help you answer your questions

- Jon mainly in technology
- Christian mainly in life-science

Applying the above to your cases



The NABC Model

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THE DEAL

Preparation is everything

Understand your value proposition

Understand the situation of the licensee

Be prepared to explain him how it fits his business

Bring business case with numbers - preferentially

Establish win-win situation

The invention will improve the business of the licensee

You want to share the net profit

You want to work with them to make them successful

You will enjoy the largest financial benefit after the licensee

The negotiation itself

Create relaxed atmosphere

Understand their key issues

Achieve partial agreements – identify difficult issues

Be tough on the essential issues

If you give way on one issue – demand compensation on another issue

Make sure you have written minutes (term sheet)

Leave contract writing to professionals - based on the term sheet

Follow-up

Implementation of the technology transfer (GE case)

Monitoring the deal

Collecting financials

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