#### A CTI training programme



### **Start-up and entrepreneurship** CTI Entrepreneurship



Schweizerische Eidgenossenschaft Confédération suisse Confederazione Svizzera Confederaziun svizra

Swiss Confederation

Commission for Technology and Innovation CTI

## **CTI Entrepreneurship**

Business Conception Week 8: Protection

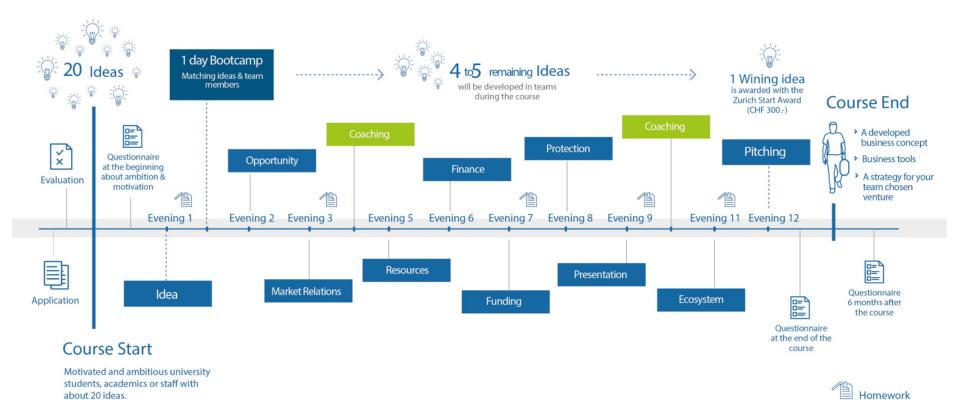
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## Module 2 - Business Concept

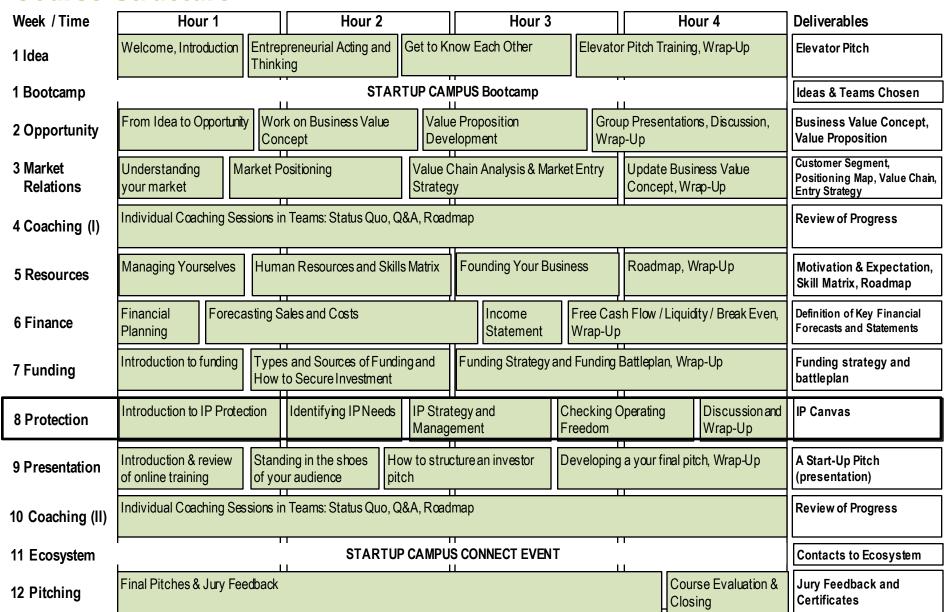
### **CTI** Entrepreneurship Training

Course Schedule

about 20 ideas.



### **Course Structure**



## Trainer Biography – Matthias Ehrat



- Dr. Matthias Ehrat co-founded VELTRU AG, a robotics enterprise that provides parallel robotics solutions and is momentarily involved in a start-up project in area of industrial radiography.
- He has managed the patent and trademark portfolio at two multinational companies where he was responsible for applications, prosecution and monitoring of the IP portfolio.
- He has been a member of the management team in the investment goods industry.
- He is currently a researcher and lecturer at the Centre for Strategy and Operations (ZSO) at Zurich University of Applied Sciences (ZHAW). He presently works on a project to visualize prior-art-search.
- He has a PhD in Technology Management from St. Gallen University HSG and a MEng in Mechanical Engineering from ETH Zurich (CH).

## Trainer Biography - Kamran Houshang Pour



- Dr. Kamran Houshang Pour is patent expert and IP trainer at Swiss Institute of Intellectual Property (IPI) in Bern.
- After obtaining a PhD in physics at the EPF Lausanne he worked as product manager at Nortel Networks in Zurich, where he conducted yield improvement projects for the existing products, qualified new products and introduced them into the market.
- He later cofounded a consulting entity providing technical supports specially for young startups by the quality management as well as by the technical questions.
- After a master in statistics at the Université de Neuchâtel he returned as Post Doc to EPFL (TRANSP-OR) conducting an externally financed project on modeling customer behavior.
- Since 2008, he is working at IPI, where as patent expert he conducts different type of patent searches, such as validity or freedom-to-operate searches, and examines patent applications in his field of knowledge. As IP trainer, he gives lectures on divers intellectual property subjects at the universities and in the companies.

## Trainer Biography – Rolf Corrodi



- PhD from University of Zurich UZH in Law
- Over 15 years of professional experience with Intellectual Property Rights Management and Trademark / Brand Management for various clients in leading Swiss IP-Law firms.
- Expertise in Copyright Law, in particular Reproduction Rights, Licensing Contracts and Art Law
- Founder of Büro Corrodi GmbH (Copyright, Art Law, Trademark Law, Licensing)

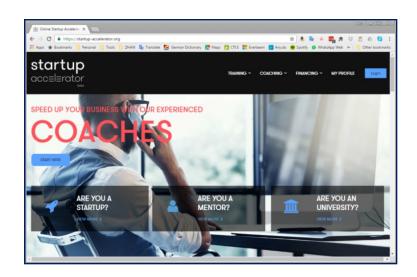
### Trainer Biography – Bernhard Hostettler



- Dr. Bernhard Hostettler founded and manages IPROMA GmbH, a consulting company that provides services in intellectual property management (IPM). He supports spin-offs, start-ups and SME in IP strategy.
- He has managed the patent and trademark portfolio at three multinational companies where he was responsible for educating inventors in IP matter, patent monitoring, competitive technology intelligence (CTI) and for management of the IP portfolio.
- He has been a member of the management team in the animal diagnostics industry where he was also head of a business unit.
- He is currently a lecturer at Technopark® Zürich, Bio-Technopark® Schlieren and glaTec EMPA Dübendorf. He presently also works as an IP expert for the CTI Label Board.
- He has a PhD in Chemistry from ETH Zurich and was doing research for about 20 years in Roche, Maag and Givaudan before he changed into IP management and business development.

# **IMPORTANT**: you need to follow a short online course to prepare for next week (about 30 mins)

- This semester, we are piloting a new online platform for startups called <u>startup-accelerator.org</u>
- By the end of the week you will receive an email for a link to the sign-up page
- To prepare for next week (Week 9 Presentation) you need to login to the website, go to the Presentation training topic and follow the online course
- There are 4 videos (15 minutes in total) and 2 PDF documents (10 minutes of reading), plus curated content from elsewhere



# After you receive the email, follow the steps shown in the video to access the training

## Week 8: Protection - Agenda

Part One	Introduction to IP (1 hour)		
Part Two	Review of IP Canvasses (45 mins)		
BREAK	(15 mins)		
Part Three	IP Strategy (Case Studies) (45 mins)		
Part Four	Checking operating freedom (45 mins)		
Part Five	Update IP Canvases and Wrap-Up (30 mins)		

## Week 8: Protection - Agenda

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## Introduction to Intellectual Property

### 1. Overview

- 2. Types of intellectual property rights
- 3. Protection strategies
- 4. Practical Next Steps

### What do we mean by intellectual property?



British Philosopher John Locke (1632 – 1704) The 2<sup>nd</sup> Treatise of Civil Government 1690 - CHAP. V. - Sec. 44 "of Property"

The fruits of a person's original creative efforts should be theirs to own and trade

- Creative effort = 'Intellectual'
- A tradable asset = 'Property'

## What are Intellectual Property Rights (IPR)?

- Legal rights that protect the owners of the IP
  - i.e. contracts apply only to the parties in the contract, IPR apply against all entities in the territories they are registered in
- Sub-divided into a number of categories:
  - Patents
  - Copyright
  - Trademarks
  - Design Rights
  - Trade Secrets
- Different countries/regions = different interpretations

# Why are intellectual property rights important to business?



They allow owners to **exclude other people** – usually competitors – from commercially using the IP



IPR turns innovations and creations into a marketable commodity and a **company asset** 



IPR help market a company's products and services and promote a company's reputation

Source: Swiss Federal Institute of Intellectual Property (2010). Envisioned. Created. Protected.

## What does this mean for a startup?



You must protect your own use of your IP and prevent its misuse by others in every relevant country that you intend to:

- Manufacture;
- Sell;
- Advertise; or,
- Use,

... your goods or services



You must check you have the "freedom to operate" without infringing the IPR of others

## The limits of intellectual property rights

- IP rights expire following a maximum term of protection (trademarks are an exception)
- IP rights are only valid in a certain country (the principle of territoriality)
- Generally, only the commercial exploitation of an invention or creation is protected
- The scope of protection is precisely defined

Source: Swiss Federal Institute of Intellectual Property (2010). Envisioned. Created. Protected.

## Introduction to Intellectual Property

- Overview
- 2. Types of intellectual property rights
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- 4. Practical Next Steps

# The <u>main</u> ways to protect your intellectual property in Switzerland

### **Unregistered Rights**

#### Registered Rights

**Patents** 



Domains



Designs
(Registered/
Unregistered)



Trademarks (Registered/ Unregistered)



Copyright



Trade Secrets



## Intellectual Property Rights in Switzerland

As we go through the different types of IPR, please refer to the table shown on the right, which can be found in the IP Handbook

	Trade mark protection	Patent protection	Design protection	Copyright <sup>2</sup>
What is protected?	Registered signs from misuse by others	Inventions i.e. new technical solutions to technical problems	Forms i.e. the exterior appearance of an object	Works of literature and art (including computer programs)
How does it become pro- tected	Registration in the trade mark register	Granting of the patent	Registration in the design register	Automatically at the moment of creation
Minimum requirements	Does not infringe on others' rights     Distinctive     Not descriptive     Not against public order or public morality	Novel     Industrially applicable     Inventive step     Disclosure of invention	Novel     Overall impression must clearly differentiate from existing forms     Not against public order or public morality	Literary and artistic creations of the mind that possess an individual character
No protection for	Simple signs     Abbreviations     Generic designations     Coats of arms     etc.	Animal breeds, plant varieties     Diagnostic, therapeutic or surgical procedures on humans or animals     Use in keeping with public order or public morality     Certain biotechnological inventions	Purely technical functions     Ideas and concepts     Anything that violates federal law (e.g. protection of coats of arms) and treaties	Content (ideas and concepts) Laws and official decrees Decisions by authorities Means of payment Patent documents
What are the exceptions?	When not used as a trade mark	Private use, research and teaching		Private use, citations, back-up copies and reporting of current events
Scope of protection	Defined by the sign and the goods and ser- vices classes	Defined in the patent claims	Defined by the representation	Defined by the concrete work
Period of protection	10 years (indefinitely renewable)	Max. 20 years	5 years (renewable thereafter 4 × 5 years up to a maximum of 25 years)	Up to 70 years after the death of the author (50 years for computer programs)
Indications of protection		+pat+; pat. pend. (patent pending) Use optional, misuse punishable by law	mod. dep. Use optional, misuse punishable by law	©, "Copyright", "All rights reserved", "Tous droits réservés" or similar Use optional
Application fees (CH) <sup>1</sup>	550 CHF	200 CHF (for the application), 500 CHF (optional search), 500 CHF (examination)	200 CHF (basic fee) including publication of one representation	None
Renewal / maintenance <sup>1</sup>	700 CHF (10 years)	100 CHF for the 4th year, after which the fee increases annually by 50 CHF (150 CHF for the 5th year, etc.)	200 CHF (5 years)	None
Unique to Switzerland	Infringement of earlier IP rights not examined for (trade mark search recom- mended)	Novelty and inventive step not examined for (prior art search recommended)	Publication can be deferred for up to 30 months     Novelty not examined for	Collecting societies: SUISA, SUISSIMAGE, ProLitteris, SSA, SWIS- SPERFORM

Source: Swiss Federal Institute of Intellectual Property (2010). Envisioned. Created. Protected.

# Registered rights Patents – what is patentable?



- Any new and useful process: an act, or method, of doing or making something, (primarily includes industrial or technical processes)
- Composition of matter (a chemical composition that may include mixtures of ingredients as well as new chemical compounds)
- A "machine" (clockwork, tractor, computer, medical device, etc.)

# Registered rights Patents – what is not patentable?



- Ideas, concepts, discoveries
- Inventions that will not work
- Computer programmes (except algorithms producing technical results)
- Scientific theories, teaching methods
- Organizational operational sequences, game rules
- Mathematical methods and aesthetic creations of form\*,
- New varieties of plants\*\*, animal breeds, diagnostic methods
- Methods for therapy or surgery practised on humans or animals
- \* "Aesthetic creations of form" may be registered as designs.
- \*\* "New varieties of plants may be protected under a plant variety protection act.

# Registered rights Patent application and patent



#### Inventor



### **Patent lawyer**



#### **Patent Office**



- Understand invention and work out state of the art
- Patentable?
  - New, inventive step
  - Industrially applicable
- Reproducible?
  - Experiments
  - Clarity

- Search for state of the art
- Check for patentability
- Formal examination
- (Amendment of application)
- Granting or rejection
- Possible objection by 3<sup>rd</sup> parties
- Costs: 15,000 to > 100,000 CHF to get everything filed (>250,000 CHF over 20 year patent lifetime)

## Registered rights Domain names and social media



- .ch
 A must for a company headquartered in Switzerland

swiss
 Swiss registered company with relevant trademark

- .com Highly desirable if you are active outside

Switzerland

eu
 Was hyped at launch, but does not rival .com

Reserved for organizations

Facebook

Twitter

org

Linkedin

Instagram

Google+

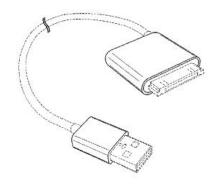
Etc

Essential for most businesses

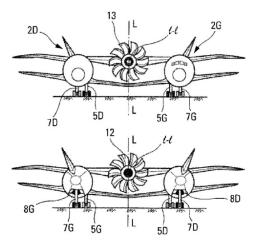
Importance of other social media sites varies according to sector/business type (b2b, b2c, etc)

# Registered/Unregistered rights Design protection













Honda CR-V

Laibao SR-V

# Registered rights Registered trademarks - examples



- Words Victorinox
- Combinations of letters ABB, SBB
- Numericals 501 (Levi's)
- Graphic images (logos)
- 3D-forms







- Slogans "Cats would buy Whiskas"
- Melodies Xbox 360 startup sound
- ....but not descriptive: 4WD, Windproof, 220V

# Registered rights Registered trademarks – the process



### Your company



### **Trademark lawyer**



#### **Trademark office**

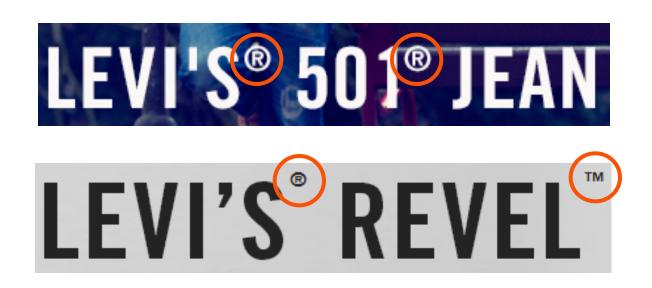


- Word, figure, sound, combination
- Identifying of goods and services
- Registrability:
  - Descriptive, inherently distinctive?
  - 3<sup>rd</sup> party marks?
  - Likelihood of confusion?

- Check for registrability
- Check for goods and services (classes)
- Entry into the trade mark register
- where necessary opposition proceedings
- Costs: manageable, mainly official fees

## Unregistered rights Unregistered trademark (USA only)





## Unregistered rights Copyright

- Books, literary Texts not: concepts, ideas, claims
- Drawings, art, photographs
  - but not all of them!
- Software
- Musical and dramatic works
- Sound recordings
- Audio-visual works
- Architectural works

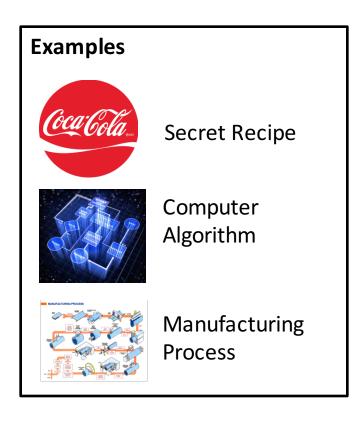
### Use: "[Owner] © 2016"

- © identifies the article as a copyright protected work and indicates its [owner]. However, its use is not mandatory.
- The year indicates the year of publication

## Unregistered rights Trade secrets

Trade Secrets

- Any confidential business information which provides an enterprise a competitive edge
- Encompass manufacturing, industrial and commercial secrets
- May cover sales methods, distribution methods, consumer profiles, advertising strategies, lists of suppliers and clients, and manufacturing processes



## Introduction to Intellectual Property

- Overview
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## Protection strategies Decision Tree



Do you intend to cooperate with others (e.g. industry partners, colleagues)?

#### If yes, prioritise:

- 1. working contracts and licenses
- 2. brand, tradenames and domains
- 3. copyrights
- 4. your long-term requirements

#### If you are independent, prioritise:

- 1. brand, tradenames and domains
- 2. how to stay ahead of competition
- 3. Setting up employee agreements
- 4. your long-term requirements

Do you intend to market your product/service yourself or license it to others?

#### If yes, prioritise:

- 1. checking freedom to operate FTO
- 2. how to ensure know-how retention
- 3. brand, tradenames and domains
- 4. long term: speed or protection?

If you are independent, prioritise:

- licensing requires IP: know & protect your freedom to operate (FTO)
- 2. license and cooperation contracts
- 3. employee agreements

Source: developed by Matthias Ehrat, ZHAW School of Management and Law

## Protection strategies Key questions

- Is protection actually necessary?
- What protection is best?
- What exactly needs protection?
- How far should the protection go?
- In which countries do you want to operate (make, sell or market a product)?
- Are you infringing the IP rights of others?



Source: Swiss Federal Institute of Intellectual Property (2010). Envisioned. Created. Protected.

# Protection strategies Patent strategy

### Internal considerations

- Application or Trade Secret
- Product or technology related patent portfolio («patent umbrella»)
- Kind of IP (utility model, topographies, design, granting, registered)
- · Geographic reach: national, regional, international
- Application strategy (national, regional, international (PCT))
- Enforcement of own IP (license or sale offer or lawsuit)

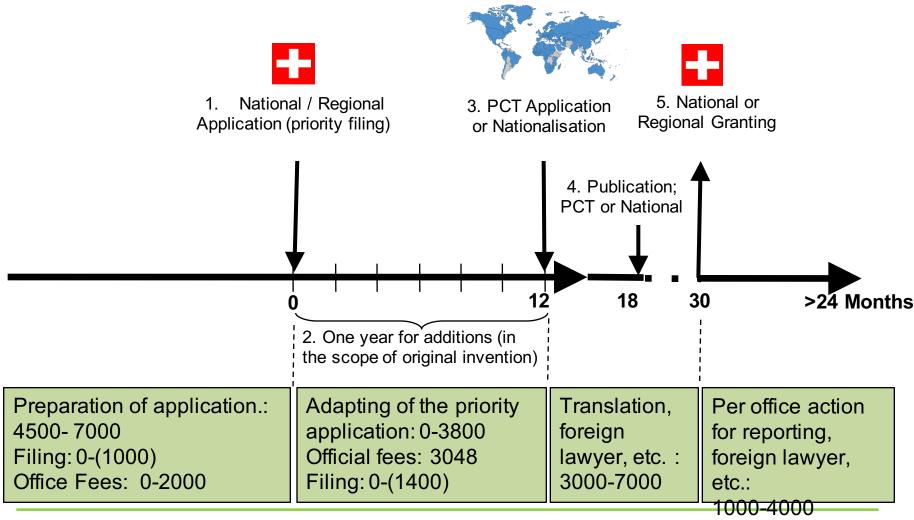
### **External considerations**

- Freedom to operate
- Monitoring
- Trends and developments

### **Key Terms**

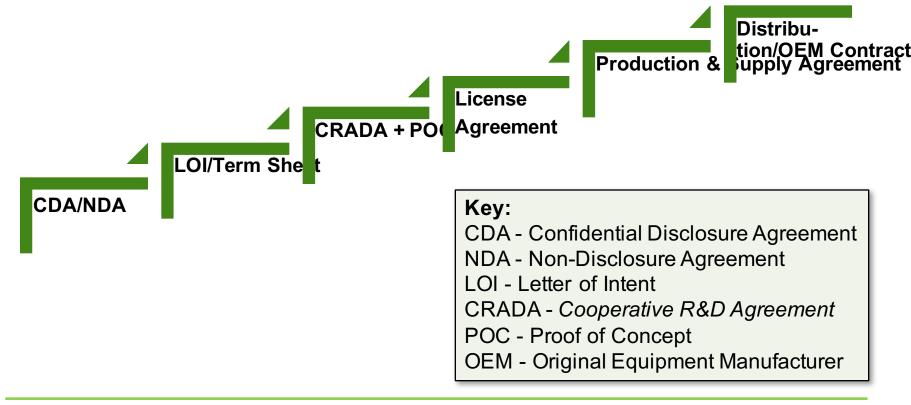
- Priority: "secure the date"
- PCT: Patent Cooperation Treaty
- FTO: Freedom to Operate

## Protection strategies Patent Process and Costs



# Protection strategies Managing contracting issues

Do not start with a full commercial agreement (e.g. license). Do it step by step:



# Introduction to Intellectual Property

- Overview
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# Practical next steps Who to speak to next

	Technology Transfer Office	Swiss IP Office	Advisor/Lawyer
Role	<ul> <li>Manages industry relationships</li> <li>Assists with transfer of technology to industry</li> <li>Advises staff/students on IP and startup related matters</li> </ul>	<ul> <li>Grants intellectual property rights and administers them</li> <li>Examines Swiss national filing applications</li> </ul>	<ul> <li>Help develop your IP Strategy</li> <li>Assist with patent applications</li> <li>Assess 3<sup>rd</sup> party conflicts</li> <li>Represent you to patent offices</li> <li>Advise on licensing/sale of IPR</li> <li>Advise on disputes</li> </ul>
Costs	<ul><li>Equity</li><li>Royalties</li><li>Milestone payments</li></ul>	Filing fees for registered rights	Expect to pay between 200 CHF and 600 CHF an hour
Benefits	<ul> <li>Assessment of your IP</li> <li>Advice on IP Strategy</li> <li>Help you license your IP</li> <li>Will cover costs of initial and PCT patent filing (if TTO sees value in the patent)</li> </ul>	Searches, advice, information, training, Register of Patent Attorneys, links	<ul> <li>Essential expert advice for patenting and designs</li> <li>Highly recommended for other forms of IP (e.g. trademarking)</li> </ul>
Things to look out for	<ul> <li>The TTO works on behalf of the University, not you (they can advise you &amp; may assist with costs, but you must also negotiate with them)</li> </ul>	They cannot advise on freedom to operate, but carry out the related searches	<ul> <li>Experience and hence expertise can vary by sector</li> <li>Consider using a Registered Patent Attorney (see next slide)</li> </ul>

Sources: www.ige.ch

# Practical next steps How to find the right advisor/lawyer

- Where possible get a referral
- Make use of the IP Advisory Network (a free 45 minute consultation by IP Attorneys in Switzerland):
  - https://www.ige.ch/en/service/patentattorneys/ip-advisory-network.html
- The Swiss IP Office maintains registers of Patent Attorneys and Trademark Attorneys:
  - https://www.ige.ch/en/service/patentattorneys/register-of-patentattorneys.html
  - https://www.ige.ch/en/trademarks/prote ction-in-switzerland/trade-markconsultants.html









# Practical next steps Employment issues

- Employee obligations related to IP are enshrined in Swiss law, but related clauses in employees' contracts are recommended, for example in relation to:
  - Who owns IP (for example, in the US inventions are owned by the person and must be formally assigned to the employer)
  - Confidentiality
  - Non-competition laws (to prevent ex-staff competing within a certain period after leaving)
  - Employee incentives that retain people who hold knowledge (e.g. share options that exercise after x years)
- Other HR policies may also cover topics such as:
  - Need to know principle
  - Access restrictions
  - Software installations
  - Data storage
  - Etc

# **Useful links**

Site	Address	Focus
IGE	www.ige.ch	СН
IP Search	www.ip-search.ch	СН
Swissreg	www.swissreg.ch	СН
WIPO Madrid	www.wipo.int/romarin	Global
Google Patents	www.google.com/patents	Global
EP patent search	worldwide.espacenet.com	Global
EP legal state	https://register.epo.org/regviewer	Global
PCT patent search	patentscope.wipo.int	Global
US patent search	www.uspto.gov/patents/process/search	US
US legal state	portal.uspto.gov/pair/PublicPair	US

# Week 8: Protection - Agenda

Part One	Introduction to IP
Part Two	Review of IP Canvasses
BREAK	
Part Three	IP Strategy (Case Studies)
Part Four	Checking operating freedom
Part Five	Update IP Canvases and Wrap-Up

# Review of IP Canvasses (45 mins)

# Objective:

 Present current state of Intellectual Property Canvas for feedback from peers and trainer

## Tasks:

- Each team presents its IP Canvas
- 2. Team should highlight key questions related to IP
- 3. Peers and trainer provide feedback



## Intellectual Property Canvas

Answer as many questions as you can as fully as you can

1

### **Business Value Concept**

#### Source of Value

#### The Problem

What is the problem? What could be done better?

#### The Solution

What is the solution to the problem? What is our idea? What is the value proposition to the customer (why would they want it)?

#### Magic Sauce

What is the "valuable new thing" behind the solution? What is the unique source of value? Eg.: technological invention, design, assets, brand, creativity, etc.

#### Potential of Value

For:

#### The Market

How big is our target market? Who are the key customers? What are the market trend  $\mathcal Q$  is the timing right?

#### Competitive positioning

Who are our main competitors? What is our USP and how does this position us versus competitors? What products and/or services would we displace?

#### **Business model**

What are the key activities we will undertake in the value chain? What won't we do? Who will be our suppliers, customers and partners? How will we make money?

#### Realisation of Value

On:

#### Plan

By:

What is our road map to market/profitability? What are the milestones that will create value? What resources will we need? What are the critical next steps?

Version:

#### Team

Who is in our team and whatare their roles? What are their skills? Where are the gaps? What other resources will we need? How will we develop and utilise our network? Who is responsible for IP currently?

#### Finance and Funding

What are our forecast sales, costs, income and cash flow? When will we break even? How will we finance our business?

## **Intellectual Property**

#### **Our IP Rights**

What special or unique elements, know-how etc. do we have? Eg. Special Brand; Patent; Cutting Edgetechnology, Know-how, etc. Do we already own IP rights? If so, which? Do our competitors protect their IP rights? If so, how? Which IP rights are crucial far us and which are niet-to-haws?

#### Freedom to Operate

Do we depend on know-howor products of third parties (Licenses, contracts, etc, ...)
Which countries do we need our IP rights to be protected in ? Which IP rights do we need in
order to auran the full operability?

#### Strategy (future)

What are the future possible developments in our core market. Eg., related to technology, marketing, competitors, distribution, products. In which a reas should wefocus our attention to in order to remain competitive? Whatare the consequences for IP?

#### Third Party IP Rights

Might weinfringethelP rights ofthirdparties through our activities? (Brands, TMs, Patents, etc). If so, what action could wetake? Might thirdparties infringe our IP rights nowor in future? If so what action could wetake? Do we need a monitoring service? Do we have the resources (time, HR, know-how)?

#### Finance

Revenues: Are our IP rights crucial to securing and growing our revenue streams? If so, how? Could we license our IP rights (patents, designs) to third parties? If so, to wham and is it advisable (given competition)?

Costs: How many trademarks/designs/patents dowe have to file protection for? What are the costs related to filing and keeping upour IP rights? (one-time as well as recurring). What would be our annual IP budget?

#### Next Steps

Which IP Rights should we secure first? How long will it take and what are the crucial dead lins (e.g. patent filling dates)? Do we need to set-up periodic meetings to review our strategy? If so, how frequentity? What are the next steps and who is responsible for each of them?

# Week 8: Protection - Agenda

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	<b>3 7</b>
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# Week 8: Protection - Agenda

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# IP Strategy (Case Studies) (45 mins)

## Objective:

 Understand best practices for developing your IP strategy, by reviewing the detailed IP issues of a specific case related to your own

## Tasks:

Split into two groups to cover two cases (one case per trainer) related to the ideas in the room

- Trainers will choose either:
  - 1. An actual case from the room; or,
  - 2. A generic case prepared by them.
- 2. Review the IP Canvas for the case
- 3. Trainer-led discussion of key topics for the case and related cases, with examples & indication of best practice

# **Activity Guide**

### Generic cases:

- Freitag focus: branding, design and trademarking
- 2. PARK-U focus: software/app protection (trademarking, copyright)
- 3. Nespresso focus: patents, trademarks
- 4. Prionics focus patents

## Tips:

- Take or create a blank copy of the IP Canvas to note down the key insights in each section & the implications for your IP Strategy
- Make use of the IP Decision Tree in the IP Handbook
- If necessary split your team to cover both cases (being presented by the different trainers)

# IP Strategy (Case Studies)

## 1. Freitag

- 2. PARK-U
- 3. Nespresso
- 4. Prionics

Answer as many questions as you can as fully as you can



### **Business Value Concept**

#### Source of Value

#### The Problem

- there is no sturdy truly swissbike messenger bag.
- most messenger bags are not sturdy enough for the daily abuse of the business,
- everybody wants to be individual, special, has special preferences in clothing & accessories. As of now, there is, no possibility to have individual, hip & cool bags.

- FREITAG will produce special bags and access ories out of old truck tarps.
- The customers thus get a truly individual product since every bag is unique. The resulting product is sturdy, versatile, waterproof and stylish.

#### Magic Sauce

The recycling thought is coming to the mind-set of customers. We get 2 by 1: doing something good (save the planet, recycling) and being unique and crazy (to each his own). The unique source of valuelies in the design of the bags, its versatility and most of all, its uniqueness.

#### Potential of Value

#### The Market

In an initial phase, we address Zurich and Switzerland. Ultimately, target market is worldwide. The key customers are bike messengers and students, usually between 15-30 years, hip, urban, with high affinity for events and design. Thereis no real market trend as of now, the timing can be possibly right.

#### Competitive Positioning

Main competitors are all manufacturers of hip rucksacks, like Eastpack, Invicta, as well as Messenger Bag manufacturerslike JOBLESS and such. Our USP is the uniqueness of each bagre: designof the canvas. And SWISS MADE.

#### We would not displace other products, but other branded products Business model

For: Freitag

key activities are manufacturing solid, uniquely designed bags. We will stick to the recycling theme. We will not produce goods that we personally would not wear or keep. Our suppliers are truckcompanies. Our customers and partners are shops in the bigger Swiss cities & the mountains. We make money from small infrastructure (garage-like).

#### Realization of Value

By: Freitag Brothers (RC)

In the Y1, we work from home, customizing bagsfor friends individually, IN Y2/3, we will renta production facility and work with institutions for the handicapped. This will broaden in Y4. A milestonesthat will create value is the «wanna-have» reflexHR - bootstrap (friends, family) in Y1. Critical next steps are discussions with truck companies.

Version: 01

On: March 1993

Daniel and Markus Freitag. Designers, Bag Manufacturers, Bike Messengers. Gaps: we have no clue of economy. But by starting small, we do not need any other resources. We rely on our strong network in bikemessengeroutdoorand snowboard circles, advertising agenciesetc. Nobody is responsible for IP currently.

#### Finance and Funding

Since working from home, costs are low, income depends on sales. Bags are high quality individual goods. No one is the same as the other, thus economy of sale is not really applicable as long as wekeep ressources low. Price is high for a bag. Literally no real finance investments are needed, currently, we have no budget for IP protection.

## **Intellectual Property**

#### Our IP Rights

Our special or unique elements, know-how etc.

- Name = Brand
- We know needs of our customers (messengers, commuters), because we ourselves are bike messengers
- Low costs for ressources

We do not already own IP rights

There are literally no IP rights that are crucial for us. Since FREITAG is our last name, no one can forbid us to market our products under this brand / trademark

#### Freedom to Operate

We depend on truck tarps of third parties, but no IP rights (no Licenses, contracts, etc, ...)

There are no countries we would need our IP rights to be protected in, in order to gain access to the market.

We do not need any IP rights in order to guarantee full operability.

#### Strategy (future)

What are the future possible developments in our core market?

- Technology: new materials / fabrics
- Marketing: new means of spreading news (Internet, e-Shop) +
- Competitors: new competitors with new ideas being better / hipper
- Distribution: new channels of distribution (B2C channels etc.)
- Products: change in customers needs: enhancing product line

We should focus on Uniqueness and being true to ourselves in order that customers like our products on the long run and thus to remain competitive.

There are no direct consequences for IP matters for the time being (could depend on fabrics etc.)

## Third Party IP Rights

#### Infringements / Third Party Rights

- To our knowledge, we are not infringing third party rights such as Brands, TMs, Patents, etc, through our activities.
- We must not take action to prevent infringement of third party rights.
- (we do not need licenses, new brandsetc.)
- Today, there are no third parties infringing ourrights.

#### Future Infringements

- In the future, if third parties infringe our IP rights (violation of design, exact copies), we should defend our IP rights by lawyers.
- we do not need a monitoring service, since market is open to all and newsof competitors designs will spread.
- If our IP rights are infringed, we will engage a specialised IP lawyer to defend our rights. No inhouse ressources available andreasonable

#### Finance

#### Revenues / Income

- Since we do not have any IPRights as oftoday, we therefore cannot license such IP rights (patents, designs) to third parties.
- In a later period given successofour company and products, we will apply for trademarks and possibly designs of our products. We will make sure that our prices account for the costs of our IP.

#### Costs

Number of trademarks/designs/patents we do have to file protection for:

- Trademarks: 1 Swiss, 1 EU Tm
- Designs: Key productline (cash cows), possibly 5
- Costs related to filing and keeping up our IP rights?
- one-time: TM: 10'000 CHF // Design: None (registered letter)
- Recurring: depending on infringements
- Whatis our IP budget Yearly: 3'000.-
- 5-vear: 15'000.-
- 20 vear-term: 60'000,-

#### **Next Steps**

Which IP Rights should we secure first? Swiss Trademark FREITAG Designs by means of registered letter.

How long will it take to install their protection? Ca. 1/2 vear.

Crucial deadlines (e.g. patent filing dates)?

Do we need to set-up periodic meetings to review our strategy? YES YEAR! Y BASIS

What are the next steps and who is responsible for each of them? Markus will contact

Thomas Muster of Muster IP Lawyers to discuss next steps until April 30, 1993.

# IP Strategy (Case Studies)

1. Freitag

## 2. PARK-U

- 3. Nespresso
- 4. Prionics

Answer as many questions as you can as fully as you can



### **Business Value Concept**

#### Source of Value

#### The Problem

More and more cars seeklessor equal numbers of parking spaces. Polution, frustration and parking lot seeking is common Most of the time, going with public transportation is no real alternative

#### The Solution

PARK-Uwill provide smartphone users with an app, merging the providers of unused parking spaces with the car drivers actual needs. With Park U users can find and book nearby parking spaces in inner cities, at event locations or even near airports,.

#### Magic Sauce

Usability is a treat: the app will be easy to handle and very effective.

Furthermore, one can pay cashless - onlineor with the Park U app. No need for coins.

#### Potential of Value

For: PARK-U

#### The Market

Starting with Switzerland, we first address the bigger Swiss cities. Ultimately, target market could be worldwide, although there are similar services being established in the UKand in USA already. The key customers are car drivers in possession of a smartphone, who are fed up looking for a parking space, between 20-55, in big cities.

#### Competitive Positioning

Main competitors are park-it and possibly nokia. Our USP is the ease of use of the UI. We could displace public parking in the future. In order to act as main supplier of private parking spaces, we focus on availability, spread, UI, marketing & branding.

#### Business model

Our suppliers are people who owndriveways. We give them the opportunity to rent them out. Our customers are car drivers in the bigger Swisscities, whereparking space is rare. We make money by acting as intermediary and retaining a share of the parking fee; we get a third of the turnover our suppliers make estimated parking hourfee is CHF 3.-In, thus being competitive with normal parking lotfees.

#### Realization of Value

On: July 2011

By: Chr. Oldendorff (RC)

Crucial for successis demand/supply balance. So we aim to act as first movers, with a great UI, gaining a lot of driveway owners (suppliers), and car drivers (customers) early and reacting to criticism proactively. For profitability, we need a total of 1.5 M CHF in turnover, equating to around 1'700 parking hoursarranged through park-U each day. Milestones that will create value result from awareness, success, and word of mouth. Investment time horizon is around 5 years. Low costs means (friends, family) are all it takes initially, (Y1), Critical next steps are app development go live, growing awareness.

Version: 01

Christian Oldendorff, CEO. MA Econ, USG. | Thomas Mustermann, Software Engineer | Adriana Bachblüte, Backoffice. | Christian is responsible for IP.

#### Finance and Funding

Operational costs are 0.5 M CHF/year. We will start funding by investors as of July 2011. Budget for IP protection is 10'000 CHF per year.

### **Intellectual Property**

#### Our IP Rights

Our special or unique elements, know-how etc.

- Best UI, Ease of Use
- First mover
- Brand
- Software (code)

We do not already own any IP rights

We rely on the Ease of Use for customers and suppliers. Thus, we need a well thought UI and the code behind it is crucial to us. Furthermore, the name PARK-II is to be secured

#### Freedom to Operate

We do not depend on third parties IP rights (Licenses, contracts, etc, ...)

The countries of main activity need to be secured in terms of TM (Brand). We have to make sure the software code and all rights concerning the apps are in our hands (copyrights, employee contracts, ...)

Which IP rights do we further need in order to guarantee full operability? - TMs in various countries.

Which already owned IP rights do we unarguably need? (Planning costs, monitoring, expiry dates...) copyrights

#### Strategy (future)

What are the future possible developments in our core market?

- Technology: new OSs, new devices,
- Substitution: new car technology with implemented parking search systems
- Supply: more public space being made available, no further demand
- Competitors: new competitors with better UI ideas/designs
- Products: change in customers needs: substitution of cars etc.

We should focus on the advantage of the first mover, a great UI for our customers and gaining as many customers and suppliers as possible in short time.

No direct consequences for IP matters for the time being.

Future possible developments in our core market could be a liberalisation to parking spaces, whereas you can park anywhere; or restrictions with respect to possibillities of driving in cities. Competitors can imitate without too much problems.

### Third Party IP Rights

Are we infringing third party rights through our activities? We have not yet conducted TM or other IP searches.

Must we take action to prevent us from infringing third party rights? (e.g. licenses, abandonment, new brands....)

Are third parties infringing our rights? How? How should we proceed? Not yet. Code is not available, TM not applied.

As of today, our close competitors do not protect their IP rights. (park it, Parking Panda) by trademarks. Probability is high, that they will apply for TMs.

#### Finance

#### Revenues / Income

We could license our own IP rights (code, TMs, designs) to third parties, but it would result in a strong competitor. In countries we do not intend to getactive, we could, however, form a license package for third parties.

Do our prices account for the costs of our IP? Depends on demand/supply balanceand users/sold parkingspaces.

#### Costs

Number of trademarks/designs/patents we do have to file protection for:

- Trademarks: 1 Swiss, 1 EU Tm or IR with several countries DACH
- Code / Software: Copyrights secured by employee contracts and confidentiality. one-time: TM: 10'000 CHF // Copyright: None
- Recurring: depending on infringements and possible expansion of our market. Whatis our IP budget
- Yearly: 3'000.-
- 5-year: 15'000 .-
- 20 year-term: 60'000.-

#### **Next Steps**

Which IP Rights should we secure first? Swiss Trademark PARK-U.EU TM or IR.

How long will it take to install their protection? Ca. 1 year until registration.

Crucial deadlines for Freedom to Act?

Do we need to set-up periodic meetings to review our strategy? YES. YEARLY BASIS.

What are the next steps and who is responsible for each of them? Christian will contact Thomas Muster of Muster IP Lawvers to discuss next steps until August 30, 2011.

# IP Strategy (Case Studies)

- 1. Freitag
- 2. PARK-U

## 3. Nespresso

4. Prionics

Answer as many questions as you can as fully as you can

intellectual Property Canvas	For: Nespresso	By: Trainer	On: xx	Version: 01
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Business Value Concept		
Source of Value The Problem	Potential of Value The Market	Realization of Value Plan
The Solution	Competitive positioning	Team
Magic Sauce	Business model	Finance and Funding

Intellectual Property		
Our IP Rights	Freedom to Operate	Strategy (future)
Third Party IP Rights	Finance	Next Steps

# IP Strategy (Case Studies)

- 1. Freitag
- 2. PARK-U
- 3. Nespresso
- 4. Prionics

Answer as many questions as you can as fully as you can

For: Prionics, a spin-off from University of Zurich

By: Trainer

On: early 2002 Version: 01



## **Business Value Concept**

#### Source of Value

#### The Problem

Prionics is developing a diagnostic lest for detection of BSE\* and other TSEs\*\*
All their tests on 3 different platforms (ELISA, Western blot Strip) are based on
antibodies produced by Prp\*\*\* knockoumice that are patented by Uni Zürich
(WO9310227 Al), After more than 10 years the patent is announced getting granted in
Europe which by far is the biggest market for the Company (multi million tests per year).
If patentfalls in wrong hands (competitors) Prionics would be blocked completely.

\*\*85E Bowine Son on if orm Encepholopathy\*\*\* TES Transmissible \$5 \*\*\*\* Prion Protein

#### The Solution

Time is too short to develop a new product which may circumvent the patented mice. Therefore, getting a license or buy the patent is the only solution.

#### Magic Sauce

Having an exclusivelicense or beingthe patentowner will save the company and give a big advantage against the competitors. They would become potential infringers.

#### Potential of Value

#### The Market

The target market is huge (more than 100 million tests sold in three years). Key customers are a few governmental labs worldwide. This keeps the marketing division small and lean. However, the market trends are decreasing test numbers.

#### Competitive positioning

Main competitors are Bio-Rad & klexx both big US companies. Our USP is that we wee the first on the market Competitors may only compete by lowerprice Prionics only produces the antibodies (the jewel of the diagnostic kit). No big production facilities are needed. All other components are produced by 3rd parties

#### **Business model**

By doing the QC for all final products we keep the complete control in the value chain. We work with suppliers in all countriesoutside of CH. We make money by winning tenders and offering own lab workin CH. Having more than 60% of world market we have high margins (atleast for the first 3 years)

#### Realization of Value

#### Plan

Prionics at the beginning had more or less a monopoly. To keepprofilability we have to decrease the production costs substantially. Everywinning of a lender business is sort of milestone that creates value? Due to the exploding market we will need morepersonnel in each division? The critical next stepsare the finding of the right people in a short time period and to successfully managethe rapid transfer from a local start-upto a globally active SMFI.

#### Team

The founders are the core people in R&D. Therebre, we need to hire peoplethat are specialists in M&S as well as in F&A. We will also need a diagnostic team as well as a production team. Responsible for IP currently is the CEO. This needs to be charged.

#### Finance and Funding

Prionics is in the lucky position of making big earnings very rapidly and has noneed for external financing.

## 2

## **Intellectual Property**

#### **Our IP Rights**

Prionics has own patents that protect their antibodies and a special technique for applying high throughput screening (also patented). Prionics is an expert in TSEs and has a high reputation. Prionics is a full solution provider in being able to equip TSE labs with everything needed to perform the diagnostic tests: Test kits, homogenization devices, patented consumables (mini mixers for probe homogenization) and a big knowhow on practicing P3 labs (second highest security level). It has facilities that enable the company to perform the tests on their own (direct income, and best practice in daily use)

#### Freedom to Operate

Prionics depends on licenses from Unitectra. This is solved by a valid worldwide exclusive license with royalty payments. Newer patents belong to Prionics alone. In buying the "mouse patent Prionics will keep FTO.

Prionics has valid patents in all countries where cattle and sheep industry is important.

#### Strategy (future)

It is clear that the need for such large amounts of tests will not keep for ever. Therefore, Prionics urgently needs to get away from being a "single product provider".

Future possible developments in our core market are going from full screening to only surveillance programs. In order to remain competitive we need to develop new tests. A market analysis revealed that there is a gap on the market for new veterinary tests for zoonotic diseases. So we will focus on new developments in this field. To be protected we will need new patents for each of such new diagnostic tests. This will substantially grow our patent portfolio and also the related costs. Entering into the private market will also mean to put more efforts into marketing and therefore into trademark registrations.

#### Third Party IP Rights

Being active in a strongly competitive market we will need to monitor our competitors in order to not infringe the IP rights. It will also request to regotiate for licenses of third party IP. Brands are not playing a large role. However, with the registration of our umbrella trademark "Priocheck®" in more than 30 countries we are well positioned. Third parties may infringe our IP rights, because nearly all antibodies used for TSE tests are based on the mouse patent. However, to fight against big shots like Idexx and Bio-Rad sholud be well reconsidered. Of course we need a monitoring service. To do so we will need new ressources and probaly an IP specialist.

#### Finance

Revenues: Our IP rights are crucial to securing and growing our revenue streams. Therefore, fighting for granted patents is a must. However, a strong patent portfolio management is key to control the costs. Currently the budget for IP is continuously increasing. We will have to challenge the IP portfolio at least twice a year. IP that is no longer used has three options: We can license it to a 3rd party or sell it. If no buyer or licensee is found the third option is to drop it.

#### Next Steps

It is clear that we need to buy the mouse patent or get an exclusive license to it as fast as possible. The crucial deadline for that is the day where it is definitely granted in Europe. As said already we need a strong IP management that holds periodic meetings to review our strategy at least every half a year.

# Week 8: Protection - Agenda

Part One	Introduction to IP
Part Two	Review of IP Canvasses
BREAK	
Part Three	IP Strategy (Case Studies)
Part Four	Checking operating freedom
Part Five	Update IP Canvases and Wrap-Up

# Checking operating freedom Patents (45 mins)

# Objective:

•Exemplary search for state of the art patent applications and granted patents

## Tasks:

- 1.Define the technological field
- 2.Define known companies active in that field
- 3.Define search terms

(Trainer will advise on a case to use if the team's case is not appropriate)

# **Activity Guide**

To define the technological field you may want to consider:

- The patent classification
- · A relevant patent you know
- Search terms that you expect in the abstract

Try a simple search on a free database such as Swissreg, Patstat or

Espacenet

**Tip:** use the links in the IP Handbook

# Checking operating freedom Trademarks (45 mins)

# Objective:

•Exemplary search for similar trademarks

## Tasks:

- 1.Define the field of activity
- 2.Identify companies active in that field
- 3. Define search terms
- 4.Search TM Databases Swissreg, Romarin
- 5. Conclusion? Next Steps?

(Trainer will advise on a case to use if

# **Activity Guide**

To define the TM application you may want to consider:

- The trademark classification
- A relevant trademark you know / potential opposer / competitors
- Search terms that you expect in the abstract

Try a simple search on a free database such as Swissreg, Romarin

**Tip:** use the links in the IP Handbook

# Week 8: Protection - Agenda

Part One	Introduction to IP
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BREAK	
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Part Four	Checking operating freedom
Part Five	Update IP Canvases and Wrap-Up

# Update IP Canvases (25 mins)

# Objective:

•Teams update IP Canvasses to incorporate learning from the evening

## Tasks:

1.Update IP Canvasses with main learnings from the evening2.Discuss your Strategy and NextSteps with the coach

## **Activity Guide**

## Tips:

- In the relevant sections of your IP Canvas note:
  - Key insights about the IP Strategy you should pursue (Part Three)
  - Findings from your initial operating freedom searches (Part Four)
  - 3. Open questions
  - 4. Next steps

# Wrap-Up (5 mins)

# Objective:

•Summarize key outcomes from this week and look ahead to the next week

## Tasks:

1.Group discussion of the keyoutcomes and deliverables of the week2.Group discussion of any keyconsiderations for next week

# **Activity Guide**

## Tips:

 Share your main insight/learning from the evening with the plenum

# Week 8: Protection Summary

## **Learning Goals**

The participants are able to:

- 1. Understand different IP rights
- 2. Identify the IP in their business
- 3. Understand how to check that they are free to operate
- 4. Understand how to protect and exploit their IP

## Deliverables:

- Development of an initial IP strategy
- Initial searches to determine freedom to operate



**Key Take Aways** 

# Week 9: Presentation Outlook

## **Homework/Preparation**

Review and update Business
 Value Concept

(Use Version 3.0 on next slide)



## **Learning Goals**

The participants are able to:

- Understand the basics of creating and delivering successful presentations
- 2. Convert their business concept into a convincing startup story
- 3. Persuasively present their startup story

## **Deliverables**

An investor pitch (presentation pack)

# **Business Value Concept Version 3.0**

## 1- Source of Value

(Is it needed, unique and defensible?)

## The Problem

What is the problem that your team has identified? What could be done better?

## The Solution

What is your solution to the problem? What is your idea? What is the value proposition to the customer (why would they want it)?

## **Magic Sauce**

What is the "valuable new thing" behind the solution? What is the unique source of value? E.g.: technological invention, design, assets, brand, creativity, etc. How can you protect/maintain/develop it?

## 2 – Potential of Value

(How big and secure is the prize?)

## The Market

How big is your target market? Who are the key customers? What are the market trends? Is the timing right?

## Competitive positioning

Who are your main competitors?
What is your USP and how does
this position you versus
competitors? What products
and/or services would you
displace?

## **Business model**

What are the key activities you will undertake in the value chain? What won't you do? Who will be your suppliers, customers and partners? How will you make money?

## 3 - Realisation of Value

(Is it doable and how would we do it?)

### Plan

What steps must you take to establish your business as a profitable venture? What are the milestones that will create value? What resources will you need? What are the critical next steps?

## **Team**

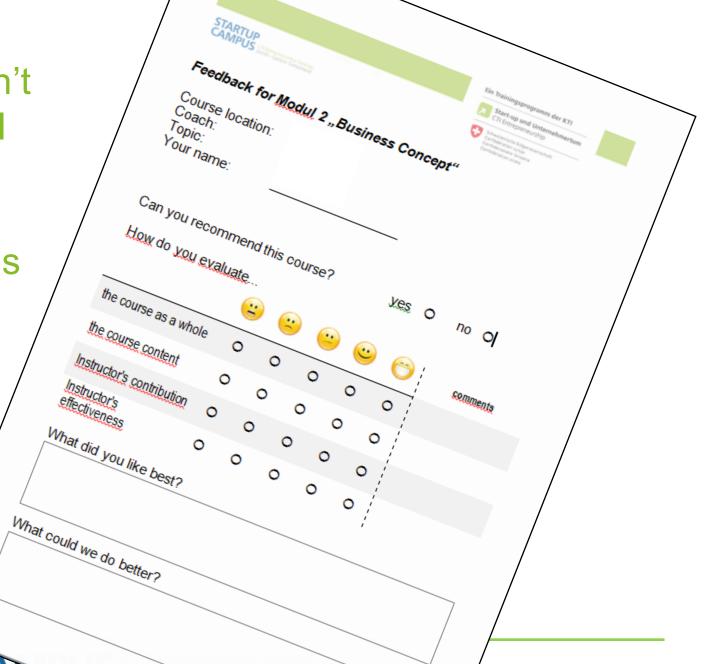
Who is in your team and what are their roles? What are their skills? Where are the gaps? What other resources will you need? How will you develop and utilise your network?

## **Finance and Funding**

What are your forecast sales and costs? How do these translate into income and cash flow statements? When will you breakeven? How will you finance your business? What do you need now?

Focus on the questions in black

Please don't forget to fill in your feedback form for this week



# **CTI Entrepreneurship**

Business Conception Week 8: Protection

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