HOW TO VALORISE YOUR RESEARCH

For ICT researchers and academic entrepreneurs of high-tech startups

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Rogier de Haan

Commissioned by
COMMIT/
With valorisation science becomes much more fun. And exploitation is so much better when it is based on research, because the chance it is unique is much more greater. At the same time valorisation contradicts with research.

It takes concentration and dedication to excel in science. Focus and isolation will be necessary to achieve goals.

Valorisation requires sometimes closed eyes and a go-for-it mentality, but at the same time you have to scan continuously the environment for opportunities and acting adjust your chances. There are not many researchers who have all skills on their own, so teamwork is ingrained in valorisation.

COMMIT/ has excellent valorisation ambassadors. In the second half of COMMIT/ they achieved a lot. Therefore, they tell their best practices and story here once again: what are the do’s and don’ts during the valorisation process. Put it to your advantage, because it really works!

Commit and go for it!

On behalf of the COMMIT/ Board of Directors,

Prof. Dr. Ir. Arnold Smeulders
Chairman of COMMIT/
Public-private research community for ICT research
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Identification of valorisation opportunities</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>1.1 Identify hidden value of your research &amp; competition</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>1.2 Your personal passion</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>1.3 Transfer awareness</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>1.4 Identify valorisation opportunities</td>
<td>17</td>
</tr>
<tr>
<td>2.</td>
<td>IP management</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>2.1 Ownership &amp; Technology Readiness Level</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>2.2 IP protection</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>2.3 IP valuation</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>2.4 Exploitation strategy</td>
<td>30</td>
</tr>
<tr>
<td>3.</td>
<td>Team creation</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>3.1 Entrepreneur &amp; team skills</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>3.2 Motivation &amp; incentives</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>3.3. Team construction</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>3.4 Evolving team, communication and collaboration</td>
<td>42</td>
</tr>
<tr>
<td>4.</td>
<td>Value creation</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>4.1 Business Model Canvas</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>4.2 Value proposition &amp; Unique Selling Propositions</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>4.3 Define your market</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>4.4 Marketing preparation</td>
<td>58</td>
</tr>
<tr>
<td>5.</td>
<td>Funding the dream</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>5.1 Budget &amp; cashflow forecast</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>5.2. Subsidies &amp; grants</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>5.3 Investors: angels, VC's and PE's</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>5.4 Pitching for investors: tips</td>
<td>66</td>
</tr>
<tr>
<td>6.</td>
<td>Starting the business</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>6.1 Business plan</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td>6.2 Start the company</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>6.3 Product launch</td>
<td>72</td>
</tr>
<tr>
<td></td>
<td>6.4 Launching customers &amp; pricing</td>
<td>76</td>
</tr>
<tr>
<td>7.</td>
<td>Networking, sales &amp; traction</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>7.1 Finding your first customers</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>7.2 Networking</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>7.3 Pitching &amp; sales</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>7.4 Traction and the power of social media</td>
<td>85</td>
</tr>
<tr>
<td>A.</td>
<td>Appendix</td>
<td>88</td>
</tr>
<tr>
<td></td>
<td>A-1 Interesting links &amp; contact information</td>
<td>88</td>
</tr>
<tr>
<td></td>
<td>A-2 Do's and don'ts for high-tech startups</td>
<td>91</td>
</tr>
<tr>
<td></td>
<td>A-3 10 Recommendations for entrepreneurs</td>
<td>94</td>
</tr>
<tr>
<td></td>
<td>A-4 Top 10 books for tech startups</td>
<td>94</td>
</tr>
<tr>
<td></td>
<td>A-5 Business plan format</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td>A-6 Invention Disclosure Form</td>
<td>97</td>
</tr>
<tr>
<td></td>
<td>A-7 About Valorisation.com</td>
<td>104</td>
</tr>
</tbody>
</table>
Introduction

‘Valorisation is the process of creating value from knowledge, by making knowledge suitable and available for societal and/or economic application and by transforming it into products, services, processes and new business.’

Source: NWO, 2015

Valorisation is a core task

It is very important for researchers, institutes and universities to create as much impact as possible from the knowledge they have developed. Together with education and research, valorisation is a core task that has been embedded in the Higher Education and Research Act since 2005. Universities believe it is important to create social and economic added value. They stimulate entrepreneurship among students and researchers and work towards strengthening the knowledge and innovation agenda of cities, areas and ecosystems. This is done in collaboration with the business community, social organizations (including cultural institutions), and the government.

Why is valorisation important?

Valorisation also benefits you as a researcher because:

• the collaboration lets you develop new knowledge and insights
• you receive access to empirical data
• you increase your chances of receiving external funding

Public funding

There is another very valid reason to valorise. Your research is financed with public funding. It is therefore logical that you share your research results with your financers, i.e. taxpayers, because there is a demand for accountability from society. This also applies, incidentally, to all research institutes and departments of universities which are financed by public funding.
Introduction

Valorisation is a process
The definition of valorisation starts with the concept of a process. Researchers should interact with other parties to carry out activities with a clear outcome: the knowledge will be utilized and value is added to the 'pure' research results. Scientific knowledge is sometimes already in a form that can be valorised, but it often requires several modifications in terms of both content and form.

To put it simply, valorisation is a process in which interaction between theory and practice plays an important role. Valorisation is tailor-made and, above all, it is 'people work', i.e. its success depends on the interaction between people.

How to use this book?
Successful valorisation initiatives originate from the creativity, curiosity, and motivation of individual researchers, which will lead to interesting research results. But what will be the next step towards gaining impact with these results in society? This book is not meant to be an integral academic report, but written as a practical guide with background information, tips and checklists. Seven chronical steps will lead you towards the final goal. Every step is described in four paragraphs, to support you in taking the actions necessary. The book will end with some practical links, formats and contact details to save time searching on the internet.

The seven valorisation steps

1. **Identification of valorisation opportunities**
   - Identify hidden value of your research & competition
   - Your personal passion
   - Transfer awareness
   - Identify valorisation opportunities

2. **IP management**
   - Ownership & Technology Readiness Level
   - IP protection
   - IP valuation
   - Exploitation strategy

3. **Team creation**
   - Entrepreneur & team skills
   - Motivation & incentives
   - Team construction
   - Evolving team, communication and collaboration

4. **Value creation**
   - Business Model Canvas
   - Value proposition & Unique Selling Propositions
   - Define your market
   - Marketing preparation

5. **Funding the dream**
   - Budget & cashflow forecast
   - Subsidies & grants
   - Investors: angels, VC's and PE's
   - Pitching for investors: tips

6. **Starting the business**
   - Business plan
   - Start the company
   - Product launch
   - Launching customers & pricing

7. **Networking, sales & traction**
   - Finding your first customers
   - Networking
   - Pitching & sales
   - Traction and the power of social media
1. Identification of valorisation opportunities

In this first step of the valorisation process, we want to identify the most promising valorisation opportunities based on your research.

There are two types of opportunities:
1. The first are opportunities arising because of developments or changes in society, which we will call market pull. An example of this could be the ageing society in Europe that calls for new (digital) health-related solutions.
2. The second type is based on the development of new technologies or insights that enable new opportunities such as big data or quantum computing. We will refer to this second type as ‘knowledge push’, and this is the situation that most researchers are in: academic work often leads to the newest developments on the technological frontier for which a demand has yet to be created.

Market-pull opportunities have little commercial risk: there is a clear demand from a market in society, the only thing you have to worry about is whether you will be able to meet their expectations, there is technological risk. Knowledge push opportunities are more difficult because there is a sense that the newly developed is valuable, but we are still unsure where to realize that value. Already your research is valuable through its contribution to the body of scientific knowledge. But can we also identify direct value addition to society? Which opportunities could that be?
1. Identification of valorisation opportunities

1.1 Identify hidden value of your research & competition

Often, researchers tend to think in terms of their results when thinking about the impact of their work. You’ve answered a research question (hopefully) and therein lies the novelty. However, there are more sources of value to be found in any type of research. The following five sources of value could be hidden in your research:

- **Results**: The most intuitive one of all the sources. In your research, you hope to answer the research question and contribute to a knowledge gap in academia and hopefully also in society. In some cases, results can even be directly applicable to solve issues for companies, governments or other societal stakeholders.

- **Data**: Most types of research collect data. This data is analyzed, interpreted and can then yield results. However, in many cases, the data in itself can be useful for societal stakeholders. This can be the raw data, or some combination with other sources. The main question is what potential uses the data could serve, and which organizations are looking for that service.

- **Network**: A potential opportunity also lies in the network that you are building in order to conduct the research. The group of people you work with can be valuable in itself. This can be an extra asset but also a core value when the group of people is hard to access otherwise.

- **Methods**: This source of value is not always applicable because methodological developments are shared often in research. However, if your methods are relatively new, they could contain value for other scientific disciplines, other geographic areas or non-academic researchers. Sometimes, software developed for research purposes can be extremely valuable for consultancy companies, for example.

- **Skills**: As a fifth source of value, you also possess specific skills both as a researcher as well as a person. Which skills and knowledge combined with your research can be of value for societal parties? You might be equipped with specific programming skills, or able to interview particular audiences. The differences between skill and methods are somewhat ambiguous. Generally, methods can be codified in protocols or procedures, whereas skills rely on ‘tacit’ knowledge that you as a person have, and they are less transferable to others.

The above mentioned list of value sources is not completely exhaustive, nor mutually exclusive. These sources of value hopefully inspire you to think differently about your work and identify additional opportunities. Of course, combinations are also possible.

For your own research, also attempt to identify the different ‘content’ that is present in your proposal. What kind of data are you gathering, what kind of methodology is being developed. What are the skills you as an individual are developing?

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“However, there are many opportunities for exploitation, it takes a lot of time, money, and effort to realize them all. Selecting options that have the greatest potential is very difficult.” - Paul Havinga
1. Identification of valorisation opportunities

1.2 Your personal passion

Another way to look at this same process is to look at your personal passion or preference. Ask yourself the following question: “what do you like to do aside from research?”: Do you have a passion for teaching, do you have a lingering entrepreneurial spirit or do you enjoy helping policymakers tackle tough dilemma’s?

Taking this personal angle as a starting point (or using it as a filter on the opportunities identified above) is helpful because the personal drive will help you through the rest of the process.

Please find below a list of ‘roles’ that we’ve gathered for your inspiration. They’re grouped in three categories: commercial because they create primarily economic value, interest where you need to manage the interests of multiple stakeholders and two roles that are related more closely to research. The list is not exhaustive but intended as inspiration.

“Valorisation is an important aspect of research and makes occasionally a refreshing perspective because it makes sure the researcher also takes a step back from his detailed challenges, at a meta-level look at the impact on society.” – Robby van Velden

<table>
<thead>
<tr>
<th>Type</th>
<th>Role</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Commercial</td>
<td>Entrepreneur</td>
<td>As a co-founder of a spin-out or startup, you can realize your entrepreneurial ambitions. This can be a small consultancy company based on research, or a high-tech startup with growth ambition</td>
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<tr>
<td></td>
<td>Chief Scientific Officer</td>
<td>You are the scientific conscience of a company (could be a position on an advisory board) – safeguarding the correct use of scientific insights.</td>
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<tr>
<td></td>
<td>Licensor</td>
<td>A more at-arms-length collaboration with a company where your knowledge is formalized as intellectual property (for example a patent) and licensed out to a company.</td>
</tr>
<tr>
<td>Interest</td>
<td>Consortium researcher</td>
<td>You are balancing the interests of public and private parties in a consortium or PPP (Public-Private Partnership).</td>
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<tr>
<td></td>
<td>Policy Advisor</td>
<td>Providing policymakers with advice based on the latest scientific insights. This is very much an ‘interest’ role because the policymakers regularly have an interest in a certain outcome.</td>
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<tr>
<td></td>
<td>Practitioner</td>
<td>As a part-time practitioner (common in the clinical domain and law practice) you combine a part-time role as a practitioner with research, able to combine the latest insights from both practices.</td>
</tr>
<tr>
<td>Research related</td>
<td>Public authority</td>
<td>Becoming the public authority or key expert on an issue helps to stay close to the academic work. It helps if the topic is trending in the media, but it also helps to specialize and be visible on that specific topic.</td>
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<td></td>
<td>Tech User</td>
<td>Instead of being a ‘provider’ of knowledge or technology, you could also aim to be the user of new equipment, and thereby provide new companies with a first use-case.</td>
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</tbody>
</table>
1. Identification of valorisation opportunities

1.3 Transfer awareness
Experience shows that successful valorisation initiatives originate from the creativity, curiosity, and motivation of individual researchers. Intrinsic motivation and curiosity - ‘the desire to solve the puzzle’ - is often what sparks and maintains an interest in valorisation activities, followed by one’s own reputation and, finally, the profitability aspect (Lam, 2011). It is a matter of ‘just get started’ and ‘just do it’.

Step 1: Ask yourself who will benefit from your research
Step 2: Make the idea concrete
Step 3: Arrange time and resources
  • Planning & Control
  • Legal aspects
Step 4: Find an experienced coach
Step 5: Define your network
Step 6: Look for connections to existing themes
Step 7: Talk to partners
Step 8: Make the necessary adjustments (again and again and again)
Step 9: Present the results

Try to think in terms of problems
Whichever value or personal role you prefer, we believe that opportunities need to contribute to the solution of a problem or fulfill a need. Someone in society is experiencing a headache and you are developing the painkiller. All too often, valorisation opportunities become ‘nice-to-have’ products that are okay but don’t address an urgent need. They are the vitamins while we are looking for painkillers: on which would you spend your last euro?

This approach to value creation is elaborated further in chapter 4.

Stakeholders
After you have identified the sources of value within your research it is time to think about the parties in society that could benefit from your research. They are the problem owners of the problem you have identified. This could be the curator of museum X, the data analyst in company Y or the policymaker in department Z of the ministry of Economic Affairs. Target groups like: ‘the general audience’ or ‘everyone who eats’ are too broad: it is impossible to get in touch with such a group and get their feedback. We should narrow this group down and think about which person to contact.

1.4 Identify valorisation opportunities
If the target group is actually a larger group in society, they might be organized again in labor unions, interest or lobby groups. Within those organized elements, there will be individuals that are aware of the issues you want to address.

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<tr>
<th>Value</th>
<th>Problem</th>
<th>Problem-owner</th>
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<tbody>
<tr>
<td>Results</td>
<td>![Target Icon]</td>
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<tr>
<td>Methods</td>
<td>![Wrench Icon]</td>
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<tr>
<td>Data</td>
<td>![Bar Graph Icon]</td>
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<tr>
<td>Skills</td>
<td>![Light Bulb Icon]</td>
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<tr>
<td>Network</td>
<td>![Share Icon]</td>
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All we did up to now is hypothesize (or guess) what could be of valuable to people or organizations. The next step is to actually contact these organizations / people in order to find out if they recognize the issues and validate our thinking.
1. Identification of valorisation opportunities

Examples of Valorisation Opportunities

Adding economic value by
- Books (publishers).
- Exhibitions (fairs or even at museums).
- Executive communication on methods (communication consultancy firms).
- Language training (internationally-operating companies).
- Effectiveness of psychotherapies (mental health care).
- Postgraduate programmes on pension rights (law firms, legal experts).
- Coaching of executives or executive teams (consultancy to companies).
- Contributing to a learning and cultural society
- Multilingualism.
- Historic understanding.
- Inspiration and creativity through the arts.
- Ability to contend with other cultures, religions, and social structures.

Top 10 valorisation lessons

1. Getting started: take the first step!
2. Find support to take effective follow-up steps
3. Make agreements with the faculty or your manager
4. Teamwork means working as a team
5. Make all interests transparent
6. Overcome your hesitation and request valorisation funding
7. Don’t do it for the money
8. Don’t price yourself out of the market
9. Protect intellectual property
10. Use existing models

Source: IZA Valorisation guide - Practical handbook for social sciences and humanities researcher

This chapter is written together with the input from Tijmen Altena and Paul Tuinenburg of IDfuse, a company specialized in valorisation. The exercises are based on their impact workshop they give at universities. More information on www.idfuse.nl

"Scientific work alone does not necessarily impact. Some innovations deserve a place in the market or in society" - Guido van ’t Noordende
2. IP management

Intellectual property (IP) refers to creations of the intellect for which a monopoly is assigned to designated owners by law. Intellectual property rights (IPRs) are the protections granted to the creators of IP, and include trademarks, copyright, patents, industrial design rights, and in some jurisdictions trade secrets. Artistic works including music and literature, as well as discoveries, inventions, words, phrases, symbols, and designs can all be protected as intellectual property.

2.1 Ownership & Technology Readiness Level

There has been a steady rise in the number of startups that grow out of university-sourced innovations; hence several universities have started incorporating policies for such joint collaborations between startups and universities.

There are several situations from which joint research collaborations may arise from a university.

- The technology is developed and nurtured in the university and the technology has been spin-out as a startup.
- The university may have played an incubator role in the starting stages of a startup and have played an advisory role in the development of a technology.
- There may be a case where a continuous association with the startup and the academic institute is maintained as part of the joint research collaboration.

Ownership

Ownership of IP varies with the above situations. However, before discussing ownership and rights of intellectual property, let’s understand its relevance in decision making.

- Background IP is generated before the joint research collaboration
- Foreground IP is generated during the research collaboration
- Postground IP is generated in a certain time span after the collaboration
- Sideground IP is generated during the collaboration phase but in non-project related activities
All the above IPs include patents, know-how, and trade secrets. How should these IP rights be governed between the university and startup? It is regulated by various clauses in an agreement for joint research, advisory, spin-off, etc. Some of the clauses may include the following:

- Who owns the IP; especially the Foreground IP, Postground IP and Sideground IP? Ownership for the Background IP is generally understood.
- If a startup does not own an IP, does it have a license for the technology? Is the license exclusive or non-exclusive? What is the duration of license? Is there a provision for further sub-licensing of any of its IP Rights? If the right to sub-license is absent, it may drastically affect the manufacturing process when it is not in-house. Also, there may be adverse effects, if the startup is to be acquired in the later stages.
- Who will manage and maintain the patents? In most cases, an owner is responsible for maintaining the patent. However, in some scenarios the responsibility may be shifted to a licensee. A startup has to check whether it should keep the maintenance rights or not besides strategising the required checks and balances for maintaining the IP rights. Abandonment of its IP may adversely affect its market position.
- Who is responsible for indemnification in case of third party IP infringement suites? When the owner of the IP has not checked the probability of third party IP infringement, it may result in an infringement suit and a licensee may ask for indemnification in such cases. The responsibilities of each party, namely, the owner of the IP, the joint owner, and/or the licensee, need to be agreed upon in the relevant contracts/agreements.

If you are a licensee, are you allowed to institute an infringement proceeding? Keeping such rights with you may help you in cases when a competitor is infringing upon products for which you have an exclusive license.

- Do the above rights have a variation based on a specific country or a product line?
- Whether non-disclosure agreements for trade secret are in place or not?
- Whether non-compete clauses are in place?
- Are the considerations well specified in case of grant of ownership or license?
- Is the license only for “use” or for “commercial exploitation” too?

It is suggested that the expectations should be set correct between both the parties, according to the effort and investments made by each of them, so as to create a win-win situation for both. Surely, the academia provides specific expertise and infrastructure which can optimize costs and improve innovation to help the startup in providing cost-effective and competitive products.

Source: https://yourstory.com/2015/02/management-ip-rights/

**Technology Readiness Level**

Technology readiness levels (TRL) are a method of estimating technology maturity of Critical Technology Elements (CTE) of a program. TRL are based on a scale from 1 to 9 with 9 being the most mature technology. The use of TRLs enables consistent, uniform discussions of technical maturity across different types of technology. A comprehensive approach and discussion about TRLs has been published by the European Association of Research and Technology Organizations (EARTO).

Technology Readiness Levels were originally conceived at NASA in 1974 and formally defined in 1989. The original definition included seven levels, but in the 1990s NASA adopted the current nine-level scale that subsequently gained widespread acceptance.

“Valorisation is an important aspect of research and makes occasionally a refreshing perspective because it makes sure the researcher also takes a step back from his detailed challenges, at a meta-level look at the impact on society.” - Robby van Velden
2. IP management

### Technology Readiness Level

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<thead>
<tr>
<th>Phase</th>
<th>TR-level</th>
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<tbody>
<tr>
<td>System Test, Launch &amp; Operations</td>
<td>9</td>
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<tr>
<td>Technology Demonstration</td>
<td>8</td>
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<tr>
<td>Technology Development</td>
<td>7</td>
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<tr>
<td>Research to prove feasibility</td>
<td>5</td>
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<tr>
<td>(Fundamental) Research</td>
<td>4</td>
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<tr>
<td>Actual system proven in operational environment</td>
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<tr>
<td>System complete and qualified</td>
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<tr>
<td>System prototype demonstration in operational environment</td>
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<tr>
<td>Technology validated in relevant environment</td>
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<tr>
<td>Development of prototype</td>
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<tr>
<td>Proof-of-concept: experimental / analytical validation</td>
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<tr>
<td>Definition of proof-of-concept</td>
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<tr>
<td>Conceptual idea / basic principles observed</td>
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### 2.2 IP protection

Intellectual property rights include patents, copyright, industrial design rights, trademarks, plant variety rights, trade dress, and in some jurisdictions trade secrets. There are also more specialized or derived varieties of sui generis exclusive rights, such as circuit design rights and supplementary protection certificates for pharmaceutical products (after expiry of a patent protecting them) and database rights (in European law). Some examples:

- **Patents**: A patent is a form of right granted by the government to an inventor, giving the owner the right to exclude others from making, using, selling, offering to sell, and importing an invention for a limited period of time, in exchange for the public disclosure of the invention. An invention is a solution to a specific technological problem, which may be a product or a process and generally has to fulfil three main requirements: it has to be new, not obvious and there needs to be an industrial applicability.

- **Copyright**: A copyright gives the creator of an original work exclusive rights to it, usually for a limited time. Copyright may apply to a wide range of creative, intellectual, or artistic forms, or “works”. Copyright does not cover ideas and information themselves, only the form or manner in which they are expressed.

- **Industrial design rights**: An industrial design right protects the visual design of objects that are not purely utilitarian. An industrial design consists of the creation of a shape, configuration or composition of pattern or colour, or combination of pattern and colour in three-dimensional form containing aesthetic value. An industrial design can be a two- or three-dimensional pattern used to produce a product, industrial commodity or handicraft.

- **Software**: Patenting Software Modern society relies heavily on computer technology. Without software, a computer cannot operate. Software and hardware work in tandem in today’s information society. It is no wonder that intellectual property protection of software is crucial not only for the software industry, but for other businesses as well. The intellectual property protection of computer software has been highly debated at the national and international level. Furthermore, the Internet raises complex issues regarding the enforcement of patents, as patent protection is provided on a country-by-country basis, and the patent law of each country only takes effect within its own borders. (see also: [http://www.wipo.int/sme/en/documents/software_patents_fulltext.html](http://www.wipo.int/sme/en/documents/software_patents_fulltext.html))
Violation of intellectual property rights, called “infringement” with respect to patents, copyright, and trademarks, and “misappropriation” with respect to trade secrets, may be a breach of civil law or criminal law, depending on the type of intellectual property involved, jurisdiction, and the nature of the action.

**What should startups do to protect their IP assets?**

- Patent what is important to others, not just you.
- Make time to get smart on intellectual property. Educate yourself and team on the basics of trademarks, copyrights, patents, and trade secrets. Investing a day or two early on will save headaches later.
- Reduce costs by doing your own IP searches first. Start with a Google patent search at google.com/patents.
- Work with an attorney who specializes in intellectual property and ask for a fixed rate to file.
- Save money by working with a patent attorney from a different geography. Ivy-league lawyers in Amsterdam are just as good as Ivy-league lawyers in New York City. The cost savings may be upwards of 50%, and sometimes more.
- Patents aren’t your only asset. Conduct an audit to identify all your registered and unregistered trademarks and copyrights.
- Invest in well-written non-disclosure agreements (NDAs). Make sure your employment agreements, licenses, sales contracts and technology transfer agreements all protect your intellectual property too, right from the get-go.
- File as fast as you can. A patent application holds your place in line. You will have 12 months from that initial submission to expand upon your filing. And remember, EU patents can take more than five years to issue.
- Investigate international patents if key competitors are outside the US. A US patent will not protect you against competitors in Europe, never mind China.
- Think hard about the future. From your vantage point, what does the future look like? Use this information to devise your patent strategy, and to figure out which of your work needs to be legally protected. From there, your patent applications should flow.

Source: inc.com 2012

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**2.3 IP valuation**

Intellectual property (IP) valuation is considered as one of the most important management strategic issues. There are numerous individual reasons or motivations for conducting an intellectual property valuation or economic appraisal analysis. It is prepared, for example, for transactions, pricing and strategic purposes. The valuation process necessitates gathering much more information as well as in-depth understanding of economy, industry, and specific business that directly affect the value of the intellectual property. Therefore, such information may be gathered from external and / or internal sources. Numerous approaches are used by analyst in order to reach a reasonable indication of a defined value for the subject intangible assets on a certain date which is referred to as the valuation date. The most common approaches to estimate the fundamental or fair value of the intellectual property are defined as the following:

**Income Approach**

Income approaches focus on the future cash flow derived from a particular piece of IP. As with all income valuations the need to accurately forecast future cash flow is of paramount importance. The following variables are needed when using an income approach:

- An income stream either from product sales or licensure of the patent
- An estimate of the duration of the patent’s useful life
- An understanding of patent specific risk factors and incorporating those into the valuation
- A discount rate

**Discounted Cash Flow (DCF) Method**

The discounted cash flow approach attempts to determine the value of the IP by computing the present value of cash flows, attributable to that piece of IP, over the useful life of the asset. Unlike an enterprise DCF valuation, terminal values are rarely used, as the useful life of a patent is typically a finite period of time. Since 1995, patents expire 17 years after issuance or 20 years after filing. The benefits of the DCF method are its ability to compare values among different patents, likely availability of many of the required inputs from the firm’s financial statements and market information. A drawback of DCF is that it does not capture the unique independent risks associated with patents.

“Scientific work alone does not have necessarily impact. Some innovations deserve a place in the market or in society”
- Guido van ’t Noordende

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Market Comparable
Conceptually, a market comparable approach should offer a good indication of a patent’s value, as it reflects the exchange of value between two parties. However, in valuing patents it is difficult to find a suitable comparable transaction. The two primary reasons for this are the lack of disclosed sale or licensure activity and by its definition, a patent must be unique.

Cost Approach
The cost approach is based on the economic principle of substitution. This principle states that an investor will pay no more for an asset than the cost to obtain, by purchasing or constructing, a substitute asset of equal utility. There are several cost approach valuation methods, the most common being:

- **Historic Cost**: This valuation methodology measures the amount of money spent in the development of the intellectual property at the time it was developed. But unless the intellectual property was developed in the recent past, an historic cost measure tends to be unreliable due to the impact of inflation and the changes that occur in technology over time. In addition, it is not always possible to provide accurate information on the resources spent for such quantification.

- **Replication Cost**: This measures the amount of money that would need to be spent in current cost terms in order to develop the intellectual property in exactly the same way and to achieve the same final state as it currently exists. This includes costs incurred on any unsuccessful or inefficient prototypes.

- **Replacement Cost**: This measures the amount of money that would need to be spent in current cost terms in order to develop the intellectual property as it currently exists, but excludes the costs relating to unsuccessful or inefficient prototypes.

Other valuation approaches
As with many types of valuation, other methods exist to value IP, which we touch on only briefly here:

- **Venture Capital Method**: The Venture Capital valuation technique also derives a value for a patent from the cash flows that arise over the asset’s life.

- **Relief from Royalty Method**: Relief from royalty is based on deprival value theory and looks at the amount of income that a company would be “deprived” of, if it did not own the intellectual property in question but was required to rent it from a third-party instead.

- **Real Options Method**: The Real Options Method (ROM) recognizes that a patent has intrinsic value based on its projected cash flows discounted at the opportunity cost of capital for the owner of the patent.

Other Valuation Approaches

More information will be provided on www.valorisation.com

“Valorisation of scientific research is crucial. Science is not only there for itself, but research is also important for the next generations. If valorisation is successful, money for future research will be more accessible.” - Paul Havinga
2.4 Exploitation strategy

Intellectual Property exploitation is generally used to refer to the commercial exploitation of intellectual property rights once they have been established. This might include manufacturing and distributing patented products or services by the company that invented them in the first place, licensing the IPR for others to use in return for royalties or other remuneration, or the sale of the IPR to realize a capital sum.

There can be several basic routes for exploitation be defined:
- Start a new company to develop a product / service
- License / sublicense to an existing company under certain terms & conditions like:
  - Territory
  - Field of use
  - For a limited time
- Sell IP to other party
- Attract new/further research

License vs Startup

Licensing or starting up a company have the same commercial objective, but follow different routes to gain impact with the IPR developed. The major challenge will be to determine who will hold the best position to “productise” and bring the technology to the market.

License vs Startup

<table>
<thead>
<tr>
<th>License</th>
<th>Startup / Spin-off</th>
</tr>
</thead>
<tbody>
<tr>
<td>licensee has expertise and resource</td>
<td>must acquire expertise and resource</td>
</tr>
<tr>
<td>Takes advantage of expertise, resources and market know-how of companies already operating in the field.</td>
<td>A committed and enthusiastic team</td>
</tr>
<tr>
<td>Can address different fields of use and geographical areas</td>
<td>Resources for developing, manufacturing and marketing can be very large, particularly if world wide</td>
</tr>
<tr>
<td>• Establish markets and suppliers</td>
<td>• A critical mass of expertise</td>
</tr>
<tr>
<td>• Evolutionary/incremental technology</td>
<td>- Management</td>
</tr>
<tr>
<td>• The IP fits a gap in someone else’s portfolio</td>
<td>- Financial</td>
</tr>
<tr>
<td>• The IP is a one-off stand-alone invention</td>
<td>- Sales &amp; Marketing</td>
</tr>
<tr>
<td>• New market for new suppliers</td>
<td>- Manufacturing / operations</td>
</tr>
<tr>
<td>• Revolutionary or platform technology</td>
<td>- Technical / Support</td>
</tr>
<tr>
<td>• The IP can deliver a unique, independent business advantage</td>
<td>- Administrative</td>
</tr>
<tr>
<td>• There is a pipeline of potential products</td>
<td></td>
</tr>
</tbody>
</table>

Market & Technology

<table>
<thead>
<tr>
<th>License</th>
<th>Startup / Spin-off</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Low financial commitment</td>
<td>• Returns take longer (via IPO or trade sale)</td>
</tr>
<tr>
<td>• Can have early returns</td>
<td>• Company will need to finance further R&amp;D</td>
</tr>
<tr>
<td>• Licensee might fund further R&amp;D with inventors</td>
<td>• The investors are interested in a commercial role</td>
</tr>
<tr>
<td>• The inventors have no interest in commercial role</td>
<td></td>
</tr>
</tbody>
</table>

Finance and Return On Investment (ROI)

<table>
<thead>
<tr>
<th>License</th>
<th>Startup / Spin-off</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Further development?</td>
<td>• New market for new suppliers</td>
</tr>
<tr>
<td>• Trials?</td>
<td>• Revolutionary or platform technology</td>
</tr>
<tr>
<td>• Regulatory approvals?</td>
<td>• The IP can deliver a unique, independent business advantage</td>
</tr>
<tr>
<td>• Further development?</td>
<td>• There is a pipeline of potential products</td>
</tr>
</tbody>
</table>

Source: https://www.iprhelpdesk.eu/sites/default/files/events/06%20Exploitation%20strategies%20and%20business%20models.pdf
You may have a great business idea, solid financial backing, and optimistic market research, but if your founding team doesn’t have the right balance of competences, you could soon close the shop” (Bernd Schoner, author of The Tech Entrepreneur’s Survival Guide; McGraw-Hill, May 2014).

Having the right team on board is the most important thing for a new venture. The founding team cannot be changed, and no one can speak to investors or customers with authority like a founder. The skills and traits of a company’s founders are irreplaceable, making it important to get it right at the onset.

Of course, it will be possible to start on your own, but experience has learned that startup teams are more successful. Founding teams will be able to cover more of the required skills than an entrepreneur on his own. But even a sound team needs an entrepreneur.

### 3.1 Entrepreneur & team skills

Should you join the millions of people every year who take the plunge and start their first ventures? There is a gut level “fit” for people who are potential entrepreneurs. There are strong internal drivers that compel people to create their own business. Daniel Isenberg (Professor of Management Practice, Babson College) has developed a 2-minute Isenberg Entrepreneur Test to see if you should become one. Just answer yes or no and be honest with yourself. Remember: the worst lies are the ones we tell ourselves.

“Teamwork makes the dream work”
- John C. Maxwell
3. Team Creation

Skills needed
A startup needs six personalities to be successful. While one person might have more than one of these traits, these six need to exist:

1. **Genius**: Every startup needs at least one genius to get off the ground. Often a diva, the genius will challenge the rest of the team and ask for things that the others aren’t sure how to get done. This person is filled with passion and is often considered to be the most high-risk member of the team.

2. **Superstar**: The superstar is the person who gets down to business and accomplishes tasks. From ordering office supplies to keeping the office network running, this person has a combination of eccentricity, nerddiness, and charisma. (The prima donna and the superstar can be the same person, but adding this personality later will be nearly impossible)

3. **Leader**: Running a company with more than one founder is a democratic process, but hard decisions need to be made that affect everybody’s lives. Consensus usually requires compromise. Therefore every startup needs a clear leader in case there is conflict and controversial decisions need to be made.

4. **Industry veteran**: While startups are often formed around new ideas, it helps to have someone who knows how things are done in an industry. It will take a long immersion in the marketplace to call yourself an insider, to understand the subtleties of the competitive landscape, to recognize people as true assets, and to look through the propaganda of technical collateral and PR campaigns. (The leader and the industry veteran could come in same person).

5. **Sales**: Startups with brilliant ideas often forget that someone needs to sell them. Having a strong salesperson on the founding team helps minimize the risk. The combination of technical insight, founder authority, and sales experience will be hard-to-beat by the competition.

6. **Financial**: Startups also need financial talent. While this is the easiest personality to add on later, professional controllers and chief risk officers often have their own agenda. If you can put a skilled cofounder in charge of overseeing the finance function, you may enjoy a little bit of extra peace of mind.

“Good skills are an insurance policy against hard times on a company. But when in doubt, pick people who have similar values. How do they define success for startup? Is it money? World contributions? Having similar beliefs about how you run your life can bring longevity as a team.”

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### Entrepreneur Test

<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I don't like being told what to do by people who are less capable than I am.</td>
</tr>
<tr>
<td>2</td>
<td>I like challenging myself.</td>
</tr>
<tr>
<td>3</td>
<td>I like to win.</td>
</tr>
<tr>
<td>4</td>
<td>I like being my own boss.</td>
</tr>
<tr>
<td>5</td>
<td>I always look for new and better ways to do things.</td>
</tr>
<tr>
<td>6</td>
<td>I like to question conventional wisdom.</td>
</tr>
<tr>
<td>7</td>
<td>I like to get people together in order to get things done.</td>
</tr>
<tr>
<td>8</td>
<td>People get excited by my ideas.</td>
</tr>
<tr>
<td>9</td>
<td>I am rarely satisfied or complacent.</td>
</tr>
<tr>
<td>10</td>
<td>I can't sit still.</td>
</tr>
<tr>
<td>11</td>
<td>I can usually work my way out of a difficult situation.</td>
</tr>
<tr>
<td>12</td>
<td>I would rather fail at my own thing than succeed at someone else's.</td>
</tr>
<tr>
<td>13</td>
<td>Whenever there is a problem, I am ready to jump right in.</td>
</tr>
<tr>
<td>14</td>
<td>I think old dogs can learn — even invent — new tricks.</td>
</tr>
<tr>
<td>15</td>
<td>Members of my family run their own businesses.</td>
</tr>
<tr>
<td>16</td>
<td>I have friends who run their own businesses.</td>
</tr>
<tr>
<td>17</td>
<td>I worked after school and during vacations when I was growing up.</td>
</tr>
<tr>
<td>18</td>
<td>I get an adrenaline rush from selling things.</td>
</tr>
<tr>
<td>19</td>
<td>I am exhilarated by achieving results.</td>
</tr>
<tr>
<td>20</td>
<td>I could have written a better test than Isenberg (and here is what I would change ....).</td>
</tr>
</tbody>
</table>

If you answered “yes” on 17 or more of these questions, look at your paycheck (if you are lucky enough to still get one). If the company that issued the check isn’t owned by you, it is time for some soul searching:

- Do you have debts to pay?
- Kids in college?
- Alimony?
- Want to take it easy?

Maybe better to wait. Do you have a little extra cash in the bank and several credit cards? Do you have a spouse, partner, friends, or kids who will cheer you on? If so, start thinking about what kind of business you want to set up. It doesn’t matter what age you are: research by the Kauffman Foundation shows that more and more over-50s are setting up their own businesses. Talk to people who have made the plunge, learn how to plan and deliver a product or service, think about that small business you might buy, talk to people with whom you would like to work, and talk to customers.

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3.1 Entrepreneur & team skills
3. Team Creation

3.2 Motivation & incentives

A startup team normally has very limited history together, no or few traditions and rituals to keep the culture flourishing, and limited incentives to offer along with lack of Employee Value Proposition (EVP) and a lack of brand to be proud. As such, your incentives to a startup team should encourage all to stay onboard in the risky startup environment and participate in your success.

The Six Human Needs for incentive program design
1. Certainty – A fixed basic salary to ‘keep lights on’ may be enough for most team members until you break through the startup ceiling and enter the revenue generating category where more certainty can be on offer.
2. Uncertainty/variety – You should have plenty of this to offer your team.
3. Significance – If you are offering equity to your team members, they will feel significant. If they are part of your key decision making, then even more so.
4. Connection/Love – Constant communication in your team and activities that create the feeling of closeness and unity are essential to cover this need for us all.
5. Growth – Continuous learning and fast personal growth from working with smart and inspirational fellow team members and others around the startup usually beats money based incentives.
6. Contribution – The act of giving is something we all bring to the table. Let everyone be heard and allow everyone to give to the team what they want. It is almost always more than you imagine if you have the right people in your team—and show appreciation when it happens.

Assuming that you want your team to be innovative and agile for the future – then you will be looking to have people who have very open minds, people who value imagination, unity, and action and experiential learning. You want everyone on your team reimagining, stretching themselves, and preparing for a new world which is significantly different from the one they inherited. A three-step approach to designing the incentives that keep any startup team motivated throughout the roller-coaster ups & downs that every startup goes through. They are:
- Define your own metrics of success
- Create the rituals for sustainable team success
- Build your Employee Value Proposition around your incentives

3.3 Team construction

How can I build a successful team? There are six items crucial to help teams function effectively.

Team Building

Mission

It is the shared commitment to a specific mission that helps define a team. A mission statement can provide powerful documentation about the team’s purpose. Creating a mission statement requires team members to think about, discuss and come to agreement on the following questions:
- What is the work we were brought together to do?
- Why can this work best be done as a team?
- What will be different as a result of our working together?
- What will our work create for our organization, our team and ourselves?
- For project teams: What will a successful outcome look like for our team? How will we know we’ve completed our task?
- For standing teams: How will we measure our success in an on-going way?

A team’s mission may be based on a directive from management or others outside the team. But good team discussion about how each member—and the group collectively—understands that mission will
make the mission statement meaningful and useful to the team. Mission statements may be short; they should be written in everyday language that each team member understands and supports.

**Goals**

Mission statements give a team guiding principles, but goals give the team a real target for their activity. Goals should be something worth striving for important results that the team can provide for the organization. The best goals are S-M-A-R-T goals: Specific, Measurable, Achievable, Relevant and Time-bound. “Improving customer service” may sound like a good goal for a team, but it doesn’t really meet the S-M-A-R-T criteria. A more effective goal would be “Reduce call-back time to customers to two hours or less within six months.” The revised goal is:

- Specific (reduce call-back time to customers)
- Measurable (to two hours or less)
- Achievable (The team would need to decide this. Maybe call-backs need four hours, or maybe the time can be reduced to 30 minutes.)
- Relevant (Again, the team will know - is slow call-back time an issue for the customers? For the team’s manager? Is reducing call-back time important enough to merit team effort?)
- Time bound (within six months)

**Roles and responsibilities**

It’s particularly important in a team environment that team members know what is expected of each of them. Without these expectations, members can’t develop mutual accountability or trust in the team. When a team’s expectations are clear and members meet (or exceed) expectations, trust and an increased sense of “teamness” are natural by-products.

Almost all teams should have designated team leaders. Team leaders are the individuals who are held accountable for the team’s results by the team’s sponsor. The Team leader often serves as a spokesperson for the team and may also be responsible for coordinating the team’s work. Facilitators may be a member of the team or a resource person for the team. The facilitator is responsible for guiding the team’s process. This might include helping to set agendas for team meetings and running the meetings. Sometimes these two roles are played by one person.

**Ground Rules**

To be effective, teams need to be explicit about the ways they will work together. Ground rules are guidelines for specific behaviors. Teams don’t need a lot of ground rules to work together well, but everyone on the team should agree to the ground rules and share responsibility for ensuring that they are followed.

Possible areas for ground rules include:

- How you communicate DURING team meetings (Are interruptions OK? Should the Facilitator call on you before you speak? What about side conversations?)
- How you communicate BETWEEN team meetings (How quickly should you respond to emails? Are there suggested length limits on emails or memos? How do you keep everyone on the team informed of your progress?)
- What constitutes respectful behavior towards other team members?

Some sample ground rules include:

- Be respectful of others -- don’t bad-mouth team members within the team or outside the team
- Share your own experiences and opinions; avoid “they say” statements
- One speaker at a time
- Keep discussions focused on topic at hand
- Honor time limits - start and end on time

**Decision making**

Teams may choose different models for making decisions; the most important factor is that the decision-making model be explicit and understood by all team members. A clear decision making model describes who makes the decision and how others will be involved. (Will decisions be made by consensus where everyone can agree to support the final decision? Will the team leader get input but make the final decision? Will the team vote?) Knowing what decision-making model will be used lets team members know what to expect and what is expected; this can help build support for the final decision.

Good decisions have two characteristics: quality and commitment. Quality decisions are logical, supported by sound reasoning and good information. Steps towards making quality decisions include checking to see if all available information has been gathered and shared, that all team members have been consulted, and that critical input from stakeholders (individuals or groups affected by the decision) outside the team has been considered as appropriate.
Commitment is demonstrated by the active backing for the decision by every team member. Each team member agrees with the decision, is committed to carrying out the decision, and understands their individual role in doing so.

**Communication**
Using ground rules as a starting point, teams need to develop practices for open communication. Examples include:
- Listen respectfully and respond with positive interest to ideas from team members.
- If an idea is confusing or seems unconventional or odd to you, ask for more information to understand the idea better. (Saying, “Can you tell me more?” is a great way to continue a conversation.)
- Help create an environment that encourages team members to share all ideas - even the “half-baked” ones. Most great ideas are built by teams building on an initial thought. Sometimes it’s the “crazy” ideas that really spark the team’s creativity. Treating every idea as important keeps team members from holding back some “half-baked” thought that could be just what the team needed.
- Don’t hide conflicts; try to surface differences and use them to create better results that all team members can support.

**Mutual Accountability**
Each member of a team is responsible for the success of the team as a whole. This is the interdependence that makes teams stronger than the sum of their parts. Working together towards specific tangible results is the best way to start creating mutual accountability. Recognize and celebrate small accomplishments and successes of individuals and milestones (large and small) for the team as a whole. By acknowledging successes, team members can develop an increasing trust in their teammates and the team as a whole.

**Appropriate self-evaluation**
It will be helpful for team members to “stop action” at regular intervals and check out how the team is working. These self-evaluations can be as simple as a team discussion: “Looking at X, what things worked well and what would we like to improve next time?” or they can be deep and reflective (e.g., “How can we deal with conflict more effectively?”). Regardless of the method or tool used, the real benefit of self-evaluation comes from the team discussion about their assessments of the team.

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### Team creation checklist

<table>
<thead>
<tr>
<th>A Driving issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Why is this team being formed?</td>
</tr>
<tr>
<td>2 What are the critical issues the team should address?</td>
</tr>
<tr>
<td>3 What is the team’s scope? (Has the scope been set by or approved by the team’s sponsors?)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 What are the specific project (or process improvement) goals?</td>
</tr>
<tr>
<td>2 What constitutes success?</td>
</tr>
<tr>
<td>3 How can we make these goals measurable? If they’re not quantifiable, how can we look for qualitative data about improvement?</td>
</tr>
<tr>
<td>4 How do these goals support the overall mission of (our department, the project, the Institute)?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C Roles and responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Why has each member of this team been selected?</td>
</tr>
<tr>
<td>2 What skills/expertise does each team member bring?</td>
</tr>
<tr>
<td>3 What is the role of the Team Leader?</td>
</tr>
<tr>
<td>4 What is the role of the Facilitator?</td>
</tr>
<tr>
<td>5 What is the role of our Sponsor?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D Deliverables &amp; timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 What is the output/product for this team?</td>
</tr>
<tr>
<td>2 What is our timeline overall?</td>
</tr>
<tr>
<td>3 Are there mid-point milestones or approval processes?</td>
</tr>
<tr>
<td>4 What is the deadline for deliverables?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 How much time are we expected to spend on this effort?</td>
</tr>
<tr>
<td>2 Do all team members need to be available for each meeting?</td>
</tr>
</tbody>
</table>

Source: http://hrweb.mit.edu/learning-development/learning-topics/teams/articles
3.4 Evolving team, communication and collaboration

Teams go through stages of development. The most commonly used framework for a team’s stages of development was developed by Bruce W. Tuckman (psychology professor at Ohio State University). Although many authors have written variations and enhancements to Tuckman’s work, his descriptions of Forming, Storming, Norming and Performing provide a useful framework for looking at your own team. Each stage of team development has its own recognizable feelings and behaviors; understanding why things are happening in certain ways on your team can be an important part of the self-evaluation process.

The four stages are a helpful framework for recognizing a team’s behavioral patterns; they are most useful as a basis for team conversation, rather than boxing the team into a “diagnosis.” And just as human development is not always linear (think of the five-year old child who reverts to thumb-sucking when a new sibling is born), team development is not always a linear process. Having a way to identify and understand causes for changes in the team behaviors can help the team maximize its process and its productivity.

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“Try to find industry experts who have experience in the market you want to enter” - Alain le Loux
### Stage 3: Norming

<table>
<thead>
<tr>
<th>Feelings</th>
<th>Behaviors</th>
<th>Team Tasks</th>
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<tbody>
<tr>
<td></td>
<td>During the Norming stage of team development, team members begin to resolve the discrepancy they felt between their individual expectations and the reality of the team's experience. Team members feel an increasing acceptance of others on the team, recognizing that the variety of opinions and experiences makes the team stronger and its product richer. Constructive criticism is both possible and welcomed. Members start to feel part of a team and can take pleasure from the increased group cohesion.</td>
<td>Behaviors during the Norming stage may include members making a conscious effort to resolve problems and achieve group harmony. There might be more frequent and more meaningful communication among team members, and an increased willingness to share ideas or ask teammates for help. Team members re-focus on established team groundrules and practices and return their focus to the team's tasks. Teams may begin to develop their own language (nicknames) or inside jokes.</td>
</tr>
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### Stage 4: Performing

<table>
<thead>
<tr>
<th>Feelings</th>
<th>Behaviors</th>
<th>Team Tasks</th>
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<tbody>
<tr>
<td></td>
<td>In the Performing stage of team development, members feel satisfaction in the team's progress. They share insights into personal and group process and are aware of their own (and each other's) strengths and weaknesses. Members feel attached to the team as something “greater than the sum of its parts” and feel satisfaction in the team's effectiveness. Members feel confident in their individual abilities and those of their teammates.</td>
<td>Team members are able to prevent or solve problems in the team's process or in the team's progress. A &quot;can do&quot; attitude is visible as are offers to assist one another. Roles on the team may have become more fluid, with members taking on various roles and responsibilities as needed. Differences among members are appreciated and used to enhance the team's performance.</td>
</tr>
</tbody>
</table>

While working on a high-performing team may be a truly pleasurable and rich experience, it is not the end of team development. There is still a need for the team to focus on both process and product, setting new goals as appropriate. Changes, such as members coming or going or large-scale changes in the external environment, can lead a team to cycle back to an earlier stage. If these changes - and their resulting behaviors - are recognized and addressed directly, teams may successfully remain in the Performing stage indefinitely.
4. Value creation

Value creation is the primary aim of any business entity. Creating value for customers helps sell products and services, while creating value for shareholders, in the form of increases in stock price, insures the future availability of investment capital to fund operations. From a financial perspective, value is said to be created when a business earns revenue (or a return on capital) that exceeds expenses (or the cost of capital). But some analysts insist on a broader definition of “value creation” that can be considered separate from traditional financial measures. “Traditional methods of assessing organizational performance are no longer adequate in today’s economy,” according to ValueBasedManagement.net. “Stock price is less and less determined by earnings or asset base. Value creation in today’s companies is increasingly represented in the intangible drivers like innovation, people, ideas, and brand.”

4.1 Business Model Canvas

Preparing a business plan can help a business owner think strategically about their business. A business plan will also provide some structure as it requires a business owner to document their current assumptions and guesses about the future of their business.

The Business Model Canvas (by Alexander Osterwalder) was developed to be used in conjunction with the Lean Startup methods (http://thebusinesstherapist.com/2013/04/proud-of-the-lean-startup-progress/)
4. Value creation

Why use the business model instead of writing a business plan from the beginning?

- It’s more visual – a lot of business owners think visually. Planning their strategy seems to work better moving sticky notes around a wall than writing out a ten-page document.
- It’s more dynamic – The business plan is a static document, but the business model canvas evolves as the business owner experiences the world around them.
- It’s about actions as well as thinking – The activity of ‘validating’ the static guesses is more about actions and experiences than just thinking. While thinking is important, the following statement can be more applicable: “You can’t think your way into a new way of acting, but you can act your way into a new way of thinking.” The experiential learning obtained from ‘getting out of the building’ and validating assumptions is key.
- It’s about key activities more than results – A business plan usually includes a projected income statement. Income Statements report the results after the activity of business takes place. Business owners need to focus on activities in order to get better results.

What is the difference between a business model and a business plan?

- **Outside versus Inside the Building:** Most business plans are written using library research. Successful business models are achieved through talking to customers and making changes based on feedback from those conversations.
- **Input versus Output Focus:** Most business plan competitions are focused on compelling write-ups and slide presentations that check all the right boxes. In the Business Model Canvas, sleek presentations are not going to cut it. And the boxes that do need to be checked are completely new and impossible to fake. The goal is to identify your assumptions and turn them into facts by getting outside the building. And when a startup has done this, the story is compelling and it is an awesome one to tell because it is based on facts. Validated learning about
what customers really want is the stuff a business model is made of and music to the ears of potential investors.

- **Lean Development versus Product Development**: Most business plans imply a careful development process to optimize the final outcome. Forget it. Apply Lean Startup principles to radically compress your development cycle and take a prototype (even if it is just a picture drawn in the late hours of the night) to jump start the learning process. Find the most creative but minimally viable product and start learning.

- **Change versus Fortify**: Most business plans attempt to fortify/prove the core idea with evidence. Judges of the Business Model Canvas will be looking for instances where teams learned they were wrong and made a pivot in a new and right direction. Your application should focus on the lessons learned and “pivots” made—the more the better.

- **Chasing Customers versus Chasing Funding**: Let’s face it, many business plans are written to raise money. Unfortunately the business plan formula doesn’t capture the answers VCs most want to see: real validation you can make a product customers want. Instead of chasing the money, chase customers. Getting into the field you will validate the model and raising money will be easy (see appendix for more).

- **Launching versus Talking**: Business plans often talk about what will happen in the future. The Business Model Canvas is about what you learned by applying a Customer Development / Lean Startup / Nail It then Scale It process.

Basically, the business model canvas and the business plan are used in a different stage of the company. At first you will have to determine the right business model. This will be a process of testing and adapting. When getting further in developing your business you will have to communicate with people about your business in detail. That will be a good moment thinking about drafting a business plan.

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"Valorisation is an essential part of doing science, it may take some effort, but also provides a lot of new ideas and contacts." - Paul Havinga
4. Value creation

7 Agency - Market and sell an asset or service you don’t own on behalf of a third-party, then collect a percentage of the transaction price as a fee.

8 Audience Aggregation - Get the attention of a group of people with certain characteristics, then sell access in the form of advertising to another business looking to reach that audience.

9 Loan - Lend a certain amount of money, then collect payments over a pre-defined period of time equal to the original loan plus a pre-defined interest rate.

10 Option - Offer the ability to take a pre-defined action for a fixed period of time in exchange for a fee.

11 Insurance - Take on the risk of some specific bad thing happening to the policy holder in exchange for a pre-defined series of payments, then pay out claims only when the bad thing actually happens.

12 Capital - Purchase an ownership stake in a business, then collect a corresponding portion of the profit as a one-time payout or ongoing dividend.

Source: https://personalmba.com/12-standard-forms-of-value/

Unique Selling Proposition (USP)

A unique selling proposition (USP, also known as unique selling point) is a factor that differentiates a product from its competitors, such as the lowest cost, the highest quality or the first-ever product of its kind. A USP could be thought of as “what you have that competitors don’t.”

A successful USP promises a clearly articulated benefit to consumers, offers them something that competitive products can’t or don’t offer, and is compelling enough to attract new customers.

The main thing is to find a space in the market, make sure it’s going to be something that can stand out on its own first, and make sure it’s something potential customers need. The sellers also need to try selling it to themselves; this is so they know they are passionate about that business and confident it can succeed. The seller needs a key point to use when trying to sell their product or service, and coming up with it prior to selling will benefit. Having a point of difference to stand out is a major benefit in the markets; customers will be drawn to the business as it offers something no one else has. This is exactly what every business should be looking into whether it is home delivery service from the store or all-organic food at the restaurant.

Writing a USP

Though many USPs are only a few sentences long, that doesn’t mean they should be created quickly. Let’s mention three essential questions all solid USPs should tackle:

• Why should I do business with you instead of anyone else? > Example: “We offer the nation’s most affordable health-care coverage to businesses with 10 employees or fewer.”

• What can your product or service do for me that others can’t? > Example: “We sell the only pain-relief cream that will completely eliminate carpal tunnel symptoms in seven days.”

• What can you guarantee me that no one else can guarantee? > Example: “We are the only car dealership in the tristate area with a five-year, 50,000-mile warranty.”

To determine what truly sets them apart, businesses should look at several key areas, including the service they offer, the market they cater to, the products or services they sell, their customer experience, and their pricing.

To further help development of a USP, Entrepreneur.com recommends organizations do several things, including:

• Put yourself in your customers’ shoes: Step back from your daily operations and carefully scrutinize what your customers really want. The answer might be quality, convenience, reliability, friendliness, cleanliness, courtesy or customer service.

• Know what motivates your customers’ behaviour and buying decisions: You need to know what drives and motivates customers. Go beyond the traditional customer demographics, such as age, gender, race, income and geographic location that most businesses collect to analyse their sales trends.

• Uncover the real reasons customers buy your product instead of a competitor’s: As your business grows, you’ll be able to ask your best source of information — your customers. You will be surprised how honest people are when you ask how you can improve your service.
4.3 Define your market

Finding relevant market information is essential. To convince investors, yourself and others, insight on the ‘market opportunity’, ‘competitive edge’ and ‘growth’ market is needed. Moreover, good market analysis saves time, money and increases the chances of success.

A lot of entrepreneurs and expert struggle to find relevant information, and/ or rely on their instincts and experience to assess the market opportunity. However, in only a few days, everyone should be able to find 80-90% of all the relevant information.

Next to the Google tips & tricks, you can use (summaries of) existing reports (from companies like BCG, Gartner, Frost & Sullivan, Forrester), presentations via Slideshare or public databases to find information. These methods are out of scope for this specific paragraph, we hope here to be valuable with these Google tips & tricks.

The rationale behind these tips & tricks is to filter and find the interesting results. Only a few percent of the people are looking beyond page 1 (ten results), a percentile beyond page 10 (100 results). Nevertheless, Google is still proud of showing their huge number of results, ‘millions of results in 0,0012 seconds’. This is just an overload of information. We prefer 300 results in 12 seconds.

In a nutshell: we want to find instead of search the information.

Tip 1) Search for answers

One of the most important things to remind when searching in Google is to search for answers. There is no Artificial Intelligence-robot to interpret your question. Therefore, try to translate your question into a part of the answer.

What we mean with that is:

- **Market size** is often presented as a million or billion-dollar market. So please include million OR billion in your search query. As an example to search for market size of Corporate Venturing:

  ![Google search](image)

  On the first page you will found other companies like Deliveroo, Foodpanda, Grubhub and many others. Obviously, it still requires some extra research to determine your competitive position.

- **Competition** is situation-dependent, but there is a universal way of finding your relevant competitors. In most cases, one knows already a few competitors. If you include these names, and search for them, you often encounter a site/ report with other competitors as well. See here a simple example of the online food delivery business:

  ![Google search](image)

  Again: the first result is the one we are looking for, the market is growing with almost 27% per year.

Tip 2) Search documents (PDF)

To find interesting reports, it is good to refine to documents. The majority of reports, presentations and other documents are shared in PDF-format. In Google, use `filetype:pdf` to find only PDF-documents.
4. Value creation

Tip 3) Advanced search results
There are numerous ways to search like a pro. In fact, you can Google it (picture thanks to pageflipper.com):

We use the following best practices:
The “quotation marks” to search exact phrases --&gt; “corporate venturing”
Site: to search within sites, helpful in complex websites and databases
--&gt; site:accenture.com
OR to search different terms --&gt; “food delivery” + market OR industry
OR sector
Pluses and minuses (+ and -) to include and exclude words.
Recent results, go to search tools - “any time” to select a time period.
For example last year, see below:

Tip 4) Use Google Alerts
At one point you know the market, your competitors and found the relevant reports, journalists and sites. Congratulations! However, it is (just) a snapshot of a dynamic market that will be different tomorrow. It is therefore crucial to stay up-to-date. We use Google Alerts to get alerted when there is something new with respect to:
• Your clients
• Your potential leads
• Your competitors
• Yourselves

Just go to google.com/alerts and add your information. You will get updates automatically in your inbox: once a week, once a day or as-it-happens. Just make sure that you select “all the results”. And on really important one: don’t be too broad in your query. You don’t want to receive tens of results every day, just the important one.

Finding instead of searching.
With thanks to the Golden Egg Check (www.goldeneggcheck.com), specialists in empowering entrepreneurs and organizations with software tools and services like market research.
4. Value creation

4.4 Marketing preparation

Offering value is not enough. If no one knows (or cares) about what you have to offer, it doesn’t matter how much value you create. Without Marketing, no business can survive – people who don’t know you exist can’t purchase what you have to offer, and people who aren’t interested in what you have to offer won’t become paying customers.

Every successful business finds a way to attract the attention of the right people and make them interested in what’s being offered. Without prospects, you won’t sell anything, and without completing profitable transactions, your business will fail.

Marketing is the art and science of finding prospects – people who are actively interested in what you have to offer. The best businesses in the world find ways to attract the attention of qualified prospects quickly and inexpensively. The more prospects you entice, the better off your business will be. Marketing is about getting noticed; Sales is about closing the deal.

The Marketing Mix

Simply put the Marketing Mix is a tool used by businesses and Marketers to help determine a product or brands offering. The 7 P’s marketing mix is a tool used to sent the right message to the selected group of potential customers. Marketers are able to adapt the Marketing Mix to include changes in communications such as social media, updates in the places which you can sell a product/service or customers expectations in a constantly changing commercial environment.

The Marketing Mix 7 P’s:

- **Product** - The Product should fit the task consumers want it for, it should work and it should be what the consumers are expecting to get.
- **Price** – The Product should always be seen as representing good value for money. This does not necessarily mean it should be the cheapest available; one of the main tenets of the marketing concept is that customers are usually happy to pay a little more for something that works really well for them.
- **Place** – The Product should be available from where your target consumer finds it easiest to shop. This may be High Street, Mail Order or the more current option via e-commerce or an online shop.
- **Promotion** – Advertising, PR, Sales Promotion, Personal Selling and, in more recent times, Social Media are all key communication tools for an organisation. These tools should be used to put across the organisation’s message to the correct audiences in the manner they would most like to hear, whether it be informative or appealing to their emotions.
- **People** – All companies are reliant on the people who run them from front line Sales staff to the Managing Director. Having the right people is essential because they are as much a part of your business offering as the products/services you are offering.
- **Processes** – The delivery of your service is usually done with the customer present so how the service is delivered is once again part of what the consumer is paying for.
- **Physical Evidence** – Almost all services include some physical elements even if the bulk of what the consumer is paying for is intangible. For example a hair salon would provide their client with a completed hairdo and an insurance company would give their customers some form of printed material. Even if the material is not physically printed (in the case of PDF’s) they are still receiving a “physical product” by this definition.
5. Funding the dream

5.1 Budget & cashflow forecast

It’s all about money. Without (enough) money you cannot startup your business. Without (enough) money you cannot pay your employees. Without (enough) money you cannot pay your personal expenses. Without (enough) money no one in the world will know your product/service: you need money for marketing & sales.

A very important question is: “How much money do you have (left) and what is your monthly burn rate?”.

Important thing to keep in mind:

Sold revenue is not the same as cash on your bank account!

• Imagine that customers pay after 30 days.
• Imagine that 20% of the customers will pay too late
• Imagine that 0,5% of the customers will never pay
• Imagine that 0,3% of the customers went bankrupt
• Imagine that an agreement for 3 years with a monthly fee of € 1.000 means a contract value of € 36.000 (but after 6 months you only have € 5.000 on your bank account; if you’re lucky!).

Without cash it feels like having a machine without oil. Without cash your business will be jammed. You cannot pay your outstanding invoices, employees, etc. and you will have no money to outsource production, services, etc.

90% of the startups underestimate the marketing costs and 99,9% of the startups overestimate the market size and the speed of getting customers
5. Funding the dream

Big difference between theory and practice!

Typical startup thinking: “I made a new personal Heart Rate Monitor. I can make it for only 12 Euro and will sell it in the shops for 50 Euro. If I sell to 2% of the Chinese people I will be rich.”

(2% is equal to 27 million devices)

The most important step in starting the business and to get funded is to make an overview of all the necessary upcoming costs (and it will always cost more than you think) and the upcoming revenue stream (and it will always take 2 or 3 years more before it really starts).

Costs checklist

- notary costs for BV/ Ltd. establishment
- legal costs for general terms & conditions
- costs for personnel (salaries, pension, management fees, vacancy, illness, etc)
- administration costs
- accountancy costs
- insurance costs
- costs for translations
- interest on loan(s)
- loan repayments
- marketing costs (logo, letterhead, advertisements, etc)
- office rent
- outsourcing costs for outsourced activities
- software licenses
- hardware & server costs
- product manual(s)
- costs for hosting of sites / infrastructure
- VAT remittance
- costs for traveling
- etc. etc.

For products:
- registration costs
- distribution fees
- packaging costs
- transport costs
- transport insurance
- CE-certificates / FDA / TüV
- production costs
- warehouse costs
- product liability insurance costs
- import duties
- etc. etc.

5.2. Subsidies & grants

A very important instrument for academic entrepreneurs are subsidies & grants. Most investors don’t like to invest from the beginning an entrepreneur has to deal with the typical valley of death.

To reduce the funding problem a maximum focus on subsidies & grants in the beginning is recommended. Please ask your university Knowledge / Technology Transfer Office for funding possibilities in the early stage of the business. In general the possibilities are:

- Subsidies, loan or grants provided by the University
  - for example proof of concept funds; or first company loans
- Subsidies, loan or grants provided by the region
- Subsidies, loan or grants provided by the government
  - Some examples for the Netherlands:
    - NWO - TTW, former known as Technology Foundation STW
    - RVO, Vroege Fase Financiering
5. Funding the dream

- MIT subsidies (by RVO)
- MIT R&D cooperation projects (by RVO)
- WBSO/RDA (for R&D activities for employees on the payroll of a startup)
- Subsidies provided by the European Union (Horizon2020 subsidies with SME Instrument)

For every subsidy proposal, it is important to have an answer on the underneath questions:
- What is really innovative?
- What is the difference with other technologies?
- How much lead time do you have in advance?
- Why is this technology better?
- Who will be your (potential) customers?
- In which markets can you sell the technology?
- Business model: How to make money?
- How do you organize your marketing & sales?
- How do you protect your ideas and technology?
- Think outside-in: What’s in it for a customer?
- How do you compete with your competitors?
- Which activities are planned, what will be the output?

Other funding instruments, typically used in the valley of death phase, are:
- crowd funding
- lease instruments / rent of hardware
- proof of concept funds

5.3 Investors: angels, venture capital & private equity

Finding an investor is typically very difficult and will take mostly at least 12 months. So a good preparation is very important. Funding can be divided into four phases:

Phase 1: Own time & money / FFF-money
Money from Friends, Family & Fools. And off course bootstrapping, and using your time and money from the founders.

Phase 2: Money from informals / business angels
Money from informals / business angels, crowd funding or subsidies / grants (see paragraph 5.2). A business angel is usually, a former successful entrepreneur or professional who provides starting capital in promising ventures, and helps also with advice and contacts.

Phase 3: Money from VC’s
Money from venture capitalists (VC’s) which usually provides money in early stage companies.

Phase 4: Growth money
Money to growth the company, mostly provided by Private Equity firms (PE’s) or corporates who do strategic investments.

When talking with investors it is always a discussion what will be the value of the venture. Before you read the next paragraph, please keep in mind the following:
- A founder will not lose money when an investor comes in; instead of losing money you increase the chance of success (in exchange for shares).
- Important question: “Do you want to be 1% owner of a billion dollar company, or 50% owner of a million dollar company?”
- All the unicorns (a unicorn is a company with a value of at least 1 billion dollar) had at least five to eight investment rounds and some founders diluted up to fourteen times!

About the value of a startup, in general there are three different methods to calculate the value:

1. Value based on current investments (assets)
   - For example: € 100.000 investment (for example 2,000 programming hours times € 50) means a value of € 100.000

2. Value based on current revenue (accounting model)
   - For example: € 250.000 current revenue can mean a value of for example € 750.000 (three times the year revenue; often is also used eight to fifteen times the net profit, but for startups this model is mostly useless)
3 Market value when there is no revenue or asset
   – Market Survey – including all sorts of public data about the company depending upon the industry in which it is being valued.
   – Data from comparison of companies – data received from review of comparable companies within the industry.
   – Future projection – includes all future expected cash inflow and outflow, net profitability, asset – liability position, say for the next 5 years.

How does the dilution work?
Example: A startup with a calculated value of € 1,000,000 will receive an investment of € 500,000 by a Venture Capital fund. How much % shares will be transferred to the VC? 1,000,000 + € 500,000 makes a total value of € 1,500,000.
   • € 1,000,000 was the value before the investment (= called pre-money valuation)
   • € 1,500,000 is the value after the deposit of the investor (= called post-money valuation)
   • € 500,000 / € 1,500,000 = 33.3%
In 75% of the cases a VC takes a percentage of 25% up to 40% in the startup.

5.4 Pitching for investors: tips
Short pitch (between 60 seconds and 10 minutes)
Get your story in the first image!
1 Problem: connect emotionally with your audience
2 Solution: resolve the pain – Product / Service (what are you serving?)
3 Business/revenue model: how do you make money?
4 Competition: why you’re better than competitors
5 Marketing plan: customer acquisition / distribution channels, etcetera

Long pitch (15 - 60 minutes)
1 Problem: connect emotionally with your audience
2 Solution: resolve the pain – Product / Service (what are you serving?)
3 Business/revenue model: how you make money?
4 Proprietary technology: your unfair advantage(s)
5 Competition: why you’re better than competitors
6 Marketing plan: customer acquisition / distribution channels, etcetera
7 Financials: quarterly revenues versus expenses (forecast of 3 years)
8 Your team
9 How much money do you need and what do you offer to the investor

“It remains a challenge. There are tons needed to get to a point where investors are interested. One pitfall is including in exit strategies for investors. It can be very difficult to get funding without another party’s de facto control over the product and in particular the marketability gets it.” - Guido van ’t Noordende

How startup funding works
Hypothetical startup goes from idea to IPO
6. Starting the business

6.1 Business plan

Nowadays investors don’t read anymore dozen pages of plain text. So our recommendation is to make the following:

1. a one pager as a teaser to be used to get interest from investors
2. a business plan in the form of a PowerPoint (but with lots of readable text and not bullets with only 3 words); use PowerPoint only as a tool to edit it. An example can be downloaded on www.valorisation.com
3. an extended spreadsheet with a forecast of the costs, revenues, etcetera. At least with all the financial details for the first three years and a revenue and costs summary of the years four and five. For a cost checklist see Paragraph 5.1.

The index of the PowerPoint business plan could be:

1. Executive summary
2. Product / business idea, pains & grains
3. Target market, market size, marketing approach, press release
4. Business model: value proposition, customers, partners & channels
5. Revenue forecast, costs, cashflow & EBITDA
6. Risk management, SWOT analysis, realisation schedule
7. Investment plan & business case
8. Management team
9. Contact details

6.1 Budget & cashflow forecast
6.2 Start the company

Underneath the most important steps to establish the company:

1. Start with thinking about a good business name (check if it not exists already or can cause confusion).
2. Check also the domain name. The website www.panabee.com is recommended to check if the .com site is available and it shows also nice alternatives.
3. Start with a one pager and publish it on Internet (so Google index can do his work already).
4. Work on a logo and a corporate identity. If you don’t want to spend too much money on this, hire some students or let the crowd create your logos and identity: www.99designs.com or www.fiverr.com
5. Prepare your legal entity by a notary. In The Netherlands is called a BV (in the past you had to deposit € 18,000; nowadays you can deposit also €0,01 single eurocent). The notary will arrange the official documents and the subscription at the Chamber of Commerce. Sometimes it is a good opportunity to start as a sole trader or being self-employed (in dutch ‘Eenmanszaak’), but be aware you are personal liable. In the Netherlands an “Eenmanszaak” can be arranged, without a notary, at the Chamber of Commerce (www.kvk.nl). The company needs an address, you could use the address of one of the shareholders (or provide a rent agreement from a building / floor / room).
6. Generate general terms & conditions by a lawyer, or use available industry standards (for example: www.nederlandict.nl). Before doing business !!!
7. It is necessary to deliver the General Terms & Conditions to potential customers (at proposal phase; send them together with your proposal, else it is not valid).
8. Registering at Dutch Tax Office (Belastingdienst); forms coming itself after subscription at Chamber of Commerce.

9. Find a reliable accountant / bookkeeper in your neighbourhood.
10. Create a professional website and email addresses.
11. Create professional business cards (do not try to save money on this).
12. Create a professional PowerPoint, save it as a high-res PDF to share with potential customers. The PowerPoint must include a contact details page with names and telephone numbers. On www.presentationload.com you will find professional PowerPoint templates.
13. Start with business model testing and talk to potential customers. Do not present pricelists on your website at the beginning: try to find out what customers are willing to pay.

“From the beginning you will have to focus on marketing and sales besides the technical challenge and start with 4 important things: 1) a business name 2) a businesscard 3) a powerpoint presentation 4) a website” – Rogier de Haan
6. Starting the business

6.3 Product launch

Getting a new product ready and out the door is a daunting task. Columnist Sonny Ganguly has some tips to ensure your product launch goes off without a hitch.

Source: 7 key elements for the perfect product launch - http://marketingland.com/7-key-elements-perfect-product-launch-134634

The launch of a new product may seem like it’s occurring at a single point in time, but a product launch has far-reaching effects. A poor product launch could mean fewer sales, upset or confused customers and negative ROI. Conversely, a perfect product launch could mean more sales, more happy customers and a better bottom line.

At WeddingWire, we’re no stranger to product launches. When we launched in 2007, we started with one core product: a vendor directory. We then grew our business to offer both consumer products to help engaged couples plan their weddings and merchant products to help wedding professionals run their businesses.

Each new product is a challenge, but we’ve come up with a solid approach that helps us go to market with a strong offering each time. Below are some tips about key elements your business needs to consider during development, pre- and post-launch.

1. Opportunity

Having an original product idea is a critical starting point, but you should also think about the market opportunity for your potential product. There are many key considerations when evaluating market opportunity prior to product development, but below are the top three I like to focus on for a perfect product launch:

• Audience: Ultimately, any product should be launched as a result of an audience need — the success or failure of any product is largely based on whether or not people will use it. You’ll need to be able to clearly identify the potential audience for your product and whether or not that audience can be segmented.

Furthermore, understanding your customer will help you decide if your product solves a problem in a meaningful way. Remember to focus on providing a solution to a relevant pain point.

• Competition: It’s important to consider any competition currently in the same space you’d like to occupy. Are there other businesses that offer a similar or substitute product? A market can be much harder to enter when there’s an entrenched competitor already offering a more mature product.

2. Scheduling

Any experienced product manager will tell you that an accurate launch calendar is crucial to a successful product launch. Start by deciding on your desired launch date and work backwards to come up with a realistic timeline for all teams involved. The launch schedule should encompass each and every step you need to take to reach your goal, and your entire team should be aware of the schedule so they can prioritize tasks accordingly.

It’s best to err on the cautious side and leave ample time for each step in the schedule to be completed — things will inevitably happen to change the course of your launch. Being ready to launch a project earlier than expected is a welcome update, while launching late can cause a number of complications. You don’t want your team to be under so much pressure that they rush the work and make mistakes.

Schedule weekly check-ins with the various teams involved so you can manage expectations and keep the lines of communication open among all parties.

3. Focus

One of the hardest parts of a product launch is focusing on the development of the product, not its features. The time will come during testing to iterate and make tweaks, but the majority of the time and effort spent leading up to a product launch should be focused on creating a minimal viable product that allows your product team to collect the maximum amount of learnings about your customers with the least amount of effort.

Once you get the product out the door and in front of users, you’ll be able to add or adjust functionality as needed. Focusing too much on
trying to add cool functionality or attributes will eat up a lot of time and inevitably delay your launch. Common practice is to get a product 33% launch-ready before you release it, according to KISSmetrics’ Neil Patel. Avoid potential distractions by focusing on what your product needs to have rather than what your product could have, and accept up front that your product will not be perfect at launch. Your product will probably never be perfect in your eyes, so don’t stress too much about fixing every bug or erasing every bad design element. Keep moving forward, and you’ll stay within your timeline.

4. Testing
The best way to know if a product will be successful is to bring in some of your trusted customers to test it. Whether it’s a formal beta program, a quick focus group, a detailed survey, simple a/b testing or more complex multivariate testing, getting your new product in the hands of your brand advocates will help you learn what the end users will love, hate or don’t need.
You can make updates based on the tests to address specific, real pain points in the market. Testing is a key element of a product launch, and it can (and, in some cases, should) be replicated multiple times prior to the launch to help your team understand how each iteration of your product performs with your test group.
Additionally, the insights you gather from this research will give you great data points when communicating externally to build the case for your product. There’s no better justification for a product than statistics proving that you’ve done your due diligence to give your customers both what they want and need.

5. Positioning
When launching a new product, trust is critical. One of your biggest tasks during a product launch is to establish trust in your market. Even if your brand is an authority in your industry, you’ll still need to convince consumers that your product is a solution to a known problem. The right positioning will make your product much easier to sell in the long run. Positioning shapes the way consumers will evaluate your product and that of your competitors, which will drive customers’ purchase decisions.
Segmentation is also a key part of positioning. When you first established the target audience as part of your evaluation of the market opportunity, did you identify any additional segments within your target audience? Determine how the needs of those individual segments differ, and think about the various ways you can align your product’s position with those needs. Pick out the features that will matter most to each segment and highlight them in your messaging and promotional strategy.
No matter what product you’re launching, people tend to use the products that are the most relevant to their needs. Give them the right message at the right time, and they’ll be more likely to adopt. Remember, a product can serve the needs of multiple target segments, but the positioning needs to be appropriate to the audience.

6. Training
Training is another important pre-launch key to success. Your customer service, support, sales, public relations, and marketing teams all need training around the product that can inform their conversations and written communications.
Training teams in advance will help them start incorporating the product into their conversations and allow them to really get to know it in order to help your customers. Product training with these customer-facing teams is also a great way to get internal feedback; no one knows your customers better than your customer service team!
Including your public relations and marketing teams in your pre-launch product training will make for a smooth transition as they begin writing about and promoting your new product. They can start aligning messaging and finalizing pitches that will maximize the impact on the actual launch day.
Plus, if they’re informed early enough, they can create campaigns to tease your new product and start creating buzz before you go live. Bringing these communications teams in earlier rather than later will help them hit the ground running at the time of release.

“"If you really like your business: go for it. It is important to organize the marketing of your idea and to organize the funding. Make sure that you split up your realization into small activities which can be implemented step by step, to prevent that you are halfway left with empty hands.” – Guido van ’t Noordende
7. Feedback
Even if you held multiple consumer testing sessions and sent out consumer surveys, it’s impossible to please every single potential user of your new product. Be willing to accept (and listen to) feedback and provide a focused avenue for doing so.
Your customers are the end users, so it’s important to listen to their concerns and update where necessary. You’ll also empower those customers by allowing them to shape future iterations.
Providing a focused avenue for accepting feedback — like a landing page, online forum or even a simple phone call — means that you can identify patterns and assess the number of times you receive a certain request or comment. It also arms your customer service team with a place to drive unsatisfied users to make sure their feedback is being heard by the product team.

6.4 Launching customers & pricing
For every company, the first references are very important! So the advice is to start from the beginning to focus on launching customers.
The most commonly used definition of a launching customer is that it is the first major client or customer of a startup that creates not only trust in your product, but also plays a role in its further development. And thus, acts as a catalyst for a successful progression and market introduction of the product or service.
A launching customer is also sometimes mentioned in the same breath with an early adopter, another familiar term in the marketing world. But it has been too simple. An early adopter is someone who buys the product first before being discovered by the masses. Often this is a consumer who has nothing to do with your business, but through their purchasing behavior is extremely important for your business.
The product development can be done together with the first launching customers. But in the case you’re developing a standard solution be aware that your solution is not too specific, so you can’t sell it anymore to others.

Example: an IT company in The Netherlands couldn’t find customers, after they had a deal with the Ministry of Defense it was very easy to catch the next customers.

Sometimes you have to think as follows:
• The first customer is mostly a big loss-making project.
• The second one is also loss-making.
• The third one is probably break-even and then the game starts.

“There are no facts in the building… so get the hell out and talk to customers.”
– Steve Blank

Lots of startups spend a lot of time with internal discussions about what must be the price. The answer is: No one knows!!
So talk with (potential) customers. What are they willing to pay, how much is their pain, how big are their benefits, how much money can they save?
Do not mention prices on your website (only when you have online subscriptions; even that: you have to test it before going live).
Focus on value based pricing models and not a cost price+ model.

Example: an IT company had only 3 customers. Their pricing model was a 3-years commitment of € 5,000 per year, so a total of € 15,000.
After discussions with the Valorisation.com coaches they changed their pricing to € 400 per month, immediately terminable. They send all their potential customers a mailing with login codes for 3 months free use. 3 months later they had 50 paying customers and monthly € 20,000 extra revenue with only 1 mailing.
Many new businesses and start-up companies often find it difficult to get off the ground. Finding enough capital to fund a developing business and keep it running can be difficult for a company that has not had sufficient time to prove itself in the marketplace. By creating business traction, new companies can attract potential investors and gain a competitive edge in their industry.

### 7.1 Finding your first customers

Building a successful business is not easy. It is very important to realize that the key to success is not "the best idea", "the best team" or "the funding". It is all about the ability to acquire customers & grow at a sustainable rate. Startups aren’t failing because they can’t build good products. Startups are failing because they can’t find paying customers.

Attracting the first three customers is the most difficult job for an entrepreneur; mostly mentioned as launching customers. The most commonly used definition of a launching customer is that it is the first major client or customer from a startup which doesn’t have only trust in your product, but also plays a role in its further development. And thus, acts as a catalyst for a successful progression and market introduction of the product or service.

Launching customers are very important, because it will help to attract the customers in the second phase. It always helps if you can say "customer ABC uses already our system". Especially if ABC is a well-known company in the market.

Arguments to convince a launching customer to act:

- Be the first one in the market (marketing value?)
- Be able to adapt product/service to their needs (or co-development / extra features for free)
- Lower price
Listen very well to potential customers, to avoid you’re building functionality which nobody wants.

To find your first customers it is very important to spend a lot of time on networking and to improve the pitch and packaging of the company’s message.

7.2 Networking
Building a network is sometimes very difficult in the head of academic entrepreneurs, but in-fact it appears to be very easy.

Stephanie Speisman – 10 tips for successful business networking
1 Keep in mind that networking is about being genuine and authentic, building trust and relationships, and seeing how you can help others.
2 Ask yourself what your goals are in participating in networking meetings so that you will pick groups that will help you get what you are looking for. Some meetings are based more on learning, making contacts, and/or volunteering rather than on strictly making business connections.
3 Visit as many groups as possible that spark your interest. Notice the tone and attitude of the group. Do the people sound supportive of one another? Does the leadership appear competent? Many groups will allow you to visit two times before joining.
4 Hold volunteer positions in organizations. This is a great way to stay visible and give back to groups that have helped you.
5 Ask open-ended questions in networking conversations. This means questions that ask who, what, where, when, and how as opposed to those that can be answered with a simple yes or no. This form of questioning opens up the discussion and shows listeners that you are interested in them.
6 Become known as a powerful resource for others. When you are known as a strong resource, people remember to turn to you for suggestions, ideas, names of other people, etc. This keeps you visible to them.
7 Have a clear understanding of what you do and why, for whom, and what makes your doing it special or different from others doing the same thing. In order to get referrals, you must first have a clear understanding of what you do that you can easily articulate to others.
8 Be able to articulate what you are looking for and how others may help you. Too often people in conversations ask, “How may I help you?” and no immediate answer comes to mind.
9 Follow through quickly and efficiently on referrals you are given. When people give you referrals, your actions are a reflection on them. Respect and honor that and your referrals will grow.
10 Call those you meet who may benefit from what you do and vice versa. Express that you enjoyed meeting them, and ask if you could get together and share ideas.

In the Appendix is the book Traction of Gabriel Weinberg recommended. In his book he mentioned 19 possible channels for networking and getting to know potential customers and other interested audience.

The 19 channels are:
1 Blogs
2 Publicity
3 Unconventional PR (for example a launch stunt, with the goal to get a picture in a newspaper)
4 Search Engine Advertisement (SEA)
5 Advertisement on Social Media (for example Facebook, LinkedIn or Twitter; it is even possible to target your audience). Lots of entrepreneurs think it is only effective for B2C business, but also with B2B you can make effective marketing campaigns.
6 Offline advertisements (advertising in magazines for example)
7 Search Engine Optimization (SEO; this means that you optimize your website on specific keywords with the goal that you hit a top position in search engines. Tip: google on “SEO” and “long tail keywords”).
8 Content marketing
7. Networking, sales & traction

9 Email marketing
10 Viral marketing; make a nice funny video and try to get it viral (mostly you outsource this to a marketing company who are specialized in making virals)
11 Engineering as marketing
12 Business Development (BD)
13 Sales
14 Affiliate programs
15 Existing platforms
16 Trade shows; sometimes is is better (and cheaper) to go as a visitor to a trade show instead of hiring an expensive booth; you can also meet potential customers at the coffee corner (take enough flyers with you in your bag).
17 Offline events
18 Speaking Engagements
19 Community Building

Some of these channels are probably completely unknown; discuss with other entrepreneurs what they are using and which ones are successful in their situation. Watch also to other companies, competitors and check if their campaigns are successful or not.

7.3 Pitching & sales

Pitching is not only important for attracting investors. Actually, you have to pitch every day. You need a pitch for a visitor on your exhibition booth, a pitch when you meet a potential partner or customer on a network event, a pitch in your own office in meetings, everywhere. And it is very important to be prepared for different size of pitches. The shortest and the most difficult one is a pitch in maximum two sentences.

A nice exercise is: try to explain your company in two sentences….but the audience is someone without any education and is a supermarket shelf filler. This two sentences are the most important ones; and you need them again in every pitch.

Try to make pitches from different length: 30 seconds, 1 minute, 2 minutes, 4 minutes, 10 minutes, etcetera.

When you may present your company with a more longer pitch, use the underneath tips:
• Be convinced and enthusiastic
• Be prepared for your audience
• Dress well, sleep well and relax (switch 15 minutes before presenting your phone off)
• Show your product or a nice movie when your product is too big to carry
• Use pictures and a nice sheet layout (tip: download a nice template on www.presentationload.com)
• Make you letter fonts not too small (and place not too much text on the slides)
• Use a remote control
• Exercise, exercise, exercise
• Never overrun your time limits (ask before how much time you have; and try to stop 5 minutes before the deadline)
• Make spare sheets with pictures (which you can use when you receive questions from the audience)
• A sense of humor always works

Sales conversations

Lots of academic entrepreneurs starts at the beginning of a conversation directly with selling their solution. The best conversations do NOT start with solution selling. It is very important to listen first.
An example of a typically one hour meeting could be like this:

- **1 minute:** refer to the initiation of this meeting, for example “thanks that you accepted my invitation after we met on the conference” and then something like “is it correct that we have one hour for discussion?”
- **5 minutes:** getting to know each other; introductory round
- **10 minutes:** developing the relationship, talk also about common interests or common people you know
- **15 minutes:** start listening and ask open questions which refers to the problem you think you can solve. Mostly it starts first with more general questions. For example:
  - How many offices has your company? How many employees are working in this building?
  - Is it really a huge problem? How many people in your company have this issue? And how much time do they lose with this?
  - What is the impact on your organization?
- **15 minutes:** pitch your story and have short breaks to answer questions and to check if everyone is still interested and listening
- **10 minutes:** further discussion
- **4 minutes:** closing of the meeting, but most important: summarize the action points and make a new appointment!

### 7.4 The power of social media

Entrepreneurs are all jumping their presence online every day. Every other investor or entrepreneur one meets in a seminar or conference hands over his business card, which details the said person’s social media handle.

From LinkedIn to Twitter and Facebook, not one is considered any less important from the other. Right said by Facebook’s Mark Zuckerberg “When you give everyone a voice and give people power, the system usually end up in a good place.”

Fueling need of entrepreneurs to know more and find more leading them to the discovery of new and creative ideas, social media is a tool that is not only easy to use but also cost efficient.

The undeniable truth is - Social Media is a platform for real networking, growth and engagement for any venture irrespective of the industry. There was a time in the digital world when marketing was merely confined to website building and pondering information over the first ten pages of Google.com. Today, the most powerful source of marketing – be it, online or offline is undoubtedly ‘Social Media’.

To understand the actual potential of any social media tool one should understand four important steps.

- **Community Building** - The first step to engage real-time leads for a business is to attract community and not directly sell your business to the customers. Deliver great content and information and focus on building a community before monetary gains.
- **Turn Around Time (TAT)** - For any venture to excel, TAT plays a very vital role. Social Media is different from branding via newspapers, television and radio where one can expect results after a period of time. But, for Social Media Optimization to excel the (TAT) should be quick. A Blog Post, Twitter, LinkedIn or Facebook campaigning should be operated as per the stipulated time of delivery or leads.
- **Engagement** - Social Media is all about community building and your target audience getting interested in your brand and its value. For instance: A potential customer should walk up to any given business rather than the opposite happening. Social Proofing is immensely necessary for engagement i.e. a majority of interested audience committed over digital platforms to your business. The mainstream perception lies on the fact that where there are more people, the business works better there.
7. Networking, sales & traction

- **Driving Sales** - To drive sales for your business and even for personal promotion of an individual; daily content marketing and advertising over Social Media tools have a major role to play. Facebook, Twitter, Instagram and LinkedIn campaigning influence audience and drive enormous amount of sales. When advertising happens over social media then a marketing team should be clear about return of investment (ROI).

> The internet gives everyone the freedom to choose anything that they like and social media is just a medium to drive somebody to the desired platform. Today, every small and medium business uses social media to reach the desired audience.

Business traction refers to the progress of a start-up company and the momentum it gains as the business grows. There is no one way to measure traction, however, companies usually rely on customer response and revenue as indicators of their success. The reasoning behind developing traction is to grow the business while meeting specific company goals and objectives. While traction may be a seemingly abstract concept, it is important and helps a company understand where it stands in an industry and where it would like to be. Therefore, developing a high level of business traction is important to any start-up business and should be a large part of its business growth plan.

Understanding the future of the organization, developing specific goals and a means to reach those goals, is the first step for successful start-up. Clearly stated goals in both a business plan and mission statement shows investors how the company will progress in relation to marketplace factors and competition. However, simply defining these goals is not enough. To measure traction, the company needs to understand what metrics it will use to define success. Depending on the industry and external marketplace factors, traction may be measured through sales, customer response or market research.

The best barrier to entry is sales traction in the market. We now provide some ideas and suggestions for finding traction in different market environments, based on the work of some influential thought leaders, especially Porter and Kotler.

- **Finding Traction in an Emerging Market**
  Remember, you have to persuade marquee customers that they need you; you become a “must-have.” It involves educating the marketplace, maybe going against the biggest competitors and some established norms in the industry. Are you prepared to be in the education business, as well as your original business? Examples are holding seminars, conferences, and meetings in order to educate the industry about the benefits of your solution. Can you be supplying the supplier rather than a direct participant?

- **Finding Traction in a Growing Market**
  Growth and profits will come easily to anyone who drops a line in the water. You will need to satisfy the customers quickly or someone else will. Also, a growing market attracts new entrants, which will force “reactionary pricing” by the established players. You know, this could be your only chance to make it big really quickly. Are you structured for this growth, do you have a growth strategy?

- **Finding Traction in a Mature Market**
  Growth can be achieved but it will be difficult. The market is proven, the rules are written, and the norms are established. You will find that the “pie” is not finite. You will have to come in through a niche and be prepared to defend it. Consider how fragmented is the industry? Who are the leaders? Do you really have the best product for this ecosystem? Have you considered being an innovator and enabler in another industry? Or can you identify subsegments of your industry that might be growing faster than the other segments? Can you identify micro-niches where being small can provide an advantage? Would it be possible to enter a market with a product you have now, then introduce innovative upgrades? How about seeing opportunities visible to you but not visible to leaders in your industry? Finally, are you prepared to lead the industry change, as there might be fast followers in your wake?

- **Finding Traction in a Declining Market**
  How can you position your venture as viable and growing in a declining industry? Consider that some competitors will be dropping out of the market, which might be enough to leave you some headroom for growth, or at least some breathing room to quickly plant some roots, and then later move into other markets. Can you get started here and then diversify into other industry sectors? Or you could be known as the “last-to-leave” in the industry, meaning you could buy up other inventory, their customer accounts, know-how, even partner with industry leaders to take-over their accounts.

Source: Roadmap To Entrepreneurial Success

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7.4 The power of social media
A. Appendix

A.1 Interesting links & contact information

**National Institutions & hubs:**
http://www.startupdelta.org, StartupDelta
https://www.eitdigital.eu, Pan-European Accelerator Program,
Entrepreneurial innovation & education driving Europe’s digital transformation
http://www.nwo.nl, NWO - The Netherlands Organisation for Scientific Research
https://www.dutchdigitaldelta.nl/, Dutch Digital Delta
http://startupuropeclub.eu, European startup hub
http://amsterdam.impacthub.net, ImpactHub Amsterdam
http://www.commit-nl.nl, COMMIT/

**Lists and maps:**
http://foundedinholland.com, Founded in Holland
http://www.startupeuropemap.eu, Startup map of Europa
http://www.dutchstartupmap.com, Dutch Startup Directory
https://dealroom.co, Europe’s go-to website to discover new tech companies
https://www.crunchbase.com, Platform to discover innovative companies and the people behind them

**News:**
http://siliconcanals.nl, StartUp Blog Benelux startup ecosystem
http://startupdates.nl, StartUp Nieuws
http://www.eu-startups.com, Spotlight on European startups
http://startupjuncture.com, Dutch Startup News and Insights

**Tools:**
http://www.startupwerkboek.nl, Toolbox for startup entrepreneurs
http://goldeneggcheck.com, Business Plan and Investors Plan
https://strategyzer.com, Business Model Canvas and more

http://startupstash.com, List of startup tools
https://betapage.co, BetaPage: Browse, discover, and hunt for startups and new ideas.
http://www.panabee.com, Company Name Generator
https://99designs.com, Portal for outsourcing of graphic designs

**Events:**
http://www.startupdelta.org/events, Event calendar of Startup Delta
http://www.sprout.nl/events, Event calendar of Sprout
https://youngstartup.nl/events, Event calendar of Young Startup
http://startup-calendar.com, Startup events in Europe
http://www.iamsterdam.com/en/business/startupamsterdam/events, Amsterdam, events

**Books:**
www.managementboek.nl, Management books
https://www.entrepreneur.com/article/233076, 14 books every Entrepreneur should read

**Finance:**
http://www.stw.nl, NWO TTW (former STW) Foundation
http://english.rvo.nl, Netherlands Enterprise Agency
http://www.financecorner.nl, Financing
https://www.kvk.nl/advies-en-informatie/financiering, Chamber of Commerce (Dutch)
http://fundersandfounders.com, Background information about funding
http://www.bannederland.nl, Business Angels Netherlands
http://www.mvp.nl, Dutch Foundation of Private Equity Companies
http://www.amsterdamventurepartners.com, Startup Banking
http://www.fundwijzer.nl, Crowdfunding overview

**Incubators:**
https://www.rockstart.com, Rockstart
https://www.startupbootcamp.org, StartupBootCamp
http://www.hightechxl.com, HighTech XL Accelerator
http://crossspring.com, CrossSpring Lab program
http://worldstartupfactory.com, World Startup Factory Acceleration programs
TTO Support
Most universities in The Netherlands have their own Technology Transfer Office (TTO). Most TTO's can help support you in valorising your scientific knowledge in various ways. These include:
• Working together to develop your valorisation case, from idea to product or service.
• Examining other possibilities to utilise scientific knowledge.
• Carrying out joint network, stakeholder, and market analyses and project plans, preparing budgets and collaboration agreements, conducting negotiations on your behalf, and establishing partnerships or consortia.
• Brainstorming with you on how to incorporate all of this into your research group or faculty.

Valorisation / Starting from a research institute:
http://www.ixa.nl/en - VU University Amsterdam
https://www.cwi.nl/sharing-knowledge/spin-offs - CWI
https://www.tue.nl/en/tue-campus/tue-innovation-lab/ - Eindhoven University of Technology
https://www.maastrichtuniversity.nl/about-um/units/maastricht-valorisation-centre - Maastricht University
http://luris.nl - Leiden Institute of Advance Computer Science
https://www.radboudumc.nl/OverhetRadboudumc/Organisatie/Valorisatie/Pages/default.aspx - Radboud University Nijmegen
https://www.tilburguniversity.edu/about/schools/humanities/dcui/research/valorisation-2016/ - Tilburg University
https://www.tno.nl/nl/samenwerken/octrooien-en-licenties/ - TNO
https://www.umcg.nl/EN/Research/Researchers/General/EconomicValue/ValorizationandEntrepreneurship/Paginas/default.aspx - University Medical Center Groningen
https://www.utwente.nl/en/business/support-for-start-ups - University of Twente
http://utrechtholdings.nl - University of Utrecht
https://start-life.nl - Wageningen University & Research Center

A-2 Do’s and don’ts for high-tech startups
Did you ever dream of turning your promising research, whether it is hardware or software, into business by creating a spin-off company? But how to realize this dream?
• Who are your first contacts?
• What are the critical steps and key ingredients for success?
• What business plan to write?
• What revenue models are possible?
• How to protect your IP?
• How to finance the different steps in technology / IP development, market and business model validation and business creation?
• How to make the difference?

But realize not every startup will gain success. Roughly 12% of the startups lead by a “first timer” do actually succeed according to Fundersandfounders.com. Even the veteran entrepreneur backed by a VC has only a success rate of 30%.

Alain le Loux wrote in 2014 an article about the top ten reasons why startups fail, which are summarized underneath.

Top 10 reasons why startups fail:
from our own experience by directly coaching more than 200 European startups and indirectly involvement in 300 other startups and valorisation projects decade, we came to the following list why startups won’t make it.

1 Underestimate the timelines before the company is making profit (underestimate the marketing & roll-out costs)
Lots of startups really think they make profit within 12 months. In all the business plans we see huge revenues in the first year. The practice is, unfortunately, that most startups after 3 years still have a negative cash flow.

2 Overestimate the market size
Lots of startups start to calculate with 1% or 2% of the market size and think they can reach that in a few years. In practice they even don’t reach a market share of 0,001%. They forget to calculate the huge sales & marketing costs to reach a certain level of market size.
3 Funding problems and cash flow problems

It is always difficult to get funded. Or at least the difficulty is to get funded on the right timing. Lots of startups think they can get funding within a few months; in practice you need more often 1 year then a few months. Startups with funding within a few months from the startup date are exceptional. Focus on your market and focus on the next funding round. Without cash it feels like running a machine without oil. Without cash your business will be jammed. Do not underestimate the period time to get funded. It is sometimes a very frustrating process; only the real entrepreneurs will survive.

4 Problems with customer acquisition ("everyone likes it, but don’t buy it")

There is a big difference between product liking and product buying.
1. I like the product.
2. Yes, I definitely like it.
3. I would like to have it.
4. Yes I’m sure I would like to have it.
5. I think I will buy it.
6. I will buy it.
7. I’m sure I will buy it.
   – But when: next week or after 3 years?
   – Is it a substitute? Do you need to wait when the time is ready for replacement?
   – Why should people order it today?
   – Why should people pay money for it? (it is really a big problem?)
   – But when: next week or after 3 years?
8. I want to have it this week.
9. I will step on my bike / into my car and will ride to the shop?
   (even when it's raining?)
10. Yes, I got it.

5 No clear pricing and/or revenue model

Lots of startups have no glue about pricing. They forgot the process of Customer Validation: talk with potential customers and ask/discuss the potential value, the savings and the price they want to pay. Lots of startups are so stupid to communicate directly prices into the market; sometimes is it better to discuss it first with some launching customers. And do not forget to price your product/service “value based” and not “cost-price plus”; and have a look at substitutes, competitors and their value for money.

6 Not enough experienced sales power in the team

Most startup teams are young and smart, but more than 90% of this teams do not have experienced sales power on board (men or women with at least 15 years proven sales experience or market knowledge). It is very important to have a balanced management team and a mix of people.

7 Competition of other products or services

There is always competition. Even if you think you found everything on Google, you will be surprised what happened in another region in the world.

8 Product / service is not as good as expected

Lots of entrepreneurs think they have an unique product or service. But unique products will not always be automatically bought by customers. It’s all about perception of the customers and real added value.

9 Problems with scaling up and growth

A business model with potential scaling up possibilities is very important. Lots of startups forget to prepare for international growth and sometimes their pricing models are not suited for worldwide distribution. Also language and cultural problems can be a threshold.

10 Internal troubles within the management team

One manager will go left, the other one to the right. One manager wants to have direct a huge salary, another manager will not push up the burn rate. Some employees within a team have no respect for others, some are not listening to others; some employees have a short-term focus, some have mid-term focus; some employees are very smart, some employees are less smart and cannot discuss on the same high level. Some people are professionals, some are not more than well-intentioned amateurs. Some team members work 16 hours per day, 7 days per week. Some of them start at 10.00 and leave at 16.00. There are always lots of possible internal troubles. Do not forget: “you are together in the same rowing boat and have the same goal”.

A.2 Do’s and don’ts for high-tech startups
**A-3 10 Recommendations for entrepreneurs**

Now you read about the reasons why startups fail, does it mean you do not want to startup at all? The best way of avoiding startup pitfalls is to learn from others. Most academic spinoff companies having great ideas. Steve Blank, entrepreneur and author of the book “The Startup Owners Manual” said:

“but there are no facts in the building… so get the hell out and talk to customers”

1. Have fun! When you don’t have fun, stop immediately.
2. Talk with potential customers
3. Focus on launching customers. The earlier you involve potential customers in the R&D process the better.
4. Rule-of-thumb: spend 1 euro for marketing for every euro you spend in R&D / developing your products / services
5. Try to set up a revenue model with recurring revenues
6. The lower the thresholds the easier to get new customers
7. Test your business plan with Business Model Testing
8. Commercial skills in the management team is necessary
9. A formal launch with a press release can fasten-up the market entry
10. Find an experienced startup mentor.

**A-4 Top 10 books for tech startups**

There are thousands of thousand management books. The authors of this book read hundreds of them and concluded that only a few of them will help a startup entrepreneur.

All the other books are nice to have and interesting if your business is already running for three to five years or if you work within a corporate. If you don’t have enough time, then only buy and read the underneath four -most important- books:

1. **Disciplined Entrepreneurship: 24 Steps to a Successful Startup** – Bill Aulet
   A step by step guide to a successful business.
2. **The Startup Owner’s Manual** – Steve Blank
   Steve Blank is famous of the sentence “Get the hell out of the building, there are no facts inside”.
3. **Business Model Generation** – Alex Osterwalder
   Business Model Generation is a handbook for visionaries, game changers, and challengers striving to defy outmoded business models and design tomorrow’s enterprises.
4. **Traction – Gabriel Weinberg**
   Most startups don’t fail because they can’t build a product. Most startups fail because they can’t get traction.

The other six, very interesting, recommended books are:

5. **Pitching and Closing everything – Alexander Taub**
   Everything You Need to Know About Business Development, Partnerships, and Making Deals that Matter.
6. **Influence – Robert Cialdini**
   Influence: Science and Practice is an examination of the psychology of compliance (i.e. uncovering which factors cause a person to say “yes” to another’s request).
7. **Spin Selling – Neil Rackham**
   Argues that large-scale sales requires different strategies than small-scale sales, and tells how to explain benefits, prevent objections, identify customer needs, and make effective closings.
8. **No Story, No Glory – Theo Hendriks**
   Storytelling for researchers is a very effective way to sell their solution.
9. **Getting Things Done – David Allen**
   Getting Things Done is the ultimate method to work more effective.
10. **We are big data – Sander Klous & Nat Wielaard**
    This book demonstrates the inevitability of a continuously growing role of data in our society and it stresses that this role does not need to be threatening: to the contrary, collection and analysis of data can help us prevent traffic jams, suppress epidemics, or produce tailor made medicine.
A-5 Business plan format
A typical business plan contains the following paragraphs:

Business Plan Topics
1. Executive Summary
2. Problem description
3. Functionality and description of the product / service
4. Market size and target customers
5. Competition and comparison
6. SWOT analysis
7. Business Model Canvas and revenue model
8. Marketing plan
9. Cash flow and revenue forecast
10. Team
11. Appendices

A-6 Invention Disclosure Form
For ICT research and high-tech technology we recommend to start to describe the current situation. The underneath questionnaire and checklist* can be used to give an overview of the invention and to start internal and external discussions.

* Model from Kennispark Twente.

INVENTION DISCLOSURE FORM

Title of invention

Institute

Research group

Contact person

Phone

E-mail

A. The invention

A1. State of the technology:
Give a general description about the application field (market) of the invention: state of the technology.

A2. Problem:
What are the actual problems in this market that are solved by your invention?
A3. The invention:
   a) Give a description in what way the invention solves those problems (mentioned in A2).

   b) Is your invention a new process, a new product, a new composition of a substance or a new composition of one or more devices?

   c) Is it about a new use or improvement of an existing product or process?

   d) What are other applications of the invention, other than applications mentioned in A2

   e) Give some keywords that describe the invention

A4. Novelty:
   a) Describe why the invention is novel: in what way does the invention differ from the present available technology?

   b) Give advantages and disadvantages of your invention. Can any disadvantages be overcome?

A5. Inventive Step:
   How obvious was this solution for you? Could other experts have come to the same solution?

A6. Best solution:
   a) Are there other possibilities to solve the above mentioned problem (A2)?

   b) Is your solution the best solution? If yes, why is your solution the best solution?

   c) Is it likely that your solution can be standardised?

A7. Phase / Technology Readiness:
   a) In what phase of development is your invention: Idea, design, prototype, ready for production?

   TR-level

   Explanation

   b) How much additional time (research/development) and money is needed to develop the invention to a commercial product? (rough estimate)
A8. Potential Market:
   a) What is the potential market of your invention? (in €)

   b) Please list possible customers (companies, end-users) or typical customers:

A9. Pricing:
   a) What would be possible the price for customers?

   b) How much is this more or less then current solutions?

B. Disclosure

B1. Publication:
   a) Has your invention (partly or entirely) been published (abstracts, website, journal, thesis etc.) or otherwise been disclosed (lectures, poster, conferences etc.) If yes, which part?

   b) When are you planning to publish your invention in an article or to present it at a conference?

B2. Other publications:
   a) Are there other publications or existing patents on the subject of your invention (please list)?

   b) What other research groups are active on the subject?

   c) Which companies are active on the subject?
### B3. Patents:

a) Please list existing patents that are close to your invention (for searching the patent database you can use e.g. espacenet (http://gb.espacenet.com/))

b) What keywords did you use for the search?

c) When was the search carried out (date)?

### B4. Actual situation:

Do you think that the publications and/or patents as mentioned in B2 give an actual overview on the research activities in this field?

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### C. General information

#### C1. Inventors¹:

Please state the name of the inventors

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#### C2. Spin-off:

Is there a team that is considering to start a spin-off (please list names)?

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#### C3. License/transfer opportunities:

a) Are there existing contacts with industrial partners that might be interested in the invention?

b) Has there been a successful transfer of IP of the inventors to a commercial partner in the past?

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#### C4. Research Funding:

a) Who funded the research that leaded to the invention?

b) Are there third parties that claim rights on the IP?

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¹ Inventors are those researchers who have contributed intellectually to the content of the invention.
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Valorisation.com is a company which gathers and provides practical valorisation advice for academic entrepreneurs. For more information visit www.valorisation.com according checklists, best practices, questionnaires, etcetera. For questions about valorisation or a support request please contact us on info@valorisation.com

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