ESI 2019 Project Day – Technical and Market Feasibility
Technology Transfer

Is the process of transferring skills, knowledge, technologies, methods of manufacturing, samples of manufacturing and facilities among governments or universities and other institutions to ensure that scientific and technological developments are accessible to a wider range of users who can then further develop and exploit the technology into new products, processes, applications, materials or services.
Technology Transfer

Is the process of transferring skills, knowledge, technologies, methods of manufacturing, samples of manufacturing and facilities among governments or universities and other institutions to ensure that scientific and technological developments are accessible to a wider range of users who can then further develop and exploit the technology into new products, processes, applications, materials or services. **It is closely related to (and may arguably be considered a subset of) knowledge transfer.**
Technology Transfer

Is the process of transferring skills, knowledge, technologies, methods of manufacturing, samples of manufacturing and facilities among governments or universities and other institutions to ensure that scientific and technological developments are accessible to a wider range of users who can then further develop and exploit the technology into new products, processes, applications, materials or services. It is closely related to (and may arguably be considered a subset of) knowledge transfer. **Horizontal transfer is the movement of technologies from one area to another. At present transfer of technology (TOT) is primarily horizontal.**
“It’s a toenail clipper that gets Facebook, checks my e-mail and makes phone calls. What do you mean, why do I need that?”
Technology Transfer & Commercialization
“This is a major project of utmost importance, but it has no budget, no guidelines, no support staff, and it’s due in 15 minutes. At last, here’s your chance to really impress everyone!”

© Randy Glasbergen for RapidBI.com
Technology Push and Market Pull

Source: https://newentrepreneurship.files.wordpress.com/2012/07/push-pull-green.jpeg
Open Innovation and the importance of TT
Universities and Research Organizations
Private Companies
Support Organizations
How can we transfer technology into a business?
– Licensing between established entities

– New venturing: ENTREPRENEURSHIP
Start-up Development Phases

Main reason for failure?

Go to Kahoot.it again!
Start-up Development Phases

Based on analysis of 101 startup postmortems, the top 20 reasons startups fail are:

1. No market need (42%)
2. Ran out of cash (29%)
3. Not the right team (23%)
4. Got outcompeted (19%)
5. Pricing / cost issues (18%)
6. User un-friendly product (17%)
7. Product without a business model (17%)
8. Poor marketing (14%)
9. Ignore customers (14%)
10. Product mistimed (13%)

EIRO forum
January 2019
Problem-Solution Fit

- Translate problems into solutions that will be adopted
Product-Market Fit

- Translate solutions in products that will be acquired by your customers
Product-Market Fit

People don’t want a quarter-inch drill  
They want a quarter-inch hole
Product-Market Fit

- Problem space vs solutions space

<table>
<thead>
<tr>
<th>Problem Space</th>
<th>Solution Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>A costumer problem or benefit that the product should address</td>
<td>A specific implementation or design to address the customer need</td>
</tr>
<tr>
<td>A well-written user story: “As a_, I want to_, so I can_.”</td>
<td></td>
</tr>
</tbody>
</table>
Product-Market Fit
Product-Market Fit
Product-Market Fit
Product-Market Fit
Product-Market Fit
Problem vs Solution

Problem space (user benefits)

- 1. Define specific problems-benefits.
- 2. Group by topics
- 3. Define specific solutions

Solution Space (product)

Book an accommodation

Booking

airbnb
Next step

1. Explore the different applications identified (solutions/products/services)
2. Implement an initial technical feasibility of the technology. Clearly identify the added value of your technology (what is the main value in the technology?)
3. Understand the market:
   1. Identify main Stakeholders (internal and external for the commercialization)
   2. Identify main potential receivers (your clients) and users (the final clients)
   3. Identify main barriers of the market
4. Consider the need to agree on the license of the technology to your company:
   1. Steps to achieve a successful transfer of the technology (development needed?, funding needed?)
   2. Foresee critical negotiation points
Consider the IP aspects

Exclusivity and duration

Geographical coverage

Sectorial coverage

Remuneration: Patent maintenance costs, Royalties and other payments. Consider initial investment of the company for the integration in the remuneration

Any IP developed during technology integration?

Use of other image rights
Thank you

Lluc Diaz (ESA)
IMKTT WG Chair EIROforum