Guidebook of IP/Technology Transfer

Track 1
Entry-level Tech Transfer Professional

Topic 1.8.2
Envisioning Potential Products/Services, and the Value Proposition of an Invention

Envisioning potential Product/Service, and the Value Proposition

- Inventiveness leads to market relevance
- But, relevance to which markets?
- Based on the inventiveness of the invention, the TTP must imagine its applications

Assessing technical and market attributes: performing invention triage

- What is it? How exactly does it work?
- What are its inventive features? How do they compare with current solutions?
- What problems does it solve? Is it important? What is the economic basis of that importance?
- Is the inventive solution economically feasible?

Assessing technical and market attributes: performing triage

- What are its superior attributes?

  Faster? More accurate? Cheaper? New capabilities, more durable? Etc., etc,…

- How do these attributes translate into economic benefits? Quantify benefits whenever possible

- What is the stage of development (where in the R&D continuum?)

Characterizing technical viability/market relevance

- Understand the economics of the problem solved
- What are its market applications?
- What are the market characteristics?
  - Size
  - # of companies
  - Typical profit margins
  - What is the innovation landscape? Are there any dominant companies?
- Are there significant regulatory hurdles?
- How does it compare with current alternatives

  Different is usually not sufficient… you need superiority
- Quantify performance superiority, if possible

Characterizing technical viability/market relevance

- Is the technology:
  - a paradigm shift (truly disruptive)?
  - a significant improvement?
  - a minor improvement?
  - no better than the alternatives?

Characterizing technical viability/market relevance

- Can the invention be commercialized as a "stand-alone……or are other components needed?
  (will licensing be complicated?)
- Is the surrounding technology space in a declining, advancing, or stagnate stage?

Assessing technical and market attributes:
a precursor to early valuation

Define and quantify at least one "value proposition"
(performance and economic justification for why someone will buy the product or service)

What will be sold? Who will buy it? Why and how much will they pay?

What portion of the product can be attributed to the invention?
(the "Product Enabling Value")
Car vs. windshield analogy

Are there extraordinary market factors?
(regulatory hurdles, PR issues, unique competitors

What are typical profit margins in the market(s)
Pharma vs. Farming

Assessing technical and market attributes: a precursor to early valuation

- Cost of manufacture

  (e.g., wheat, semi-conductor, human drug)

- Investment required vs. ”ROI”
- Is there a development “bottle neck”?

  potential flaws, difficult hurdles (e.g. human safety issues, environmental impacts, unreliable supplies, etc.?

- Consider the “equation”: stage of

  development vs. risk

Strengthening the Business Case:

define a feasible business model

Describe how the technology will be turned into a product and/or service?

How will the product/service be sold and to who?

Why will they buy it?

Describe the feasibility of scale-up of manufacture, distribution, and sale

Steps to Strengthening the Business Case

- Define the technical advantages over existing alternatives
- Describe how those advantages lead to economic benefit
- Define who has an interest in the economic benefit
- Quantify the economic benefit

Strengthening the Business Case

Develop at least one

Unique Value Proposition ("UVP")

The UVP of an invention concisely describes:

The benefit(s) it will provide……

[describe them clearly, concisely, and thoroughly]

….at a cost, that a future buyer (the customer) will perceive as a compelling “value”

“Value” = Benefits – Cost

[define and quantify the benefits and costs]

The Unique Value Proposition (UVP)

- Explains how the invention provides this unique value (specific benefits – cost) to a future buyer, compared to alternatives.
- Is a clear and concise statement that summarizes why someone would buy the product or service based on the invention.
- Describes how the invention will produce a product or service that will add more value create more profit, or better solve a problem than current alternatives.

The Unique Value Proposition (UVP)

- Makes it clear how the invention will
  solve future buyers' problems
  or improves their situation such that
  profitability is enhanced
- Identifies why the technology is superior to
  the competition (unique differentiation).

What makes a good UVP?

- Clarity! It's easy to understand.
- Communicates concrete results that will result from using the technology and its products and/or services.
- States how it's different (and better) than the alternatives.
- Avoids hype (… "never seen before, amazing miracle product"), superlatives ("best"), and business jargon ("value-added interactions").
- Can be read/understood in about 10 seconds.

UVP Examples

"Achieves the same level of pest control as current chemistries at 30% cost reduction."

"Produces materials that exhibit 25% increased life at temperatures above 450°C at a cost comparable to existing high temperature materials."

"Increases the manufacturing yield of large Li batteries by 50% with no cost increase"

UVP Examples

"A natural topical antiseptic 90% as effective as current chemical antiseptics."

"A tomato variety that exhibits 50% more solids and 25% more sugar per unit weight than currently available varieties."

"Reduces scours mortality in new-born calves from 15% to 1.5% at a cost of less than 6 Pesos per animal."

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Thank you