

Triage: Assessing Early Stage Innovations

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Disclaimer

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Overview

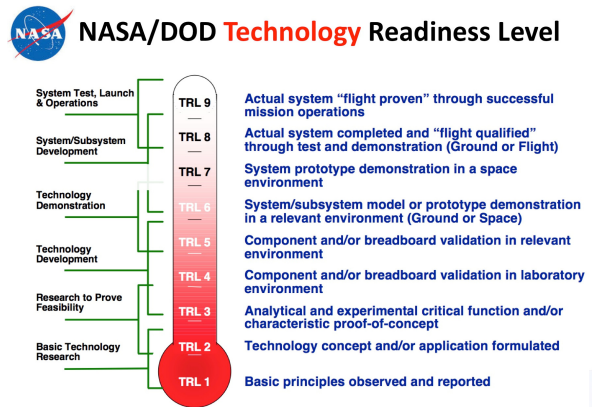
- What are the Objectives of Innovation Assessment?
- Understanding the Innovation
- Intellectual Property Considerations
- Business Considerations
- Documentation



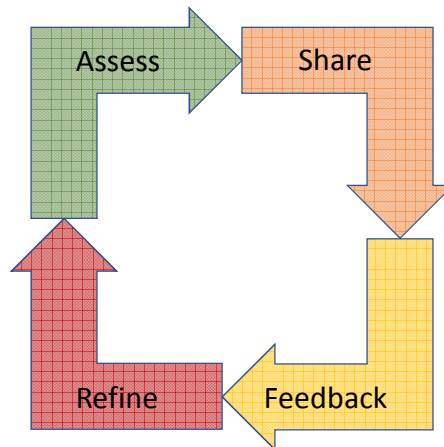
What are the objectives of innovation assessment?

Objective of the Assessment

- Decide whether to pursue or not
 - Commercialization vs. licensability
 - What makes an innovation licensable?
 - Technology (Technology readiness level?)
 - Budget (cost of obtaining and maintaining intellectual property protection)
 - Other



Iterative Process



Licensing Readiness Level™



- Intellectual property
- Unmet need
- Market / Industry
- Competition
- Non-IP encumbrances
- Intangibles
- Iterative process

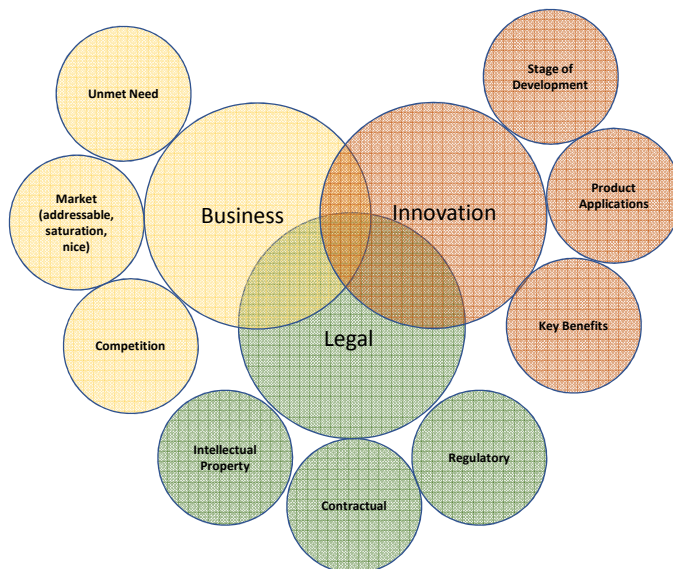
Absolute Novelty	Disruptive	Discontinuous	Sustaining
The technology is completely novel and addresses a need for which there are no products on the market	A technology that creates a new market and value proposition and eventually disrupts an existing market	The technology represents a major breakthrough and is a new technology to address an existing need or problem	The technology provides an incremental improvement with a better value proposition than what is currently available on the market

Intellectual Property	Technology	Market	Industry
Strength Breadth Scope Enforceability	Stage of development Feasibility Practicality Application	Unmet need Niche Market size	Industry dynamics Encumbrances

Understanding the innovation

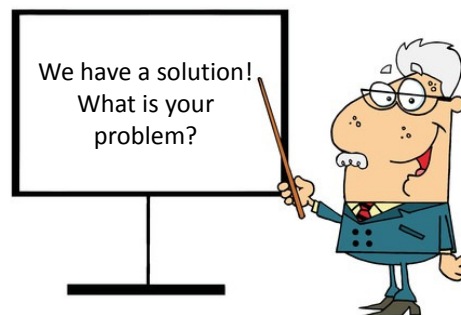


Elements of an Assessment



Early Stage Innovations

- The early stage technology conundrum
 - Often times cutting edge
 - Much more advanced than where industry is currently
 - Key benefits are often not clear

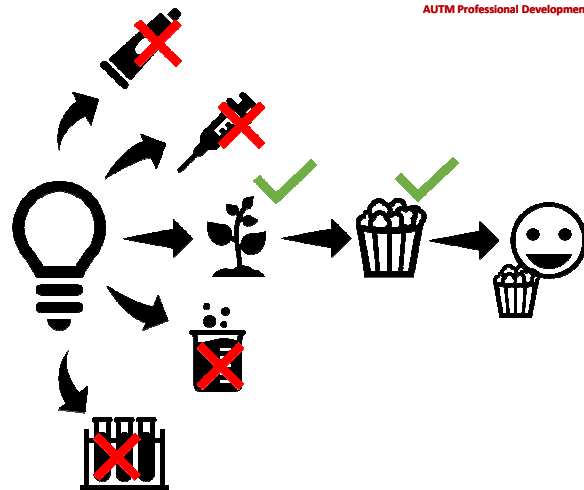


The Innovation

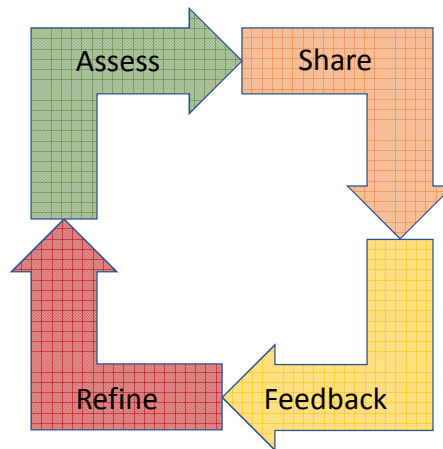
- Read and digest the innovation disclosure
- Meeting with the inventor is crucial
 - “Disclosure” = “Good things happen”
 - Place and time
 - Opportunity to communicate about the process and potential outcomes
 - What is the funding source for the research?
 - Does the inventor know anyone that is/would be interested?

The Innovation

- Stage of development
- Applications
 - What is the “best” application?
- Development next steps
- Who is the end-user?
- What is your concept of the product?
 - Changes over time



Iterative Process



The Innovation

“Existing antennas do not meet the advanced technological needs for applications such as weather radar, automotive radar, wireless communications, radio frequency identification, military security, surveillance and space applications. **Large size, heavy weight, minimum occupied space, high signal distortion, lower bandwidth and efficiency are some of their key limitations.** The invention discloses a **novel antenna module with improved characteristics, overcoming the prior art limitations.”**

Intellectual Property Considerations

Intellectual Property

- Strength
- Breadth
- Enforceability
 - Machine, process, product by process, composition of matter
- Strategy
 - What type of protection?
 - Patents, copyrights, trademarks, know how,
- biological materials



Intellectual Property



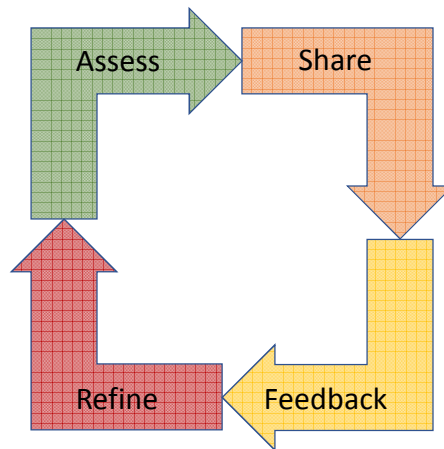
- Patents and publications
- How do you conduct a patent search?
 - Keyword **and** patent classification
 - Get to a workable number
 - Review the results
 - Read abstract/background to see if your disclosure addresses similar issues
 - Read invention description to see how patent addresses the issues
 - Select relevant patent/patent applications
- Communicate! (can send relevant applications to faculty for review)
- Search again
- Publications
- Funded grants

Intellectual Property



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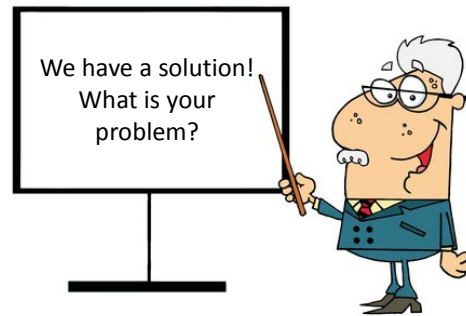
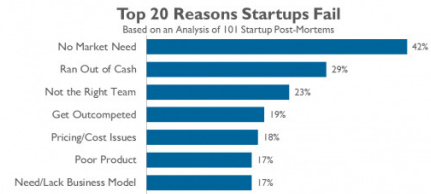
Iterative Process



Business Considerations

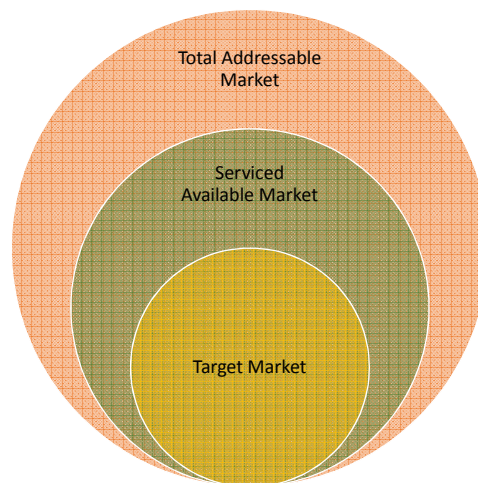
Unmet Need

- What need does the innovation fulfill
- Is there an identified problem?
- Does the innovation provide a solution to the problem?
- Key benefits



Market

- Size
- Addressable
- Saturation
- Dynamics



Major Questions

- Does it address an existing problem?
- Is it faster, better, cheaper?
- What are the potential cost savings?
- Greater yield?
- What resources would be needed?
- Does the technology/concept need further research?
- Is there enough data?
- What needs to happen to “productize”?
- What role is the faculty going to play?

The Innovation

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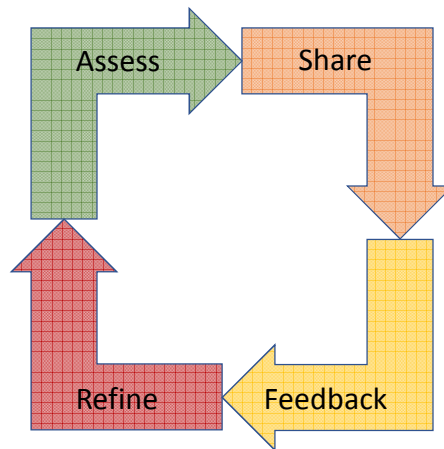
The Innovation

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Business case

- Unmet need
- Market environment
 - Potential applications and market potential
- Protection and competition
- Anticipated time to market
- Industry interest
- Strategy for commercialization and marketing

Iterative Process



Other Considerations

Other Non-IP Considerations

- Material Transfer Agreements
- Source of materials
- Joint inventors
- Ownership
- Publications
- Regulatory
- Intangibles (“sex appeal of the technology”)

Elements to keep in mind

- What is the invention / innovation?
- Expectations, philosophies, and relationships
 - Inventors
 - Direct supervisor
 - University leadership
- Political / vanity patents
- Communication is critical
 - Transparency
 - Partnership
 - Reporting
 - Feedback
 - Inventor engagement
- Patent expenses



Documentation

Innovation Scorecard

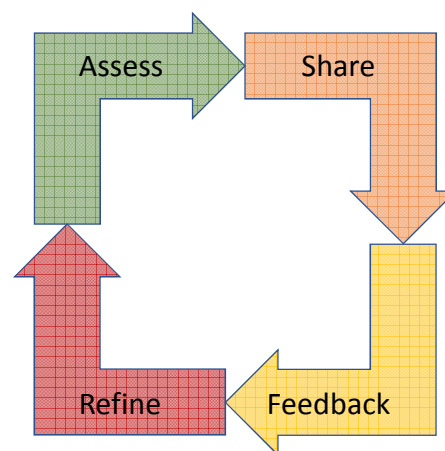
- Patentability (enforceability, scope, breadth of patentability, obsolescence: 20 points)
- Marketability (market need, market size/growth, addressable market, competition, market saturation, drivers, barriers: 20 points)
- Technology (application, development stage, additional development costs, technical obstacles, benefits: 20 points)
- Regulatory (FDA approval?)
- Other

The Decision

- Clear Yes
- Clear No
- Maybe
- Document your decision and the justification (audit purposes)
- Inform faculty of your decision
- Do you have a recommended timeframe to make a decision?
- What needs to happen to make the innovation licensable?
- Where are the gaps?

Iterative Process

- The assessment is the start of a process
- The market research is critical
- The business case is critical
- Communication is critical
- Involving the inventors is critical
- Keeping your supervisors informed is critical



Thank You



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