COMMERCIALIZATION: PATHWAYS TOWARD THE MARKET

November 29, 2016

Andrew Pollock
Director of Business Development, Office of Technology Development
We believe innovation from academic research can make a positive difference in the world. The Purpose of OTD is to help OU researchers transform ideas into tangible impact for the betterment of society.

The Mission of OTD is to provide the highest level of fiduciary expertise for the perfection, conveyance and commercialization of OU IP.

To be recognized as a driving force for OU’s economic impact through education, expertise and efficiency.
1. Evaluating Technology’s Product-Market Fit
2. Marketing Technologies: The OTD-Inventor Partnership
3. Licensing Terms and Requirements
4. Enforcement, Infringement, and Patent Trolls
COMMERCIALIZATION & IMPLICATIONS

• Why is Commercialization Important at the University?
  • Decrease in Fundamental Research Conducted by Private Sector
    • Corporations FAVORING Buy over Build-Decreased Technology Risk
    • Increase in R&D Outsourcing
  • Increased Emphasis on Commercialization of Research
    • Federal Funding Agency’s Focus Shift- NSF I-Corps
    • Graduate Student Experience
  • Decrease in Higher Education Funding
    • Inventors, University, College and Departments all directly benefit from IP Policy

• Mission of the University of Oklahoma is to provide the best possible educational experience for our students through excellence in teaching, research and creative activity, and service to the state and society.
What is Commercialization?

Perception:
- Focused on generating money
- Restricting use by certain party(-ies)
- Investment solely based on license potential

Reality:
- Exchange of Value (not just $) between parties
- Makes available a possible solution to problems
- Iterative (co-)development of viable ideas
- Highly impactful means of information dissemination
How Does OTD Commercialize

• Step #1: Disclosure – Submitted to OTD by Inventor

• Step #2: Processing and Initial Evaluation

• Step #3: Inventor Meeting – Commercialization
  • What is the product?
  • Who uses it?
  • What problem does it solve?
  • What are they using now?
  • How/From Who would they get this solution?

• Step #4: Evaluation
STEP #4: EVALUATION

- Two Part Approach
  - Research
    - Market Factors
  - Customer Discovery
    - Investigating Product Market Fit
      - Value Proposition + Customer Segment
  - Barriers to Adoption
    - Displacing vs. Disruptive
    - Pain vs. Desire
• **Step #5: Recommendation for Protection**
  - Patents, Copyrights, Trademarks
  - Domestic or International
  - Intended Value Add

- Inventor meets with OTD
- OTD files provisional app.

  1 month
  Process Disclosure
  Market and Patent Analysis

  3 months

• **Step #6: Marketing**
MARKETING ACTIVITIES

Dual Strategies

• Broad Based Marketing
  • Online Technology Portfolio Database
    • flintbox.com
  • Technology Specific One Page Marketing Flyers

• Additional Customer Discovery
  • Round 1 based on problem identification
  • Round 2 based on:
    • Identification of Strategic Plan
    • Possible Solution Integration and Barriers
STEP #6: MARKETING

Traditional Technology Transfer
STEP #6: MARKETING

Traditional Technology Transfer

Company, LLC.

Marketing Activities
STEP #6: MARKETING

Tech Transfer/Researcher Partnership

Company, LLC.

10% < Success Rate
CHALLENGES TO COMMERCIALIZATION

- **Technology Readiness Level**
  - Idea: 1
  - Bench-top: 4
  - Alpha: ?
  - Beta: 7
  - Product: 10

- **Average University TRL**
  - Idea: 1
  - Bench-top: 4
  - Alpha: ?
  - Beta: 7
  - Product: 10

- **External**
  - Rapid Conversion of Knowledge into ROI
  - Perceived Threat to Internal Development

- **Internal**
  - Solution then Problem vs. Problem then Solution
  - Perception that IP has no value
COMMERCIALIZATION ACTIVITIES

• Commercialization Agreements
  • Confidentiality/Non-Disclosure
  • Material Transfer
  • License
  • Sponsored Research

• Secondary Agreements
  • Consulting
  • Intellectual Property
  • Option
  • Term Sheet
  • Inter institutional
  • Facility Use
LICENSING 101

• Purpose is to transfer rights for consideration

• OTD will preserve:
  • Rights to Publish
  • Ability to continue research
  • Federal Use

• Terms
  • Exclusive vs. Non-Exclusive
  • Territory
  • Field of Application

• Consideration
  • Equity
  • Royalty
  • Licensing Fee
  • Patent Costs
Infringement & Enforcement

- Patent Rights
  - Ability to prevent others from making
  - Does not grant Freedom to Operate

- Infringement – Use of protected IP without a license

- Enforcement – Infringement is detected
  - Contact infringer and alert them of issue
  - Goal: Infringer becomes a Licensee
  - Litigation as a last resort
    - Cost
    - Ramifications

- Patent Trolls
  - University is a non-practicing entity but…
  - Prevent trolling by way of commercial milestones