

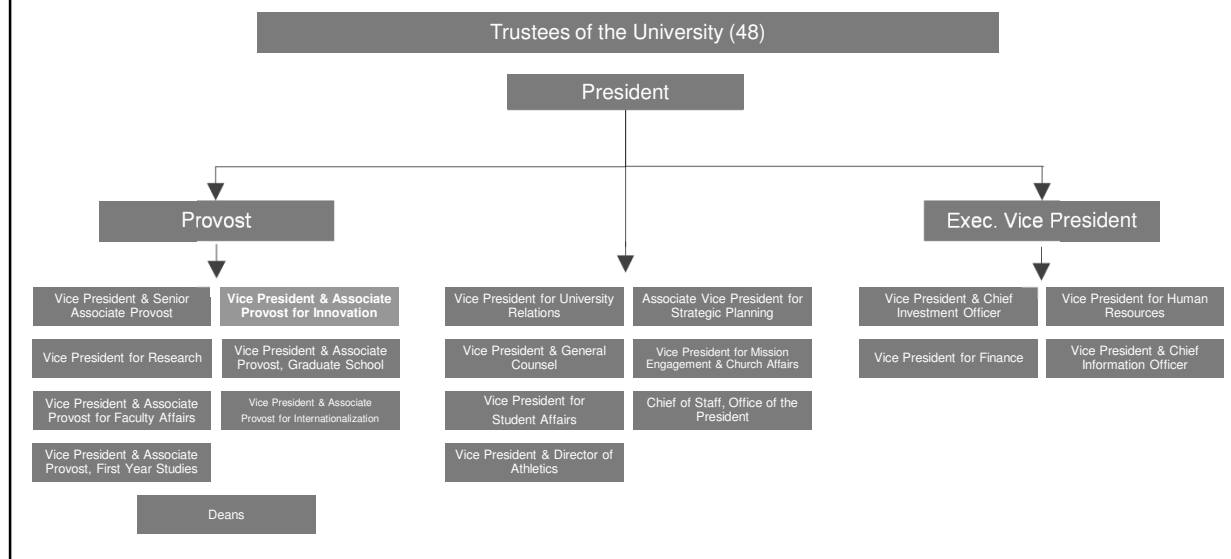


WHAT IS THE IDEA CENTER?

Standing for **I**nnovation, **D**e-Risking and **E**nterprise **A**cceleration, the IDEA Center is the fundamental resource for all commercialization and entrepreneurial activities at the University of Notre Dame.



WHERE DOES THE IDEA CENTER FIT WITHIN NOTRE DAME?



IDEA CENTER CONCEPTION

1. **Trustees:** Why is U Notre Dame lagging behind peers with respect to Commercialization and Entrepreneurship?
2. **ND Research & Commercialization Advisory Committee:** fall 2013
3. **Report Finalized:** fall 2016

It is a strategic imperative for Notre Dame to become a best in class player in the translation of innovation and research into solutions that reach the market and benefit mankind. Success in this arena is critical to fully realizing the University's stated desire to be a leading research university and a "force for good in the world".

WHAT IS THE IDEA CENTER?

What we are NOT:

Tech Transfer office

Accelerator

Incubator

Venture Fund

WHAT IS THE IDEA CENTER?

We are:

Venture Builders/Startup Studio

Shared resources to commercialization technologies.

Resources include:

1. \$\$\$
2. Mentors
3. Access to network
4. HR
5. Accounting
6. Management Talent
7. Legal
8. Facilities
9. Small \$ to:
 - A. Build prototypes
 - B. Generate interest

WHOM DO WE SERVE?

Our Customers:

Faculty/Staff of UND

Students of UND

Community

Alumni

THE 4 PISTONS OF THE IDEA CENTER

Commercialization
Engine

Innovation
Park

Student
Entrepreneurship

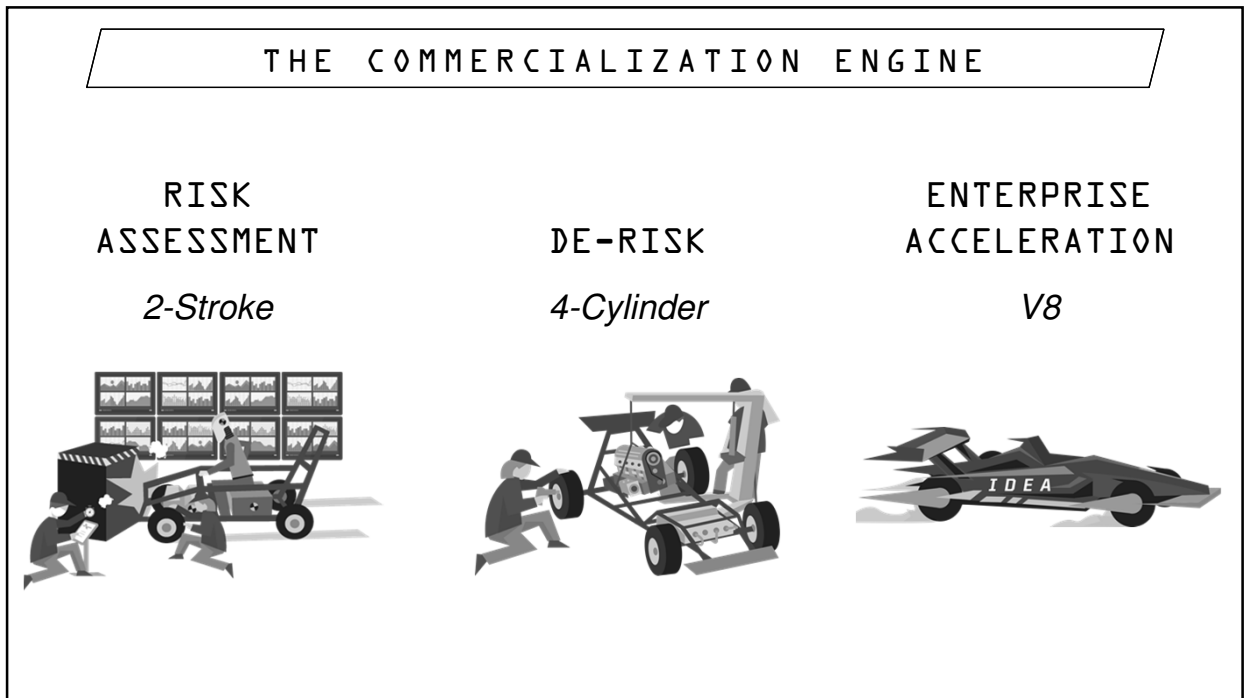
Network
Engagement

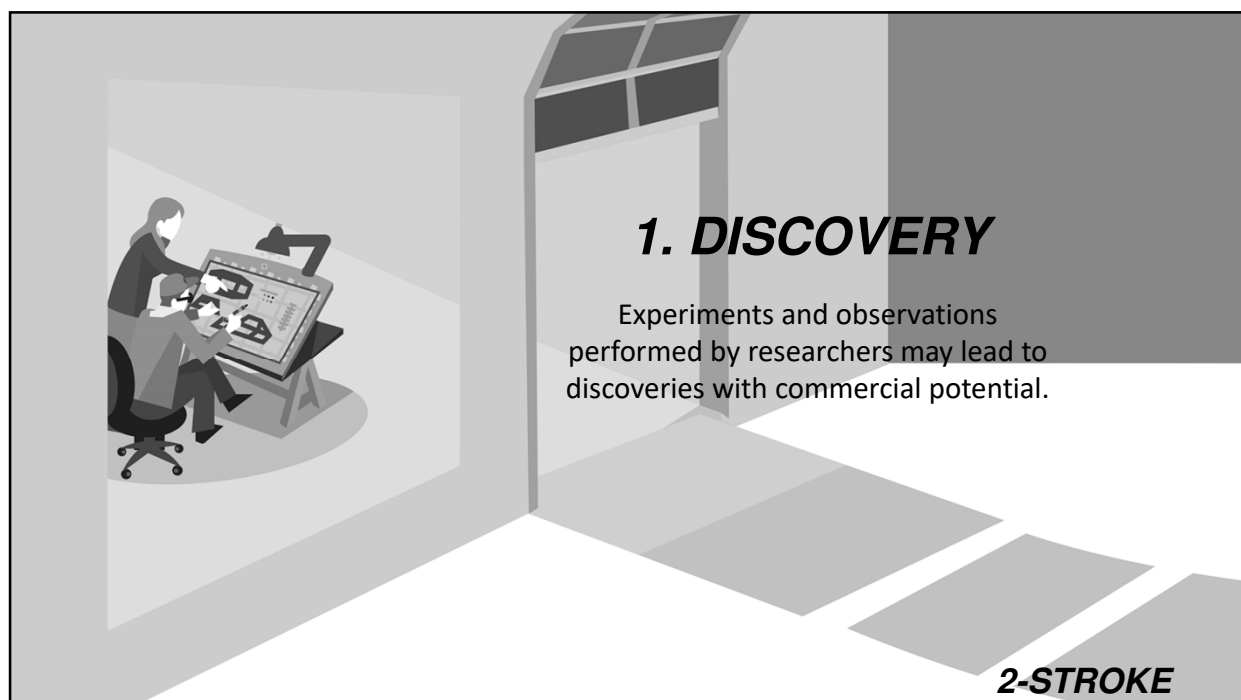
KEYS COMPONENTS

Process
Network
Funding
Organizational Structure
Recruit Board 1st
Students

KEY COMPONENTS

Process
Network
Funding







2. DISCLOSURE

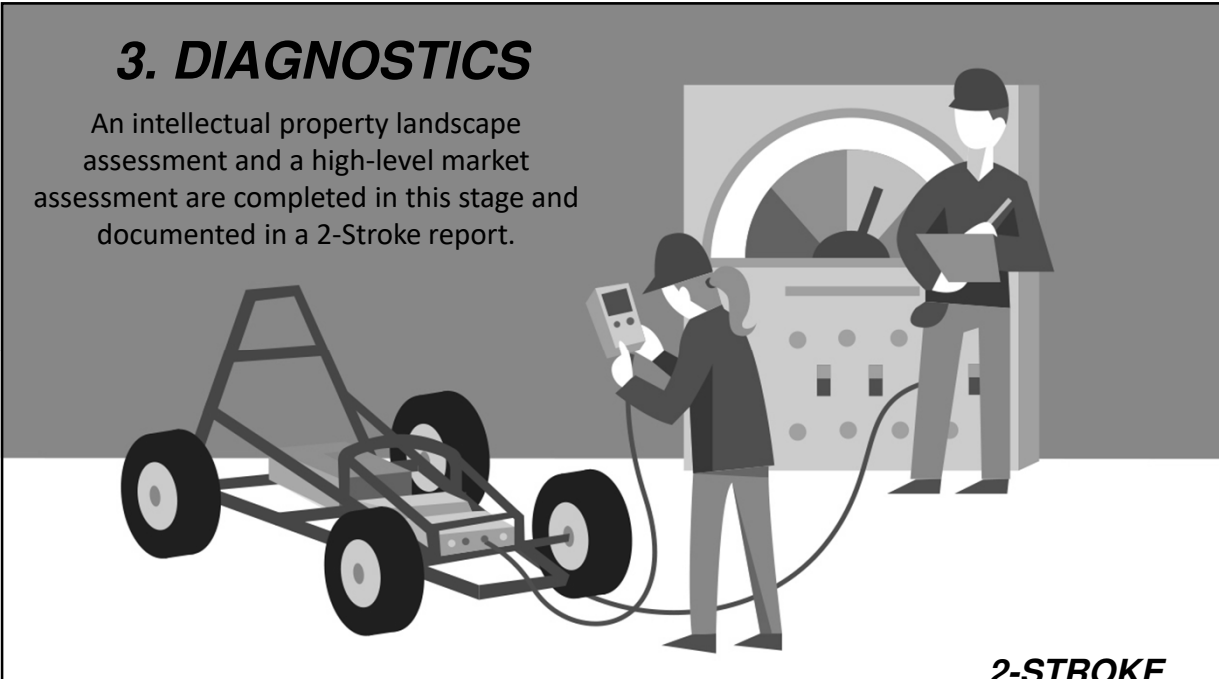
For a technology to enter the 2-Stroke stage, a completed Invention Disclosure Form (IDF) must be submitted.

2-STROKE

The illustration shows a person in a suit pushing a go-kart out of a garage. The go-kart has a battery pack on the back. In the background, there are shelves with tools and a stack of tires. The scene is set in a garage with a large open door.

3. DIAGNOSTICS

An intellectual property landscape assessment and a high-level market assessment are completed in this stage and documented in a 2-Stroke report.

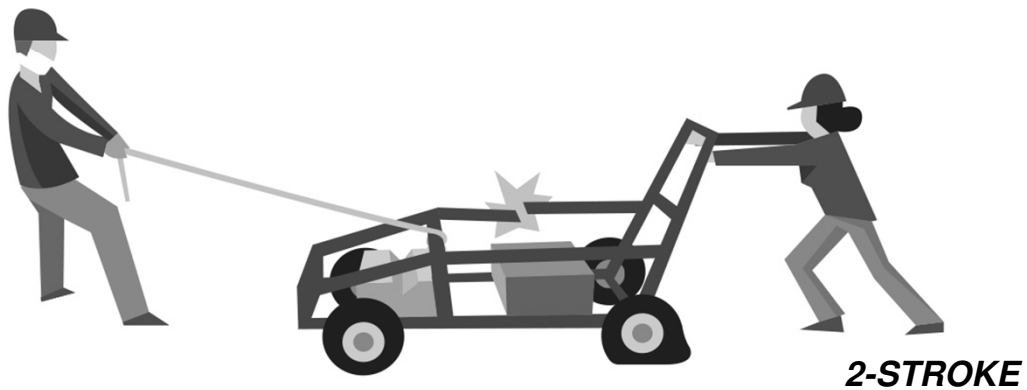


2-STROKE

The illustration shows a person in a hard hat and work clothes using a diagnostic tool on a go-kart. The go-kart is connected to a large piece of equipment with a circular gauge. Another person in a hard hat and work clothes is standing next to the equipment, looking at a clipboard. The scene is set in a workshop or garage.

ADVANCING OR RETURNING

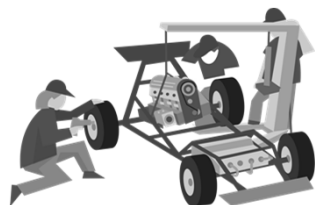
Based on the robust information collected in the 2-Stroke report, the IDEA Center will make the decision on whether to: advance the technology to the next step in the 2-Stroke stage, request modifications, or release it to the inventor.



4. RISK ASSESSMENT

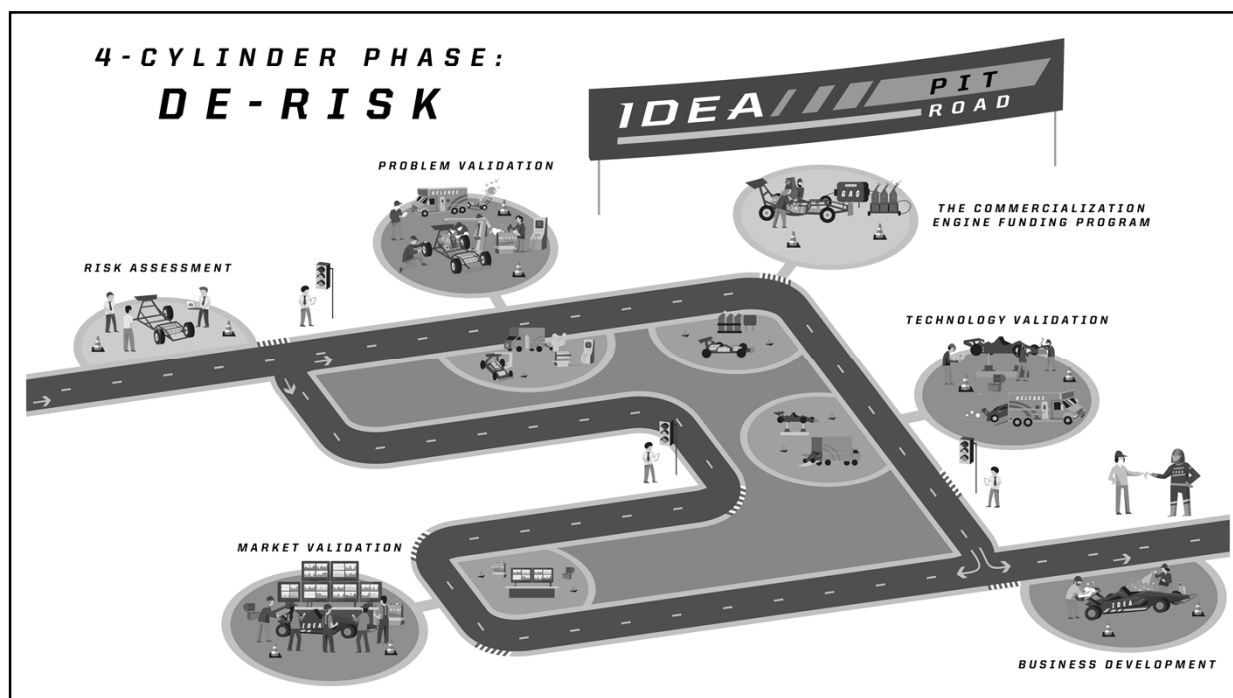
If a technology is not returned to the inventor, the liabilities associated with that technology are identified and a plan of action to mitigate these risks, starting with the most critical, is created.





DE-RISK **4-CYLINDER**

Identify rate limiting risk and eliminate
(or eliminate tech)



PROBLEM VALIDATION

Validate the Problem

- Not selling solution
- Interview 40-100 customers
- 4-7 week process
- Wording of questions – critical
- Look for market signals
- Rely on network for contacts

Solves #1 reason why companies fail

Output: Validated problem with features of interest to customer



4-CYLINDER

TECHNOLOGY VALIDATION

Build the Solution to the validated problem:

- Step 1 – Product Vision
- Step 2 - Product Development Roadmap
- Step 3 – Identify funding sources for next two steps
- Step 4 – Accomplish next development milestone
- Step 5 – Go to Step 2 (adjust product vision as needed)



4-CYLINDER

MARKET VALIDATION

Establish Market Traction:

Advertise product mockup
Crowdfunding campaigns
Customer interviews

Product-Market Fit

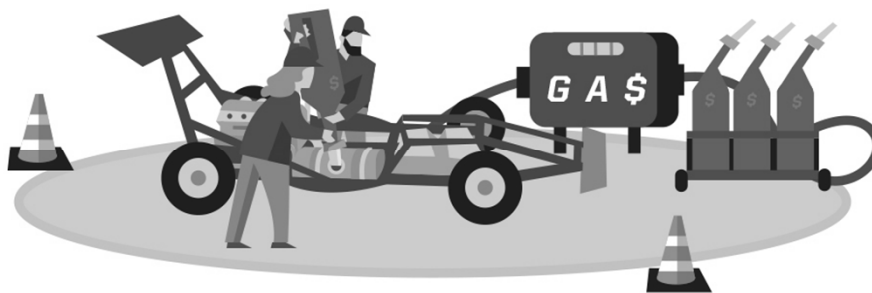


4-CYLINDER

FINANCIAL STRATEGY

Pit Road Fund
\$22.65M raised
ROI Fund
\$\$ flow two ways:
Out of Round (SAFE)
In Round

De-Risking Fund
\$250K/year
ONLY Faculty/staff
ONLY unlicensed
Considered Expense



Student Pitch Event
\$50K/year
ONLY Students
Grant

OTHER
Elevate Ventures
SBIR/STTR
Academic Grant

4-CYLINDER



ENTERPRISE ACCELERATION

V8

All De-Risking Plays available to Startups/Licensee's
Governance
Management
Funding
Strategy
Need more plays...

WHOM DO WE SERVE?

Our Customers:

Faculty/Staff of UND

Students of UND

Community

Alumni

STARTUPS BASED ON FACULTY/STAFF IP

University owns IP

IDEA Center runs/pays for Engine Process

IDEA Center pays patent costs

Financial Terms:

- license - equity & royalty (equity only deals)
- reimbursement of patent \$
- equity w/Pit Road Fund \$\$'s (up to 10% of nxt round)

STARTUPS BASED ON STUDENT IP

Student owns IP

Student runs Engine Process (with help)

Student pays patent costs (with help)

Financial Terms:

- equity w/ Pit Road Fund \$\$'s (up to 10% of nxt round)

STARTUPS BASED ON COMMUNITY IP

Community/Alumni owns IP

Community partners run 2 stroke

IDEA Center runs 4 cylinder at cost

Financial Terms:

- equity w/ Pit Road Fund \$\$'s
- up to 10% of the next round

KEY COMPONENTS

Organizational Structure

ORGANIZATIONAL STRUCTURE

Traditional:

- Technology Managers
- Cradle to grave tech management

Specialized:

- Structure mirrors process
- Specialization = increased efficiency*

KEY COMPONENTS

Recruit Board 1st

A DIFFERENT APPROACH

Pit Road Companies

Wholly owned by but separate from U Notre Dame
License (std terms) – 5% equity
Recruit Board from Alumni (experienced)
Board of Directors – weekly mtgs
Management – FT employee of IDEA Center
Board recruits long term management at Seed
All \$\$ invested in company – SAFE Note
Company pays rent for office/lab
Open cap table

A DIFFERENT APPROACH

WHY OPEN CAP TABLE

Every investor is different
Every company is different
Reduce friction

Reduce reasons to walk:

Too many shareholders
Shareholders not affiliated with company (not investors)
Founders have too much or too little equity
No shares available for employee pool

IDEA CENTER FUNDING

1. Phase 1:

- Provost and ND Research (\$\$\$\$)
- Innovation Park (\$)
- ESTEEM MS Program (\$)
- Commercialization Revenue (\$)

2. Phase 2:*

- Pit Road Fund management fee (\$\$)
- Partially endowed

3. Phase 3:

- Fully endowed
- Increased Commercialization Revenue

KEY COMPONENTS

STUDENTS

STUDENT ENTREPRENEURSHIP

**Our approach
to engaging and
supporting students
at the IDEA Center**

ENGAGEMENT

How can students engage with us at the IDEA Center?

- INVENT
- COMPETE
- LEARN
- INTERN
- EVENTS
- TINKER



INVENT

How can we help our student entrepreneurs?

- PROCESS
- SUBMISSION
- COACHING
- FUNDING
- NETWORKING
& FEEDBACK



KEYS TO SUCCESS WITH STUDENTS

What makes the difference?

- IDEA CENTER –
available to all students
- COMPETITIONS
- OUTREACH

COMPETITIONS

Contests draw students into our process

McCloskey New Venture Competition

- ✓ \$409,000 in cash & prizes
- ✓ Mentoring
- ✓ Tremendous feedback
- ✓ Open to students, alumni and community ventures
- ✓ Student participation required on all teams = excellent learning opportunity

Student Pitch Competitions

- ✓ Student inventors pitch for up to \$2,500/month to support venture developmental needs
- ✓ Great feedback
- ✓ Alumni involvement
- ✓ Industry expertise, networking are key

Idea Challenge: Student Kickoff

- ✓ 60 seconds to pitch idea
- ✓ Students vote to determine winners
- ✓ Kickoff for McCloskey Competition

OUTREACH

How best to get word out to students?

- ORIENTATIONS & ACTIVITIES FAIRS
- ENTREPRENEURSHIP CLUB MEETINGS
- CLASSROOM VISITS
- INNOVATION FELLOWS
- ENTREPRENEURSHIP CLUB LEADERS CONSORTIUM



