"Firestarter" Entrepreneurship Training:
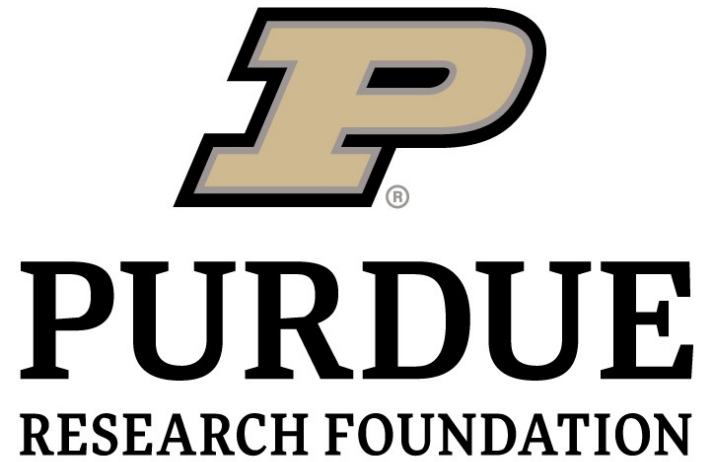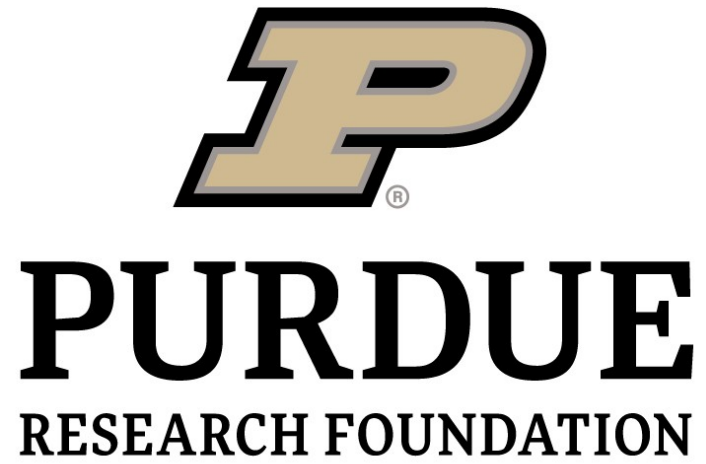## Presentation to the Mandela Washington Fellows
June 10, 2022 – Bill Arnold

Bill Arnold
Assistant Vice President &
Managing Director

Intro to Purdue Foundry

**Enable Purdue startups to improve the world**

Purdue Foundry mission statement

Purdue Foundry

Started in 2013 after President Mitch Daniels determined that commercialization and entrepreneurship were important avenues for Purdue to achieve its mission of improving the world through our technologies and graduates.

#3
In startup creation among US universities

368
Foundry companies

$570M
Raised by Purdue startups by end of FY20

180
Purdue IP-based companies among all Foundry companies

WHAT DOES PURDUE FOUNDRY DO TO ACHIEVE SUCH IMPRESSIVE RESULTS?

ENCOURAGE

Purdue faculty, students, and staff to be entrepreneurial by removing roadblocks to creating impact from their discoveries

TRAIN

To help turn those discoveries into successful companies

CONNECT

Startups and faculty to experienced founders, industry experts, and investors for mentoring, investing, and executive roles

INVEST

Through the Foundry Investment Fund, Purdue Startup Fund, and Ag-Celerator

COLLABORATE

With other centers across the university who share our mission, such as the Burton D. Morgan Center for Entrepreneurship, Engineering's John Martinson Entrepreneurial Center, and Purdue's NSF I-Corps site.

The Convergence Center

Burton D. Morgan Center for Entrepreneurship

WHAT DOES PURDUE FOUNDRY DO TO ACHIEVE SUCH IMPRESSIVE RESULTS?

TRAIN
To help turn those discoveries into successful companies

The Convergence Center

Burton D. Morgan Center for Entrepreneurship

Varieties of Entrepreneurship

Solopreneur

➢Consultant or freelancer

➢Self-employed

➢"Be my own boss"

Small Business

➢Known Business Model

➢Retail shop, for instance

Startup

➢Ambition

➢Focus on growth

➢Plan for exit

➢Venture-backed

Why Startups Fail

BASED ON ANALYSIS OF 101 STARTUP POSTMORTEMS
Top 20 Reasons Startups Fail

- NO MARKET NEED — 42%
- RAN OUT OF CASH — 29%
- NOT THE RIGHT TEAM — 23%
- GET OUTCOMPETED — 19%
- PRICING / COST ISSUES — 18%
- USER UN-FRIENDLY PRODUCT — 17%
- PRODUCT WITHOUT A BUSINESS MODEL — 17%

10/31/2022

" How can we solve this problem?

Startups fail

Scientific Method Applied to Startups

HYPOTHESIZE

Who do you think your customer is? What problem do you think they have?

EXPERIMENT

Interview customers about their problems and the solutions they have tried.

LEARN

Analyze the results/data. Does it support the hypothesis? Better yet, does it disprove the hypothesis?
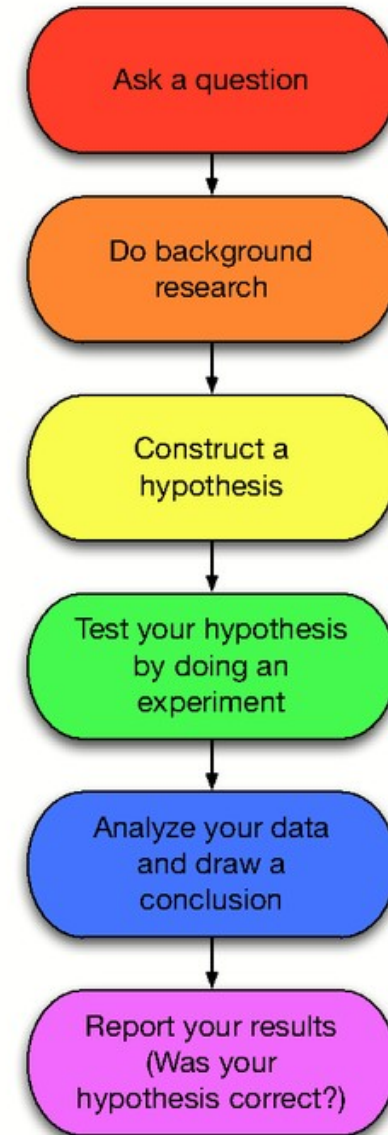
ITERATE

Make changes (adjust or pivot) as indicated.

REPEAT

Create new hypotheses around other parts of the business. Once you have validated the customer-problem, test hypotheses around the solution and the business model

The Scientific Method

Ask a question

Do background research

Construct a hypothesis

Test your hypothesis by doing an experiment

Analyze your data and draw a conclusion

Report your results (Was your hypothesis correct?)

Firestarter

TYPES OF RISK

➢Financial Risk

➢Technology Risk (includes risk related to intellectual property)

➢People Risk

➢Market Risk

Risk & Return

Evaluating from an investor's perspective.

Market Risk

- Customer willing to pay?
- Product-market fit
- Right timing?
- Competition
- Barriers to entry

firestarter

# Market Landscape

Highlighting the Opportunity for Your Idea

- Communicate where your idea fits
- Help others understand the market and competitive solutions
- Identify what values the customer cares about most
- Find your product market fit

X

firestarter
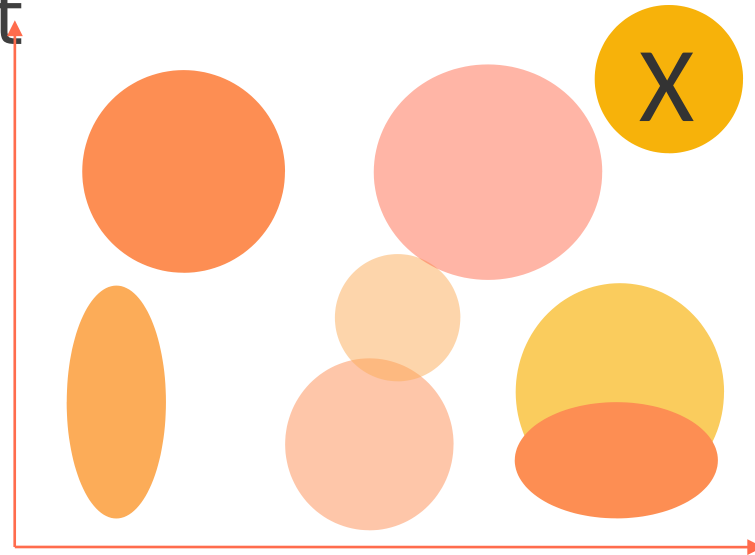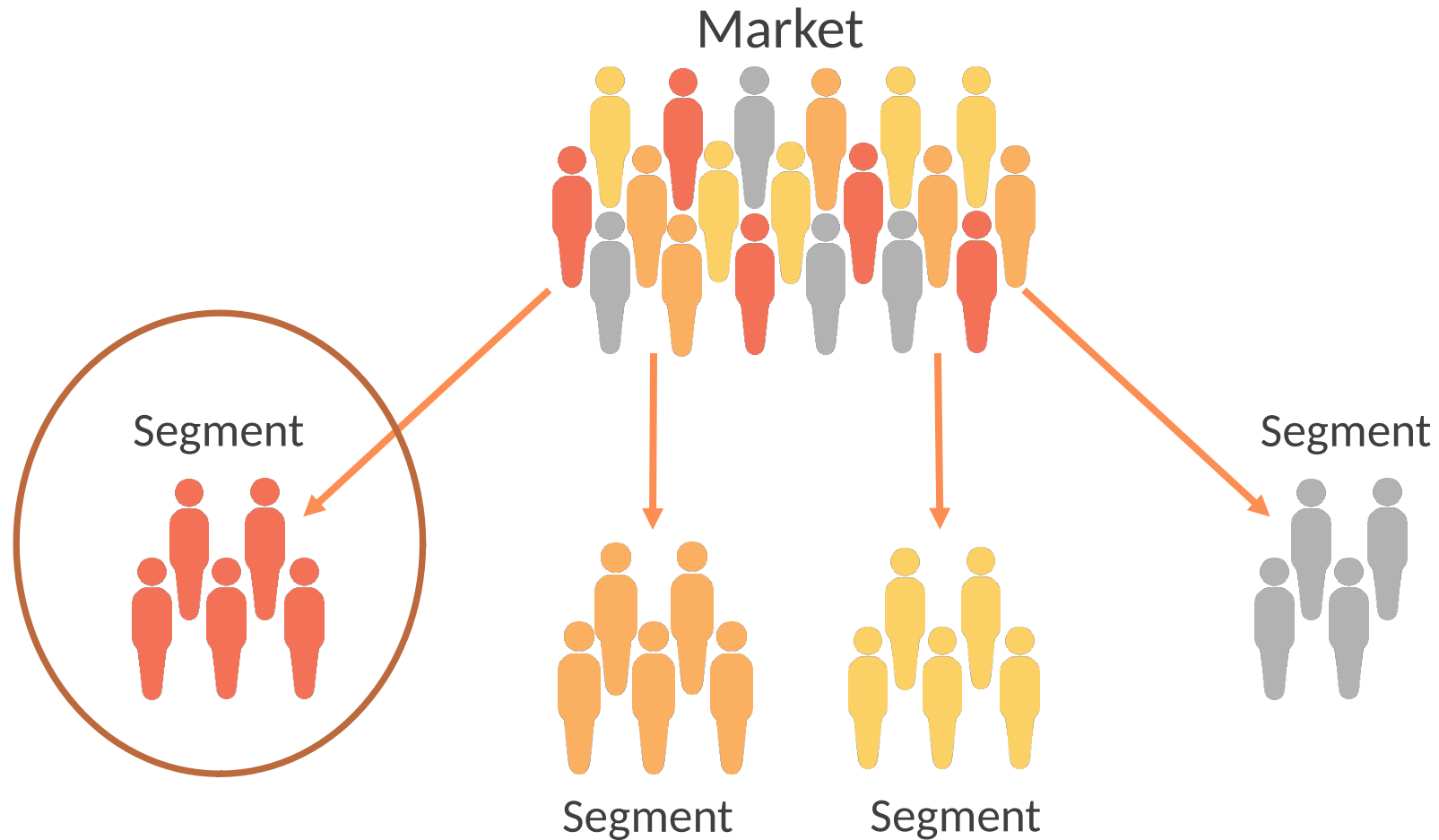
Market Segmentation

Market and Segment Definitions

Market

Segment

Segment

Segment

Segment

Segment

firestarter
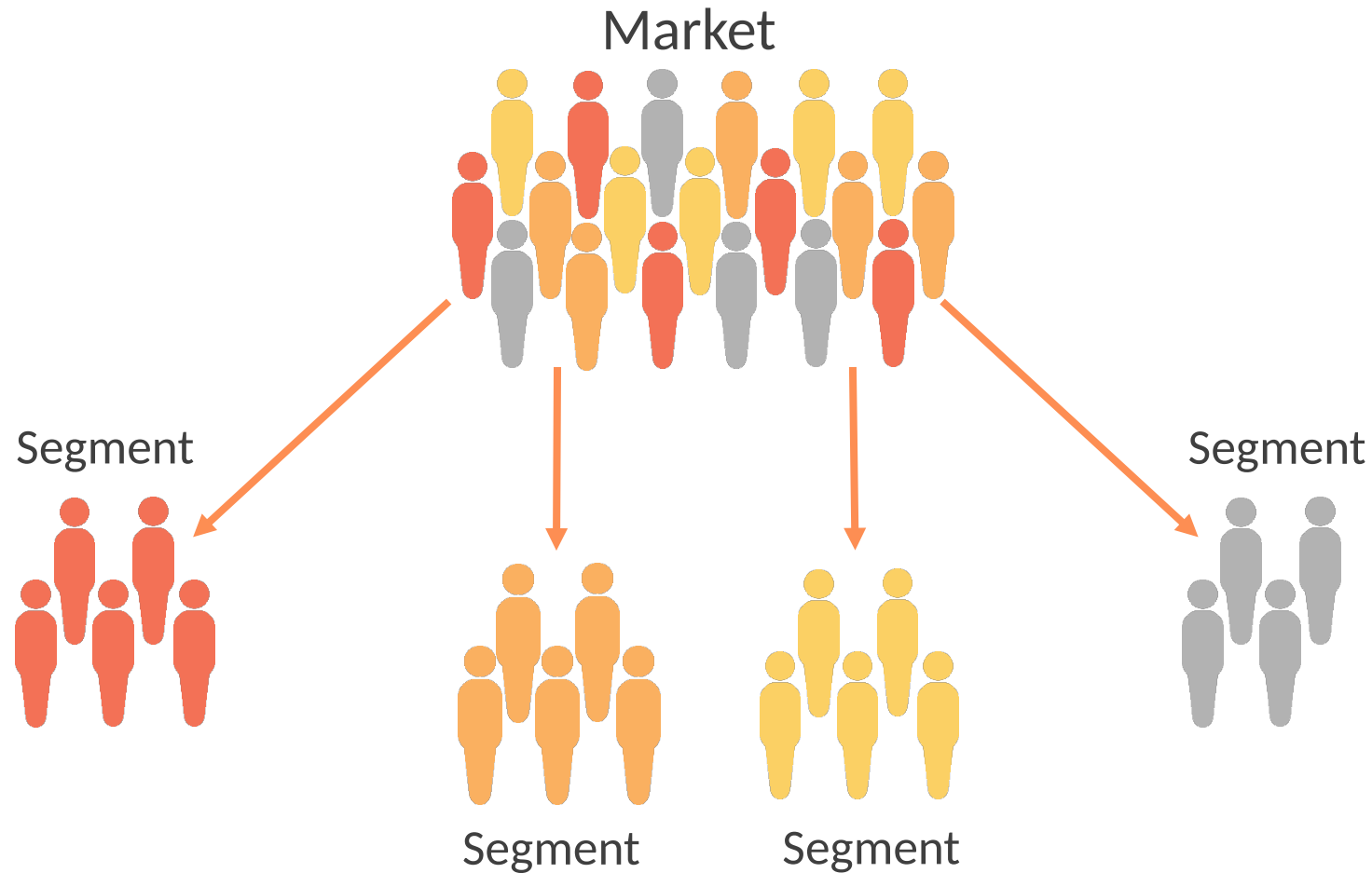
Market Segmentation

Build Your Customer Segments

Market

Segment

Segment

Segment

Segment

Segment

firestarter

Customer Types Example

Electron Microscope – US University/College
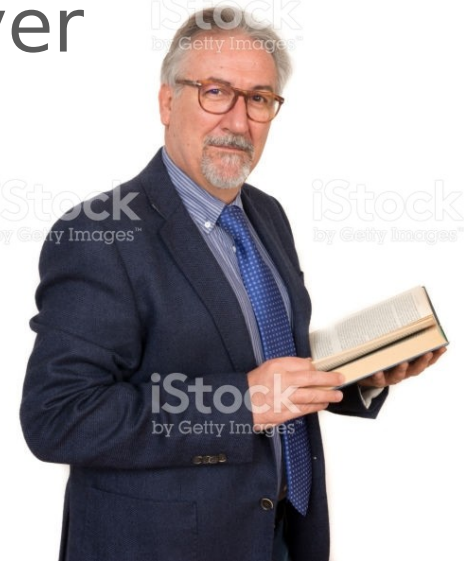
Influencers/ Saboteur

End User
Graduate Student

Economic Buyer
Business Office Manager

Decision Maker

firestarter

Firestarter

OTHER AREAS COVERED

➢Revenue Models (known, common ways to make money)

➢Milestones (what does it take to bring your product to market?)

➢Competition (how do you compare to others solving this problem?)

➢Team (and why this might be a bigger risk than Market Risk)

Firestarter

NUTS AND BOLTS (How it normally works)

➢ Cohort-based program

➢ Requires talking about your idea

➢ Typically requires 3 hours per week, with most work being done within the cohort (some outside time for Market Research)

CONCLUSION

What questions do you have?