

# Customer discovery best practices

GRANT M WARNER, PH.D.

# Grant Warner, Ph.D.

## Affiliations



## Founding Member



Innovate Egypt - Cairo



GIST Senegal - Dakar



KIC Start Korea - Seoul

# HOUSEKEEPING

PLEASE USE THE CHAT BOX TO ENTER YOUR QUESTIONS.













PITCH SHOWS HOW YOUR PRODUCT  
SOLVES THEIR PROBLEM



# Message Triangle



**TARGET:** Identify the Target



**Top Vertex: Pain/Gain and Proof.** Enter cues and prompts that remind you to articulate and validate this Target's problem, need, or opportunity.



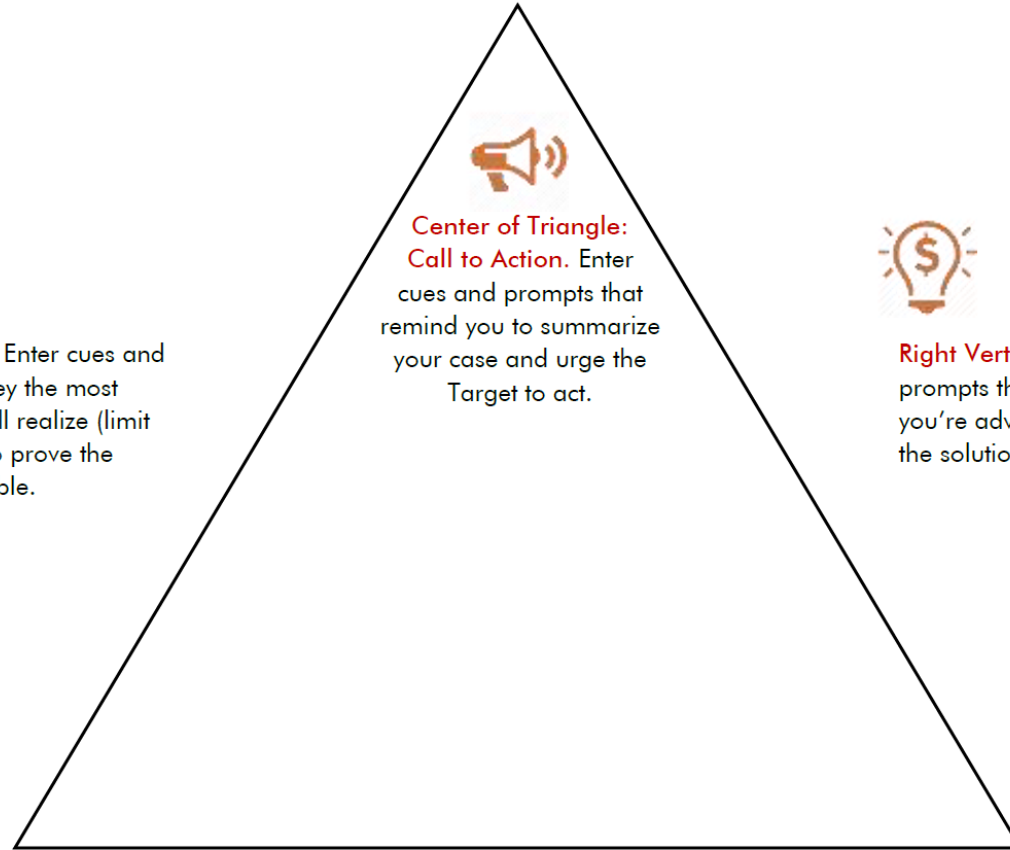
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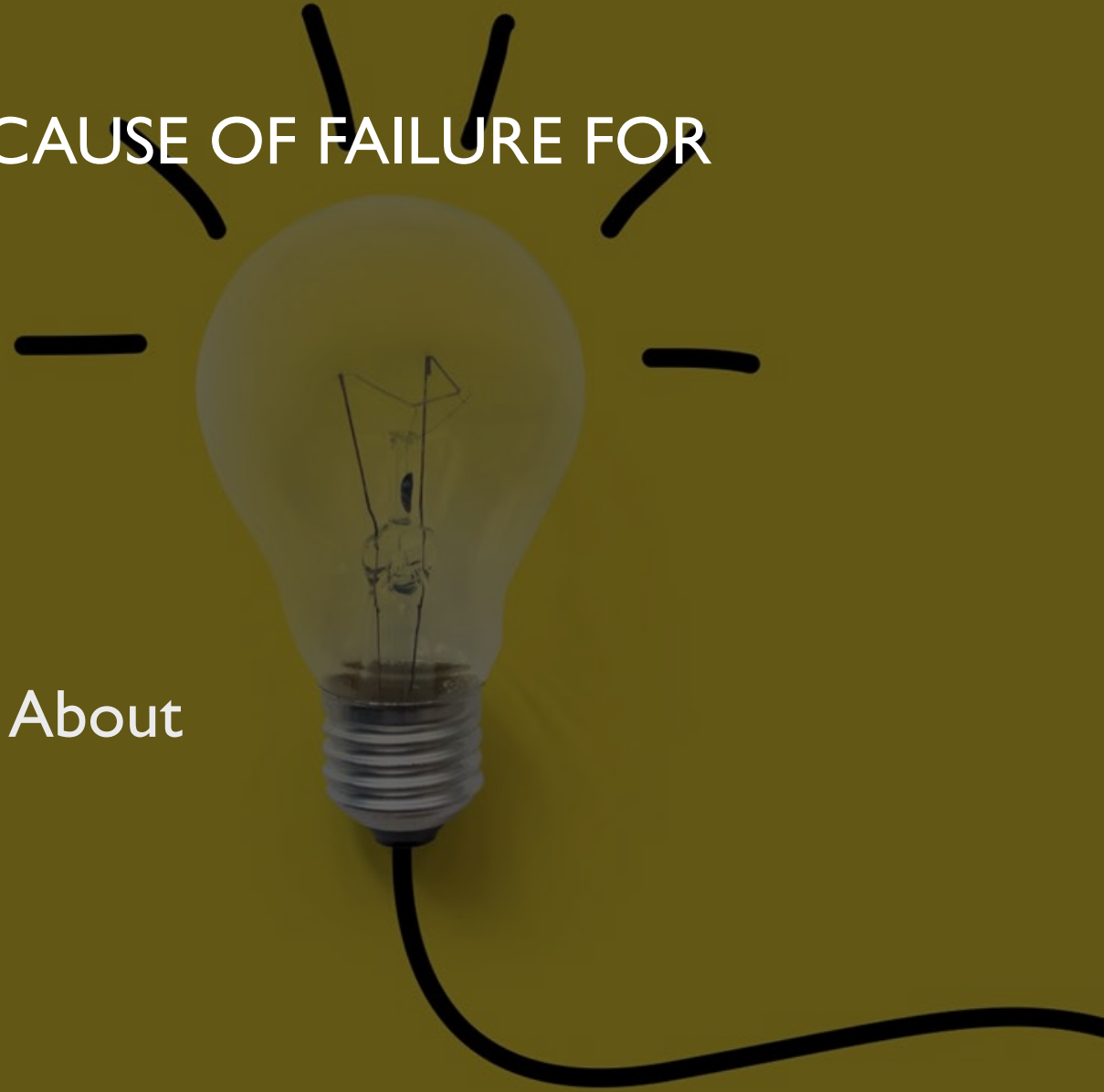


**Right Vertex: Solution and Proof.** Enter cues and prompts that remind you to relate the solution you're advocating. Add triggers to substantiate the solution's viability.



# POLL: WHAT IS MOST COMMON CAUSE OF FAILURE FOR STARTUPS?

1. Spending Money Too Fast
2. Building a Product Nobody Cares About
3. Not Having the Right Team









DO COMPANIES BUILD  
THINGS THAT NOBODY  
WANTS?





DO COMPANIES BUILD  
THINGS THAT NOBODY  
WANTS?





# The Segway



# The Segway

---



**Steve Jobs said that the invention would be “as significant as the personal computer.” Jeff Bezos said it was “revolutionary.”**



---

Segway raised over **\$100MM USD in 2001.**

Used funds to focus on execution.

Thought everyone would want a Segway

Projections: **6,000 Segways per week.**



---

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After **2 years** they sold **????? TOTAL Segways.**





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Projections: **6,000 Segways per week.**

After **2 years they sold 6,000 TOTAL Segways.**



---

# Tyson's *Law*

# Tyson's *Law*





# “Killer” Application: City Tours





# Why Customer Discovery?

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The company had expected that any softness in consumer sales would be made up for by corporate and institutional partnerships, with organizations like Disney and the U.S. Postal Service. But that never panned out. Even the police department in Segway's hometown, Manchester, ordered only four, and didn't use them much. They were fine for parking enforcement, the department told a reporter, but mountain bikes were cheaper and lighter, and they never ran out of juice.

# Why Customer Discovery?

---

When I returned the Segway, I told the guy at the rental place how I'd learned about all the incredible inspiration and innovation and work and skill that had gone into the Segway, all to make something that cost 10 times as much as a scooter and required a lesson from an expert to ride. He said something I cannot stop thinking about. "Yeah," he said, "a bunch of really smart people got together, but you needed one dumb person in the room to keep things on the level."

# Why Customer Discovery?

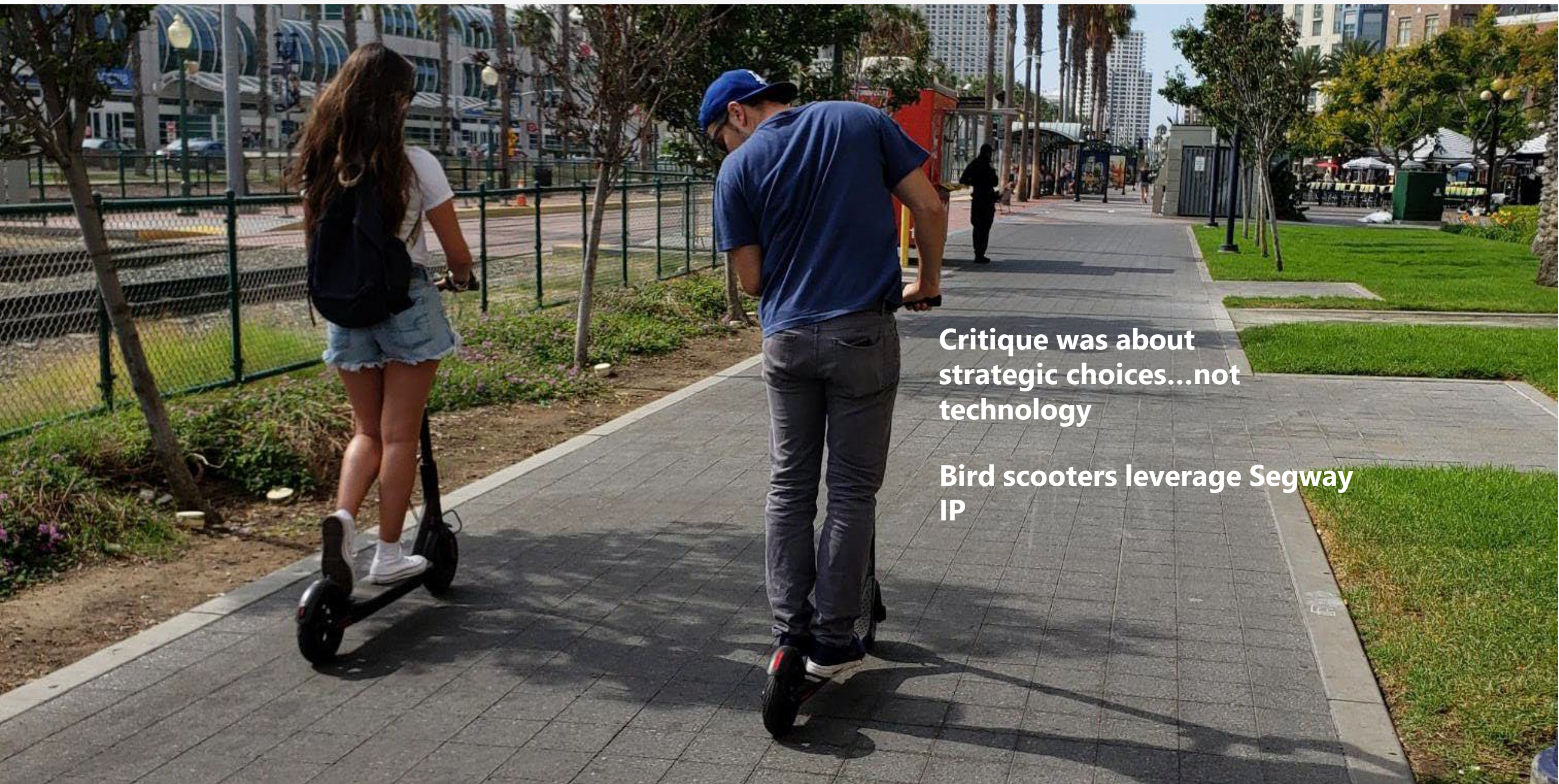
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**Innovation Coach**





**Critique was about  
strategic choices...not  
technology**

**Bird scooters leverage Segway  
IP**



---

SEGWAY WAS A GOOD *INVENTION*,  
MORE THAN A GREAT *INNOVATION*.

- They did not understand the needs of the customer.

# TOP 10

## STARTUP MISTAKES





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INVENTORS: TRY TO UNDERSTAND THE  
TECHNOLOGY



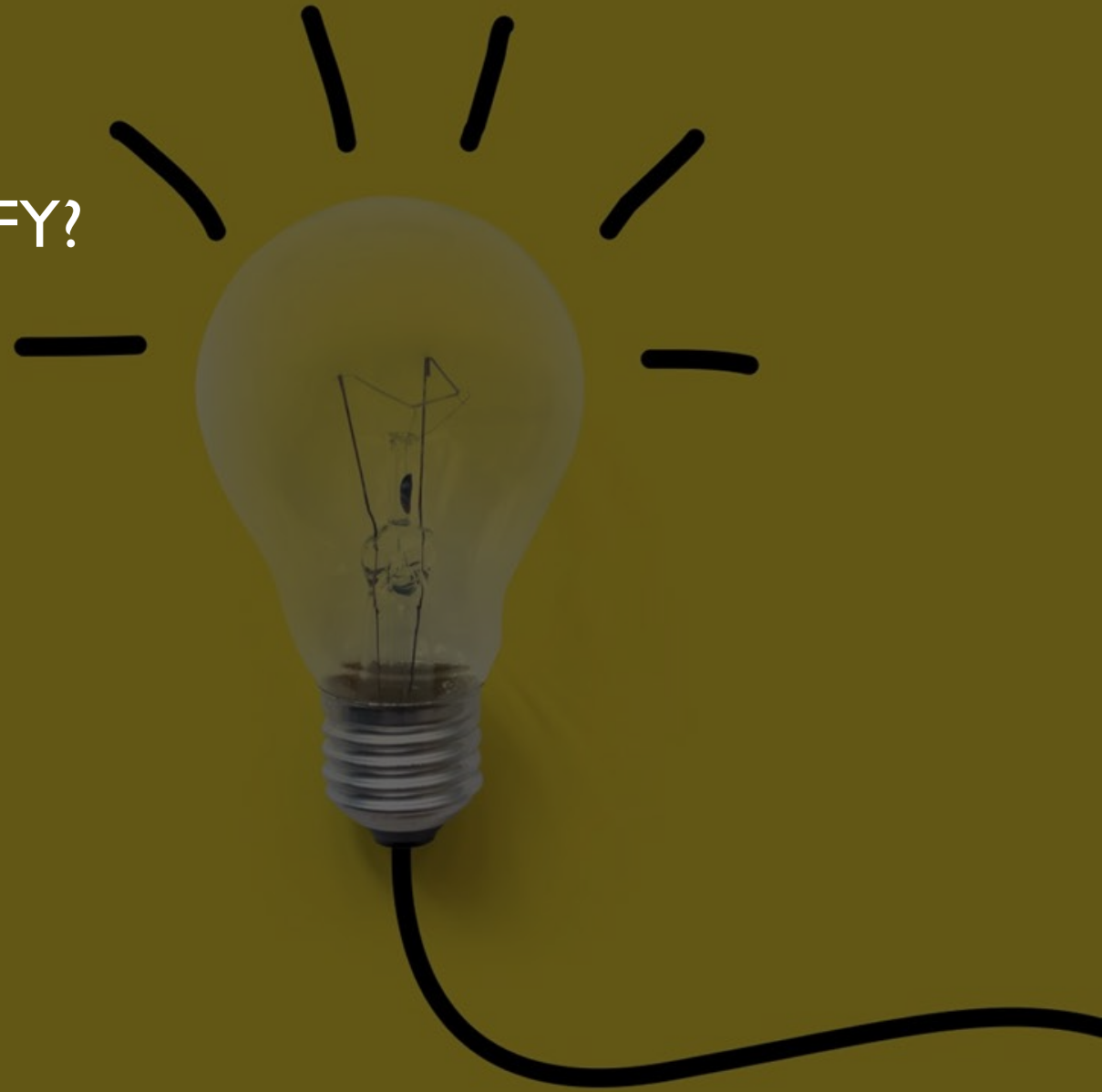
INNOVATORS: TRY TO UNDERSTAND THE PEOPLE





## POLL: HOW WOULD YOU IDENTIFY?

1. Inventor
2. Innovator
3. Other



# 2026 COMMUNITY COLLEGE INNOVATION CHALLENGE

Advancing Student Innovation & Impact



# 2026 COMMUNITY COLLEGE INNOVATION CHALLENGE

Advancing Student Innovation & Impact



We are all innovators



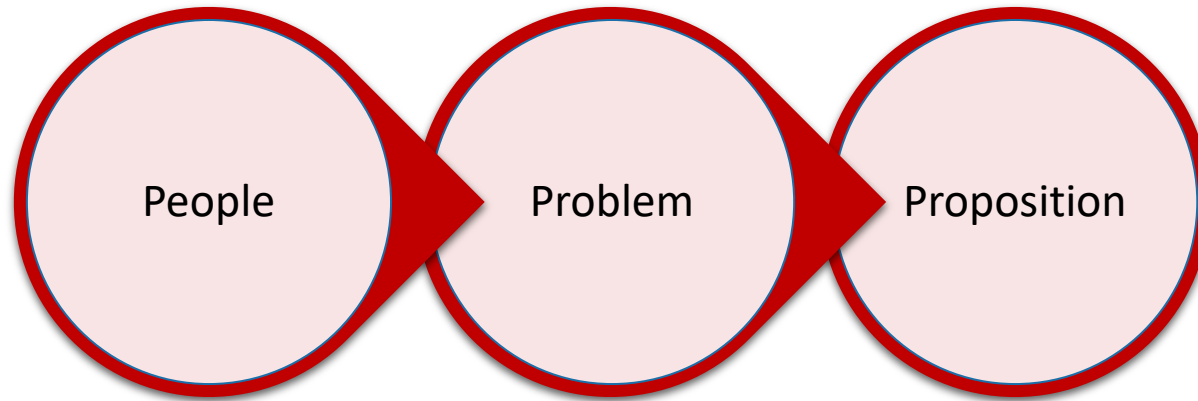
# BIG IDEAS FOR INNOVATION

- Startups are not small companies
- Get out of the Building – Customer Discovery
- Minimum Viable Product (MVP)

---

# Customer Discovery

## *Process Steps*





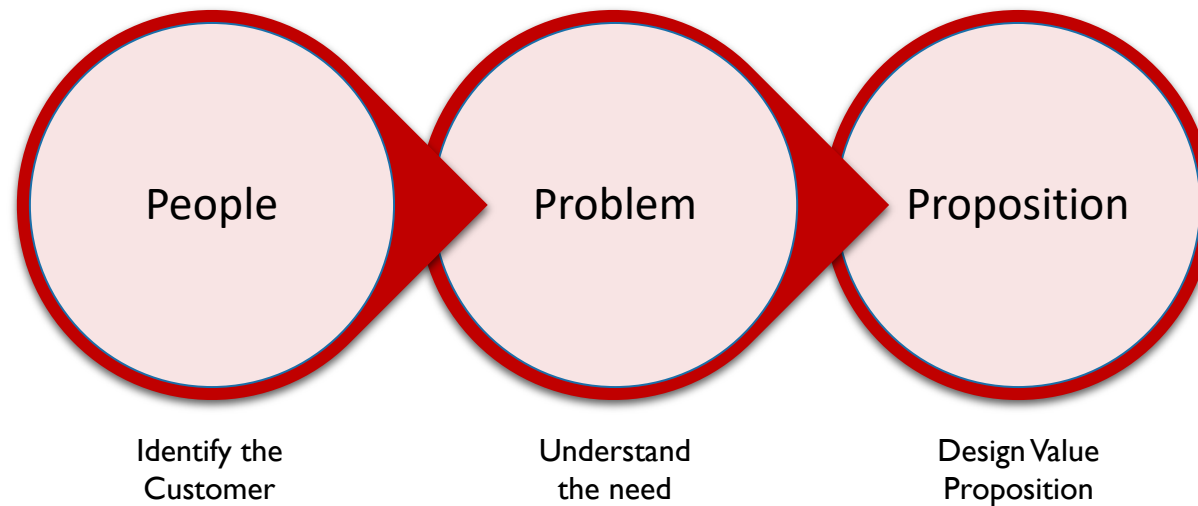
# **EVIDENCE-BASED INNOVATION**



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# Customer Discovery

## *Process Steps*



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## DRIVEN BY MANY ASSUMPTIONS:

- Who we are intending to help [identify customer]
- What this person is trying achieve [the need]
- The problem they are having accomplishing this job [pains/gains]
- How this problem might be addressed [competition/status quo]
- The value that might be accrued [value propositions]



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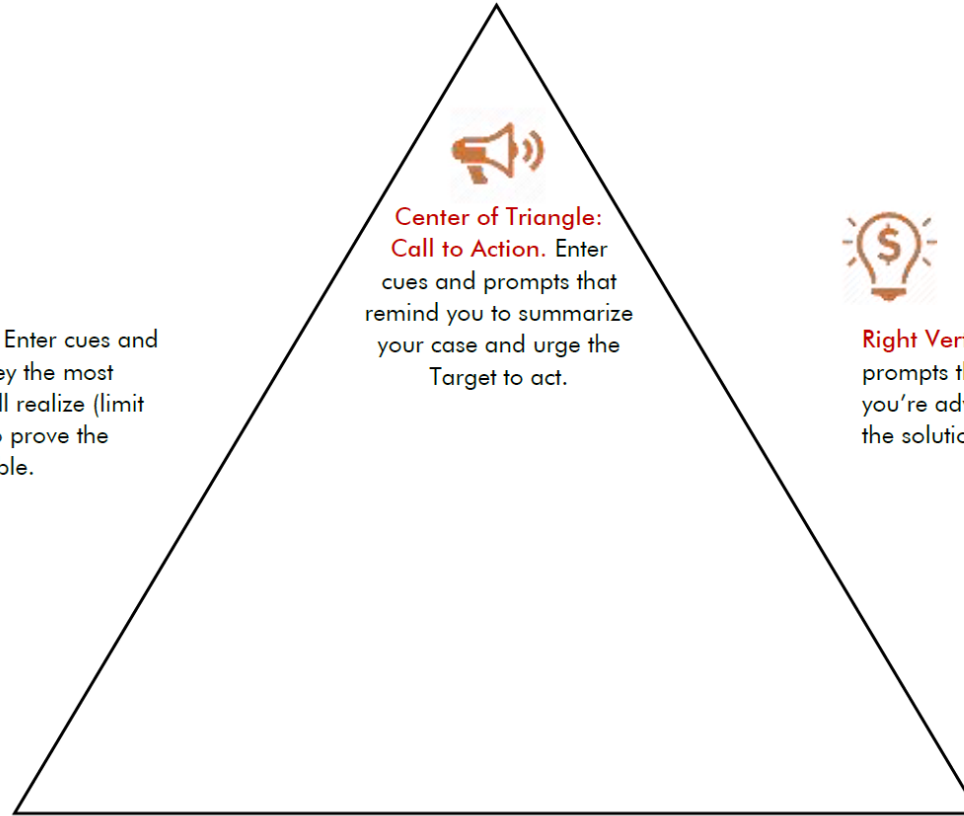
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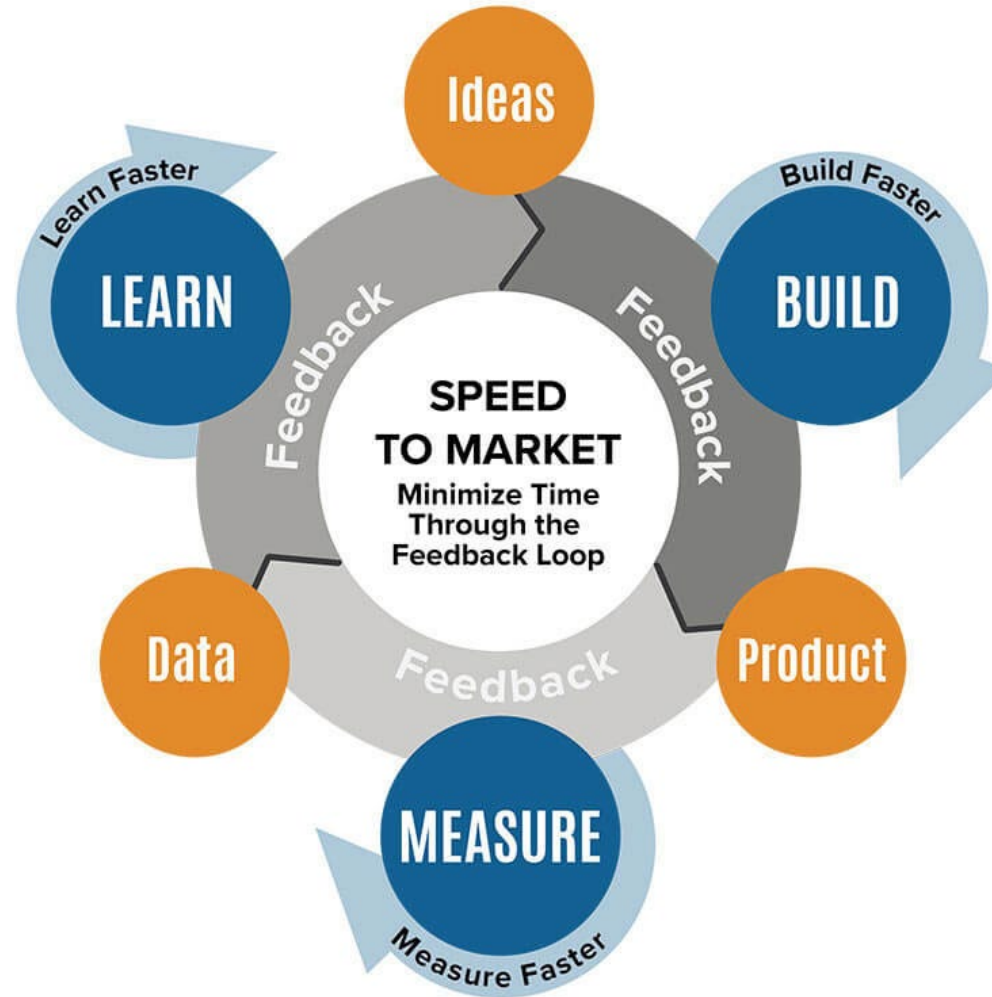


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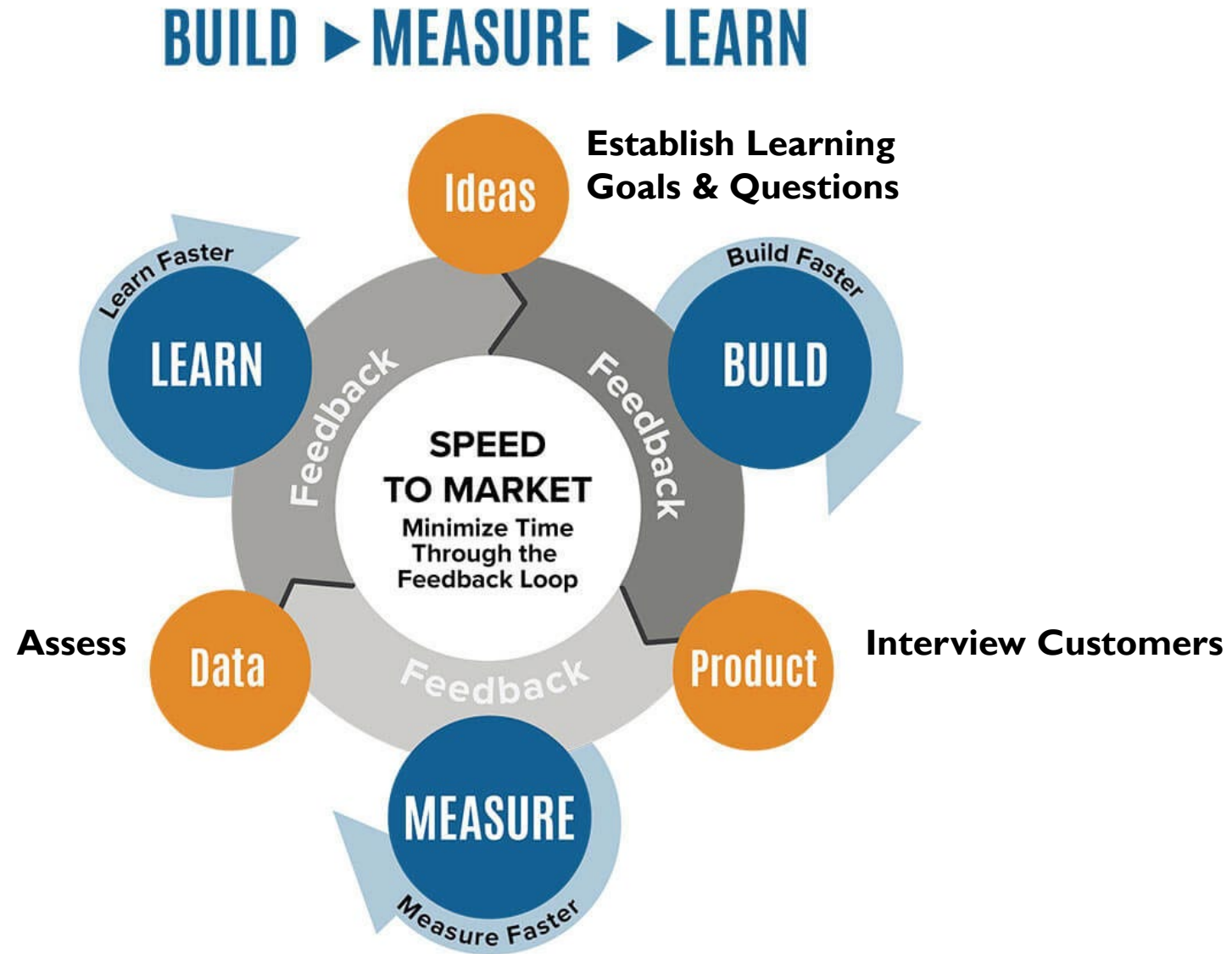
HOW A PRODUCT OF YOURS  
WILL SOLVE A PROBLEM OF THEIRS

**Your Goal:**  
Turn guesses into facts

**BUILD ► MEASURE ► LEARN**



**Your Goal:**  
Talk to people and ask  
them questions





| Stage | TWR (K) | $\Delta v$ (atm) | Time   |
|-------|---------|------------------|--------|
| 1     | 2.10    | 279 m/s          | 12.9 s |
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| 8     | ---     | ---              | ---  |

# It's NOT Rocket Science

2 x Z-400 Rechargeable Battery

Mass = 20 kg  
Capacity = 400 e

2 x OX-STAT Photovoltaic Panel

Mass = 5 kg  
Electricity = 0.75 e/s

Rockomax „Mainsail“ Liquid Engine

3 x „Mainsail“ LT-2000 Winglet  
Mass = 100 kg

Liquid Fuel = 1440 L

Oxidizer = 1760 L

Rockomax „Mainsail“ Liquid Engine

Rockomax X2000 Liquid Fuel Tank

Mass = 2 000 kg  
Liquid Fuel = 1440 L  
Oxidizer = 1760 L

6 x 60° AV-R8 Winglet

Mass = 20 kg  
Lift = 0.5

Mk16-XL Parachute

Mass = 300 kg  
Drag  
- Stowed = 0.22  
- Semi-Deployed = 1  
- Deployed = 500

Mk1-2 Command Pod

Mass = 4 000 kg  
Required Crew = 3

Rockomax „Mainsail“ Liquid Engine

Mass = 6 000 kg  
Thrust = 1 500 000 N  
Isp (atm) = 280 s  
Isp (vac) = 330 s

## KERBAL X

The Kerbal X is one of the most successful rockets that can be ordered from a catalog. Despite the original design having been meant for a plastic model, it's proved itself quite dependable as a full-sized craft.

The X is capable of achieving orbit around Kerbin, and even features a very optimistic set of landing legs on its upper stage.

Total  $\Delta v$  (atm) = 5 404 m/s  
Total  $\Delta v$  (vac) = 6 826 m/s  
Total Mass = 131 390 kg  
Part Count = 78

---

# GET OUT OF THE BUILDING

(PHYSICALLY OR VIRTUALLY)

POLL: HOW MANY INTERVIEWS SHOULD YOU  
COMPLETE BEFORE THE BOOTCAMP?

- 1
- 3
- 5





## YOUR HW

- Complete 5 interviews prior to the Bootcamp
- Log your interviews



# GOOTB: CUSTOMER INTERVIEW STEPS

- Pre-plan the interview
- Conduct the interview
- Process the interview





IDENTIFY THE CUSTOMER  
& LEARNING GOALS

# PRE-PLANNING THE INTERVIEW

---

# PRE-PLANNING: IDENTIFYING CONTACTS

WHO IS YOUR KEY CUSTOMER?



# CUSTOMER TYPES

- **End User:** Day to day users of the product/service
- **Decision Maker:** Makes the final decision to purchase
- **Economic Buyer:** Issues the PO or signs the check
- **Influencer:** Can sway the decision
- **Recommender:** Tasked to recommend solutions
- **Saboteur:** Loses out if the solution is adopted



## OTHER TYPES

- **Subject Matter Experts:** Persons with knowledge of the vertical who can be used for referrals and/or hypothesis development but NOT validation
- **Beneficiaries:** Person who benefits from your innovation but does not have influence on the adoption process
- **Champion:** Person with high influence within an organization



HOW DO WE FIND THEM?





(2) "Instructional Techno

+

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Matthew Whittlesey • 2nd

Instructional Technologist

Washington D.C. Metro Area

Summary: I am an Instructional Technologist with well over...

👤 Todd Ledbetter is a shared connection

Connect



Michelle Metzler • 2nd

Instructional Technologist at Stratford University

Washington D.C. Metro Area

Current: Instructional Technologist at Stratford University

👤 Tien Wong is a shared connection

Connect



Kristian Dabney • 2nd

Instructional Technologist at The George Washington University

Washington D.C. Metro Area

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**Kristian Dabney** • 2nd

Instructional Technologist at The George Washington University

Washington D.C. Metro Area

Past: **Instructional Technology Specialist** at Howard University

Joshua K. Brown and Adrienne Lacy are shared connections

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**Richard Culatta** • 2nd

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Connections

- ☐ 1st
- ☐ 2nd
- ☐ 3rd+

Connections of

Add connection of

Locations

Add a country/region

- ☐ United States
- ☐ Greater New York City Area
- ☐ Washington D.C. Metro Area
- ☐ Greater Boston Area
- ☐ Canada

Current companies

Add a current company

- ☐ Northside ISD
- ☐ Houston ISD
- ☐ New York University
- ☐ University of Minnesota
- ☐ Aetna, a CVS Health Company

Market Segment

Past companies

Add a previous company

- ☐ US Navy
- ☐ Apple
- ☐ IBM
- ☐ US Army
- ☐ AT&T

Industries

Add an industry

- ☐ Higher Education
- ☐ E-learning
- ☐ Education Management
- ☐ Information Technology & Services
- ☐ Primary/Secondary Education

Profile language

- ☐ English
- ☐ Spanish
- ☐ Turkish
- ☐ French
- ☐ German

Alumni Network

Schools

Add a school

- ☐ Bloomsburg University of Pennsylvania
- ☐ University of Phoenix
- ☐ University of North Texas
- ☐ Penn State University
- ☐ New York University



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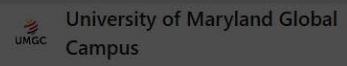
Erika Eason

edtech

Instructional Technologist

Clear

Director of Academic Technology at Maret School  
Washington, District Of Columbia · 129 connections · [Contact info](#)



Highlights

**You both studied at Cornell University**  
You both studied at Cornell University from 1991 to 1993

[Say hello](#)

About

I have been an educator for over twenty years and have always striven to incorporate the best practices of my field into my daily work. After fourteen years of teaching Spanish, I parlayed my extensive classroom experience into a new

Interested? Ad

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**Jumbo loans are available**  
Get competitive rates for home buying or refinancing from Chase.

Add new skills with these courses

**Apple Watch Tips and Tricks**  
Viewers: 10,788

**Learning Brightspace by D2L**  
Viewers: 2,610

**Moving Your Class Online Quickly and Efficiently**  
Viewers: 2,504

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**\$500/hr Advisory Roles**

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Join the Group to together Spread Awareness on Education Technology. EdTech (Education Technology) is a Group of EdTech enthusiasts across the globe who can collaboratively reform technology adoption and ...



EdTech Leaders Online

Group • 3,106 members

We are a capacity-building, online learning program based at Education Development Center for online educator professional development and virtual school programs.



EdTech Forum

Group • 11,716 members

This group is dedicated to all the Education Consultants and professionals from the Educational field in India who are looking to change the "way we teach" by coming up with innovative educational products for ...



EdTech Specialists - join the conversation with 4500 members

Group • 4,587 members

To discuss the constantly changing regulatory, technical and commercial aspects of education technology to share and comment on the latest EdTech news as well as career opportunities.



Baltimore EdTech

Group • 403 members

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\$500/hr Advisory Roles

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Safeguard Campus Health

Quickly & securely manage student, faculty & staff COVID-19 testing



BUSINESS INSIDER Premium

Red Bull fires CEO and CMO amid leaked controversial presentation slide

Messaging

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**Once you have found them  
you need a “cold-call”  
script**



## PRE-PLANNING: COLD-CALL SCRIPT

- **Who** you are?
- **What** are you looking for?
- **Why** are you contacting the person?
- **How** much time do you need?



## PRE-PLANNING: COLD-CALL SCRIPT

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---

## SAMPLE: COLD CALL SCRIPT

- Hello. My name is [Your Name], I am a student working on an NSF project exploring [the problem area you are interested in]. I am hoping to gain insight into decisions about [specific process your investigating]. As an expert in this area, I hope that you could speak with me for 10 minutes.

---

## KEY POINTERS – DEVELOP YOUR INTRODUCTORY SCRIPT

- Who/ What/ Why/ How
- Be clear that you are not selling
- Flatter your target
- Ask for minimal amount of time



**Once they agree to speak  
to you, you need interview  
goals**





**KEY EARLY STAGE  
LEARNING GOALS**



DO YOUR CUSTOMERS HAVE  
THE PROBLEM YOU THINK THEY  
HAVE?

WHERE DOES THAT PROBLEM  
FIT IN THEIR PRIORITIES?

ARE YOU TALKING TO THE  
RIGHT PEOPLE?



---

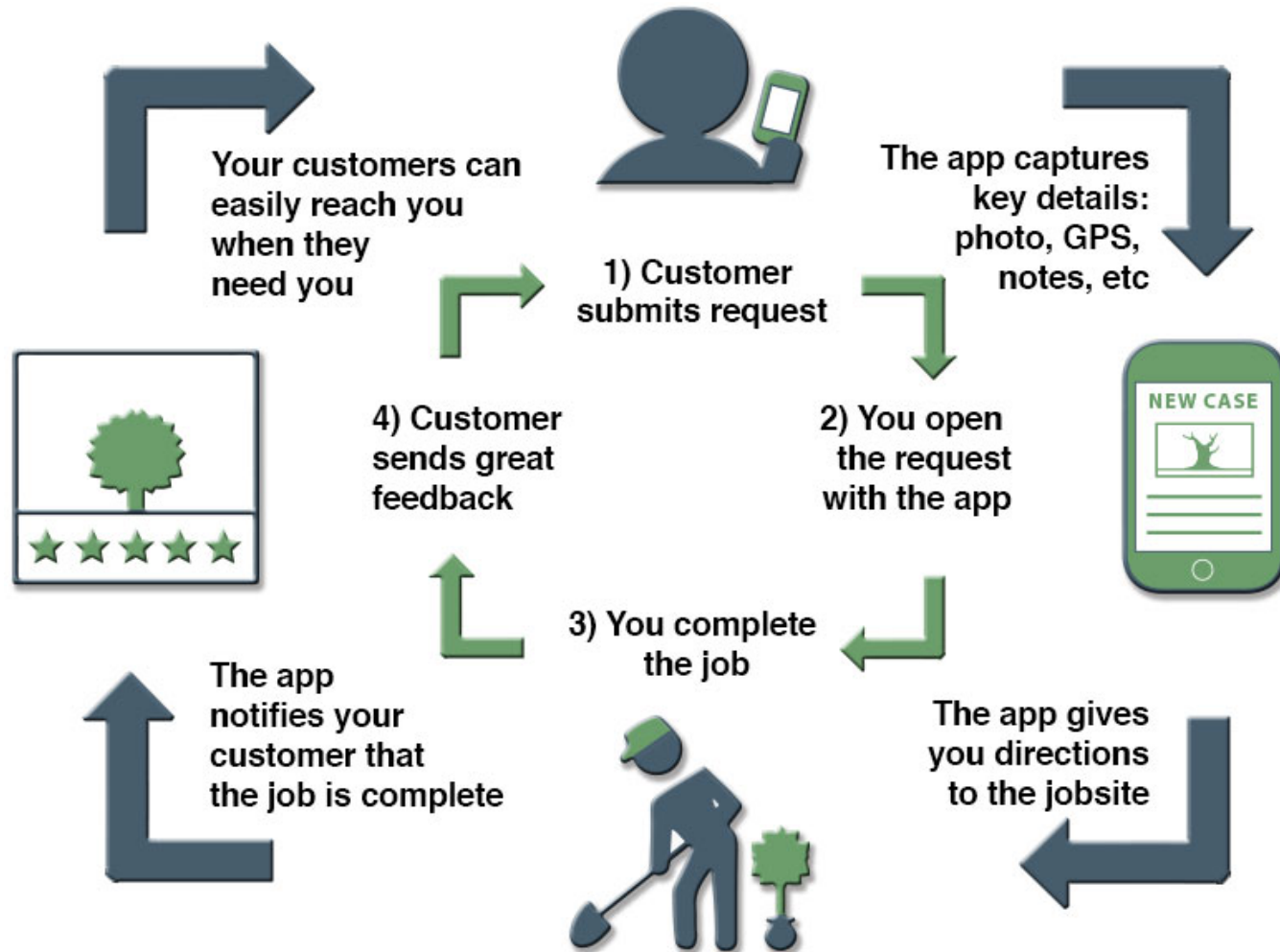
**Then create a conversation  
to help you  
validate/invalidate the  
hypotheses/goals**

# GET STORIES

- When was the last time you....
- Walk me through the process of...
- Can you explain how...
- When would....

OPEN ENDED QUESTIONS PROMPT  
DISCUSSION





## UNDERSTAND THE CUSTOMER JOB

HOW DO THEY SOLVE THE PROBLEM YOU ARE SOLVING TODAY?

WHAT IS THE PAIN WITH THAT SOLUTION?

ARE THEY ACTIVELY LOOKING FOR NEW SOLUTIONS?

---

## ASK WHY - REPEATEDLY

- WHY?
  - WHY?
  - WHY?
  - WHY?
  - WHY?
-





**GOOD  
QUESTION**



**BAD QUESTION**



WHAT IS THE BIGGEST ISSUE YOU  
FACE WHEN DEALING WITH  
PROCESS/ACTIVITY 'Y'?



WHAT IS THE BIGGEST ISSUE YOU  
FACE WHEN DEALING WITH  
PROCESS/ACTIVITY 'Y'?





Would you buy a product that did 'X'?



Would you buy a product that did 'X'?







What are the implications of not solving  
the problem?



What are the implications of not solving  
the problem?





How are you dealing with this today?



How are you dealing with this today?





What solutions have you tried?





What solutions have you tried?





What would your dream product do?



What would your dream product do?  
(customer jobs)



What would your dream product do?  
(customer feature request)





Would you pay “X” for a solution that  
did “Y”?





Would you pay “X” for a solution that  
did “Y”?





Where does the money come from to  
deal with the issue?



Where does the money come from to deal with the issue?





What do you think about this solution?





What do you think about this solution?



What do you think about this solution?







What do you think about this solution?



# CONDUCTING THE INTERVIEW

- Ask them to tell a **story** about their **jobs/responsibilities**
- Ask **open-ended** questions
- Drill Down on their **pain points** – ask **why**, repeatedly
- Listen more | Talk Less
- **DO NOT** Talk about your product
- Take notes

---

# CONDUCTING THE INTERVIEW

(CLOSING THE INTERVIEW)

---

**What else** should I have asked about?

**Who else** should I talk to?

**Can I follow up** with you later?

**Thank** them again

**LOG YOUR NOTES/INSIGHTS**



PROCESSING DATA

PROCESS THE INTERVIEW

A black and white photograph of a hand sifting soil through a metal pan. The pan is tilted, and a pile of dark, granular material is visible inside. The background is a textured, light-colored surface. At the top of the image, there are three horizontal bars: a dark grey bar on the left, an orange bar in the middle, and a light grey bar on the right.

# REMEMBER: YOU ARE SIFTING FOR GOLD

THINK ABOUT HOW RESPONSES ARE IMPACTING YOUR LEARNING GOALS

IT IS NOT ABOUT THE QUESTIONS; IT IS ABOUT THE ANSWERS

# ANALYZE YOUR DATA

- What did you hear that you never heard before?
- What learning goals/assumptions did they disprove?
- What new people did they tell you about that you were unaware of?
  
- What will you revise change?
  - New Learning Goals/Assumptions?



# CUSTOMER DISCOVERY DO'S

## DO

Know your objective before you go

***Listen more, Talk less***

Ask Open-ended Questions

Ask for referrals

Log your results honestly

***Listen more, Talk less***

# CUSTOMER DISCOVERY DON'TS

## DON'T

**Sell, pitch, sell, pitch**

*-you got it?-*

Talk About Your **Technology**

Ask them what they **Want**

*take **feature** requests*

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Rockomax „Mainsail“ Liquid Engine

Mass = 6000 kg

Thrust = 1500000 N

Isp (vac) = 330 s

6 x 60° Liquid Fuel Booster

2-2-2 Asparagus Staging

6 x NCS Adapter incl. Standard NC  
Mass = 400 kg

18 x FL-T400 Liquid Fuel Tank

Mass = 250 kg  
Liquid Fuel = 180 L  
Oxidizer = 220 L

6 x LV-T45 Liquid Fuel Engine

Mass = 1500 kg  
Thrust = 200000 N  
Isp (atm) = 320 s

6 x Hydraulic Detachment Manifold

Mass = 400 kg  
Ejection Force = 180 N

6 x 60° AV-R8 Winglet

Mass = 20 kg  
Lift = 0.5

Mk16-XL Parachute

Mass = 300 kg

Drag

- Stowed = 0.22

- Semi-Deployed = 1

- Deployed = 500

Mk1-2 Command Pod

Mass = 4000 kg  
Required Crew = 3

Rockomax „Mainsail“ Liquid Engine

Mass = 6000 kg

Thrust = 1500000 N

Isp (atm) = 280 s

Isp (vac) = 330 s

## KERBAL X

The Kerbal X is one of the most successful rockets that can be ordered from a catalog. Despite the original design having been meant for a plastic model, it's proved itself quite dependable as a full-sized craft.

The X is capable of achieving orbit around Kerbin, and even features a very optimistic set of landing legs on its upper stage.

Total  $\Delta v$  (atm) = 5404 m/s  
Total  $\Delta v$  (vac) = 6826 m/s  
Total Mass = 131390 kg  
Part Count = 78

# Startup's #1 job is?



# Startup's #1 job is?

CUSTOMER  
DISCOVERY



# Why Must Startups do Customer Discovery?





# Why Must Startups do Customer Discovery?

TO BUILD SOMETHING PEOPLE  
CARE ABOUT



# 2026 COMMUNITY COLLEGE INNOVATION CHALLENGE

Advancing Student Innovation & Impact



## QUESTIONS?