

# Texas State I-Corps Site for Entrepreneurship

**Dr. Jennifer Irvin<sup>1,2</sup>, Dr. Jana Minifie<sup>1,3,4</sup>, and Weston Waldo<sup>5</sup>**

<sup>1</sup>Materials Science, Engineering, and Commercialization Program

<sup>2</sup>Department of Chemistry & Biochemistry

<sup>3</sup>Department of Management, Entrepreneurship, McCoy College of Business

<sup>4</sup>Service Learning Excellence Program

<sup>5</sup>NSF I-Corps Consultant

# Why Texas State I-Corps Site for Entrepreneurship?

*“Texas State University is committed to applied research that can change the world. Our faculty and students are generating new knowledge, catalyzing ideas into reality, and pushing the boundaries in every discipline.”*

<https://www.research.txstate.edu/>



***Facilitator  
Weston Waldo***



***Facilitator  
Jana Minifie***



***Facilitator  
Sean Bauld***



***Facilitator  
Dami Runsewe***



***Facilitator  
Xiaohua (Nemo) Liu***

***Teaching Team***



***Facilitator  
David Angelow***



# Weston Waldo (王卫地)



Team 373 *First Interview*



## Contact

Email: [Weston.waldo13@gmail.com](mailto:Weston.waldo13@gmail.com)

LinkedIn: [linkedin.com/in/westonwaldo](https://www.linkedin.com/in/westonwaldo)

微信: Weston19

카카오톡: WestonG



UNIVERSITY OF  
ARKANSAS



A black and white portrait of Henry Ford, an elderly man with white hair, wearing a suit and tie, looking slightly to the right. The image is used as a background for the quote.

"If I'd asked my customers what they wanted,  
they'd have said 'a faster horse.'"

- Henry Ford

# Get *out* of your comfort zone!







VS



# Field of Lies





THE DREAM IS FREE,  
BUT THE

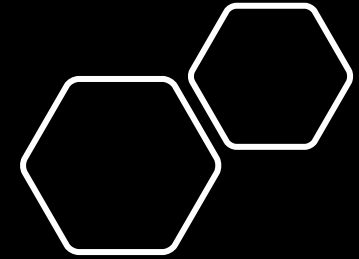
HUSTLE

IS SOLD SEPARATELY





# Career Path







*“How can we **increase the economic impact** of the research dollars invested every year?”*



# American Innovation and Competitiveness Act - Jan 2017

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## TITLE VI—INNOVATION AND TECHNOLOGY TRANSFER

### SEC. 601. INNOVATION CORPS.

42 USC 1862s–8.

(a) FINDINGS.—Congress makes the following findings:

(1) The National Science Foundation Innovation Corps (referred to in this section as the “I-Corps”) was established to foster a national innovation ecosystem by encouraging institutions, scientists, engineers, and entrepreneurs to identify and explore the innovation and commercial potential of National Science Foundation-funded research well beyond the laboratory.

(2) Through I-Corps, the Foundation invests in entrepreneurship and commercialization education, training, and mentoring that can ultimately lead to the practical deployment of technologies, products, processes, and services that improve the Nation’s competitiveness, promote economic growth, and benefit society.

(3) By building networks of entrepreneurs, educators, mentors, institutions, and collaborations, and supporting specialized education and training, I-Corps is at the leading edge of a strong, lasting foundation for an American innovation ecosystem.

## ***8 Agencies***

***NIH (SBIR & CTSA), DOD,  
NSA, USDA (ARS & NIFA),  
DHS, & SBA***

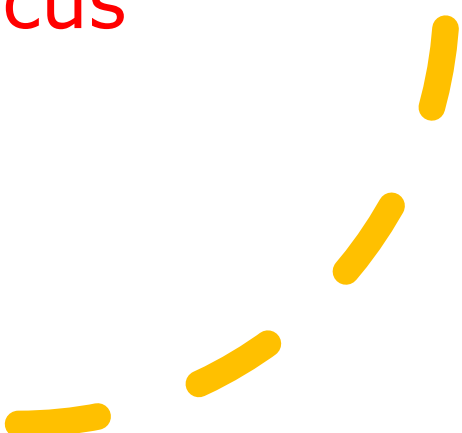


A large orange circle is positioned on the left side of the slide, partially cut off by the edge.

## I-Corps (*Pronounced "I-core"*)

NSF program designed to increase the **economic impact of research**.

Intensive program prepares **scientists, researchers, and engineers** to **extend their focus beyond the laboratory**.

A series of four yellow dashed line segments are arranged in a curved, upward-sloping path in the bottom right corner of the slide.

# I-Corps *Outcomes*



## ***Commercialization Strategy Decision***

New Start-up  
Business Creation  
Technology  
Licensing Strategy  
Pivot



Increase your chances for  
funding



Refine and strengthen your  
research agenda




# National

- 100+ Interviews
- \$50,000 NSF award
- Focus on Business Model Validation
- 1-2 week application process
- Identify pathway to Market
- 7 weeks
- Mentor required

# Regional

- 25+ Interviews
- NSF I-Corps Site award
- Focus on Introduction to Methodology
- 3-4 weeks
- Opportunity to Establish NSF lineage



**Why are we**  
*Here?*

More startups fail from a

*lack of customers*

than from product / tech  
failure

More startups fail from a

***lack of customers***

than from product / tech failure



The background features a light blue gradient on the left and a light green gradient on the right, separated by a vertical line. Large, stylized, overlapping wavy shapes in shades of blue and green are positioned in the top-left and bottom-right corners, creating a modern, abstract design.

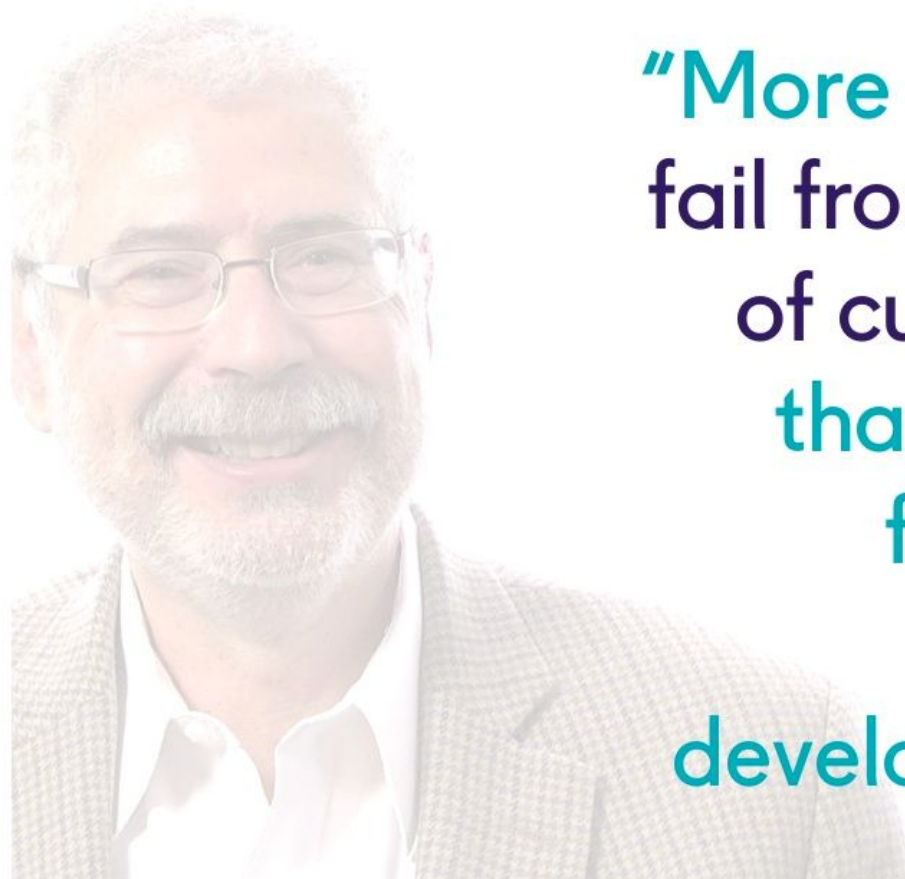
# Startup *Statistics*

# TOP 10

## STARTUP MISTAKES







“More startups  
fail from a lack  
of customers  
than from a  
failure of  
product  
development.”



# Beware of Tech Development BEFORE Customer Development!

- Segway raised over \$100M in 2001. Used funds to focus on Tech Development.
- Thought everyone would want a Segway
  - Projected selling 10,000/week
- Sold about 6,000 TOTAL in TWO YEARS!



**SEGWAY®**



**Join the I-Corps Program**

***What will you do?***

# ***Get Out of the Building***



Can you help me with  
the specific **Jobs** I need  
to get done...?

Can you solve  
my **Problems**...?

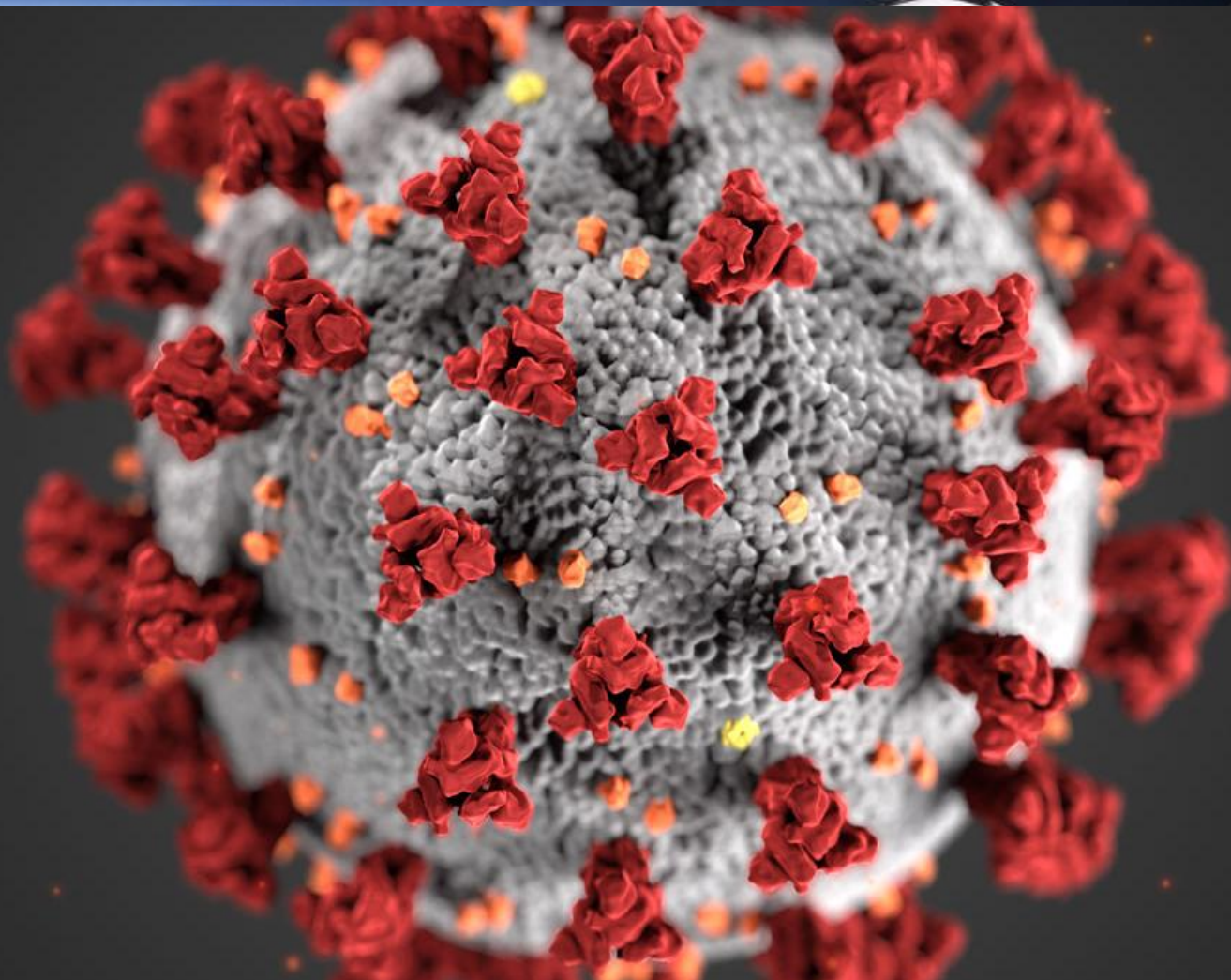
Can you satisfy my  
**Needs**...?

ZENITH  
SWISS WATCH MANUFACTURE  
SINCE 1865



# ~~Get Out of the Building~~

Can you solve  
my Problems...



# ***Get Connected to Your Customers***

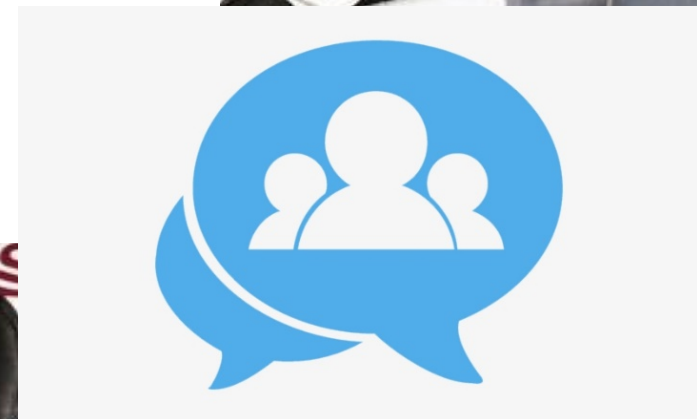


Can you  
my Pro

with  
need  
?



Webex Meetings



★  
NITH  
MANUFACTURE  
1988



# Customer *Interviews*



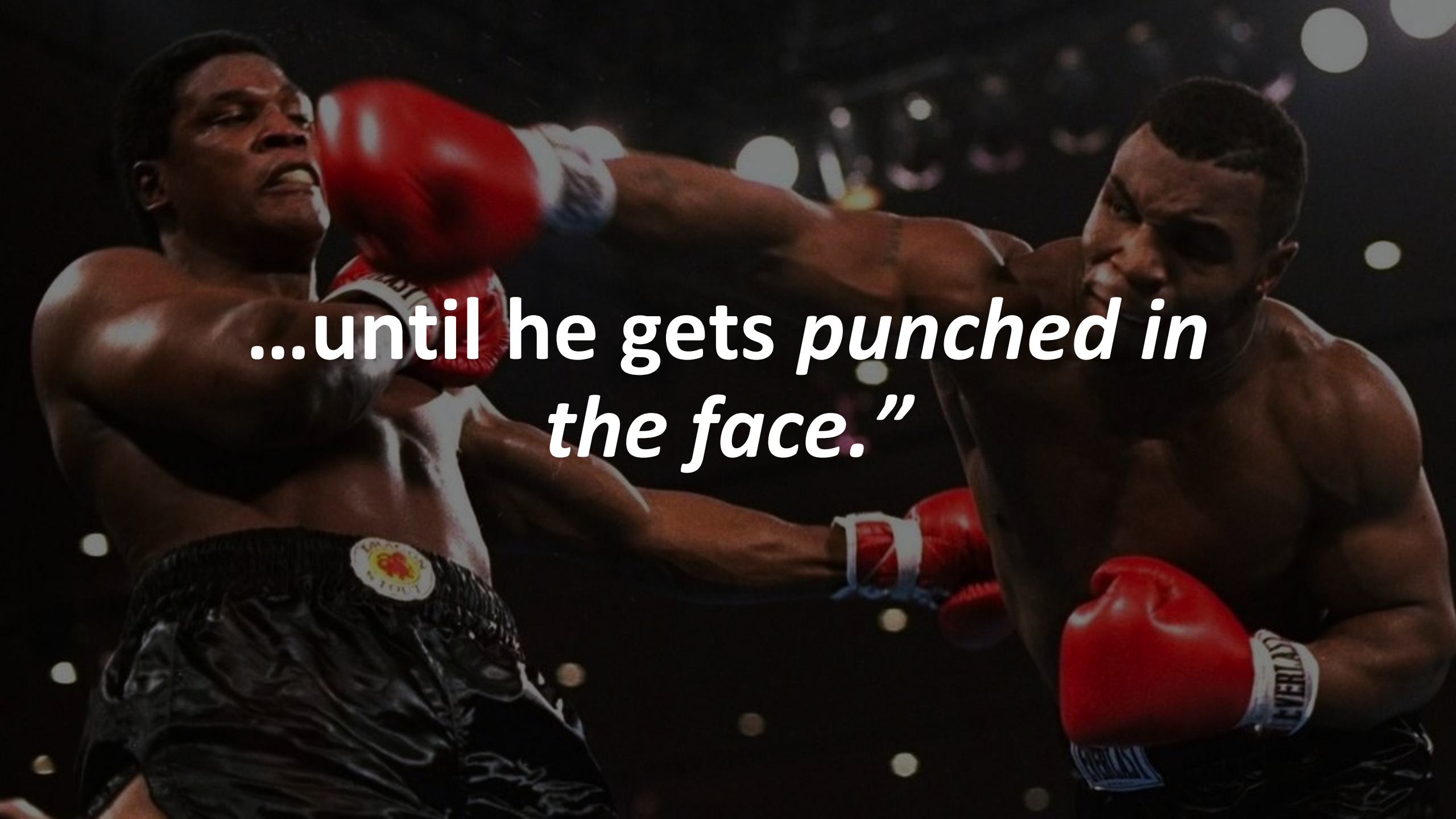


**But *why*?**





**Everyone has *a*  
*plan...***



...until he gets *punched in the face.*”



The diagram consists of two circles connected by a right-pointing triangle. The left circle is orange and contains the text 'Search for...'. The right circle is gray and contains the text 'Product-Market Fit'. The connecting triangle is also orange.

Search  
for...

*Product-  
Market  
Fit*

**Go *No-Go***

***A Business Worth Pursuing?***

**What about the time in  
between?**

***Customer Discovery***



What about  
the time in  
between?

*Get Out of the  
Building!!*



Complete your Initial Business Model Canvas



Contact, Schedule & Conduct 25+ Interviews

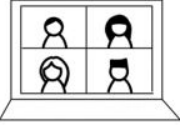

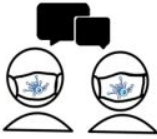


Document Interviews



Prepare to present your findings at Opening & Closing Workshops



	COUNT			
Total	101	77	24	0



- ❖ We participated in Texas State University I-Corps Site for Entrepreneurship 2019 (I-Corps Site Award Number 1829144)
- ❖ The proposed automated pavement condition survey system technology is based on research performed at Texas State University in Technology-enhanced Infrastructure
- ❖ Multi-billion market

TEXAS STATE UNIVERSITY I-CORPS

EST. 2018

ASSESSING THE COMMERCIAL VIABILITY OF  
INNOVATIVE TECHNOLOGIES



[www.icorps.txstate.edu](http://www.icorps.txstate.edu)



OVERVIEW

The Texas State (TXST) I-Corps Site focuses on providing entrepreneurial training and resources to TXST faculty, students, staff, alumni, and underrepresented community members.

By partnering with the TXST New Ventures Program, the TXST I-Corps Site provide its participants opportunities to receive additional mentoring and financial support. Overall, the TXST I-Corps Site has served as a catalyst for the growth of entrepreneurial activities in Central Texas.

SITE ACHIEVEMENTS

Since 2018, the TXST I-Corps Site has trained 5 cohorts and has collaborated across campus to initiate 2 additional entrepreneurial programs. The Site has also initiated the Texas State Entrepreneur Network, which has expanded to 600+ members who provide entrepreneurial mentorship to Teams.

BROADENING PARTICIPATION

The TXST I-Corps Site sponsors the annual Women's Entrepreneurship Week activities, which provides female entrepreneurial role models to inspire female students to pursue innovation and entrepreneurship activities. The Site also reaches out to minority-serving organizations on campus.

7

Startups are currently active in the Central Texas ecosystem, introducing innovations in biomedical devices, alternative energy, and agriculture to the market.

53%

Of TXST I-Corps participants are first-generation college students, and 41% of participants identify as Hispanic/Latino.

\$98K

Generated in commercialization grants and investment funding

81

Participants have engaged directly with TXST I-Corps

36

Teams of students, postdocs, faculty, and community members

National Science Foundation I-Corps | June 2019

[https://www.nsf.gov/news/special\\_reports/i-corps/](https://www.nsf.gov/news/special_reports/i-corps/)

Started Oct. 2018

Goal 25 teams per year

Open to Teams, minimum of 2-team members

STEM/STEM Applicable Concepts \$3,000 grants

Support to National \$50k I-Corps Program

Strengthen SBIR/STTR applications

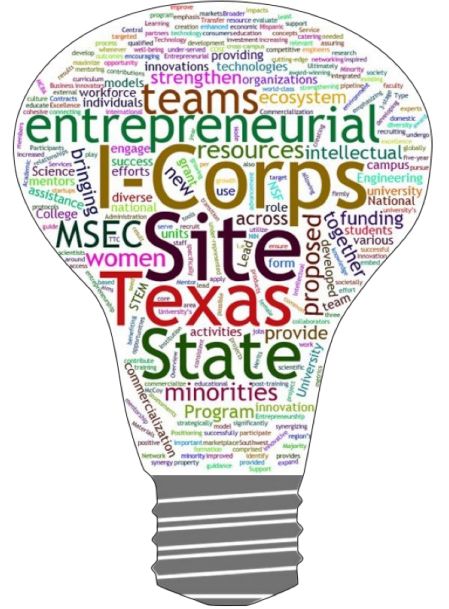
Strengthen New Ventures applications

# Texas State Researchers Going to National

- Ziliang Zong zz11@txstate.edu (Principal Investigator)  
Qijun Gu (Co-Principal Investigator) [I-Corps: GreenSoft: A Cloud Based Framework for Green Software Design and Education](#), NSF, Federal, \$50,000 (Funded February 2015 – January 2016). Grant.
- Wang, Feng (Principal), Luo, Xiaohua (Co-Principal), Minifie, Jana Roberta (Co-Principal), Gong, Haitao (Supporting), Tao, Jueqiang (Supporting). StarImage: cost-effectiveness improved automated pavement condition survey system, NSF, Federal, \$50,000. (Funded: January 2021 - December 2021). Grant.
- Two Texas State teams final round

# Program Review

- Week 1 – Initial workshop covering the program objectives, how to interview humans, business model canvas, business hypothesis, value proposition (Friday morning: 3-4 hr online workshop)
- Week 2-3 – Start interviewing humans. Go over your initial discovery during Office Hours with one of our facilitators (1-2 hours meeting)
- Week 4 – Final presentations of interviews. What's next? (Friday morning: 3-4 hr online workshop)







# I-Corps Cohorts x3 Per Year

- October
- March
- June

Visit <https://icorps.txstate.edu/>

**OPENING WORKSHOP**  
**Friday, March 12<sup>th</sup>, 2021**

Time	Session
8:45 am – 9:00 am	<b>Login to Zoom</b> <a href="https://txstate.zoom.us/j/2405905720">https://txstate.zoom.us/j/2405905720</a>
9:00 am – 9:05 am	<b>Opening Remarks</b> <ul style="list-style-type: none"><li>Review agenda</li></ul>
9:05 am – 9:55 am	<b>Business Model Generation</b> <ul style="list-style-type: none"><li>Business Model Canvas &amp; Customer Development</li><li>Customer Segments, Sub-Segments, Types</li><li>Value Propositions</li><li>Problem-Solution, Product-Market, and Business Model Fit</li></ul>
9:55 am – 10:05 am	<b>BREAK</b>
10:05 am – 10:30 am	<b>Team Presentations: [3 mins + 2 mins critique]</b> <ul style="list-style-type: none"><li>Teams split into virtual Block A/B instructor rooms</li><li>Introductions</li><li>Initial “business thesis”: What is your product, Who is your</li></ul>
10:30 am – 11:15 am	<b>Workshop: Best Practices for Customer Discovery</b> <ul style="list-style-type: none"><li>Who should you interview</li><li>How to get, conduct, and record customer interviews</li></ul>
11:15 am – 11:30 am	<b>Wrap-Up</b> <ul style="list-style-type: none"><li>Review team deliverables</li><li>Q&amp;A</li></ul>

## MID-WEEK OFFICE HOURS TBD

Teams will meet with teaching team 1 on 1 to discuss weekly progress.

### *Format:*

Time	Session
30 minutes	<b>Team Lessons Learned Presentations: [7 mins + 3 mins critique]</b> <ul style="list-style-type: none"><li>• “Business thesis”: What is your product, Who is your customer, and Why would they buy it?</li><li>• What did you think, What did you do, What did you learn, and What will you do next?</li></ul>
10 minutes	<b>Wrap Up and Q&amp;A</b>

**CLOSING WORKSHOP**  
**Friday, April 2<sup>nd</sup>, 2021**

Time	Session
8:45 am – 9:00 am	Login to Zoom <a href="https://txstate.zoom.us/j/2405905720">https://txstate.zoom.us/j/2405905720</a>
9:00 am – 9:05 am	Welcome Back
9:05 am – 9:15 am	Program Next Steps
9:15 am – 10:20 am	Team Presentations: [7 mins + 3 mins critique] - <ul style="list-style-type: none"><li>• “Business thesis”: What is your product, Who is your customer, and Why would they buy it?</li><li>• What did you think, What did you do, What did you learn, and What will you do next?</li></ul>
10:20 am – 10:50 am	Lessons Learned / What’s Next / SBIR & STTR

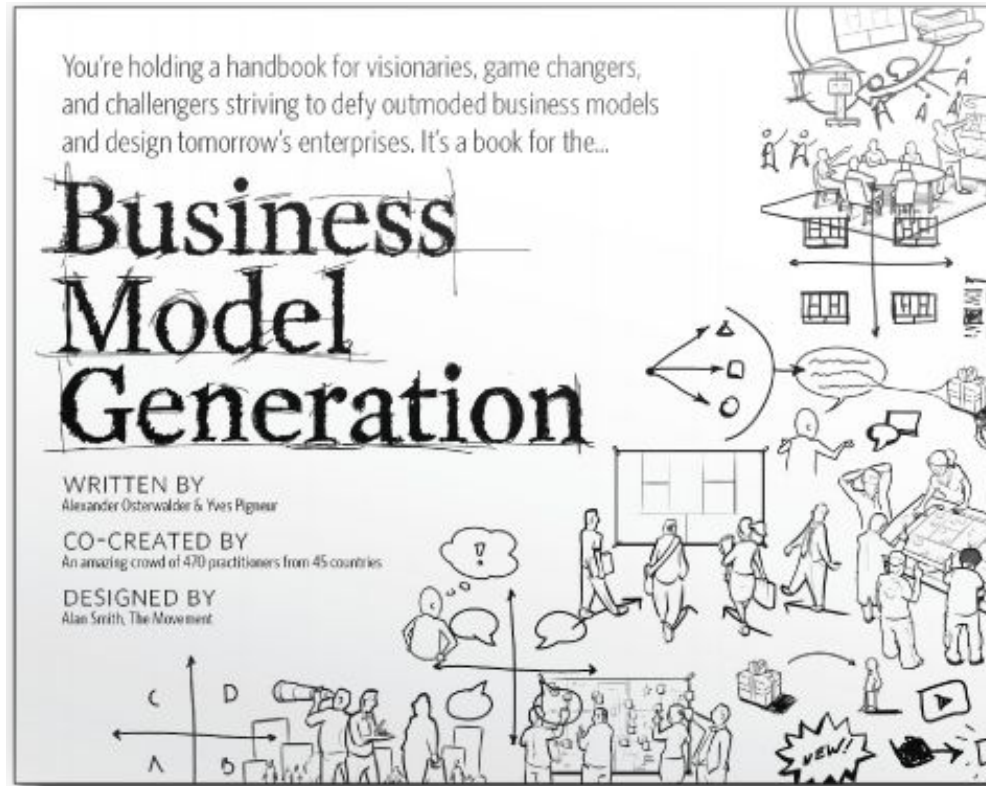


## CUSTOMER DISCOVERY



**Steve Blank**  
Stanford / UC Berkeley

# Additional *Resources*



How to create products and services customers want.  
Get started with...

## Value Proposition Design

[strategyzer.com/vpd](http://strategyzer.com/vpd)

Written by  
Alex Osterwalder  
Yves Pigneur  
Greg Bernarda  
Alan Smith

Designed by  
Trish Papadakos

WILEY



# TALKING TO HUMANS

Success starts with understanding  
your customers

---

**GIFF CONSTABLE**

with Frank Rimalovski  
illustrations by Tom Fishburne  
and foreword by Steve Blank

# Lean LaunchPad® master video library

Learn the Lean LaunchPad® Methodology

This page contains several videos to assist you in your learning and teaching of the Lean LaunchPad® methodology. The videos are arranged by topic and include instructional videos and videos showing real life examples of faculty critiquing teams during their presentations.

In addition there are several “lessons learned” videos and videos of final team presentations from the Life Science and Healthcare LaunchPad at UC San Francisco, Spring 2013.



 [I-Corps™ Home](#)



# Assignment *Review*

*Template Slides in Course Dropbox*

# Team Name



**Team Member 1**



**Team Member 2**



**Team Member 3**



**Team Member 4**

***Brief Team Description: [Insert Description]***

# **Business *Thesis***

**Who is your customer?**

**What is your product/service?**

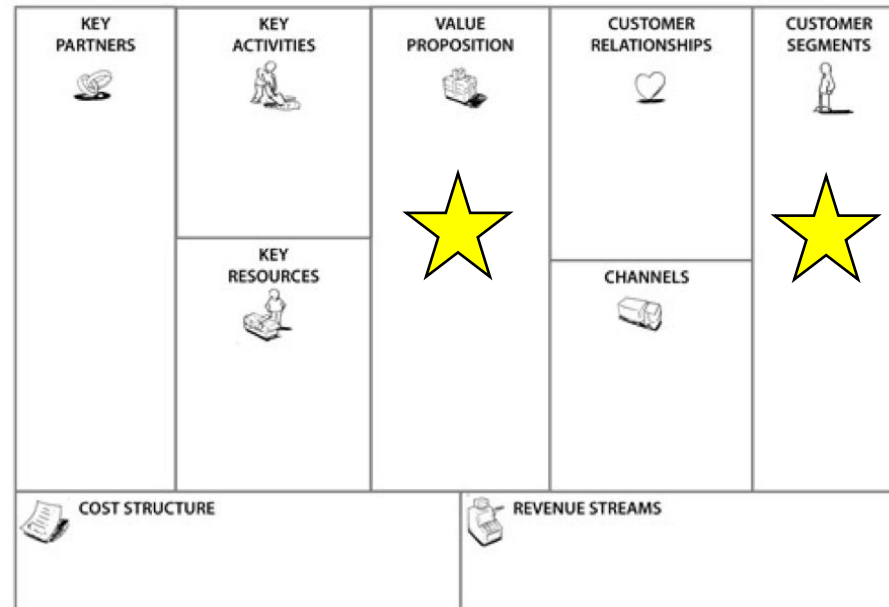
**Why will customer buy?**

# Initial Business Model Canvas

(Focus on Customer Segments and Value Propositions)

Business Model Canvas

www.businessmodelgeneration.com



# Focus on CS & VP

Value Propositions



Customer Segments





# Questions?