

# Why are *YOU* here?



THE UNIVERSITY  
OF THE  
WEST INDIES



**Cash, connections,  
sales & marketing?**

To increase our  
*SPEED* to *TRUTH*

**DAY 1**

***Rethinking how  
people **make decisions*****

# DAY 2

*How to **objectively**  
**investigate** your  
opportunity.*

**Invention** = ***Innovation***

# Duke Chang

-Fidelity Labs

- Invention, solving a puzzle



- Innovation, solving a mystery



## ***Day 1 9:15 Breakouts***

***1 - What solutions are being used today***

***2 - Who are using solutions today?***

***3 - What do you believe is important to those end users?***

***4 - Why do you think one solution may be chosen over another and vice versa.***

***5 - Why are there multiple solution in the first place?***





**3,500+** *Teams*

**15,000+** *Hours*

**Science and**

***Technology Focus***

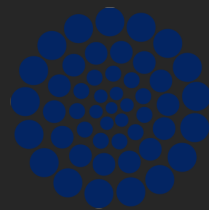
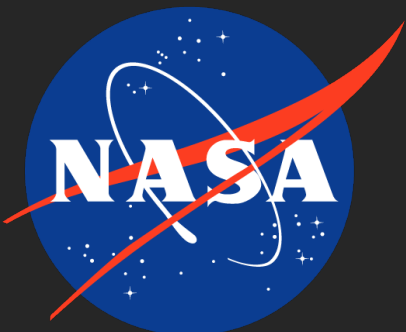
**Focus on complex  
engineering &  
technology**

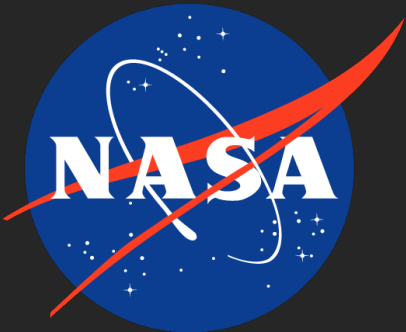
***with long time to  
market and high risk***

# Large Global Megatrends – broad searches

*Sustainability, Hydrogen,  
Electrification, GHG Reduction,  
De-carbonization, Ag-Tech, Water  
availability, Access to healthcare*

**Startups and**  
***Transformational***  
***Opportunities***





NATIONAL INSTITUTE OF...

And Fortune 500 clients we are not at liberty to name.



tecnológico Monterrey



Inter-American Development Bank

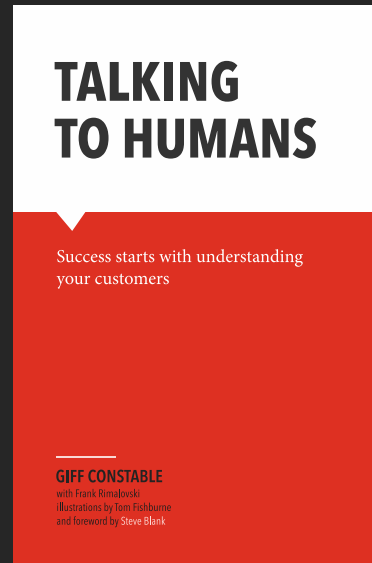
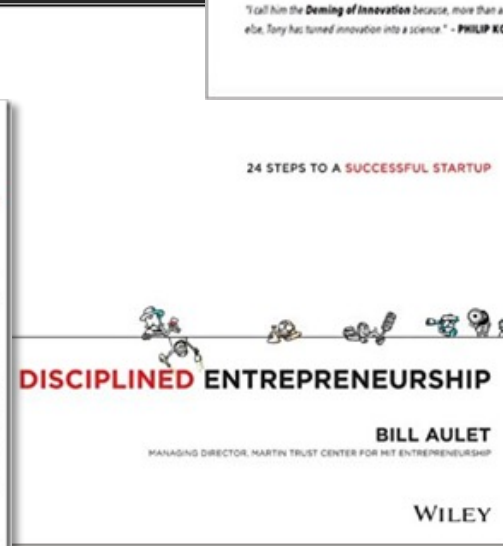
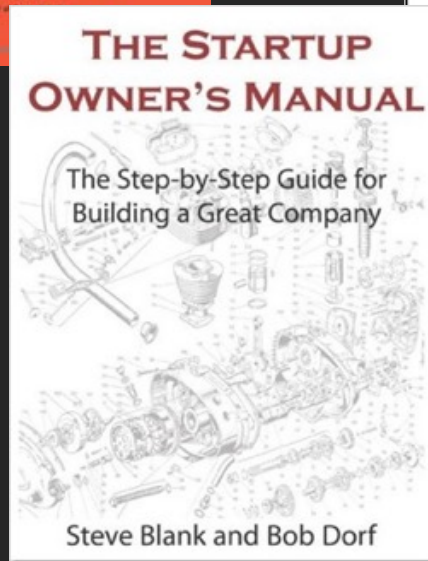
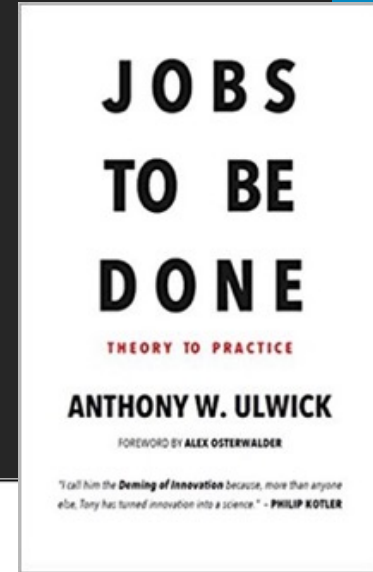
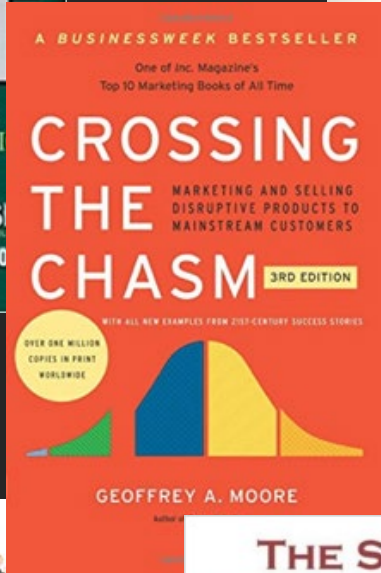
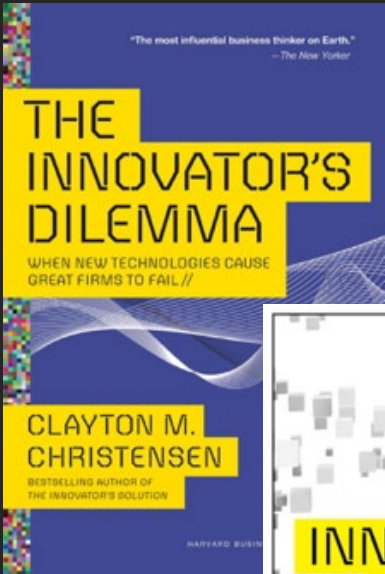


BRAINCHILE

BUSINESS • RESEARCH • ACCELERATION • INNOVATION

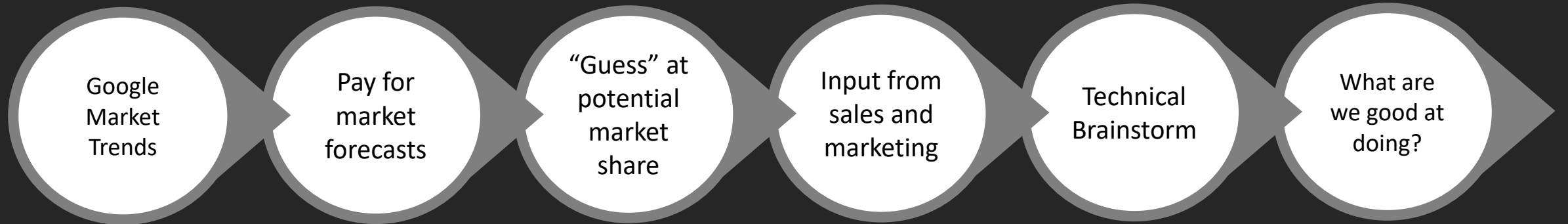






# Steps to the *Conceptual* Innovation Process

## Steps driven by *internal discovery*



## Steps driven by *internal discovery* analytics



OR...





# ***Jobs Theory***

**The most effective way  
to objectively  
understand your  
opportunity/customers**

# Features

Things you build  
into your products  
or services  
...but WHY?

*Features*

**ARE NOT**

*Value Propositions*

***Features*** are owned by  
your ***solution***.

*Features are owned by  
your solution.*

***Customers* own  
something entirely  
*different.***





# Features

**Deep Fried**

***Round***

***Shape***

***Crispy***

***Chicken***

***Crunch***

***Calories***

***Healthiness***

***Portable***

**Greasy**

***Dunkable***

***Bite-Sized***

***Freshness***

***Cheap***

***Protein***

***Grilled***

# Solution Criteria

Rank ordered list of  
criteria used to  
judge ALL possible  
**SOLUTIONS**

## Solution Criteria *are...*

The **criteria** a *customer* uses to decide between *ALL available solutions*.


# ROAD TRIP

A group of people are on a road trip in a van. A woman is driving, and others are passengers. The scene is bright and sunny, suggesting a pleasant day. The text 'ROAD TRIP' is written in large, red, hand-drawn letters across the top of the image.

***What food do you choose?***

***How about now?***





Quantify *and*  
*rank order*  
criteria for  
choosing  
solutions

Allow comparison of *solutions*

Driven by *context*

*Features* designed to meet criteria

**Common  
Criterion  
Verbs**

***ONLY COMPARATIVE  
VERBS!!!***

***ON LIMITS***

- INCREASE
- MAXIMIZE
- IMPROVE
- DECREASE
- MINIMIZE



# Special Case

Requirements

of Solution Criteria

# ***REQUIREMENTS***

***All you to play.***

***You are not considered a  
potential solution until you  
meet the requirements.***

***Features*** are owned by  
your ***solution***.

*Features are owned by  
your solution.*

***Customers own  
CRITERIA.***

# Can you change these Features into *CRITERIA*?

**Deep Fried**

***Round***

***Shape***

***Crispy***

***Chicken***

***Crunch***

***Calories***

***Healthiness***

***Portable***

***Greasy***

***Dunkable***

***Bite-Sized***

***Freshness***

***Cheap***

***Protein***

***Grilled***

**Start with**

***Minimize***

***Maximize***

***Reduce***

***Increase***

***Decrease***

***Improve***



***Features*** are  
owned by  
solutions

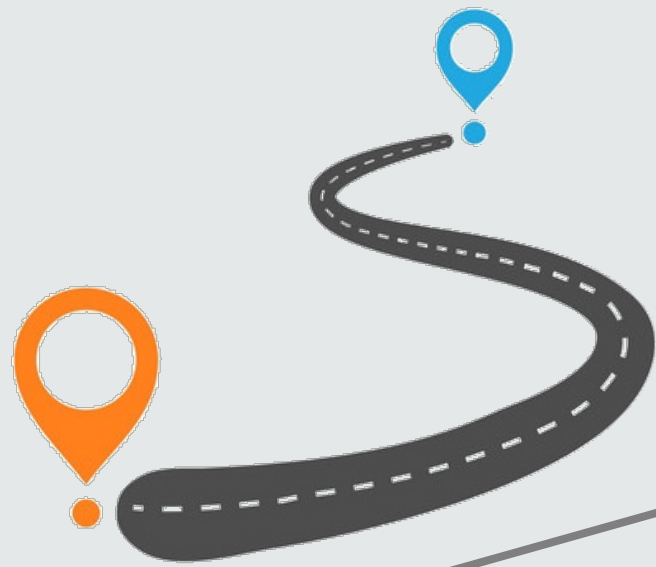
**Criteria** are  
owned by  
customers



**Features** are  
owned by  
solutions



**Jobs** require solutions in the first place



**Criteria** are owned by customers

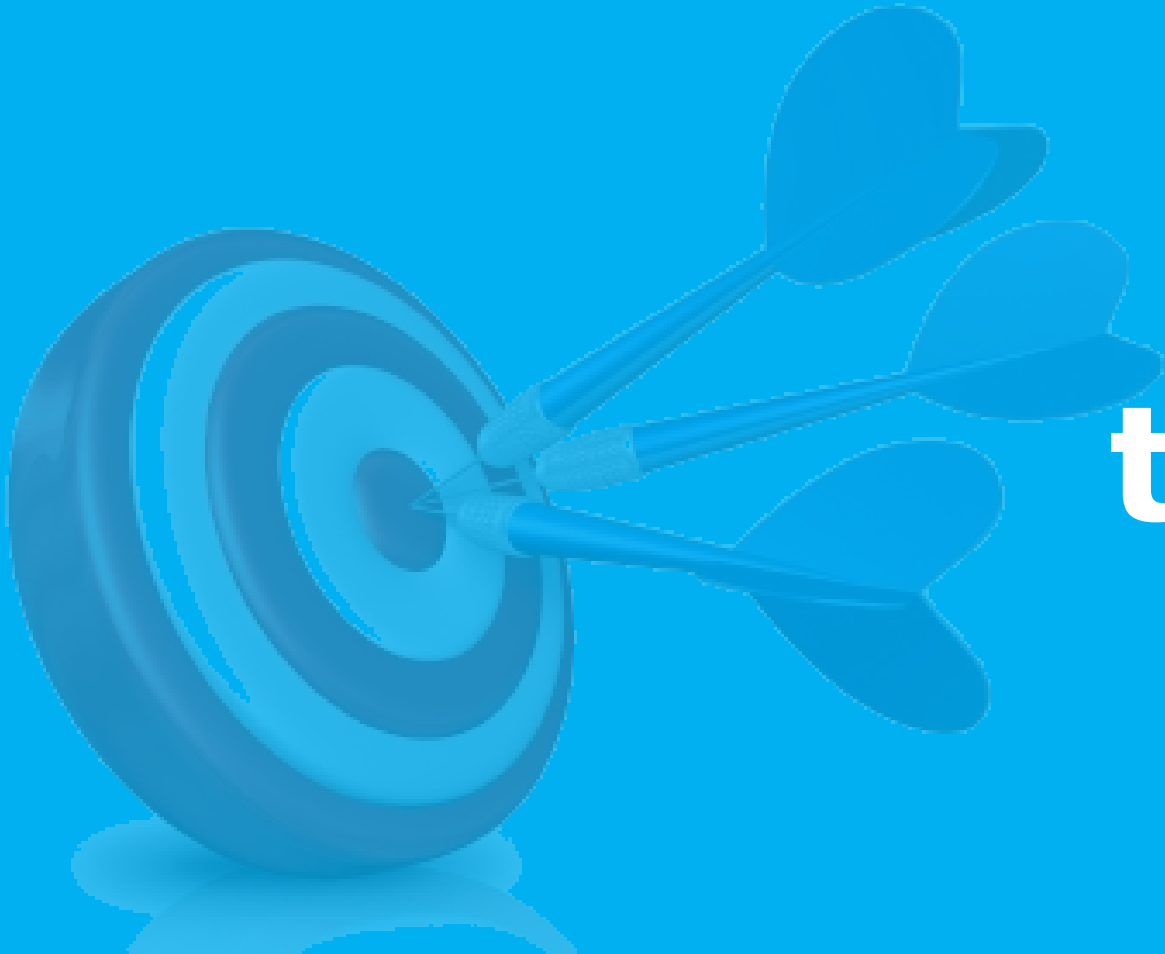


**Features** are owned by solutions





# Jobs



**The Objective  
someone is  
trying to reach  
in a particular  
Circumstance**

# ***Understanding Customers***

**Behavior is stronger  
than words!**

Customers don't care about  
*your idea, technology, or  
product...*

Customers don't care about  
*your idea, technology, or  
product...*

they **care** about reaching **objectives.**

And your solutions is

***ONE***

of

***MANY***

# A job to be done *is...*

The **objective** a *customer* is trying to achieve in a particular *circumstance*.

**“PEOPLE DON’T  
WANT A QUARTER  
INCH DRILL, THEY  
WANT A QUARTER  
INCH HOLE.”**

---

—Theodore Levitt



**Customers “hire”  
products/services...**

***to get jobs done.***



# Job Definition

*Verb + Object +  
Context*



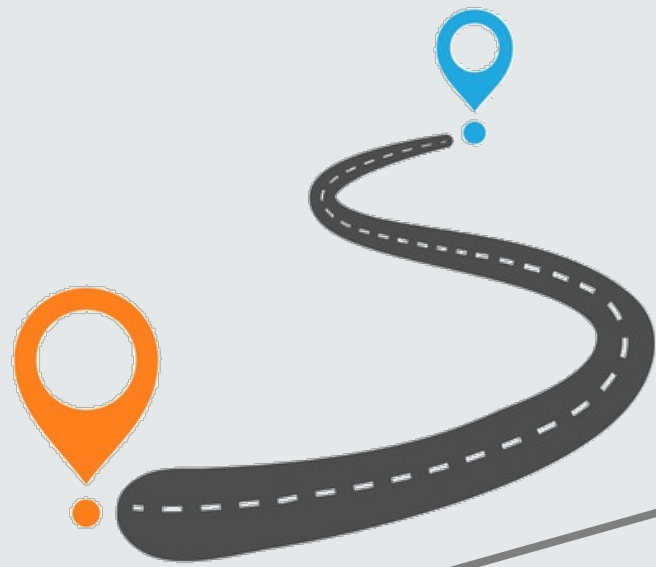
**Remember  
this?**

***Can you  
describe the  
job it did?***

**Listen (verb) +  
to Music (object) +**

***while on the go (context)***

**Jobs** require solutions in the first place



**Criteria** are owned by customers



**Features** are owned by solutions



**Common  
Job  
Verbs**

***NO COMPARATIVE  
VERBS!!!***

***OFF LIMITS***

- INCREASE
- MAXIMIZE
- IMPROVE
- DECREASE
- MINIMIZE

# *Experimental* Innovation

Identify the  
Customer

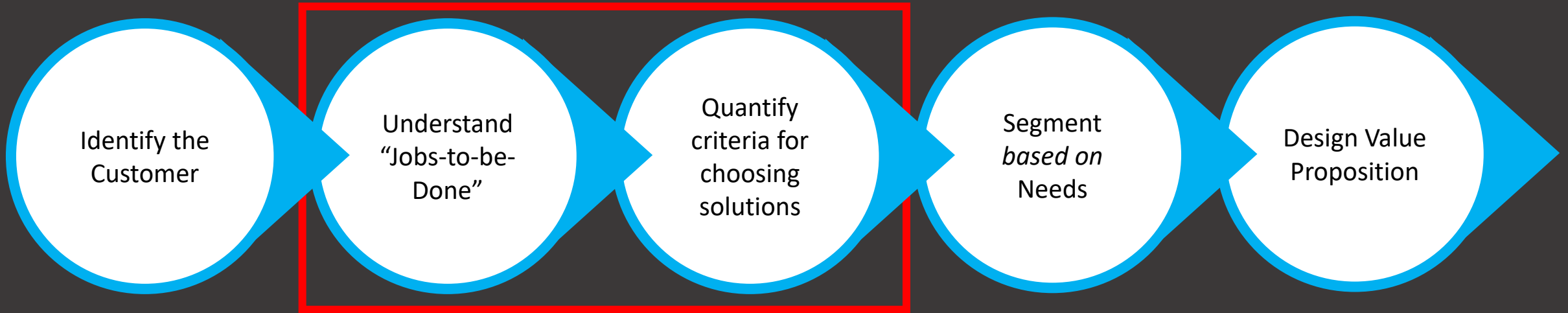
Understand  
“Jobs-to-be-  
Done”

Quantify  
criteria for  
choosing  
solutions

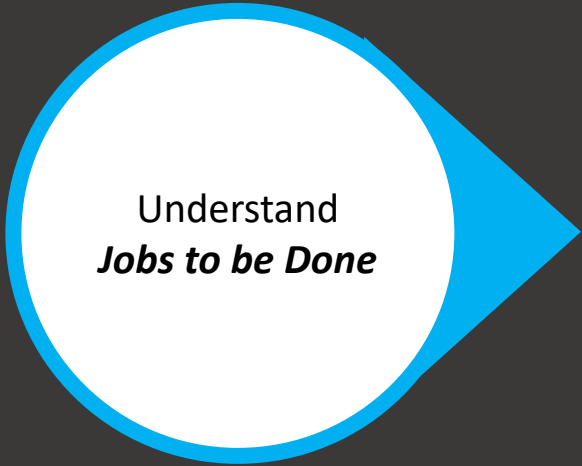
Segment  
*based on*  
Needs

Design Value  
Proposition


# *Experimental* Innovation



**Don't confuse**  
*these two*



Understand  
*Jobs to be Done*



Quantify *and*  
*rank order*  
criteria for  
choosing  
solutions



Understand  
*Jobs to be Done*

Solution *independent*  
*Non-comparative*  
"Goals" of someone's work

Quantify *and*  
*rank order*  
criteria for  
choosing  
solutions

Understand  
*Jobs to be Done*

Solution *independent*  
*Non-comparative*  
"Goals" of someone's work

Quantify *and*  
*rank order*  
criteria for  
choosing  
solutions

Tied to *solutions*  
Driven by *context*  
Used to *compare*  
*Features*, experience

**Common  
Job  
Verbs**

***NO COMPARATIVE  
VERBS!!!***

***OFF LIMITS***

- INCREASE
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**Common  
Criterion  
Verbs**

***ONLY COMPARATIVE  
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***ON LIMITS***

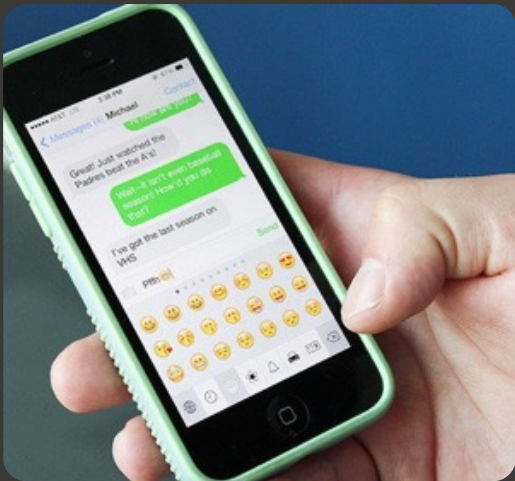
- INCREASE
- MAXIMIZE
- IMPROVE
- DECREASE
- MINIMIZE

## **Day 1 10:45 Breakouts**

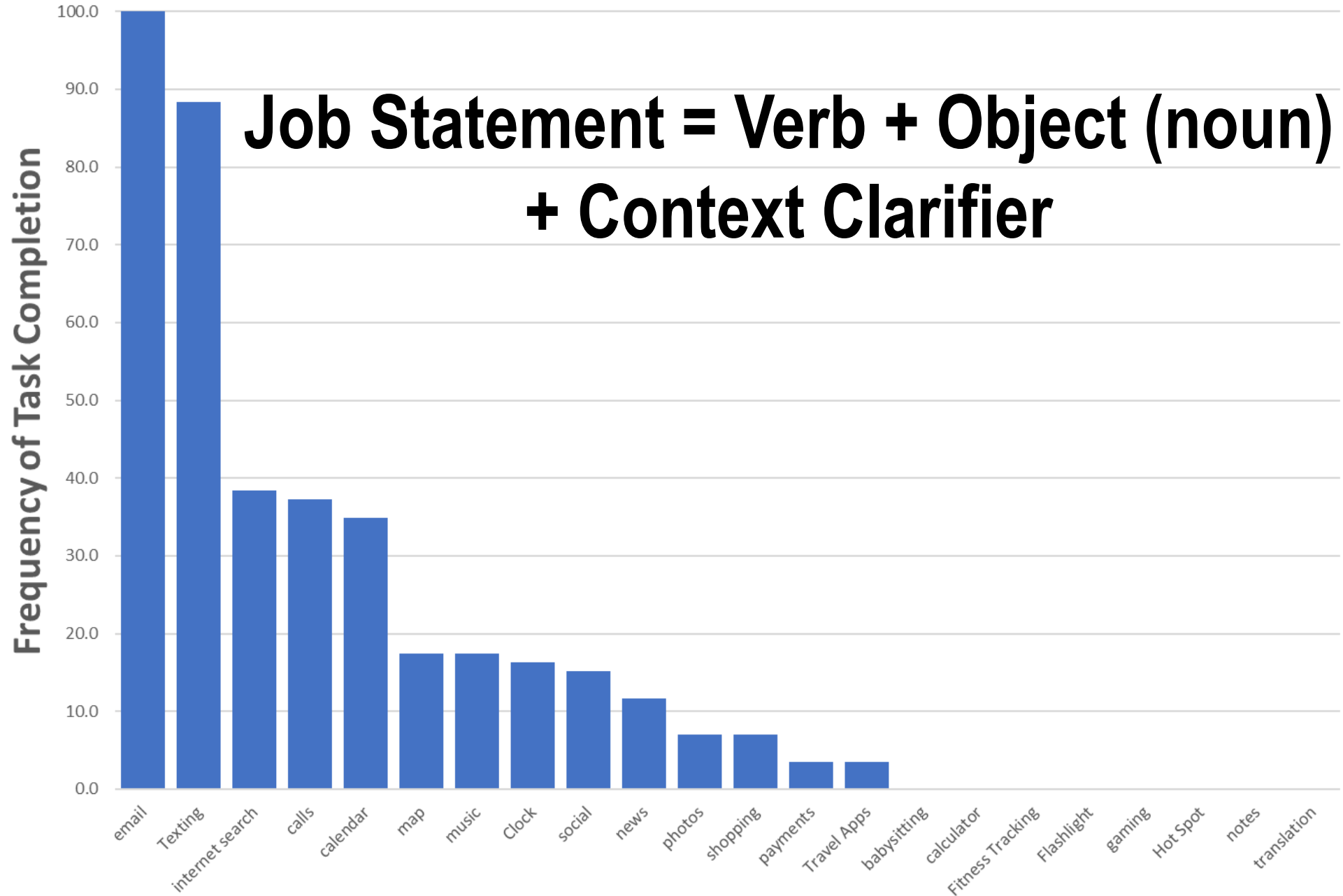
- 1 - Rethink your first breakout answers with respect to the lecture.**
- 2 - Describe solution criteria using our new rules (comparative verbs) and new perspective.**
- 3 - Define CONTEXTS that influence solution criteria (using our new rules)**
- 4 - IF TIME Define the JOBS (using our new rules – non-comparative verbs) that you are addressing.**



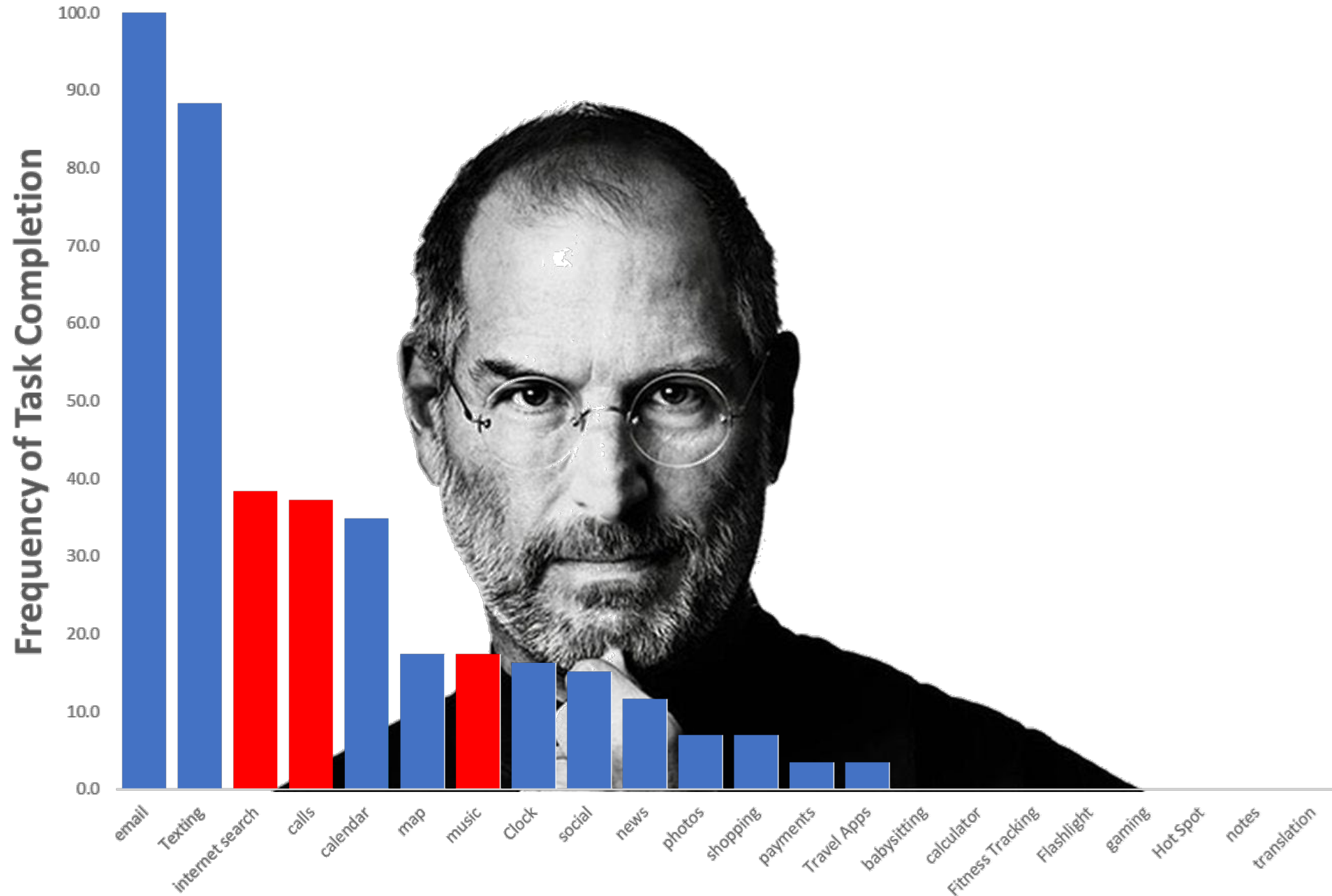
# #1 – What are the 5 most common **JOB**s you **HIRE** your **phone** to complete?



# Tasks complete using a phone



# Tasks complete using a phone







ANDROID



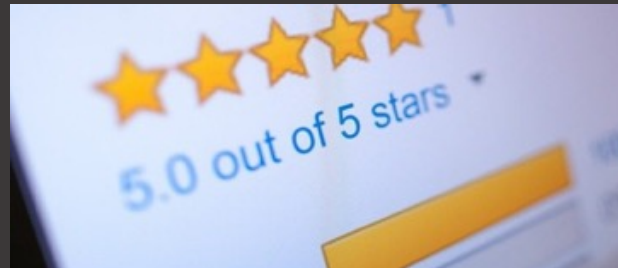
HUAWEI



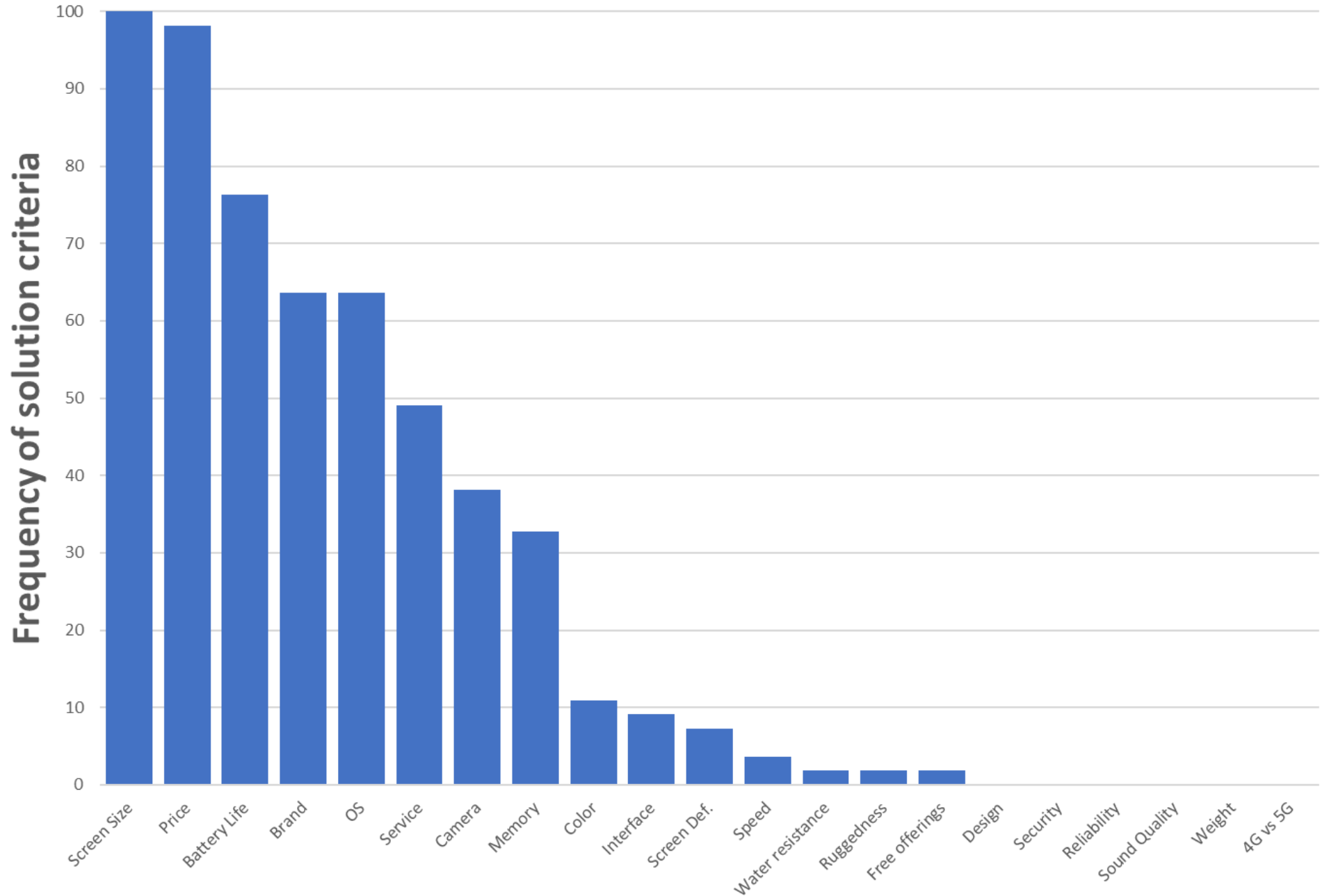
# #2 – What are the 5 most important CRITERIA you use when COMPARING new



## phones?



# Criteria when buying a phone



*So what is an **unmet** need?*

*So what is an unmet need?*

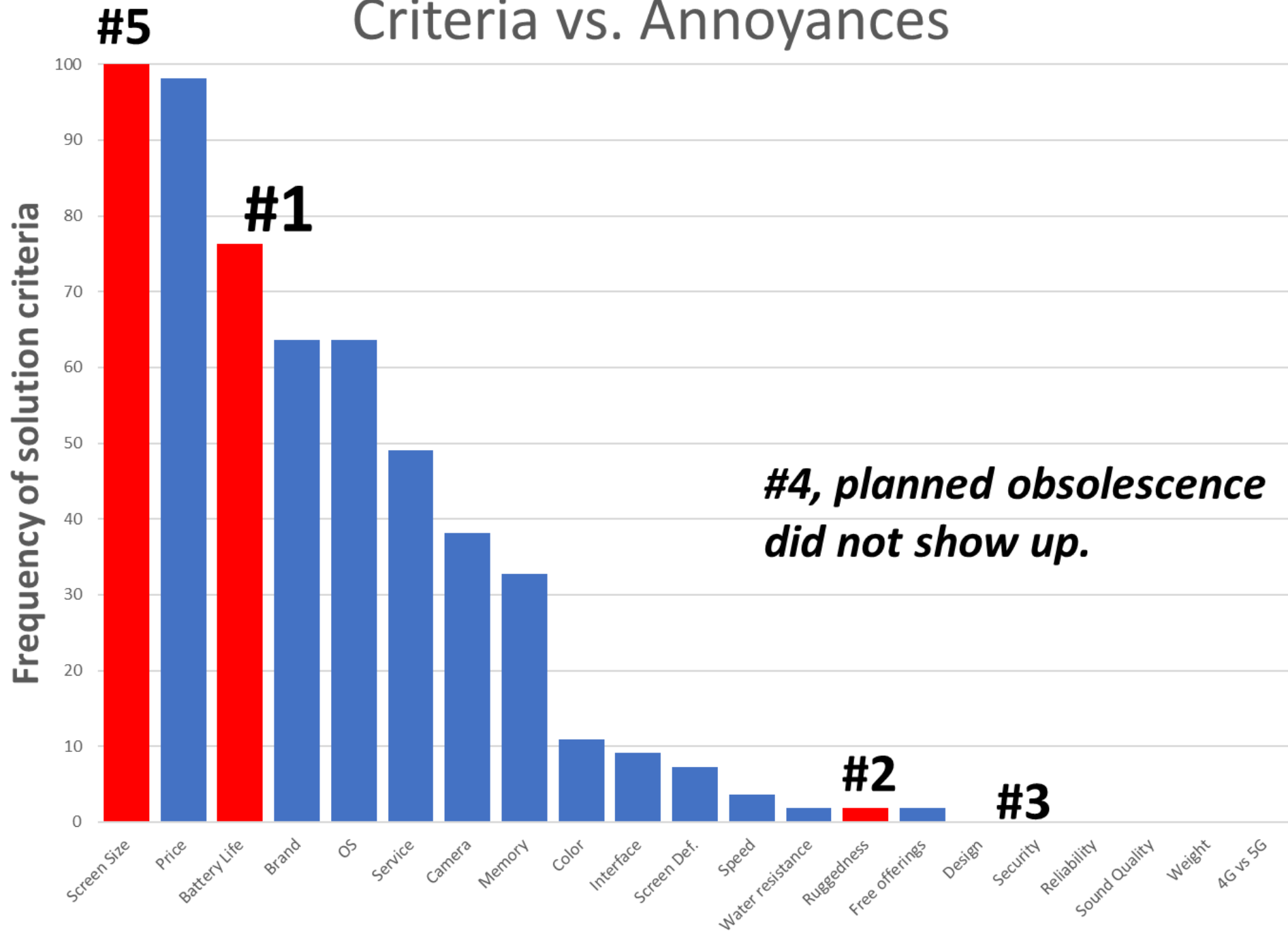
***A Solution Criterion for a  
specific job that is not being  
addressed well...***



**#3 – What are the 5 most *UNDERSERVED CRITERIA* about your *current phone*?**



# Criteria vs. Annoyances



***Sure... BUT  
phones are  
complicated  
devices  
with LOTS  
OF JOBS...***



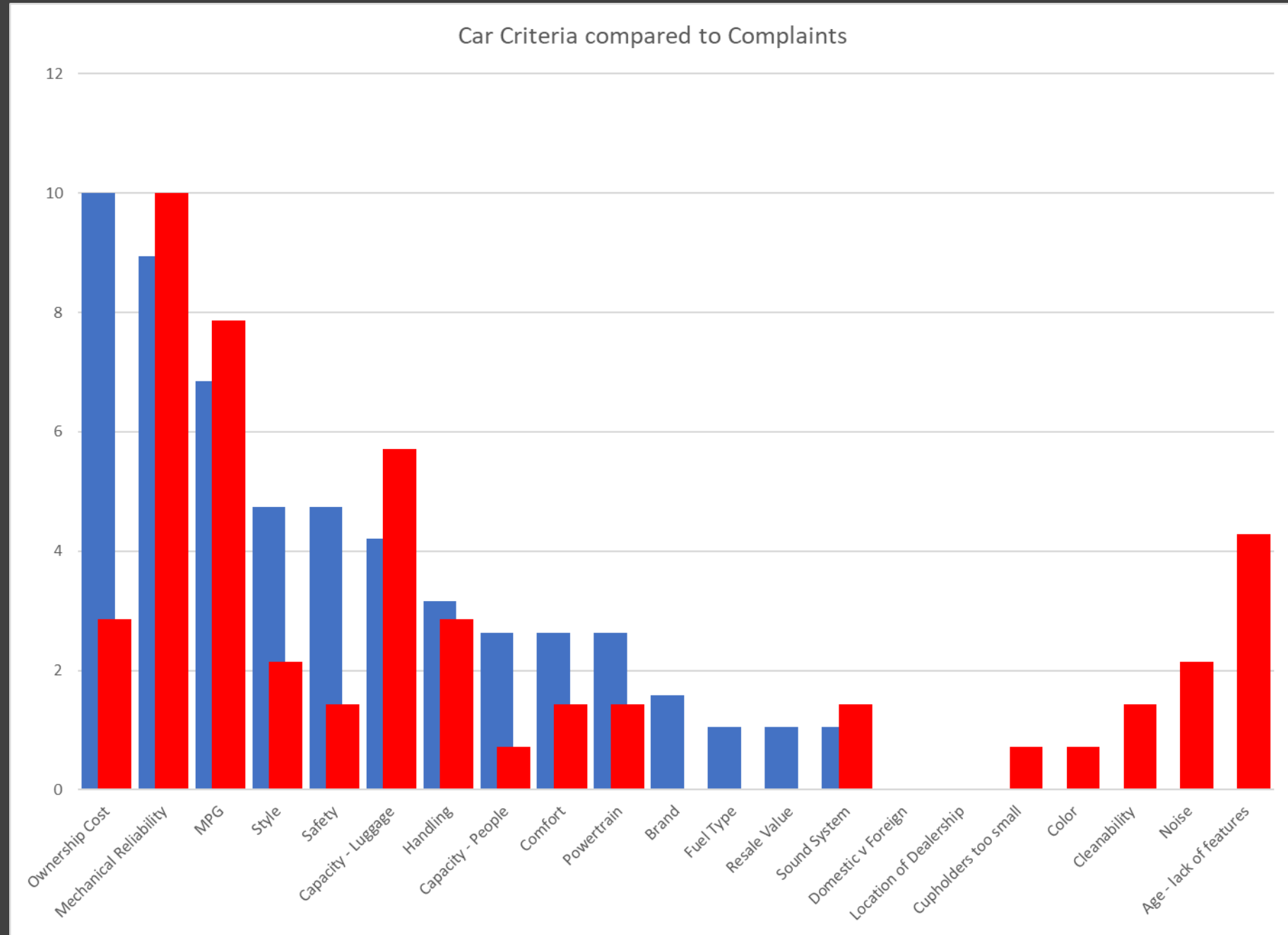
***Does this  
translate?***





**Criteria**

**Complaints**

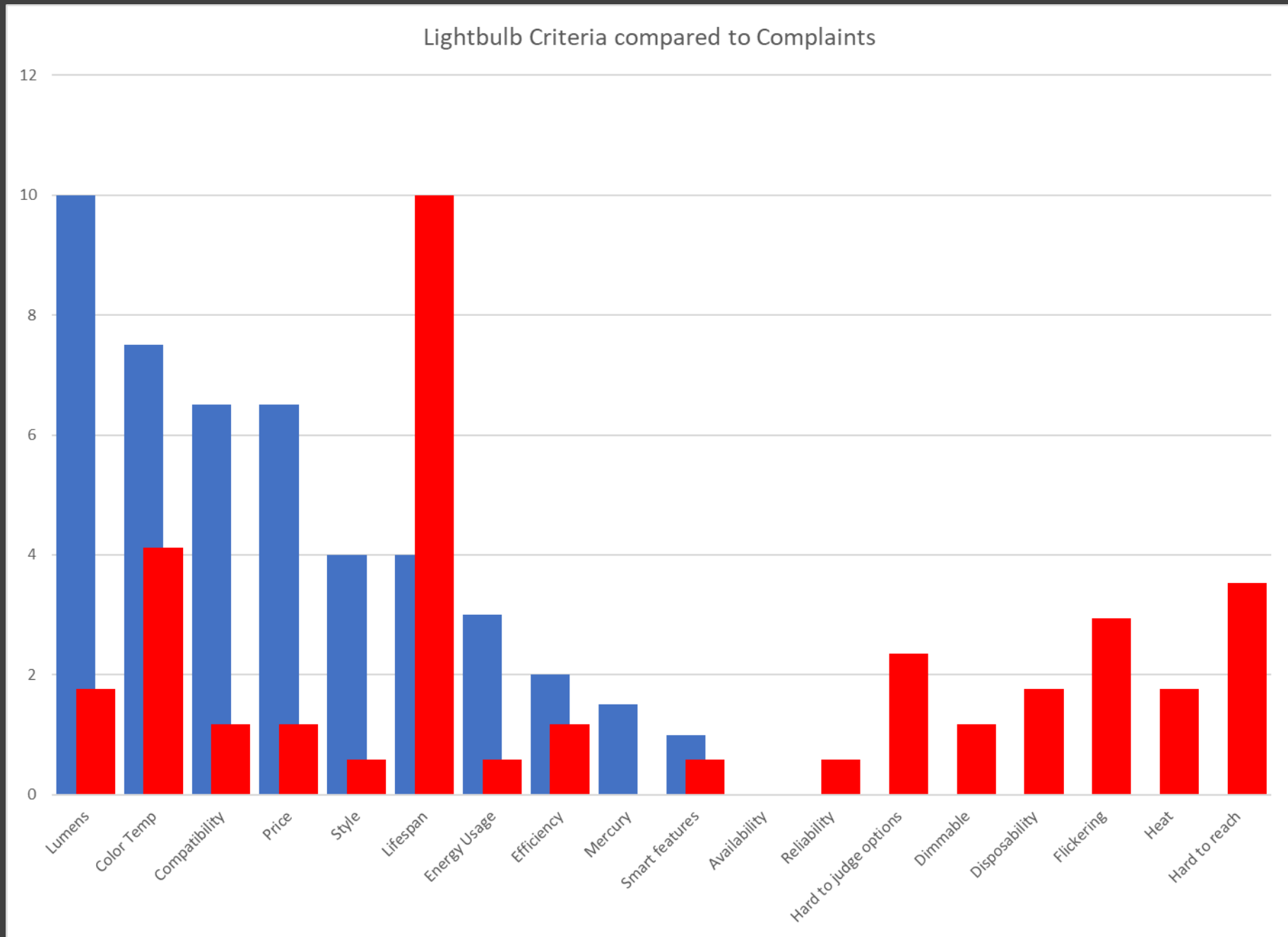






*Criteria*

*Complaints*





**VS**





# INTRODUCING... THE KFCONSOLE


*POWER YOUR HUNGER*

The KFCConsole has arrived. Forged from the fires of the KFC ovens and built by Cooler Master from the ground up, there has never been a tastier way to experience the latest titles in stunning 4k, 240fps.



# WORLD'S FIRST BUILT IN CHICKEN CHAMBER

Never risk letting your chicken go cold again thanks to the patented Chicken Chamber. Utilising the systems natural heat and airflow system you can now focus on your gameplay and enjoy hot, crispy chicken between rounds.



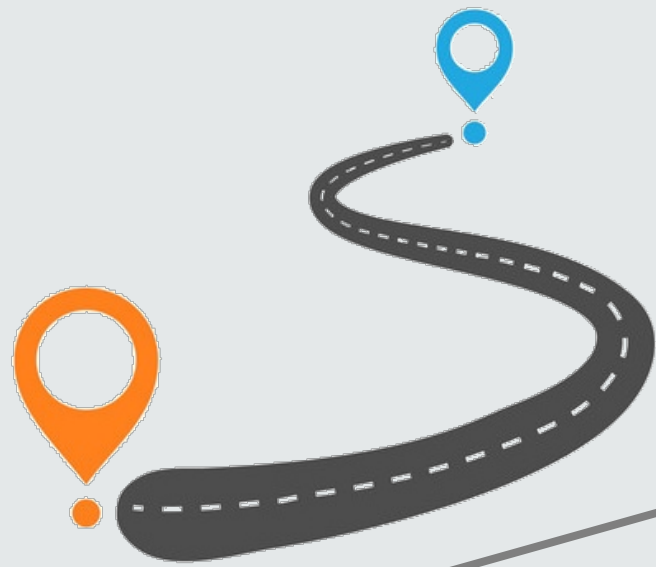
**The world's first lab-grown chicken tenders look better than McNuggets**

# *Tomorrow*

*How do we figure out what the jobs and criteria are that our end users are using?*

*This will **DEFINE VALUE PROPOSITION!***

**Jobs** require solutions in the first place



**Criteria** are owned by customers



**Features** are owned by solutions



# *Experimental* Innovation

```
graph LR; A((Identify the Customer)) --> B((Understand "Jobs-to-be-Done")); B --> C((Quantify criteria for choosing solutions)); C --> D((Segment based on Needs)); D --> E((Design Value Proposition));
```

Identify the Customer

Understand  
“Jobs-to-be-  
Done”

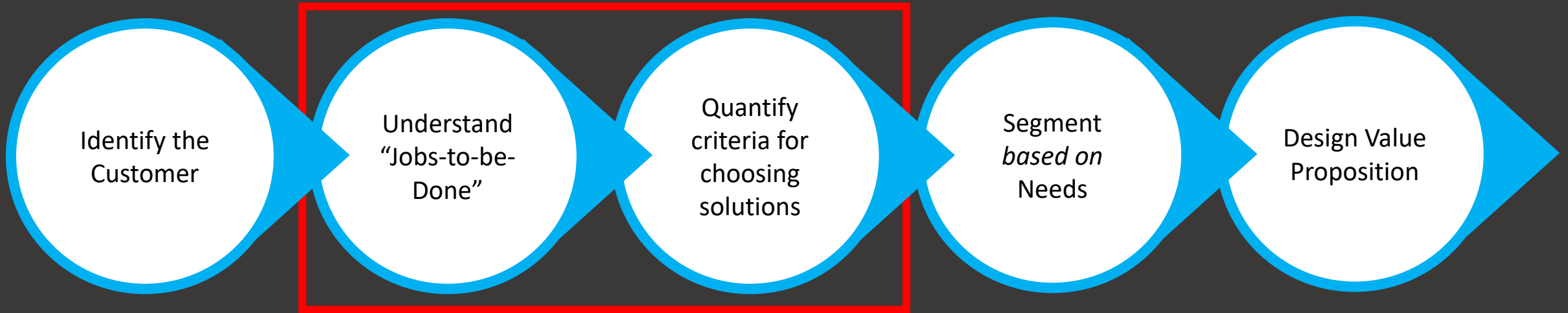
Quantify  
criteria for  
choosing  
solutions

Segment  
*based on*  
Needs

Design Value  
Proposition



# *Experimental* Innovation



**Don't confuse**  
*these two*

**Common  
Job  
Verbs**

***NO COMPARATIVE  
VERBS!!!***

***OFF LIMITS***

- INCREASE
- MAXIMIZE
- IMPROVE
- DECREASE
- MINIMIZE

**Common  
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# *Common answers* to why *innovation fails*

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The market never materialized

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We ran out of resources before we got traction

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Our Channel partners were too slow to adopt our innovation



# *Common answers* to why *innovation fails*

The market never materialized

We ran out of resources before we got traction

We couldn't master the product market fit

Our Channel partners were too slow to adopt our innovation

Our customers couldn't understand the value we provided them

What if we use a *different approach* to *analysis*?



**Analysis**

---

**A different  
approach**



Segway

# Kinematics, Dynamics and Control of Single-Axle, Two-Wheel Vehicles (Biplanar Bicycles)

Michael Shawn Abbott

Thesis submitted to the Faculty of the  
Virginia Polytechnic Institute and State University  
in partial fulfillment of the requirements for the degree of

**MASTER OF SCIENCE**

in

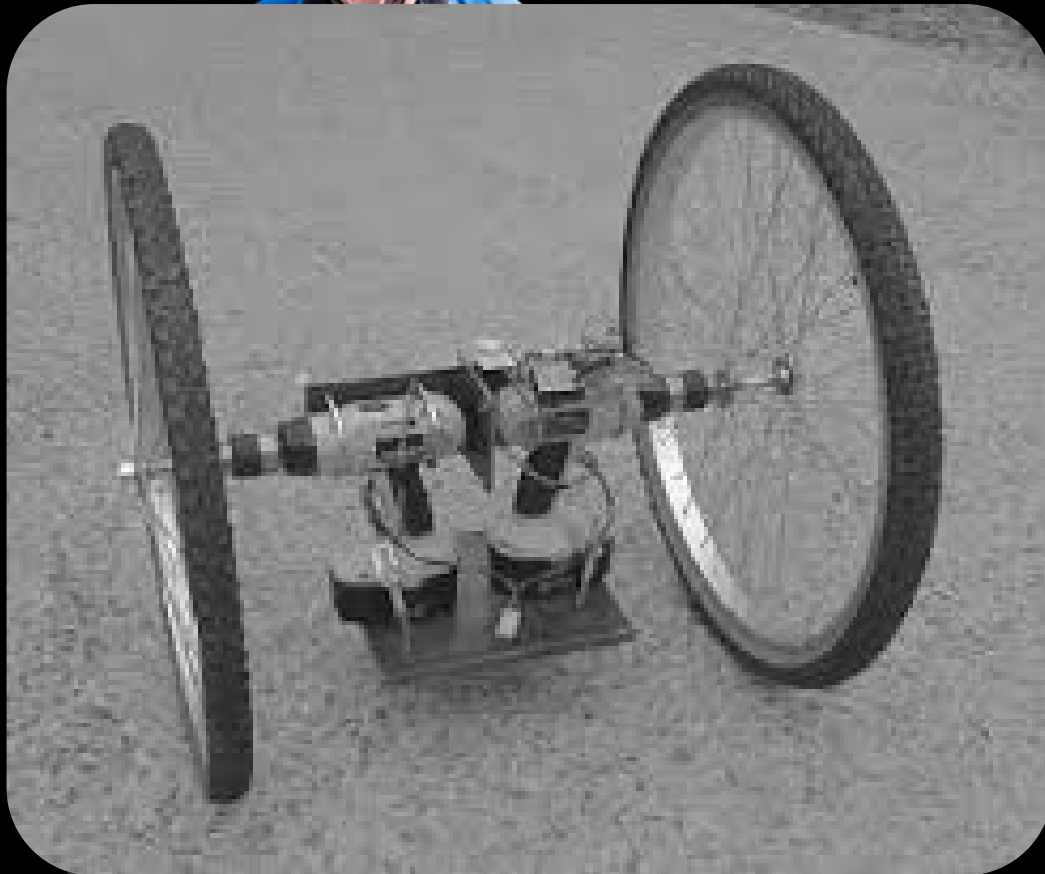
**Mechanical Engineering**

APPROVED:

C. F. Reinholtz, Chair

H. H. Robertshaw

D.J. Leo



Segway



Segway

Will anyone be allowed to use this

- Jeff Bezos

...will be bigger than the PC.

- Steve Jobs

...will be more important than the internet.  
... It will rack up \$1B in sales faster than any  
company in history!

- L. John Doerr

Kleiner Perkins Caufield & Byers





Segway

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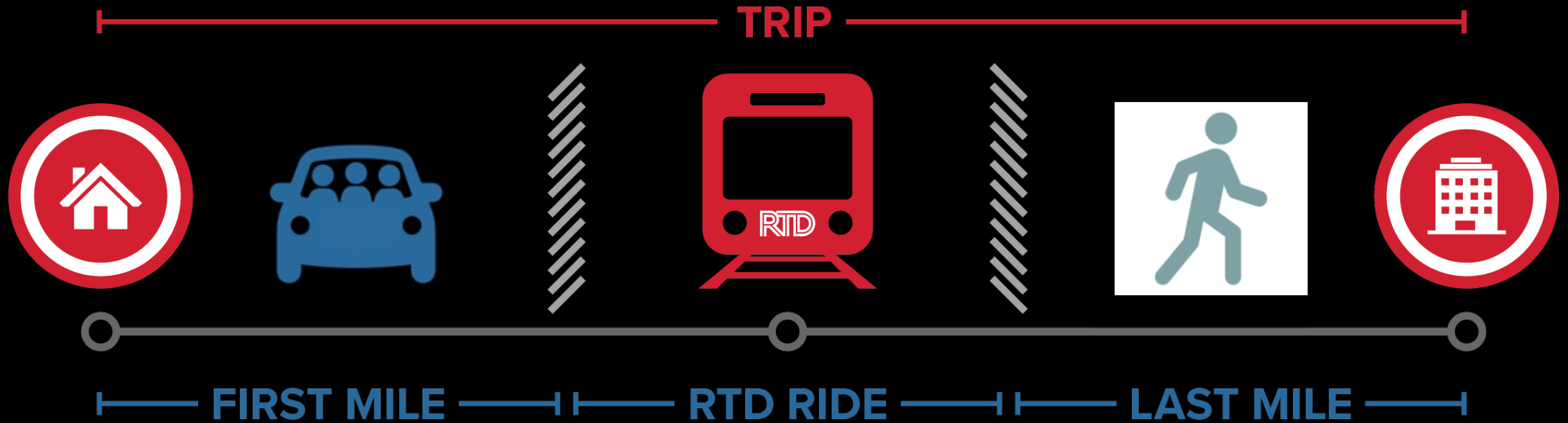
Kleiner Perkins Caufield & Byers



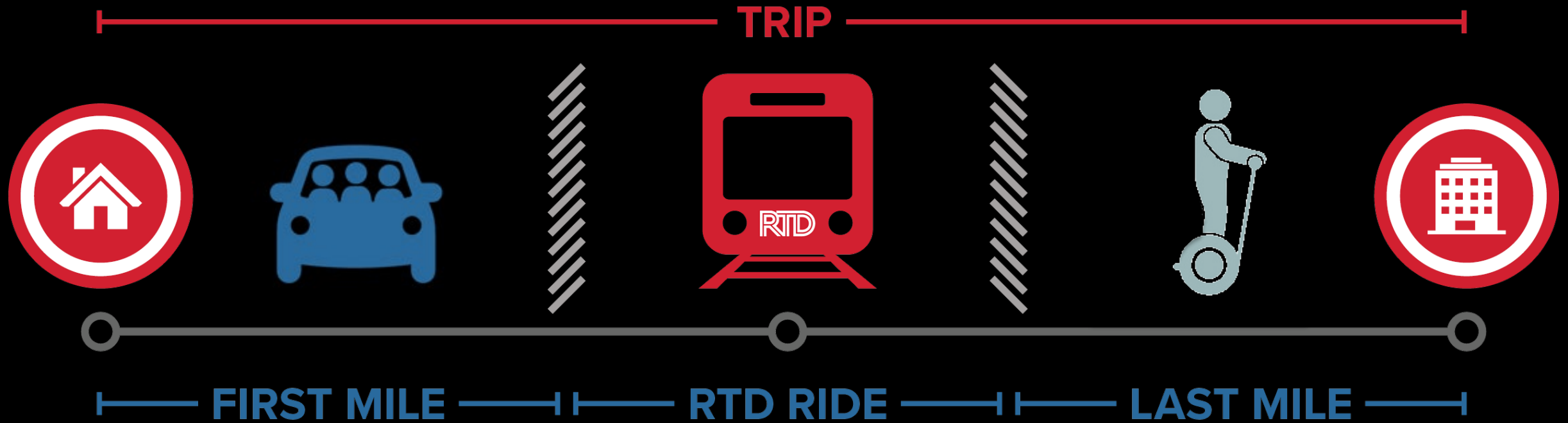
What *problem* was the Segway supposed to solve?



What *problem* was the Segway supposed to solve?



What *problem* was the Segway supposed to solve?



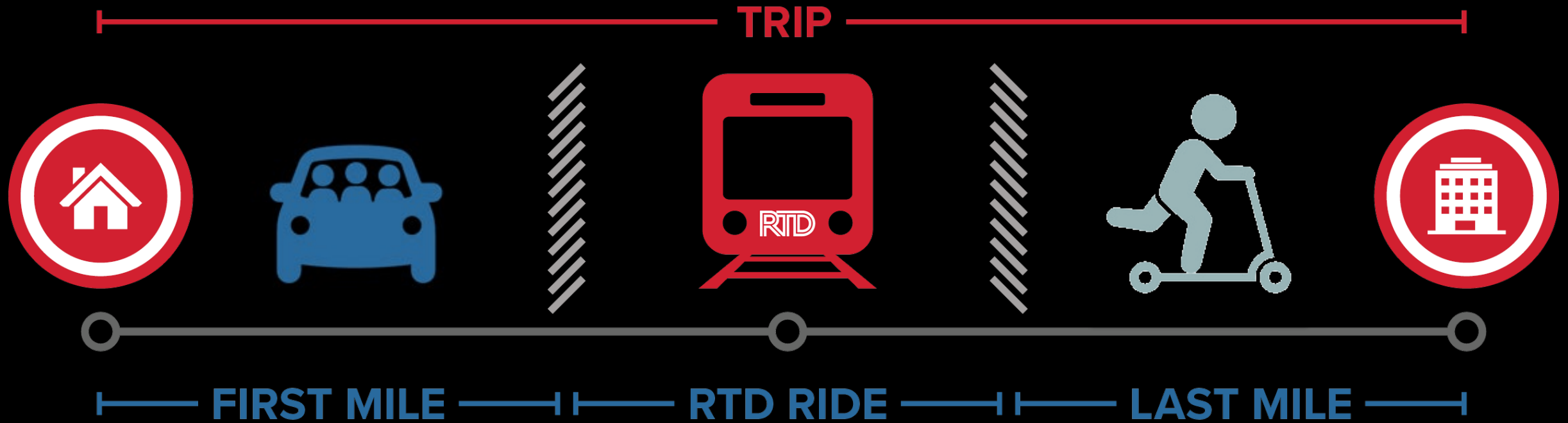
***Postscript***



**BIRD**



What *problem* was the Segway supposed to solve?



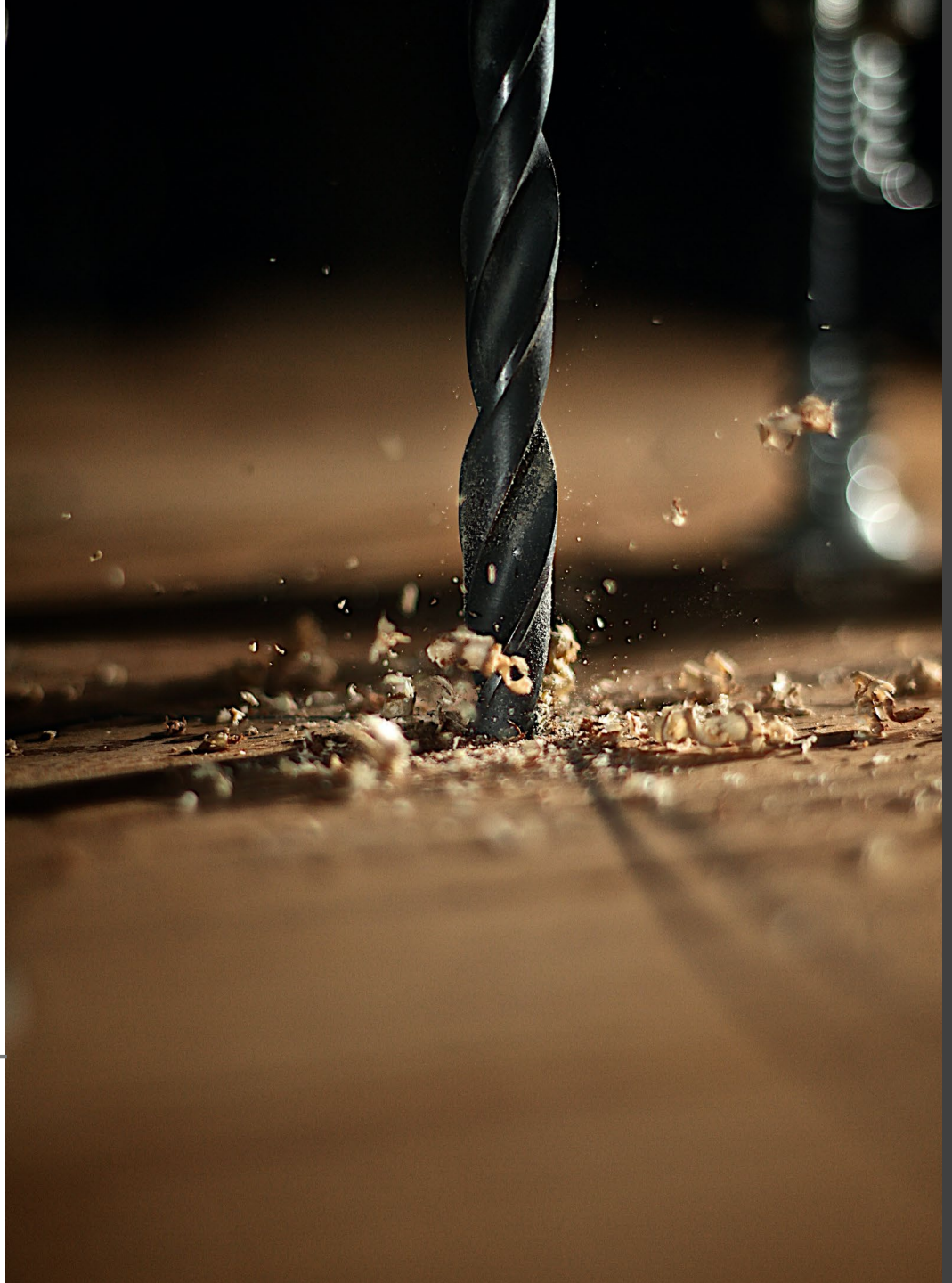
# BREAKOUT SESSION

What do you see as the ***BIGGEST RISK*** in your room's project being implemented?

**“PEOPLE DON’T  
WANT A QUARTER  
INCH DRILL, THEY  
WANT A QUARTER  
INCH HOLE.”**

---

—Theodore Levitt





# Solution Criteria

*Who is the person you plan to help and for what job?*



**User + Job**



**Financial Decision Maker + Job**



**Regulator**



**3<sup>rd</sup> Party Payers**

*When this person picks a solution for the job, what matters?*



**Use Criteria**



**Purchase Criteria**



**Regulatory Criteria**



**Payment Criteria**

# Solution Criteria

*Who is the person you plan to help and for what job?*



**User + Job**

*When this person picks a solution for the job, what matters?*



**Use Criteria**

## Start Here

***Without Users, nothing else matters.***

***What really drives user adoption?***

# Solution Criteria

*Who is the person you plan to help and for what job?*



**User + Job**



**Use Criteria**

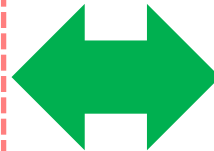
*When this person picks a solution for the job, what matters?*



**Solution**



**Capabilities  
(Features)**



**Is our solution “better enough” to drive adoption given all tradeoffs?**

***Would they even use it if it were free?!***

# VALUE!

# PROPOSITION

## Prospective Customer

## Your Offering



**User**

*Who is the person you plan to help?*



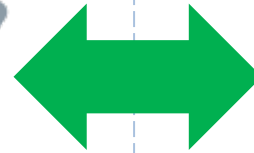
**Job**

*What will you help this person do?*



**Decision Criteria**

*When this person picks a solution for the job, what matters?*



**Capabilities (Features)**

*What are key capabilities, attributes, or specs?*



**Solution**

*What is your offering (product, service, or tech)?*

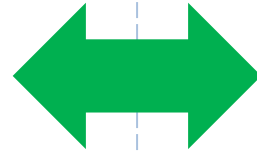


**Sacrifice**

*What capabilities (criteria) are you asking them to give up?*

# VALUE!

What do they get?



# PROPOSITION

What do they sacrifice?

IS THE SACRIFICE WORTH  
THE GAIN?

Which solution criteria do  
you address "*more  
effectively*" than the  
existing solution?

Which solution criteria do  
you address "*less  
effectively*" than the  
existing solution?



# WHEN A CUSTOMER “HIRES” A SOLUTION FOR THIS JOB

*What Solution Criteria  
Are Used? (How do  
they define better?)*

# Customer Discovery

An aerial photograph of a city, likely New York City, showing a dense grid of streets and buildings. The image is heavily tinted with a bright blue color, making the details somewhat muted but the overall structure of the city is visible.

*Phases of  
Discovery*

**Your discovery  
activities evolve with  
knowledge  
*(not with time)***





Increasing knowledge

General  
Discovery

End User and  
Decision  
Maker

What job are  
YOU hired to  
do?

What other  
jobs compete  
for resources?

How are  
solutions  
chosen?

Is your  
solution  
"form"  
acceptable  
(MVPs)

Ecosystem of  
emerging  
threats

Increasing knowledge

General  
Discovery

End User and  
Decision  
Maker

What job are  
YOU hired to  
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Ecosystem of  
emerging  
threats

Where you are now

Increasing knowledge

General  
Discovery

End User and  
Decision  
Maker

What job are  
YOU hired to  
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How are  
solutions  
chosen?

Is your  
solution  
"form"  
acceptable  
(MVPs)

Ecosystem of  
emerging  
threats

Where you are now

What does this course potentially cover?

Increasing knowledge

General Discovery

End User and Decision Maker

What job are YOU hired to do?

What other jobs compete for resources?

How are solutions chosen?

Is your solution "form" acceptable (MVPs)

Ecosystem of emerging threats

Where you are now

What does this course potentially cover?

Continues while your business is operating

Increasing knowledge

General Discovery

End User and Decision Maker

What job are YOU hired to do?

What other jobs compete for resources?

How are solutions chosen?

Is your solution "form" acceptable (MVPs)

Ecosystem of emerging threats

Where you are now

What does this course potentially cover?

Continues while your business is operating

Secondary Research is a continuous effort

**Let's**  
*simplify*

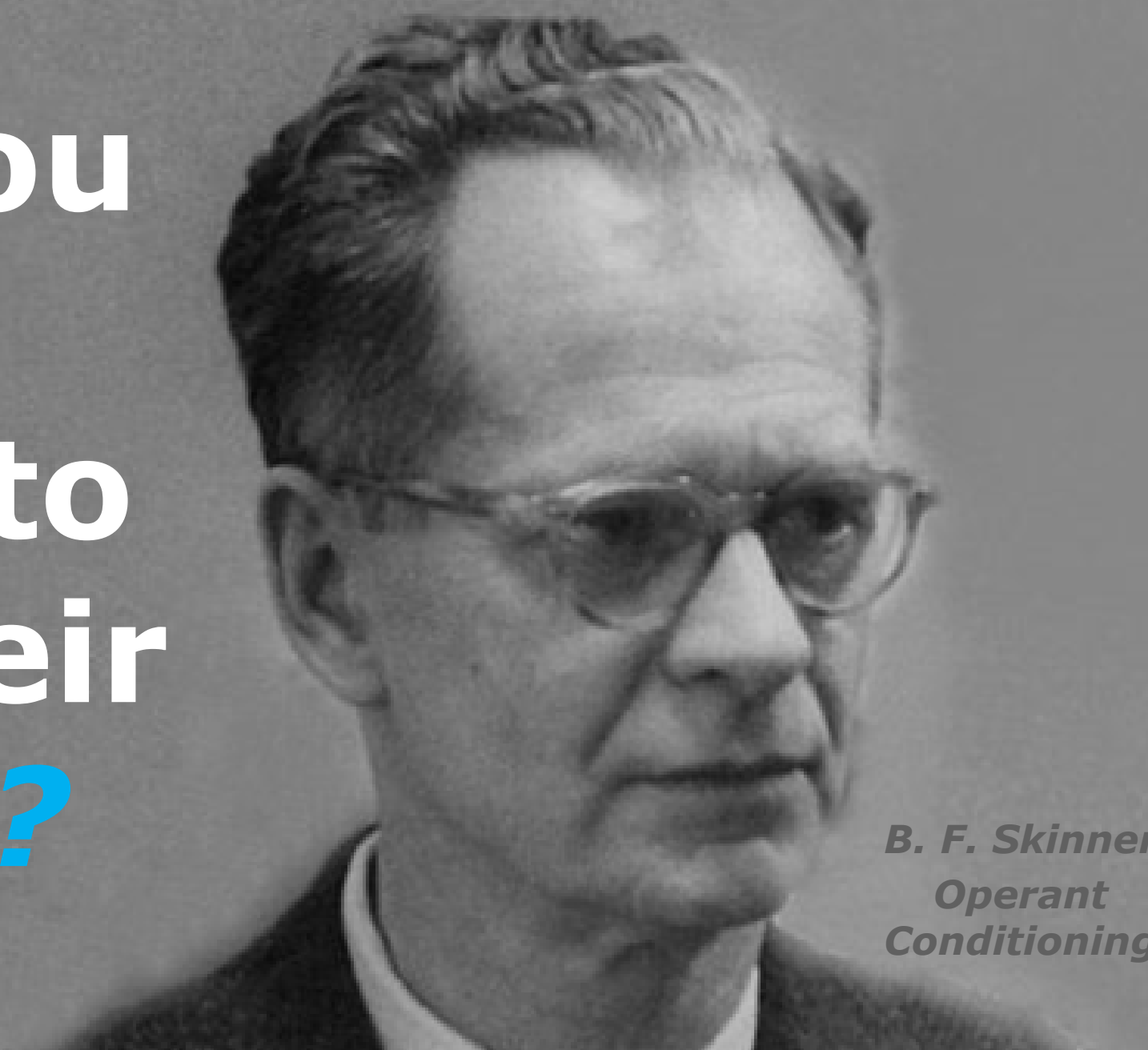
**Where are you**  
***starting today?***



**Understand**  
*the end goal?*



**How do you  
compel  
someone to  
change their  
*Behavior?***

A black and white portrait of B. F. Skinner, a middle-aged man with glasses, looking slightly to the right. The background is a plain, light color.

*B. F. Skinner  
Operant  
Conditioning*

# Changing Behavior

Requires  
understanding  
current behavior

# **Secondary** ***Research***

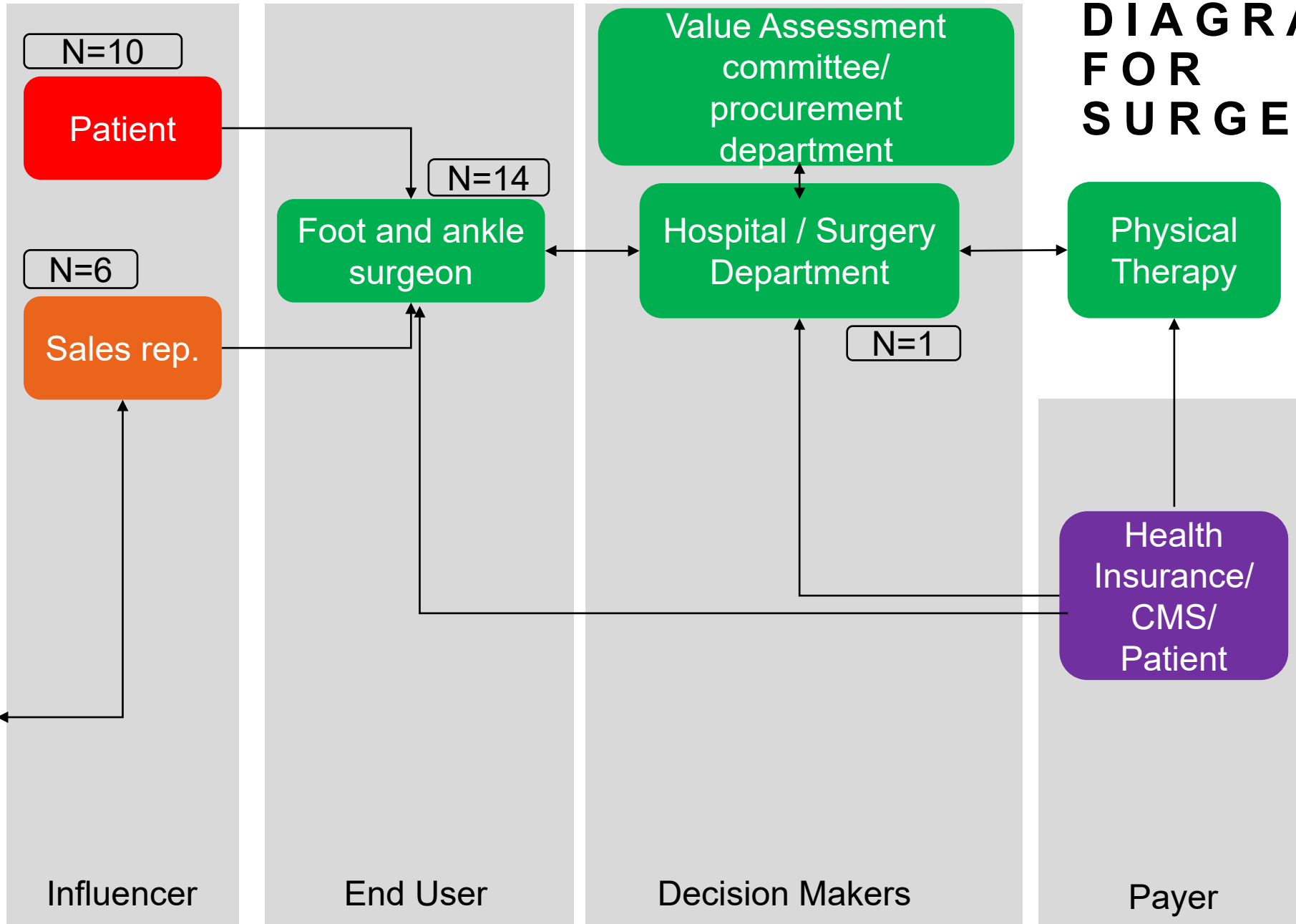
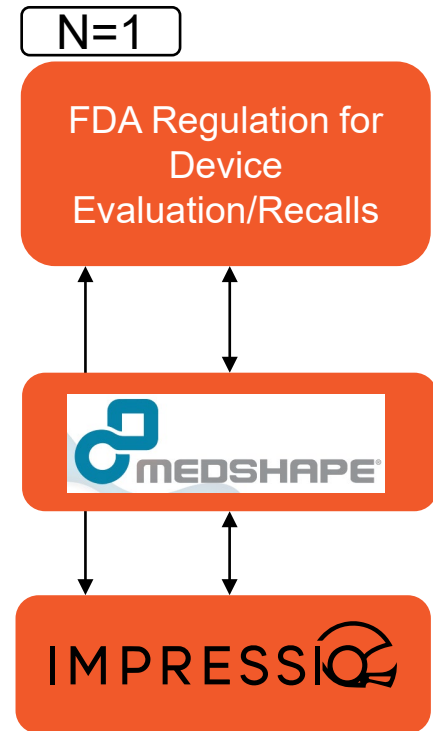
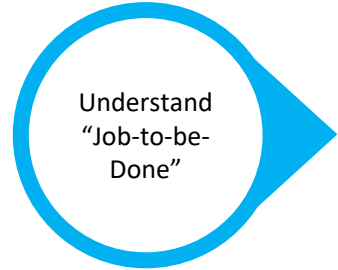
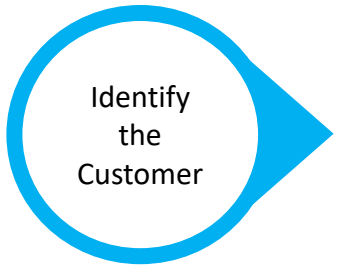




**“Don’t believe everything you read on the Internet just because there’s a picture with a quote next to it.”**

**—Abraham Lincoln**

# Workflows



# WORKFLOW DIAGRAM FOR SURGEONS



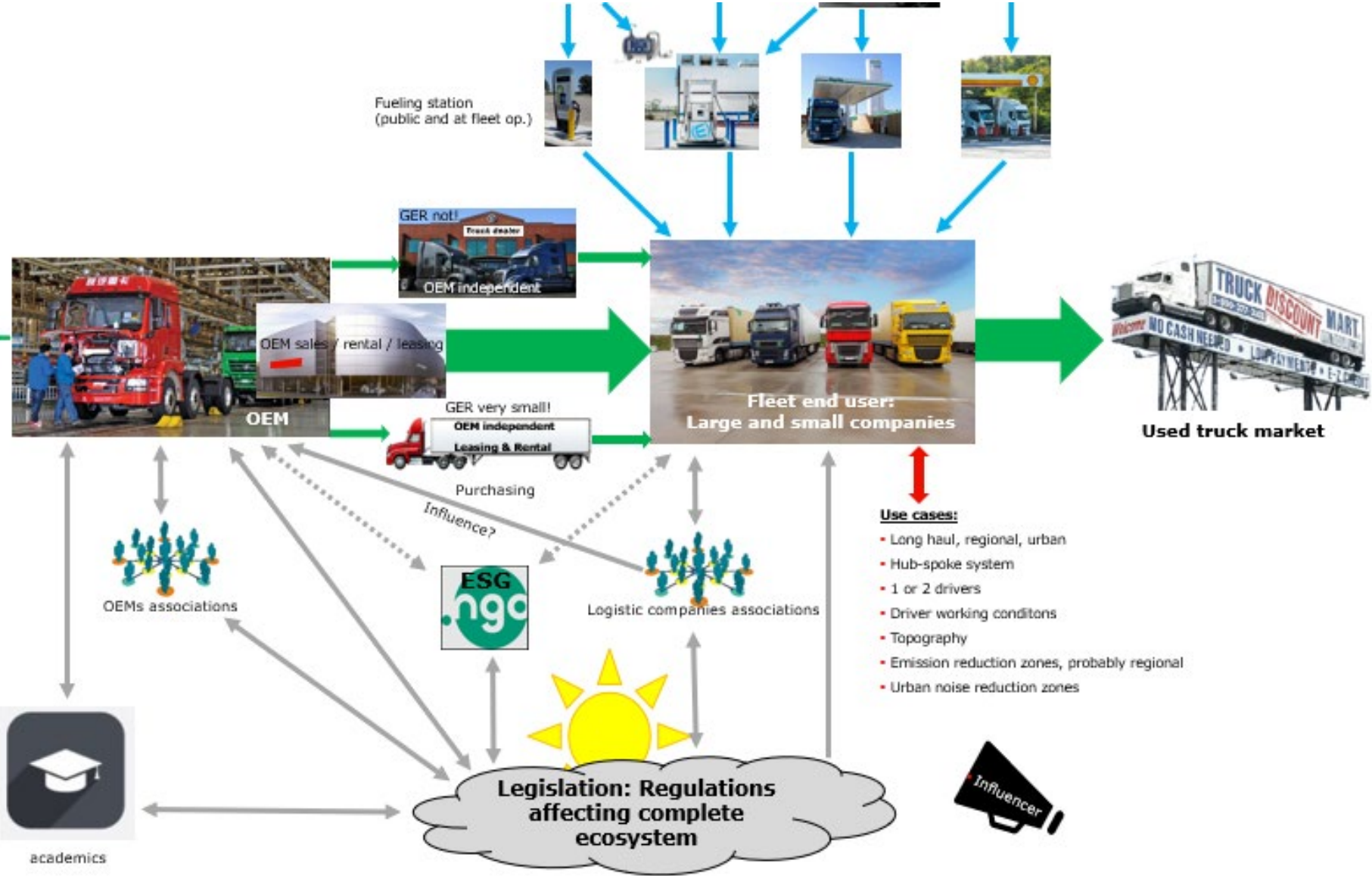
# Ecosystem Maps

Identify the Customer

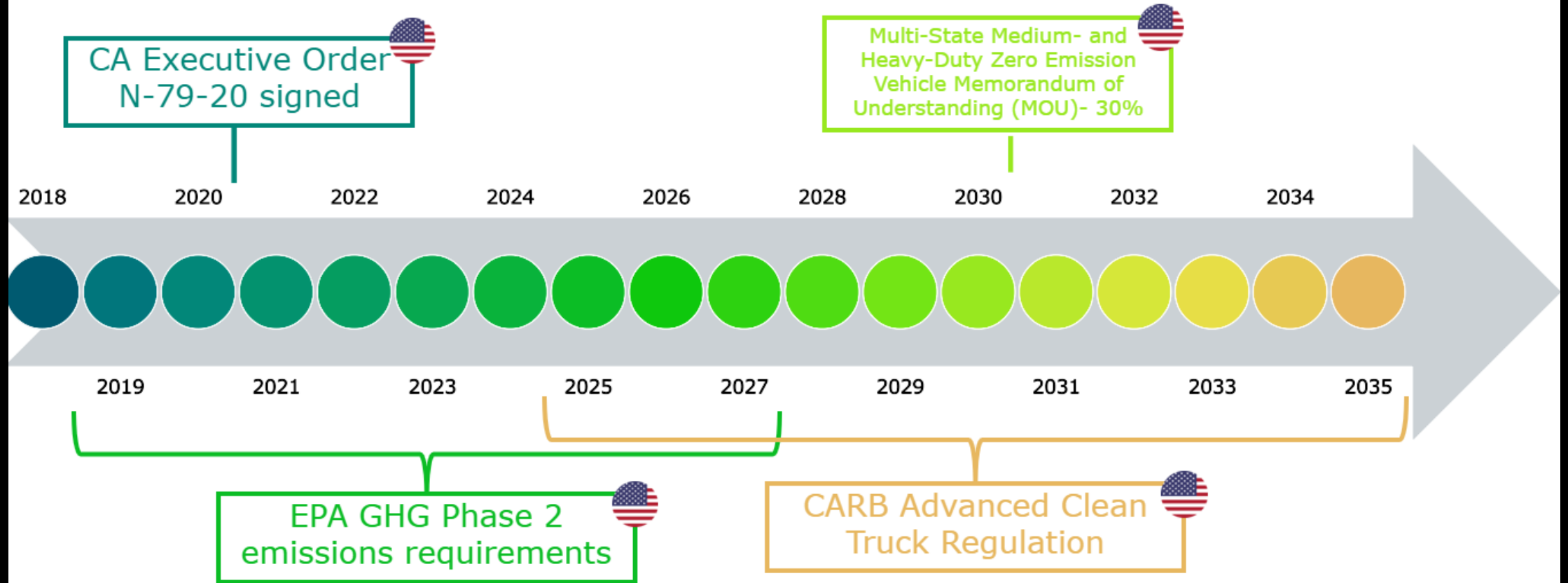
Understand "Job-to-be-Done"



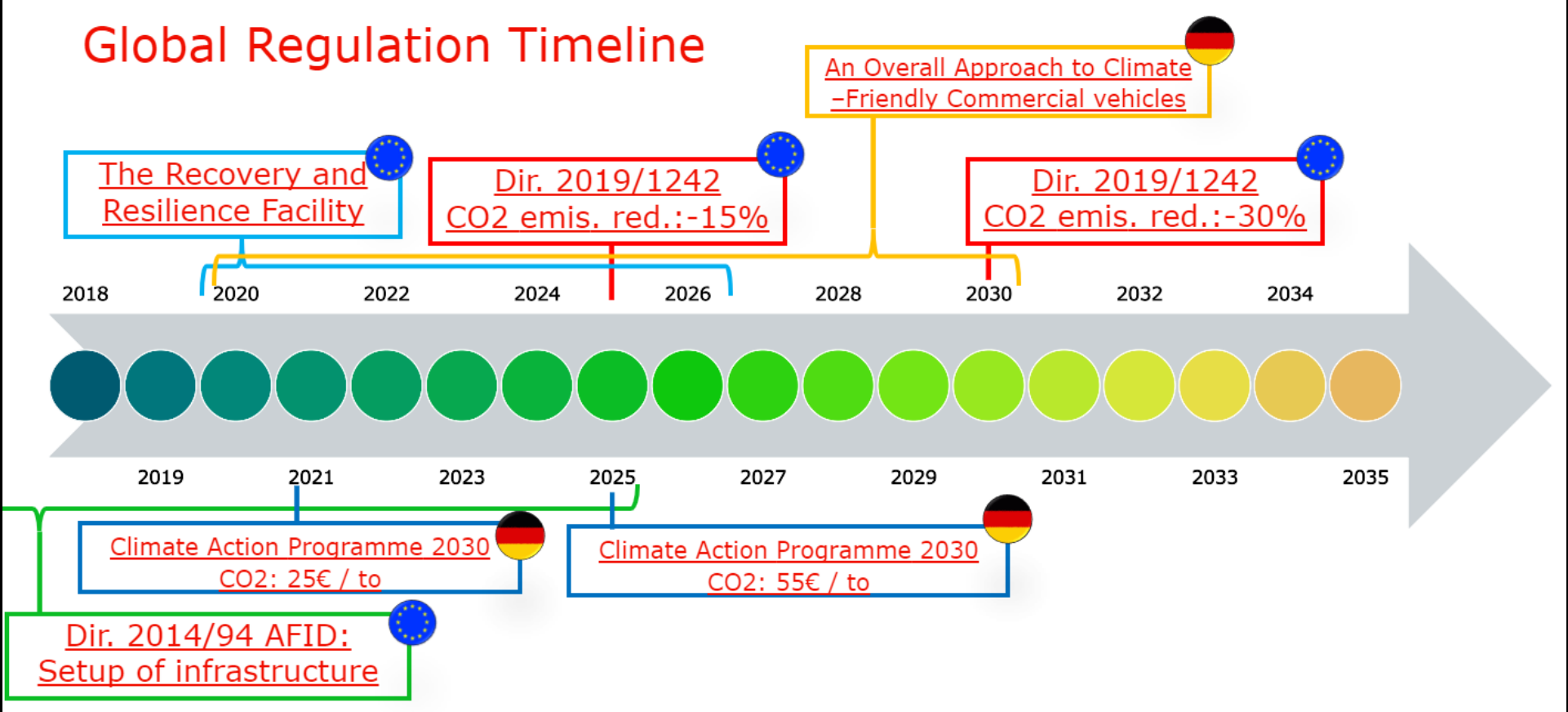
Tier 1



# Global Regulation Timeline



# Global Regulation Timeline



Feb  
2020

icking



Aerial Monitoring



Animal Farming



Breeding & Phenomics



Hi Fidelity Genetics

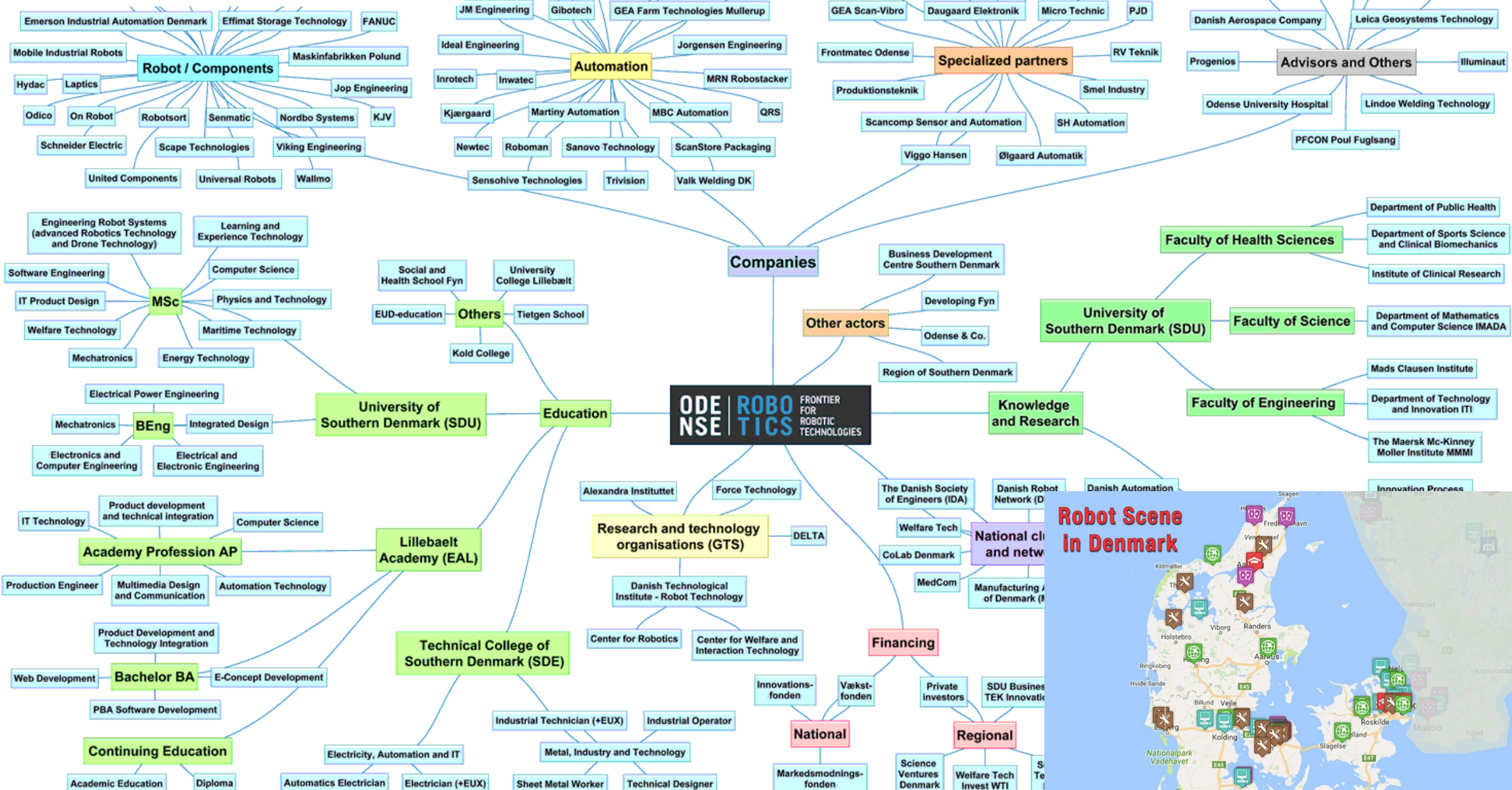


Weeding & Precision Spraying

Field Intelligence

# THE ROBOTREPORT

EXPLORING THE BUSINESS AND APPLICATIONS OF ROBOTICS



# Webinar: Robotics Clusters and Innovation Centers

By Halle Kirsh | July 29, 2019



This webinar was presented live on Wednesday, August 21, 2019. Click below to watch it on demand.

[Watch Now](#)

# **Primary** *Research*

# Question #1

What do you **KNOW**  
about your *End Users*?



# Question #2

**What job(s) will you  
be hired to do?**

# Question #3

**How are your customers getting the job done today?  
(current workflow/process)**

# Question #4

**What are the relevant contexts for the job that cause a new solution to be required?**

# Question #5

**What are the solution criteria being used to assess all possible solutions?**

# Customer Discovery Best Practices

## Lean Startup and Design Thinking

All truth passes through **three** stages



*- Arthur Schopenhauer (1788 - 1860)*

All truth passes through three stages

First, it's ridiculed.

Second, it is violently opposed.

Third, it is accepted as being  
self-evident.



- Arthur Schopenhauer (1788 - 1860)

The Value of *Listening* to Your Customers



# Customer Interviews

Customer ~~Interviews~~ conversations

Don't start by talking about your solution

Learn about HOW decisions are made

Look for: jobs, current solutions, criteria

Stay inside their experience (what they know)

Tell me about the last time you...

How did you choose the solution you have now?

If you were given \$1M to improve your workflow  
where would you spend it?

When is the last time you changed the way you do  
things? What prompted the change?

**KEEP QUESTIONS *BROAD***

***NO YES/NO Questions***

***ALWAYS ask “is there anyone else you think I should speak with? Can you introduce me?”***

# ***Creating a starting point***

**Translating your  
own ideas...**

*Start with the **functional job** your idea can do!*





*Start with the functional job your idea can do!*

*We have developed a new bacterium strain  
that we believe will be better at the  
bioremediation of petrochemical spills.*

*Start with the functional job your idea can do!*

*We have developed a new bacterium strain  
that we believe will be better at the  
bioremediation of petrochemical spills.*

*Start with the functional job your idea can do!*

*We have developed a new **bacterium strain**  
that we believe will be **better** at the  
**bioremediation of petrochemical spills.***

# Translation

The background consists of several 3D rectangular blocks in various shades of blue and teal. Each block has a different word for 'Hello' written on its top surface in a light blue font. The words include 'Hello', 'Ciao', 'γεια σου', 'Bonjour', 'Hola', 'こんにちは', 'مرحباً', and 'Hallo'. The blocks are arranged in a scattered, overlapping manner, creating a sense of depth and variety.

**Is never easy!**

# data Collection

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*...planning discovery  
activities*

**Data is *not evidence*...**

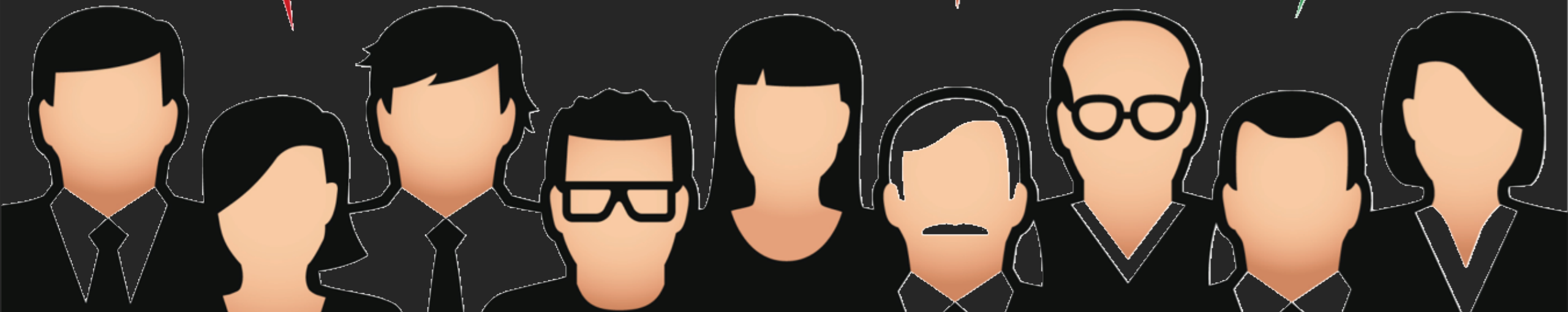
***without structure!***

***What I do***

***What I'm  
using now***

***Where I work,  
how I work***

***Complaints***

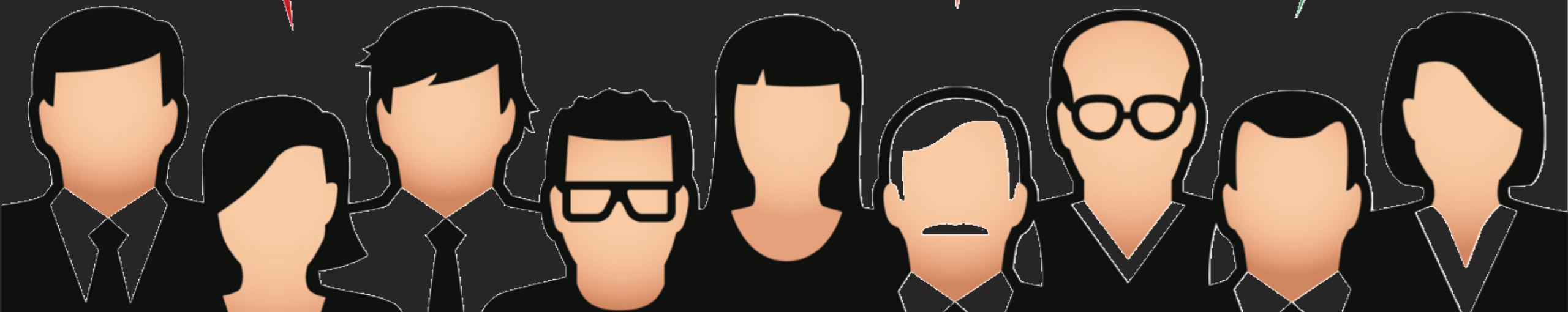


***Jobs***

***Solutions***

***Context***

***Criteria***





*Things you might actually hear and how to interpret that data...*

*It's really important to remediate chemical spills in both soil and water and a lot of effort is spent to minimize public outcry over the spill and the effort to clean it up.*

*Jobs*

*Things you might actually hear and how to interpret that data...*

*It's really important to **remediate chemical spills** in both soil and water and a lot of effort is spent to minimize public outcry over the spill and the effort to clean it up.*

*Jobs*

*Context*

*Things you might actually hear and how to interpret that data...*

*It's really important to **remediate chemical spills** in both **soil** and **water** and a lot of effort is spent to minimize public outcry over the spill and the effort to clean it up.*

*Jobs*

*Things you might actually hear and how to interpret that data...*

*Context*

*Solution Criteria*

*It's really important to **remediate chemical spills** in both **soil** and **water** and a lot of effort is spent to **minimize public outcry over the spill** and the **effort to clean it up**.*



*Things you might actually hear and how to interpret that data...*

*Jobs*

*Context*

*Solution Criteria*

*Solutions*

*Water spills pose a higher risk to people, animals, and agriculture.*

*Things you might actually hear and how to interpret that  
data...*

*Context*

***Water spills** pose a higher risk to people,  
animals, and agriculture.*

*Things you might actually hear and how to interpret that data...*

*Context*

*Solution Criteria*

*Water spills pose a **higher risk to people,** animals, and agriculture.*



*Things you might actually hear and how to interpret that data...*

*Context*

*Solution Criteria*

*Water spills pose a **higher risk to** people, **animals**, and agriculture.*

*Things you might actually hear and how to interpret that data...*

*Context*

*Solution Criteria*

*Water spills pose a higher risk to people, animals, and agriculture.*

*Things you might actually hear and how to interpret that data...*

*Context*

*Solution Criteria*

*Water spills pose a higher risk to people, animals, and agriculture.*

*Minimize risk to people  
Minimize risk to animals  
Minimize risk to agriculture*



*Things you might actually hear and how to interpret that data...*

*Jobs*

*Context*

*Solution Criteria*

*Solutions*

*Water can be more difficult. We can use floating booms, surface vacuums, and in special cases we have to dredge.*

## *Solutions*

*Things you might actually hear and how to interpret that data...*

*Water can be more difficult. We can use floating booms, surface vacuums, and in special cases we have to dredge.*

*Things you might actually hear and how to interpret that data...*

*Solutions*

*Context*

*Solution Criteria*

*Water can be more difficult. We can use floating booms, surface vacuums, and in special cases we have to dredge.*





*Jobs*

*Things you might actually hear and how to interpret that data...*

*Context*

*Solution Criteria*

*Solutions*

*Depending upon the location and severity,  
we will sometimes drill to test soil, ground  
water, etc.*

*Jobs*

*Solutions*

*Things you might actually hear and how to interpret that data...*

*Depending upon the location and severity, we will sometimes **drill** to **test soil**, ground water, etc.*

*Jobs*

*Solutions*

*Things you might actually hear and how to interpret that data...*

*Depending upon the location and severity, we will sometimes **drill** to **test** soil, **ground water**, etc.*

*Jobs*

*Solutions*

*Things you might actually hear and how to interpret that data...*

*Depending upon the location and severity, we will sometimes **drill** to **test** soil, ground water, **etc.***

*Things you might actually hear and how to interpret that data...*

*Context*

*Solutions*

*Depending upon the **location** and **severity**, we will sometimes **drill to test** soil, ground water, etc.*

- It's really important to remediate chemical spills in both soil and water.
- A lot of effort is spent to minimize public outcry over the spill and the effort to clean it up.
- Cleanup can be costly and is pure cost. Even the PR is aimed at avoiding negative press.
- There are regulatory guidelines, requirements, and goals for spill cleanup.
- Anytime we can defer remediation investments over multiple years, we do it.
- Soil spills are less urgent than spills in water due to the level of risk involved in each.
- Water spills pose a higher risk to people, animals, and agriculture.
- Soil can be addressed through means such as bioremediation, excavation, and cover, among others.
- Soil bioremediation can often be taken care of over time using native species.
- Depending upon the location and severity, we will sometimes drill to test soil, ground water, etc.
- Local and state governments often drive what we do to address spills

- Water can be harder to contain, depending upon where the spill occurs (lakes, ocean, river, etc)
- A common method is to contain spread using floating booms
- Another method is to vacuum off the surface contaminants
- Heavier contaminants fall to the bottom and get captured in the mud and sand.
- In the fracking industry we pump the contaminated water back into the wells for storage.
- There are some that believe fracking reinjection is what is causing earthquakes in shale deposits.
- Some areas care a lot (like Dallas) about fracking while others (Oklahoma) don't seem to care.
- Some contaminators will simply lie or hide an event to avoid the headache of cleanup.





## MUSHROOMS

- Composting – Spawning – Casing – Pinning – Cropping (multiple flushes) – Packaging (gas contamination)
- Trays, Bottles and Bags
- Moisture control, gas exchange, nutrient delivery
- Composting is not efficient – pasteurization is expensive and energy intensive
- Variation in sources of composts are difficult to manage – conditions change
- Disposal of “used” compost is a difficult thing – landfills don’t want it. SALT content
- Short shelf life limited shelf space – and disrupts distribution options
- Harvesting methods can disrupt shelf life as well
- Packaging moisture and gas exchange affect freshness
- Prefer biodegradable packaging
- COMPOST = mix of wheat straw, gypsum, and horse or chicken manure

## REAL PROBLEMS

Casings are non-sustainable

Casings may be regulated

# Cohort Deliverables

---

*...tools and  
expectations.*

**100**

***Customer  
Conversations***

**Office Hours**

***Every week!***

***Q&A and Report out  
what you learned***

```
graph LR; A((Identify the Customer)) --> B((Understand "Job-to-be-Done")); B --> C((Quantify Decision Criteria for Solutions)); C --> D((Segment based on Needs)); D --> E((Design Value Proposition));
```

Identify the Customer

Understand  
"Job-to-be-  
Done"

Quantify  
Decision  
Criteria for  
Solutions

Segment  
*based on*  
Needs

Design Value  
Proposition

# ***Tools/Deliverables and where they apply***

Identify the  
Customer

Understand  
“Job-to-be-  
Done”

Quantify  
Decision  
Criteria for  
Solutions

***Ecosystem Maps***  
***Workflow Diagrams***  
***Value Chains***  
***Titles/Archetypes (contacts)***

***Workflow Diagrams***  
***Value Chains***  
***Job Statements (include context)***  
***Job Trees (at least 2 levels)***  
***Importance – Satisfaction (for jobs)***

***I – S (for criteria)***  
***List of alternatives***  
***Competitive Matrix***  
***VPs (benefit + sacrifice)***

---

## ***Summary Tools***

***Business Model Canvas – stoplight risk assessment***

***BMC – other information***

***TAM/TAM Estimate***

***Tech and Market Readiness (TRL/MRL) for VALIDATED solution approach***