The Softer Side of Scale

Harnessing **VOLTAGE** in our FAIR Risk Programs

Zach Cossairt Information Risk Program Senior Manager, Equinix



Goals for Today

- 1. Provide an alternative lens to view our challenge
- 2. Teach you something new
- 3. Encourage you to rethink
- 4. Provide you something practically useful
- 5. Not mention FAIR much



Behavioral Economics

"The agent of economic theory is rational, selfish, and his tastes do not change." -Bruno Frey

- Theories of decision can be either normative or descriptive
 - Normative theory: How you **should** make choices
 - Descriptive theory: Explains how humans **actually** make decisions
- Standard economic theory
 - Foundation based on Expected Utility Theory (rational agent model)
 - Presented as normatively correct and descriptively adequate
- Behavioral Economics: Builds on traditional models
 - Borrows from psychology, neuroscience, evolution and biology
 - Truly descriptive: Makes no assumptions of rationality



What does it mean to scale?





How to Make Good Ideas Great and <u>Great Ideas</u> Scale

JOHN A. LIST Co-author of *The Why Axis* "Scaling" means achieving a desired outcome by taking an idea from a small group to a much larger one

- Social and technological progress
- Reaching the largest number of **people**
- Early promise to **widespread** impact
- Primary challenge and opportunity

"Put simply: you can only change the world at scale"



The Voltage Effect

- Science based scaling: Giving every idea a chance at success
- Consists of voltage gains and voltage drops

• Voltage Gains: Positive impact multiplied at scale

- Voltage Drops: Positive results dissolve with increased scale
- No organization or idea is invulnerable to voltage drops
- 5 signs you can monitor to identify and address hurdles to scaling
- Adoptable practices to produce and sustain voltage gains



5 Vital Signs



Vital Sign 1: Beware of false positives

- False Positive: Something appears true when it is not
 - Type 1 error model in any system where judgments are made
 - Context-dependency: Sample may not represent the population
 - o "Outlier groups" can lead to false conclusions and misinformed decisions
- Replicate if possible. And if possible, replicate again
 - This is social science experiment, **treat it as such**
- Why does this occur?
 - Evolution of the decision maker can help explain



A day in the life of an ancient forager

Behavior \rightarrow Error \rightarrow Outcome



Type I Error or False Positive >



Type II Error or False Negative

Survive and reproduce

Not be around very long

Fast thinking kept us alive

And it had a lot of practice



The modern-day decision maker



- The brain grew and adapted to deal with more difficult problems
- Older core regions and layers did not turn off
 - Mental shortcuts used due to **limited cognitive capacity**
 - Basic assessments substituted for harder questions



Contributing to false positives

Heuristics & Biases: Answering an easier question

• Confirmation bias

• Dismiss/ignore information inconsistent with our beliefs

- Social influence
 - Suppresses freethinking and rethinking
 - $_{\odot}$ Ideas generated by the few rather than the many
- Winner's curse

Large up front investments skew perception of scalability



Vital Sign 2: Know your audience

- Who are you marketing to, and what drives their decisions?
 - **Memories**: Preference are **assembled**
 - **Goals**: Deep rooted drivers of **reward**
 - **<u>Context</u>**: External signals suggest ways to **achieve goals**
- How will you handle variability across groups and customers?
 - Selection bias and representativeness
 - o Current audience vs. the future one
 - Voltage drops can occur when this is ignored



Vital Sign 3: Know your recipe

- Circumstances needed to sustain high voltage
 - Identifying ingredients in your secret sauce
 - Preserving high performing drivers
 - Continuous value assessment of your ingredients
 - Remaining faithful to those that matter
 most

- Negotiables vs. Non-Negotiables
 - Non-negotiables: Value is infinite
 - Are these people?
 - Negotiables: Value is fixed, and tradeoffs can be made
 - <u>Voltage loss</u> will occur when **non- negotiables no longer scale**



Vital Sign 4: Spillovers

- "Spillover Effect": Unintended impact of human actions on others
 - Murphy's Law: Anything that can happen, will... at scale
 - Intentional outcomes create unexpected outcomes (positive and negative)
- Considering spillovers in 3 categories
 - 1. Broad equilibrium: Large, organization-wide tipping point
 - 2. Social: Observing what others do and say changes behavior (really)
 - 3. Networked: Adoption amplifies benefits or costs for all
- Mitigate/exploit negative/positive spillovers, respectively



Vital Sign 5: Supply-side economics

- Optimum scaling achieves economies of scale
 - Early investments are unavoidable up-front *fixed costs*
 - Average cost to produce must decrease
- Diseconomies of scale when average cost increases
 - Key resources are scarce or difficult to acquire
- Questions to ask at this stage:
 - o Who likes your idea?
 - o How much will they pay for it?
 - o How much does it cost to provide?



Producing Voltage Gains



Tools of the trade: Choice Architecture

"All choice architecture is a conversation between the designer and the chooser."

-Eric J. Johnson

• We're all choice architects (designers)

Design & construct decision making environments for our choosers
 Influence the plausible path our choosers take (intentionally or not)

- Making this a conscious effort can pay dividends
 - Optimize **load shedding** (attention scarcity)
 - $_{\odot}$ Choices and consequences separated in time
 - $_{\rm O}$ Inform the **right decisions**



1. Getting the incentives right

- Incentives deal with how people work rather than who works
- Well-designed incentives scale, while humans inherently do not
- Incentives help shape choices, behaviors and outcomes
- Getting incentives right at scale is important, and can be cheap
- Applying concepts from Behavioral Economics can help



Loss Aversion

"." I hate losing more than I even wanna win" Billy Beane -Billy Beane

- Prospect Theory: Gains and losses carry value
- Choices evaluated as change from the current referenced state
- Status quo as a reference point
 - Changes viewed as concessions (losses)
 - Preference to stick with current holdings (inertia)
 - Design for small changes and avoid taking things away (endowment)
- Future goals (reward) as a reference point
 - $_{\odot}$ Failure to achieve a goal is a loss, exceeding the goal is a gain
 - Design to incentivize with segregated returns above expectations



Social Norms

- Humans are wired as **social beings** seeking cooperation
 - Motivated by a desire to conform
 - Dispositioned to construct self-image and preserve it
 - Incentivized to avoid social losses
- Nudging for good via *social influence* can **improve outcomes**
 - ✓ **Design** to elicit social cascades and bandwagon effects
 - ✓ **Construct** to promote social comparisons
 - ✓ Market what we are doing as the new normal



2. Normalize quitting as a strength

- Investments from the past are *sunk costs*
 - o Unpromising past investments, time spent, previously held beliefs
- Sunk cost fallacy
 - Commitment to resources spent (incurred costs = losses)
 - Loss/regret are psychologically painful and avoided
 - Ignore/underweight opportunity costs
- "Quitting is for winners"
 - Forecasting future well-being (current emotions rule)
 - Examine the decision problem with a broader frame
 - What if you didn't own this? How much would you pay?



3. Human nature in our risk programs

We are **humans**

- We're biased and we blunder
- We seek the easy route
- We believe then confirm (WYSIATI)
- We are averse to losses

We <u>are not</u> **Econs**

- Stable preferences
- Conscious deliberators
- Consistent and logical
- Mr. Spock and Gandhi
- ✓ Understanding this distinction helps
- ✓ Design for humans not Econs
- ✓ Build programs that work with human nature, not against it



So, is your idea ready to scale?

- Success at scale is more about the what than the who
- There are more ways to fail than to succeed
- ✓ Assessment of your pulse is a must (Five vital signs)
- Certain practices can help achieve and maintain gains
- Design optimal choice environments for decision makers
- ✓ Change is psychologically difficult. Treat it as such



Questions?

