

Summary

OIDD614 - Session 6

Karl T. Ulrich

Course Topics

- What is innovation?
- Need pull vs. solution push
- Internal vs. external innovation
- Horizon 1, Horizon 2, and Horizon 3 innovation
- VIDE success model; $\text{value} = f(\text{idea}, \text{development}, \text{exogenous factors})$
- Opportunity identification
- Individual vs. group performance in idea generation
- Problem definition using "5 Whys"
- Innovation tournament structure
- Tournament performance levers: N, mean, variance, filter ratios
- Design thinking: observational methods, rapid prototyping, iterative refinement
- Concept exploration/development methods
- Whiteboard 101 (plus more optional visual expression tutorials)
- Branding and naming
- Valuing innovation projects
- Crowdfunding and open innovation
- Lean innovation/MVP, project planning
- Culture of innovation
- Entrepreneurial Innovation
- How to pitch
- (Project-specific content and methods.)

Where does advantage come from?



1. Regulated monopoly (e.g., CCTV)



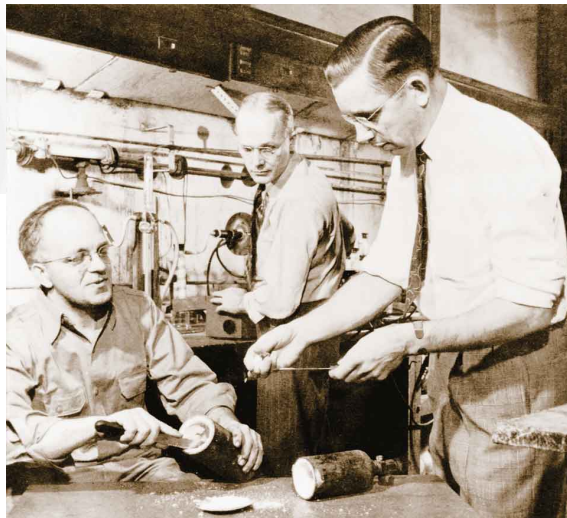
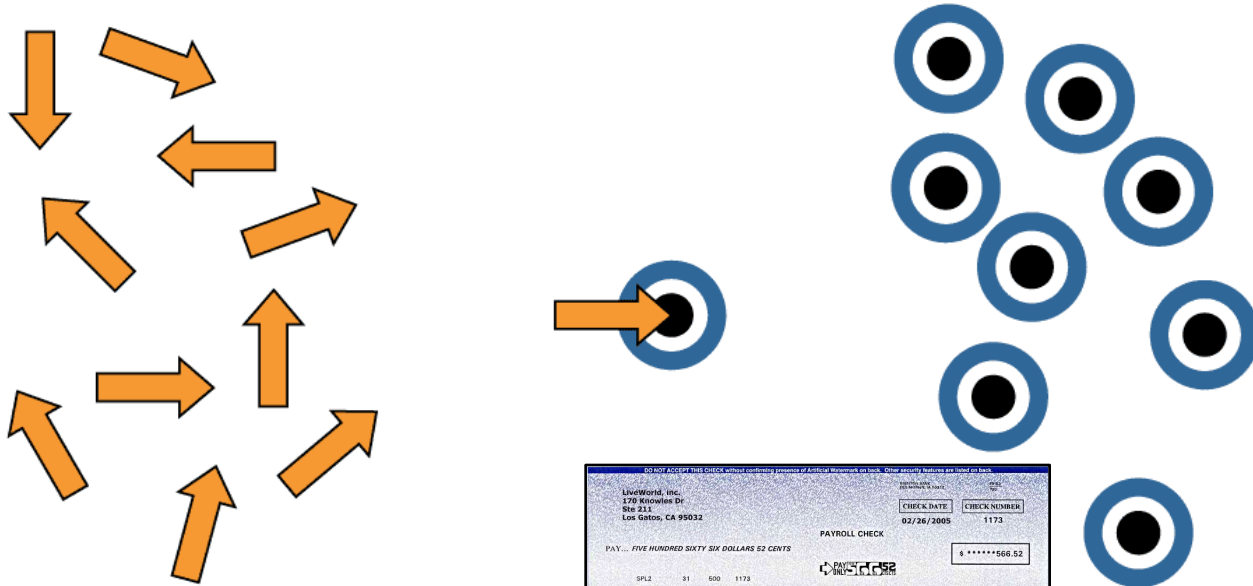
2. Scale (e.g., Walmart)



3. Doing something valuable, better, and different. 2

innovation

A new match between a solution and a need.

[illegible]

Value Creation in Innovation

1. Is the need real?



2. Does the solution meet the need?

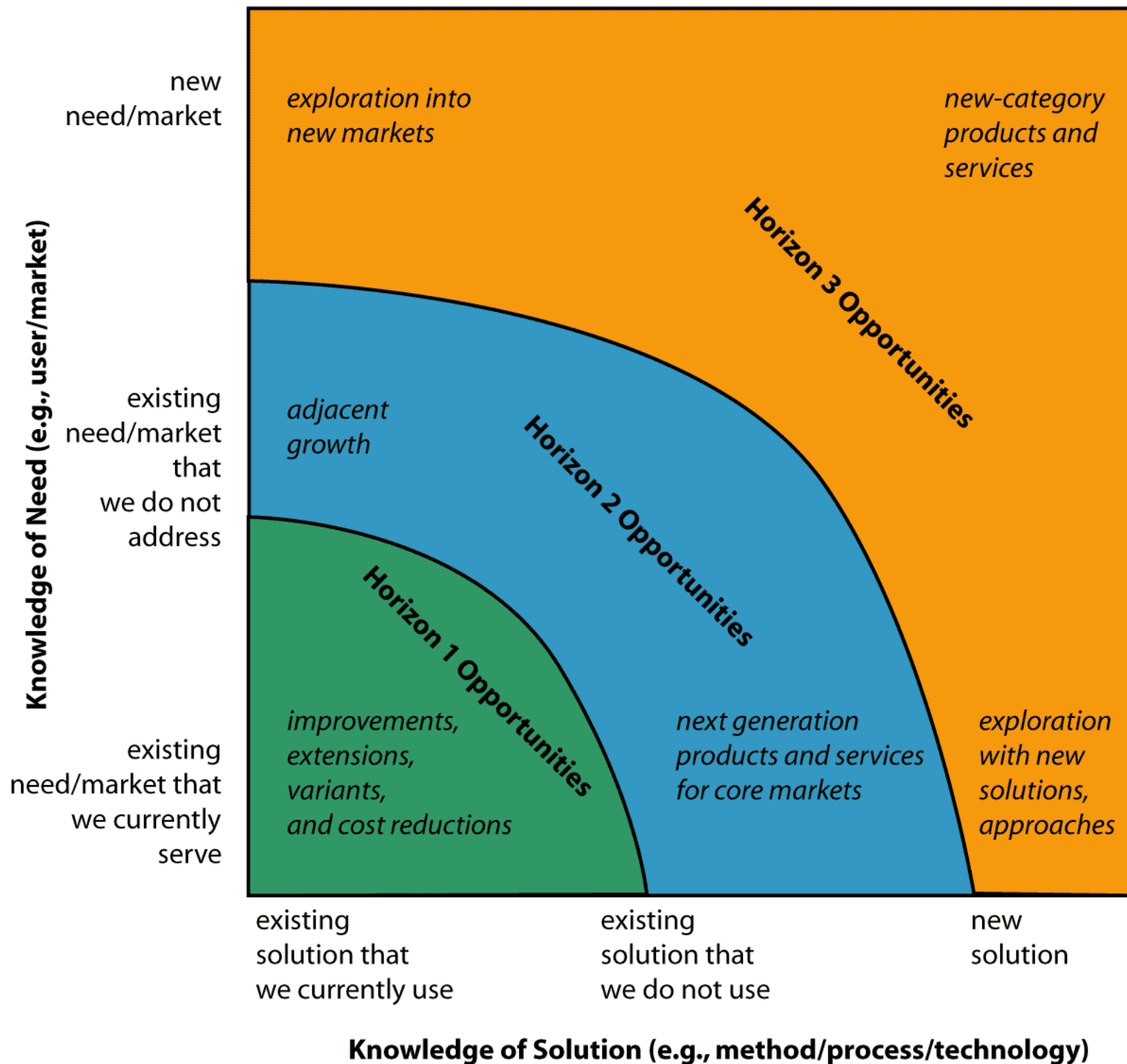


3. Is the “customer” willing to pay more for the solution than it costs to deliver it?



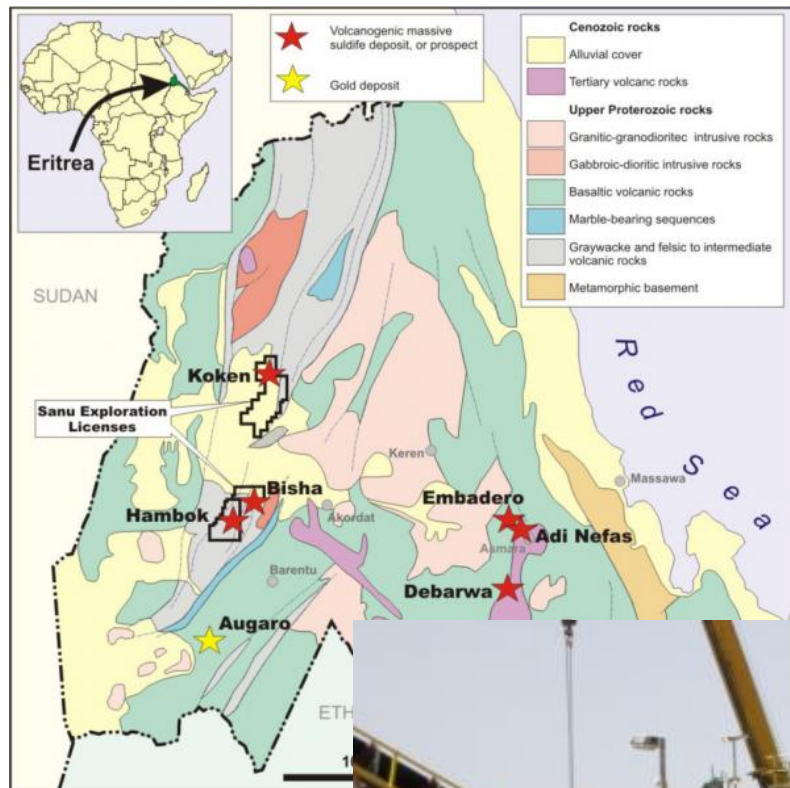
$$Price - Cost \gg 0$$



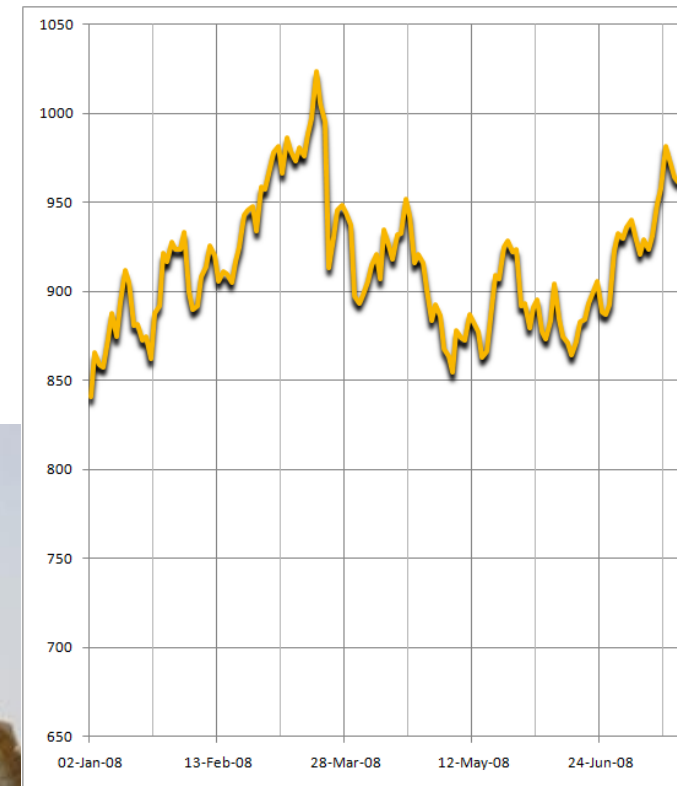


Idea

$$V = f(I, D, E)$$



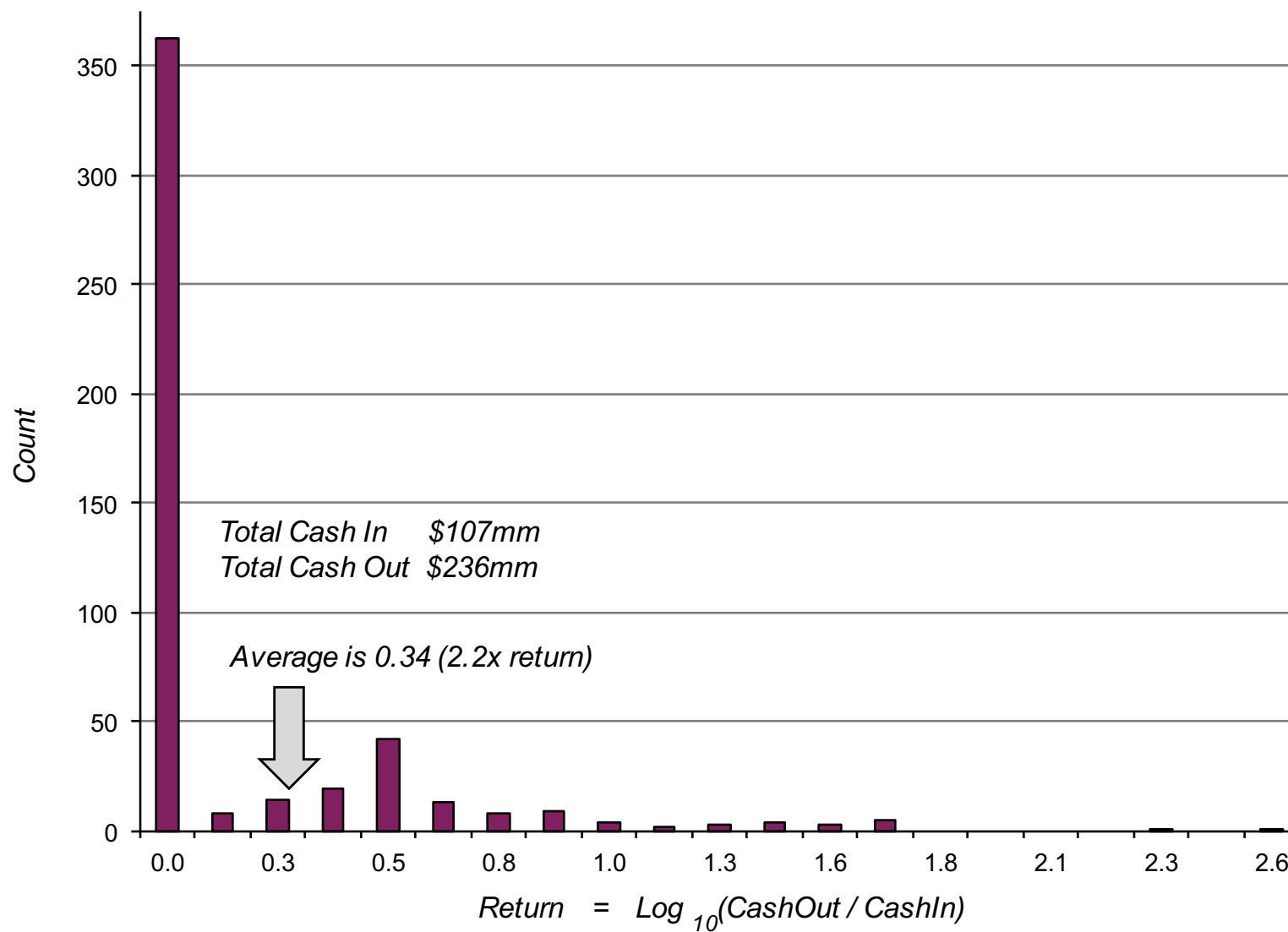
Exogenous Factors



Development



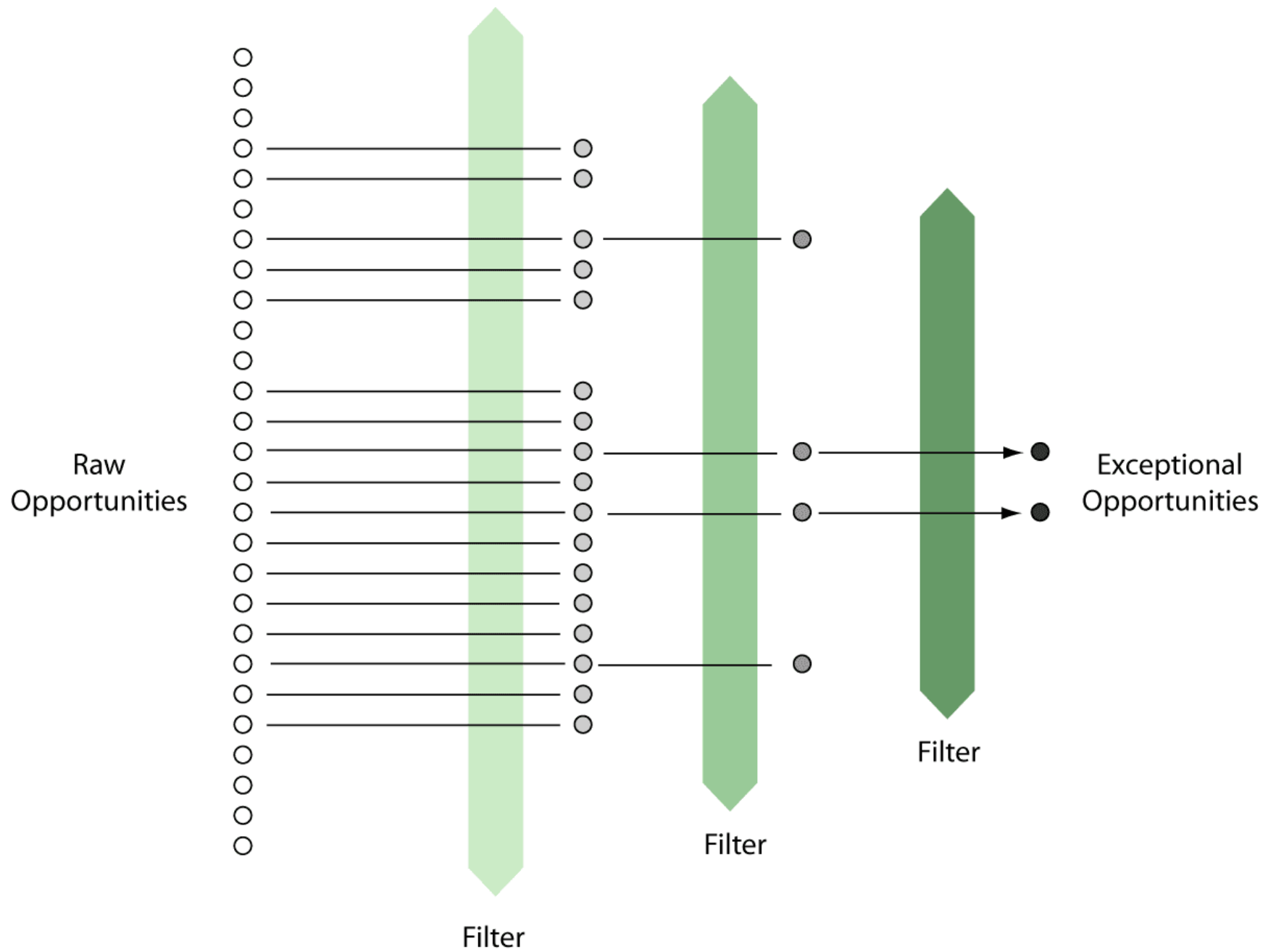
Histogram of Returns for 499 Ventures by Angel Investors



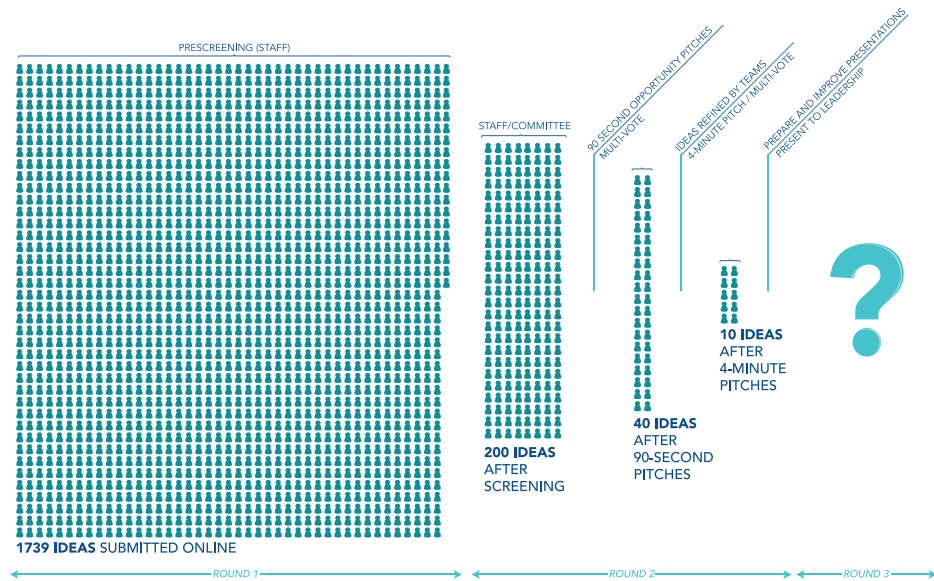
e.g. 1,000,000 cash out on 100,000 cash in has Return of 1.0

Note: Negative or undefined returns set to 0.

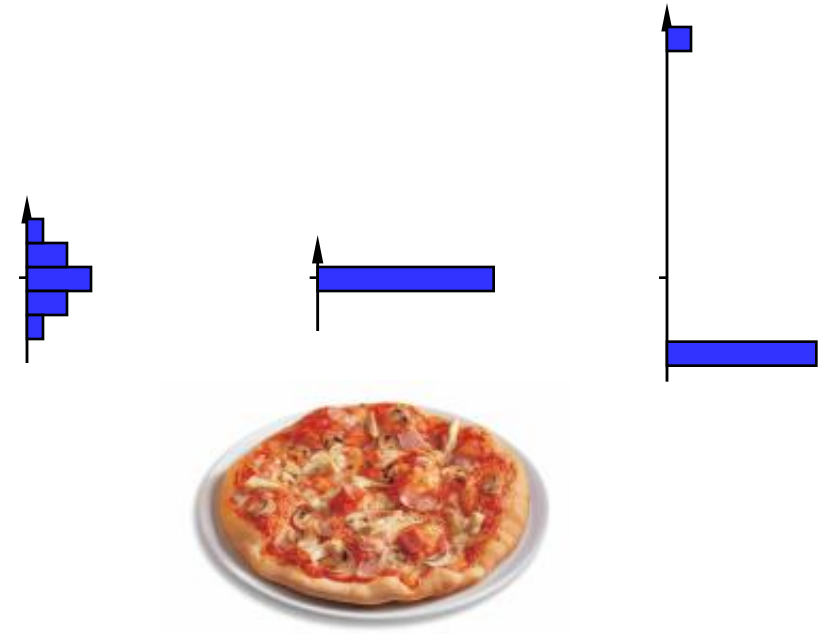
Source: Kauffman Foundation Angel Investor Performance Project. Sample is only those 499 ventures for which cash investments were made.



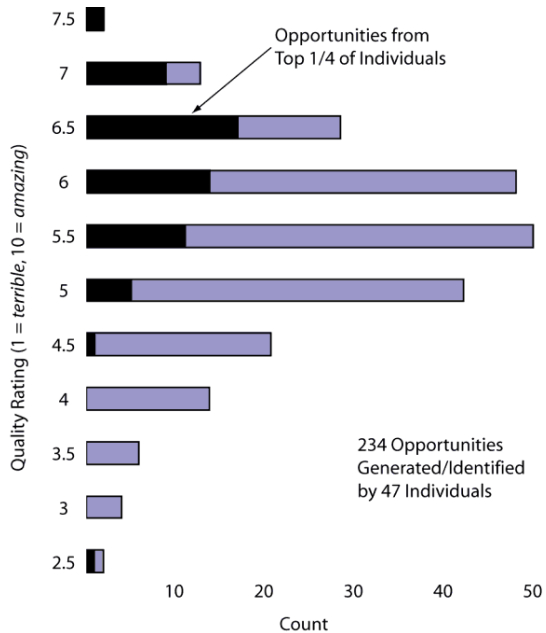
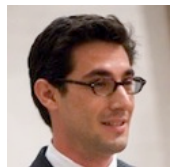
Improving Performance of Tournaments



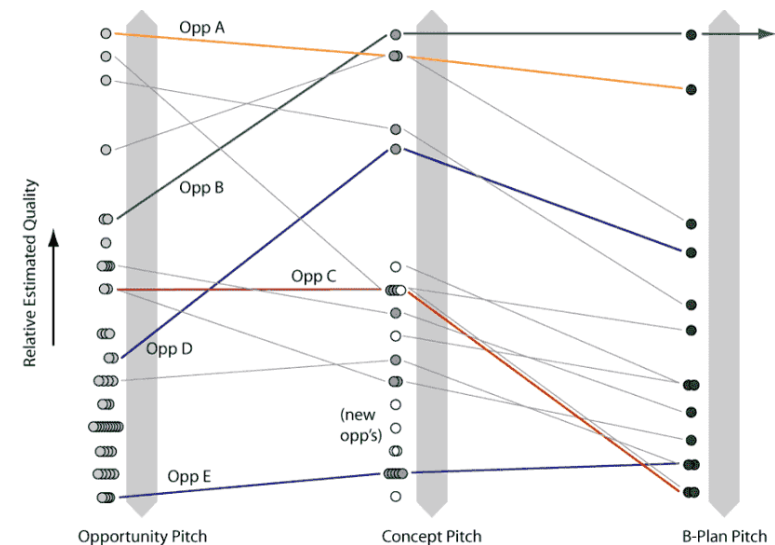
Many and diverse ideas via independent, parallel exploration.



Variance is your friend.



Solicit participation from proven high performers.



Filters generous early in process and ruthless later in process.

Challenge JOB

IWWMW improve the way jobs for young professionals are created, marketed, identified, and filled?



Challenge HOME

IWWMW improve the way rental housing for young professionals is created, marketed, identified, booked, and transacted?



Groups vs. Individuals in Idea Generation

Group Approach



30 minutes

4 people working together

Hybrid Approach



10 minutes

4 people
working
alone



20 minutes

4 people working
together

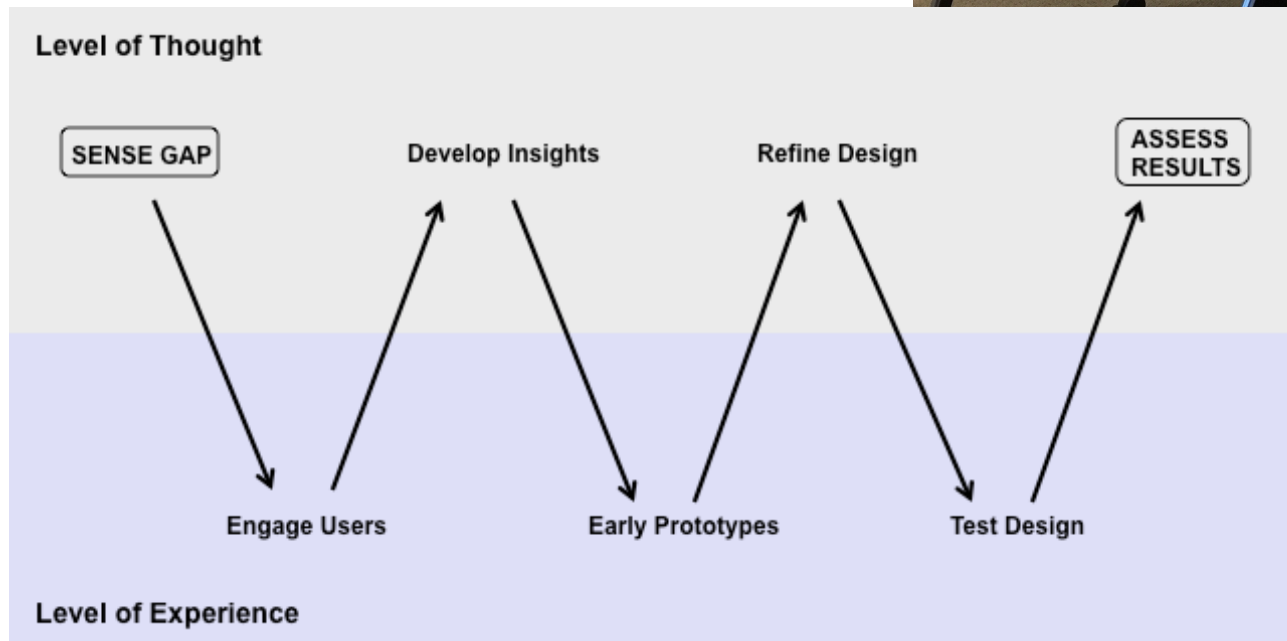
- 2.5 x more ideas
- Better quality ideas

Source: Girotra, Terwiesch, and Ulrich. 2010. Idea Generation and the Quality of the Best Idea. *Management Science*. Vol. 56, No. 4, pp. 591–605. (Available via ktulrich.com.)

“Design Thinking”

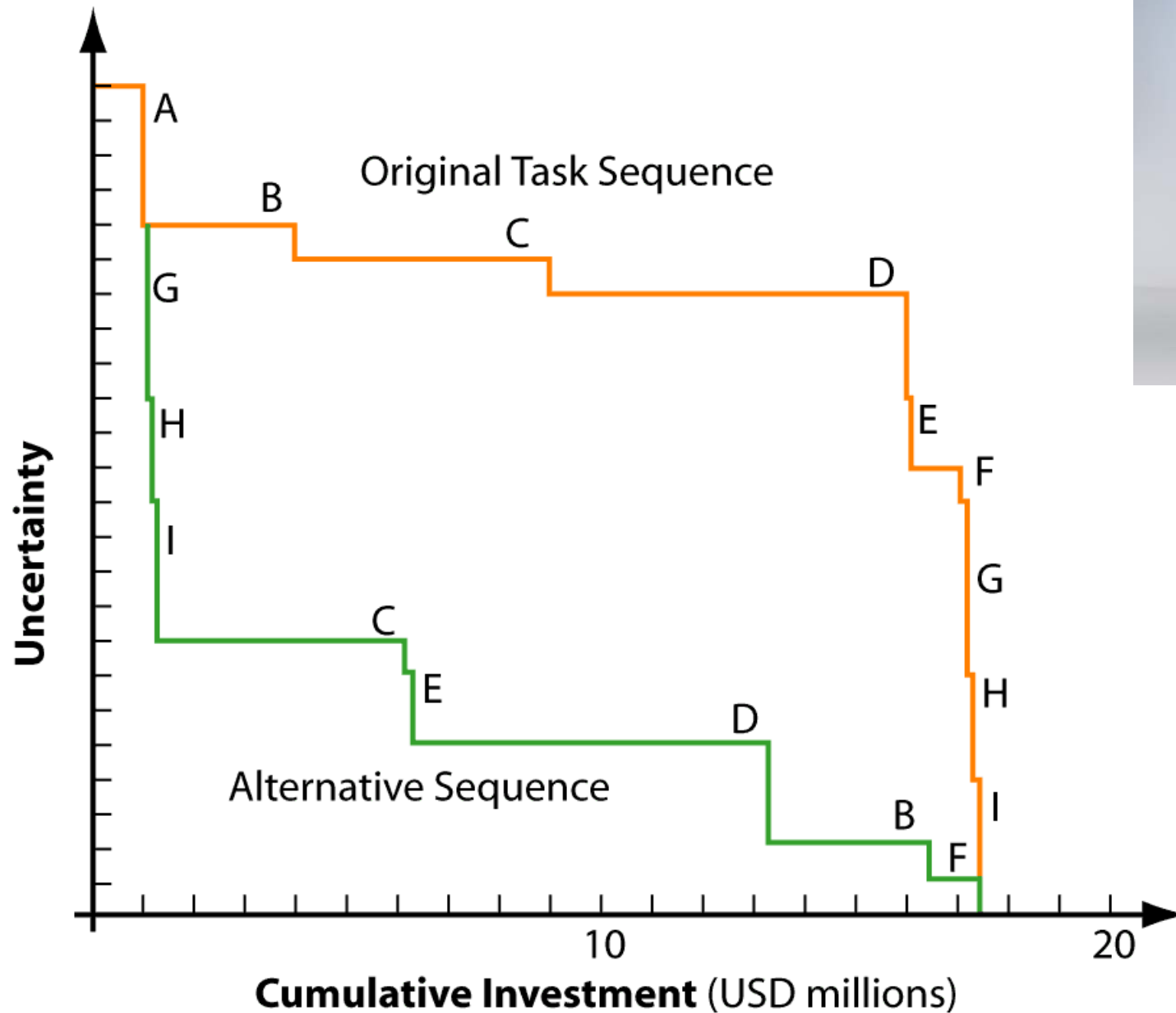
- 5 Whys – abstracting problem
- User orientation
- Observational methods
- Early prototypes
- Iterative refinement
- Visual expression
- *Culture of “yes”*
- *Bias for action*

Plus beauty, elegance, craft, and care...



Lean Innovation

(Most reduction in uncertainty for least cost)

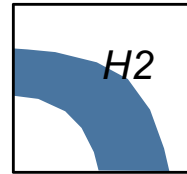


Three Cultures of Innovation

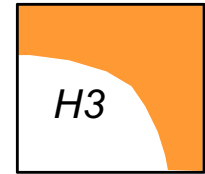


Objective

*Improvement
(75-90% success)*



*Adjacent Growth
(25-75% success)*



*New Category
(<25% success)*

*Elements
of Culture*

- | | | |
|--|---|--|
| <ul style="list-style-type: none"> • <i>Customer focus.</i> • <i>Continuous improvement.</i> • <i>Problem solving.</i> • <i>Measurement, analysis.</i> | <ul style="list-style-type: none"> • <i>Continual generation of opportunities.</i> • <i>Inexpensive exploration of feasibility and value.</i> • <i>Matching of markets and capabilities.</i> | <ul style="list-style-type: none"> • <i>Irrational optimism.</i> • <i>Vivid imagination of possibility.</i> • <i>Adaptive and dynamic planning.</i> • <i>Tenacious commitment.</i> • <i>Enthusiastic tech push.</i> |
|--|---|--|

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by Belle-V Kitchen

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Backers 1,289

Comments 58

📍 San Francisco, CA

🔧 Product Design

Funded! This project was successfully funded on Dec 8.



1,289

backers

\$64,724

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seconds to go



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Innovation Process – OIDD 614

