

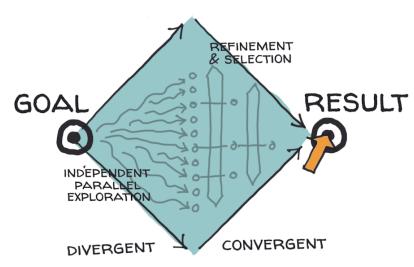
## Product Management – Product Improvement & Wrap Up

Professor Karl T. Ulrich

@ktulrich | ktulrich.com | ulrich@wharton.upenn.edu

## **Product Improvement Process**

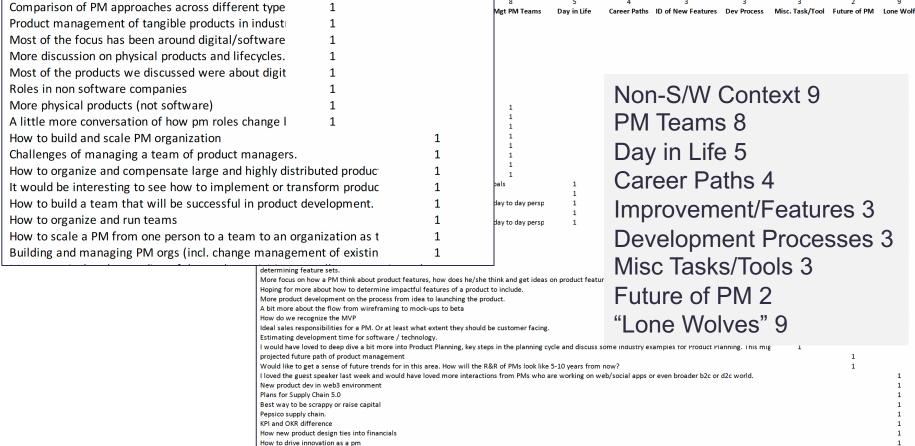
- 1. Clarify goal (e.g., profits, growth, user satisfaction) + KPIs
- 2. [DECIDE: Requires clean sheet or can be incremental?]
- 3. Engage stakeholders, gathering data
- 4. Generate alternatives (explore, divergent thinking)
- 5. Analyze, select, prioritize (convergent thinking)
  - Impact vs. Resource Requirement
- 6. Add prioritized actions to agile backlog



## **Getting Data**

- Automated data collection (e.g., app use patterns)
- Structured survey
- Net promoter score (NPS)
- Open-ended feedback survey
- Observation, open-ended interaction
- "Staple yourself to an order" you as PM eat your own dogfood





Non S/W Tech Bld/Mgt PM Teams

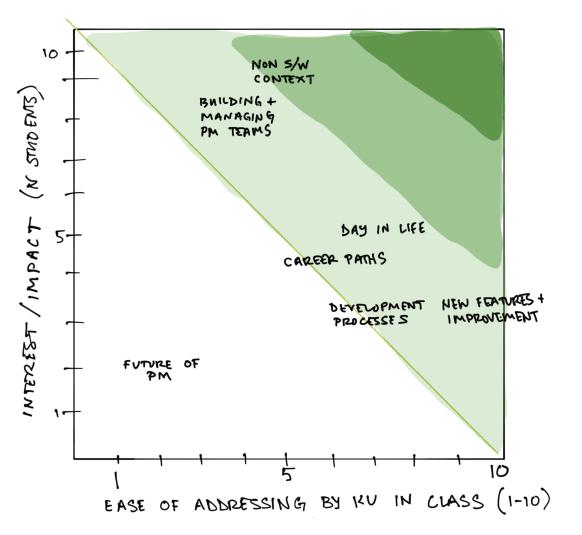
How to utilize product to engage network effects

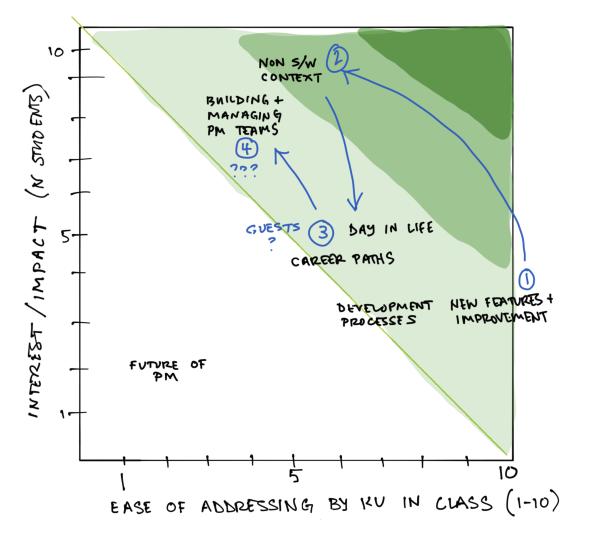
Quick Topic Feedback Survey - OIDD6540 - June 10, 2022

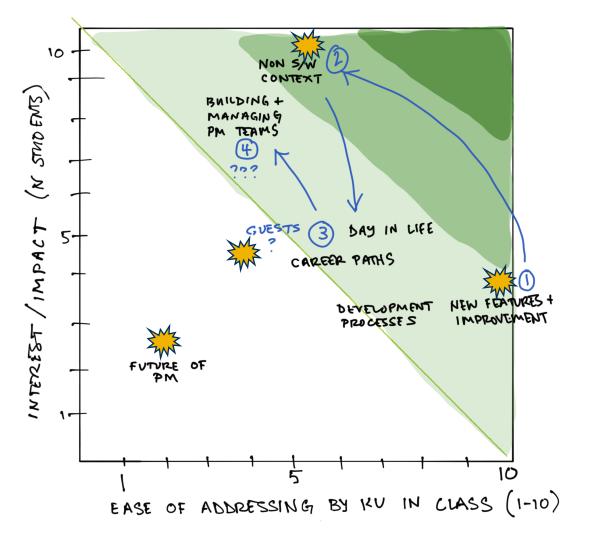
PM for non-tech industries.

CASES + EXAMPLES	DIGITAL	PHYSICAL	SERVCE	328	<b>B2C</b>
TWITTER GEN MAGIC SCOOTERS/SEGWAY	•			0	•
IN STAGRAM AUBIRDS BOOM	•	•			•
AGILE WATERFAIL CERIDIAN ABHI	0		0		
MAKERSTOCK BELLE-V SCOOP PEPSI   DEEPIKA	0		0	•	•
				MORE 7	

MORE 7







AGILE

LEAN MVP

DESIGN THINKING

design

MGO OUTSOURCING

> CAD CAM

LOW CODE

NO CDDE

3D PRINTING

PM FOR SERNOES

PIHASE GATE STAGE GATE

VOICE OF CUSTOMER

JOB to BE DONE

WEB 3

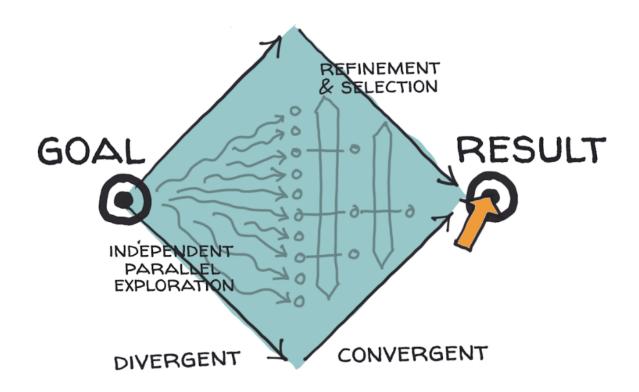
OPEN SOURCE

USER GENERATED CONTENT

CLOUD DENVERY

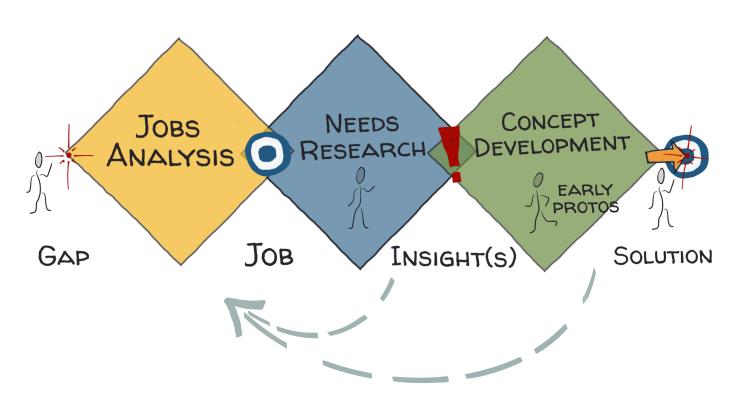
Karl T. Ulrich

## The Diamond is the Core Process (...in Life)



## **Triple Diamond Model of Design (Thinking)**

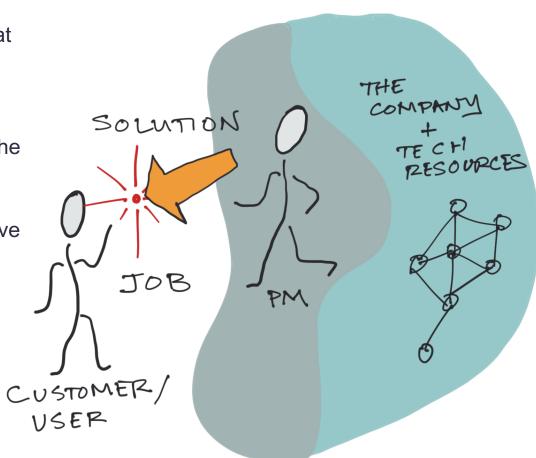
Design Thinking is Design



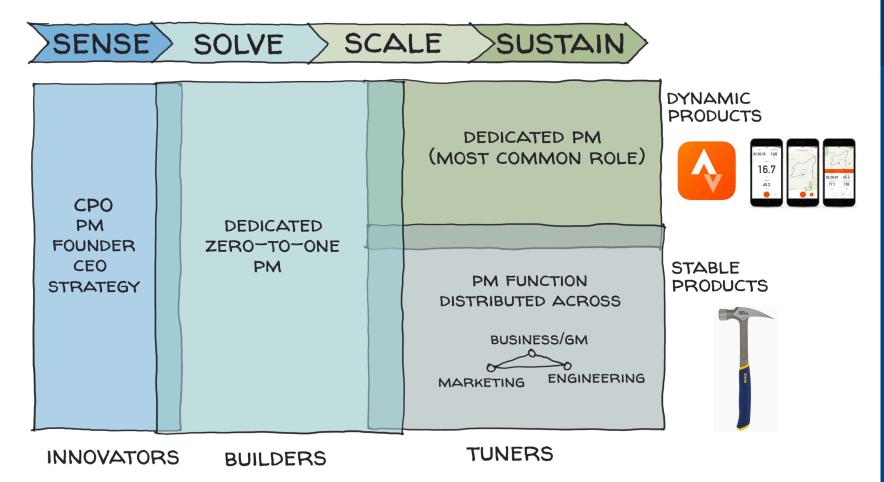
### **What is Product Management?**

The market-facing owner of what the product is.

- Creator or guardian of the product vision.
- Interpreter and protector of the customer experience.
- Guide for the technical resources to create or improve the product.
- Prioritizes the feature and improvement road map.



#### **PM** in Context

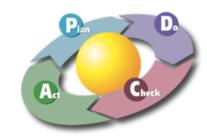


# In stable environments, incumbent power comes from ratcheting of improvements, largely through incremental change.

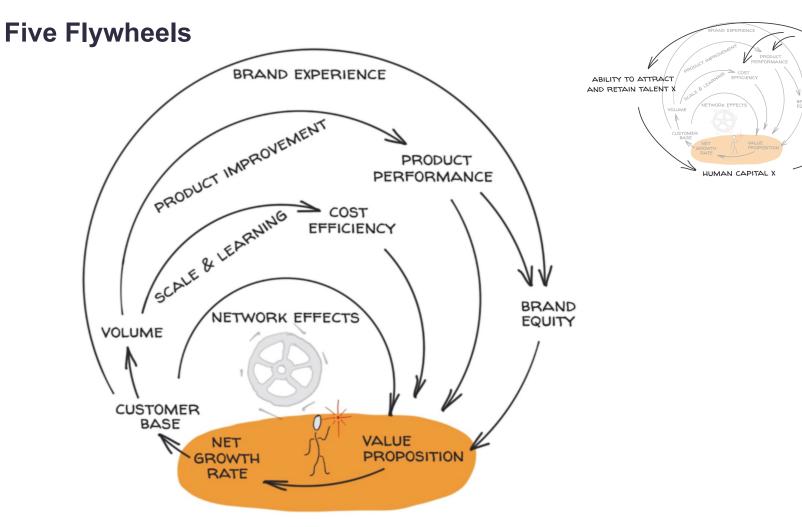


- Learning and improvement in products and processes.
- Reducing cost, usually increasing volume, achieving greater scale.
- · Reinforcing of relationships.
- Strengthening of brand.
- Building customer networks.

Essentially, TQM/Six-Sigma/Continuous-Improvement spinning up the "flywheel"



CULTURE OF X



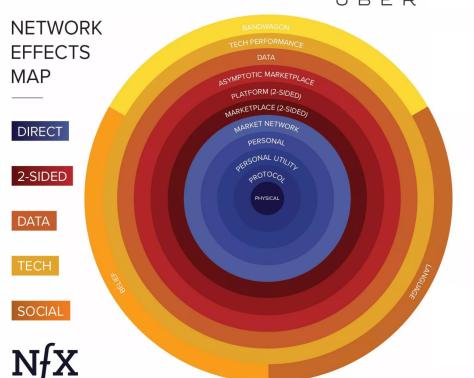
## **Network Effects (Follow Up)**



**Direct Network Effects** (e.g., WhatsApp) – value to user increases with number of users

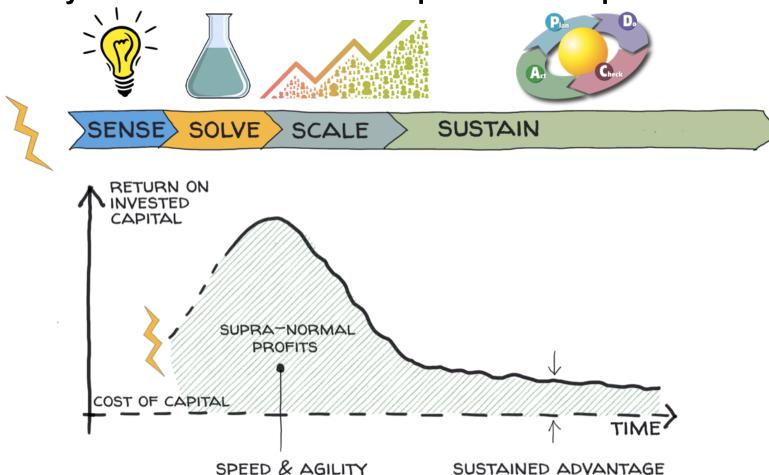
Indirect Network Effects (e.g., Etsy) – two distinct customer groups, value to one increases with number of users in other.

James Currier (NFX) defines a subtype of indirect network effect, the *Asymptotic 2-Sided Market*. He argues that Uber and Lyft are key examples. Strong network present effects initially until get critical density of users/providers, but then very little benefit to further increases in customer base. "Multi Tenanting" (users using multiple services) also limits power of network effects.

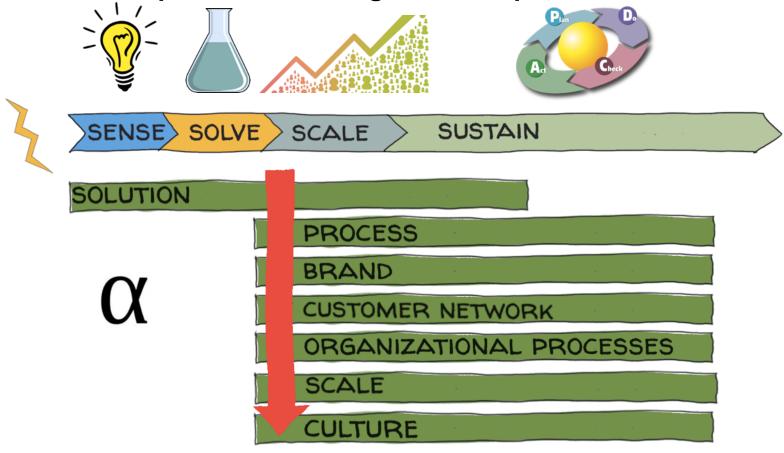


Very good taxonomy with explanations and examples: <a href="https://www.nfx.com/post/network-effects-manual/">https://www.nfx.com/post/network-effects-manual/</a> (James Currier)

## The Lifecycle of an Innovation in Response to Disequilibrium



## **Transition in Importance of Categories of Alpha Assets**



## When can product be an alpha asset?

- During sense and solve phase (based on speed and agility).
- When control of product IP is possible (e.g., Pharmaceuticals).
- "Meta Asset" of product development capability can be alpha asset in dynamic environments (e.g., fashion, gaming) or when creating great product is really, really hard (e.g., high-performance microprocessors).
- But, more typically product is "just" important, like sales and marketing are important. Product management in these settings is a "must have" but probably not a decisive source of competitive advantage.