




Session 11 - Product Management

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Ting Cui • 1st
Senior Product Manager at Uber
San Francisco, California

Uber Uber
The Wharton School
See contact info

Experience

Uber
Senior Product Manager
Uber
2018 – Present · 1 yr
San Francisco Bay Area
Startup Grind 2019 Speaker on The Future of Logistics: How Innovative Technologies Can Power Efficiencies in Dynamic, Manual Industries <https://www.startupgrind.com/conference/>

Udacity
Product Lead
Udacity
2017 – 2018 · 1 yr
San Francisco Bay Area
Udacity was founded by Sebastian Thrun who started Google X. Our mission is to democratize access to higher education. We offer nanodegree programs in the latest cutting technology including self-driving car technology, robotics, artificial intelligence, deep learning, etc.

Product Lead, Flying Car + AI for Trading Nanodegree Programs

- created product vision and build 2 new teams (17 people), developed partnerships with leading employers, and launched 2 zero to one products
- Flying Car Nanodegree Program was announced at TechCrunch Disrupt 2017
- <https://techcrunch.com/2018/01/23/udacity-opens-applications-for-its-flying-car-nanodegree-program/?ncid=rss>
- AI for Trading was created in partnership with \$5B hedge fund, WorldQuant
- <https://www.finextra.com/pressarticle/74968/udacity-unveils-ai-for-trading-nanodegree-programme/wholesale> See less

Product Manager or PM

Likely the most common role for 415/515 alums interested in products.

Senior Product Manager

Wealthfront

2016 – 2017 · 1 yr
San Francisco Bay Area

PM, Growth & Core Experience (sign up, logged in user experience, funding methods), firm doubled from \$3.5B to \$7B AUM during this time

Launched new account linking product on 3 platforms (web, iOS, android), allowing... See more

Senior Product Manager

Amazon

2014 – 2016 · 2 yrs
San Francisco Bay Area

Prime Now (2015-2016)

2nd PM hire on 3P team, grew with team as we expanded across 3 different offices from 0-\$100M revenue. Launched Amazon's first 1hr alcohol delivery experience. Defined product vision and roadmap for Prime Now merchant products (new model that allows cust... See more

What is a *Product Manager (PM)*?

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.
- Prioritizer of the feature and improvement road map.
- (Sometimes called “CEO of the Product” – but rarely has direct authority and rarely has P&L responsibility.)

“PM” is a very common title in “tech” but less so in other domains.

These canonical roles –
may overlap in practice.



Melissa Winter • 1st
Product Marketing Manager at YouTube
San Francisco Bay Area

What is a *Product Marketing Manager (PMM)*?

Typically responsible for demand generation *assuming the product*.

- Channel management.
- Advertising.
- Marketing communications.
- Pricing (usually joint/coordinated decision).
- Coordination with Sales function.



eBay
2 yrs 2 mos

Senior Product Marketing Manager, Geographic Expansion Team
Jul 2015 – Feb 2016 · 8 mos
San Francisco Bay Area

Led team's \$100M strategy plan to scale sales through new product opportunities. Initiated and executed customer insights study to identify key problems, outlined product requirements, and defined budgetary requirements and roadmap. Identified strategic partnerships to develop product solution to improve tracking and reduce item-not-received rate by 65%.

Zoom: An IPO Done Right?

March 28, 2019 by James Stanier
Leave a comment
Growth

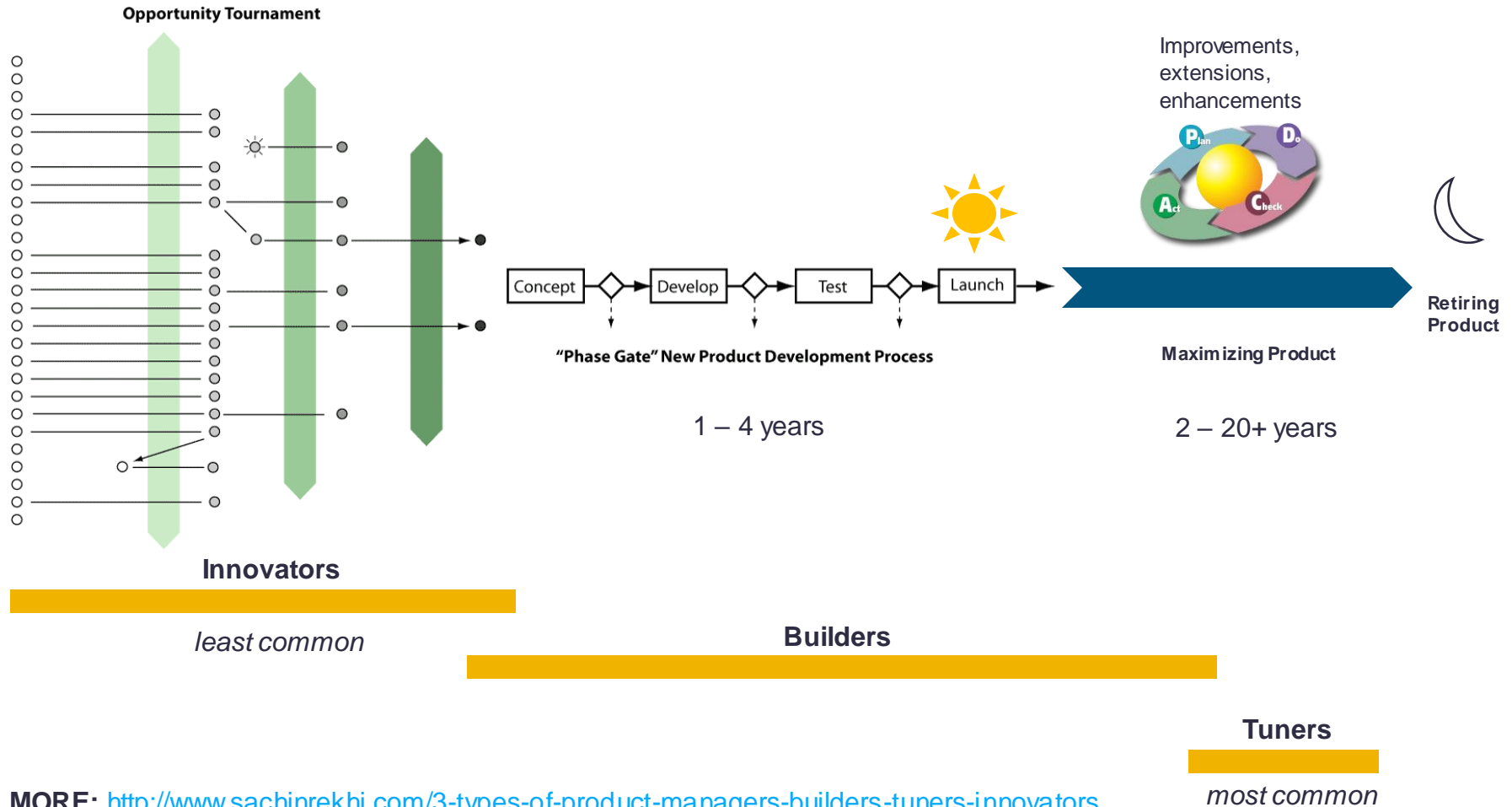


Eric S. Yuan, CEO of Zoom. Photo with credit to Zoom.

On March 22nd 2019, Zoom filed their S-1, the registration form in anticipation is the first time that the shares of a company are able to be traded on a public stock market. This allows companies to

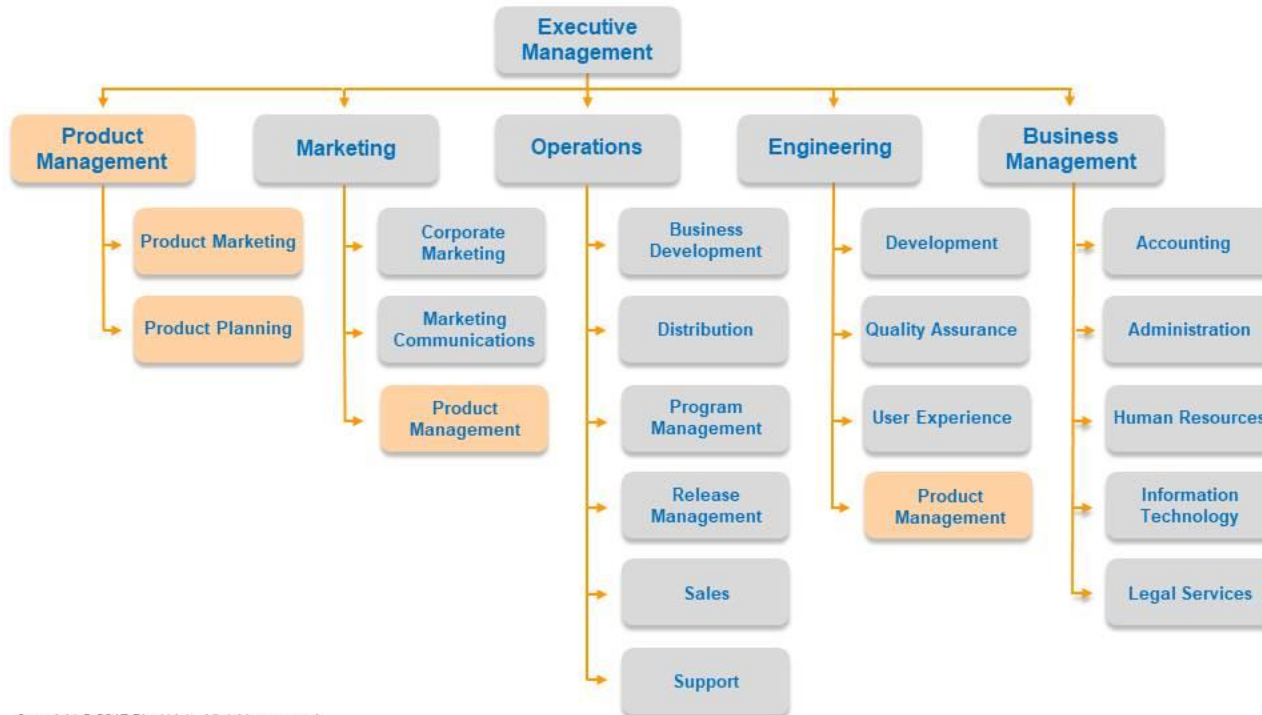
MORE: <http://theengineeringmanager.com/growth/zoom-an-ipo-done-right/>

Product Management Roles and the Product Lifecycle



MORE: <http://www.sachinrekhi.com/3-types-of-product-managers-builders-tuners-innovators>

PM Organizational Placement



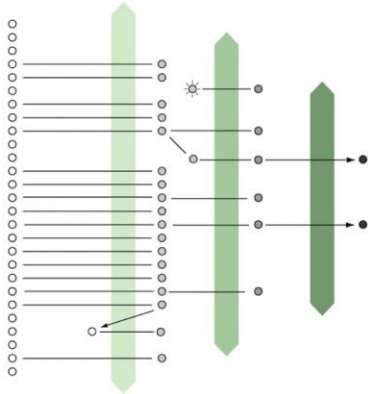
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SOURCE: <https://www.blackblot.com/>

Tools and Capabilities

Innovators

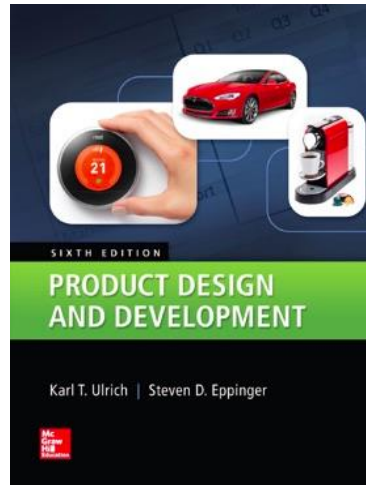
Innovation tournaments



Product vision statement

Agile development

415/515 toolkit (e.g., needs analysis)



Builders

Tuners

Customer feedback

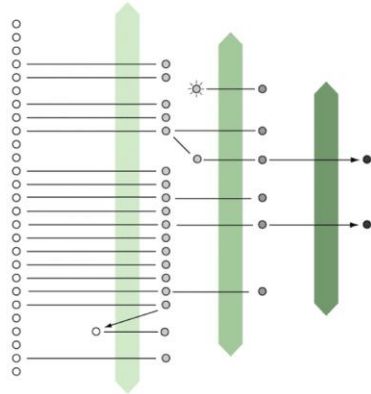
Customer analytics

KPIs / Dashboards

Tools and Capabilities

Innovators

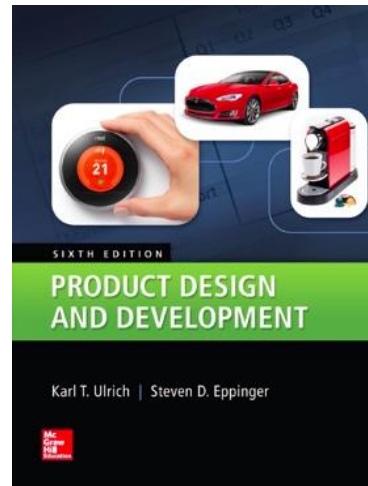
Innovation tournaments



★ Product vision statement

Builders

★ Agile development
415/515 toolkit (e.g., needs analysis)



Tuners

★ Customer feedback
Customer analytics
KPIs / Dashboards

Product Vision (aka “North Star”)

“Mad Libs” Form



Today, when

customer segment

want to

desirable activity/outcome

they have to

current solution(s)

This is unacceptable, because

shortcomings of current solutions

We envision a world where

shortcomings are resolved

We're bringing this world about through

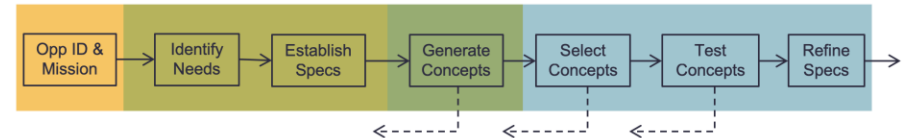
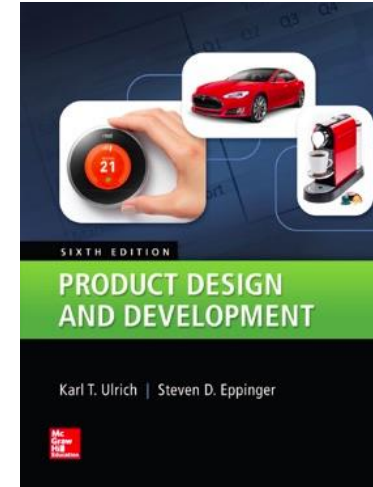
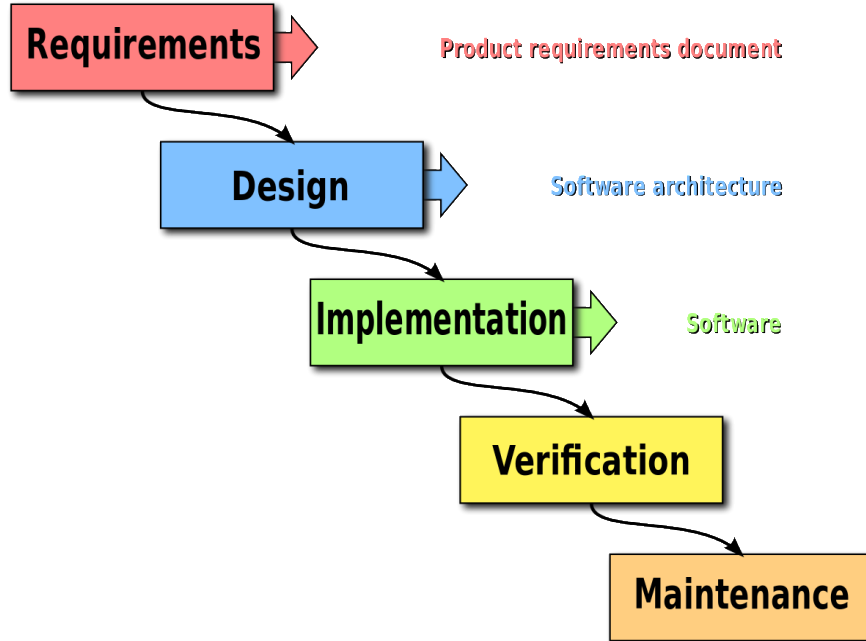
broad technology/approach

Today when [people who are interested in learning about wine (specifically those whose wine knowledge level is 2–6 on a scale of 1–10)], want to [try wines], they have to [pick wines based on attractive labels or try what's on sale]. This is unacceptable because [it's hard to learn about wine this way and leads to hits and misses (mostly misses)]. We envision a world where [buying wines is as simple as renting movies on Netflix]. We are bringing this world about through [our algorithm that gives you recommendations for wines you're likely to like, and our operational setup that quickly delivers wines from your queue to your table].

From Radhika Dutt (Radical Product) for her start-up Likeli

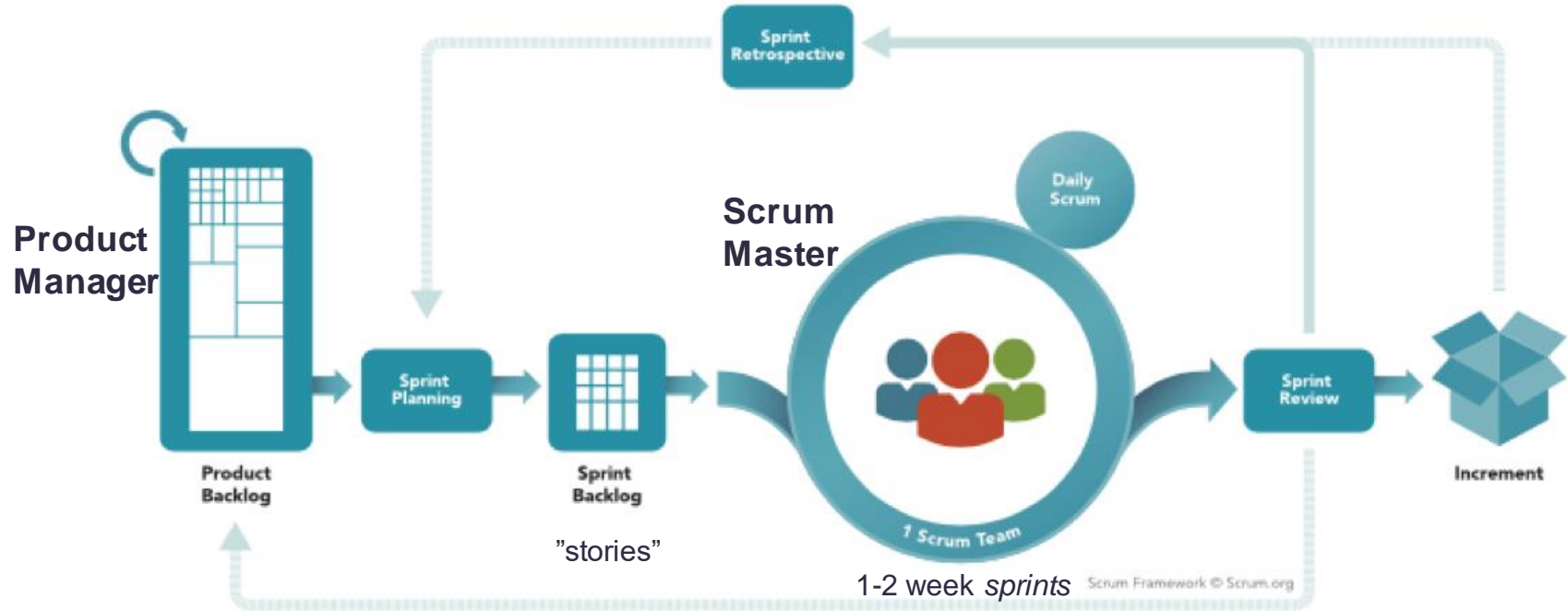
SOURCE: <https://www.radicalproduct.com/>

“Waterfall” Development Process



Agile Development (aka Scrum)

SCRUM FRAMEWORK



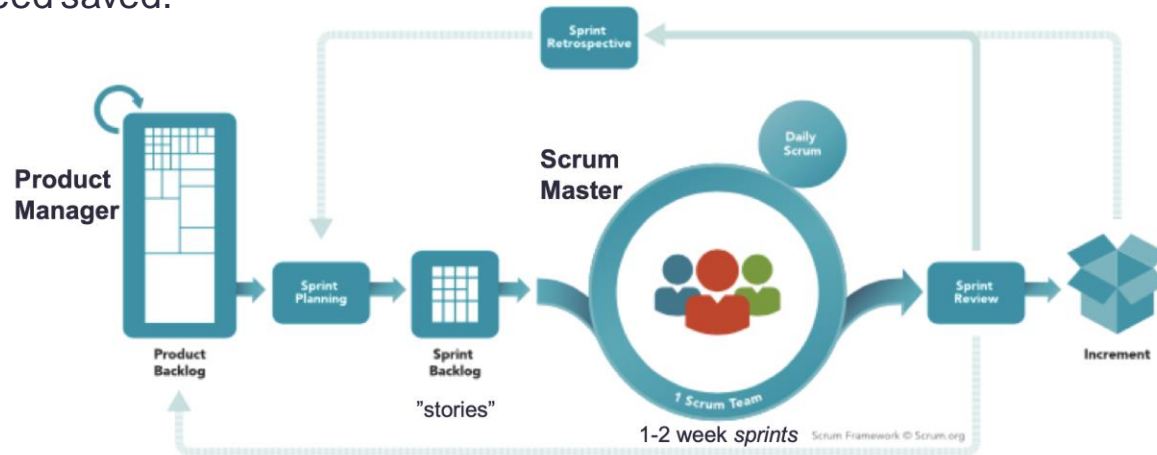
References https://en.wikipedia.org/wiki/Agile_software_development
<https://www.scrum.org/>

Agile – Scrum Stories

Describe functions, jobs, and user needs in terms of *stories* about the user.

Examples:

- As a user, I can backup my entire hard drive. [Broad stories are sometimes called *epics*.]
 - As a power user, I can specify files or folders to backup based on file size, date created and date modified.
 - As a user, I can indicate folders not to backup so that my backup drive isn't filled up with things I don't need saved.



MORE:

<https://www.mountaingoatsoftware.com/agile/user-stories>

Agile not always viable approach – Why not?



Modular vs. Integral Architectures



modular



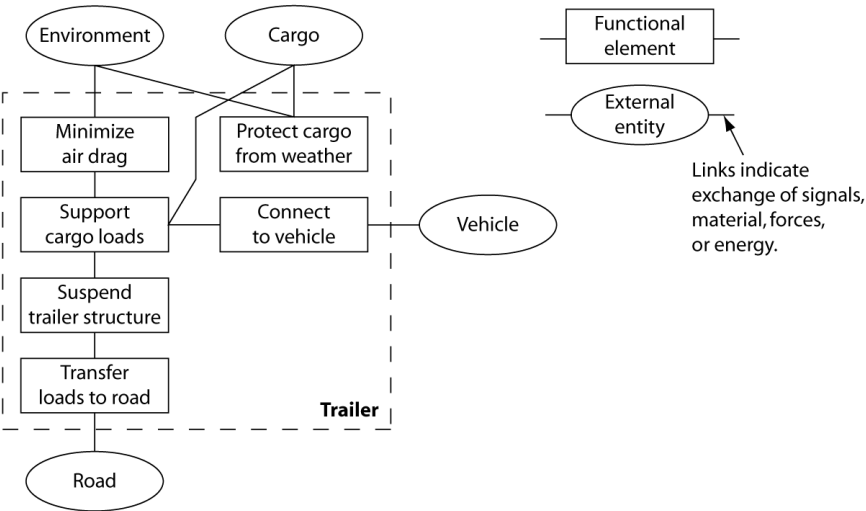
Shimano brake
and shift lever
system

integral

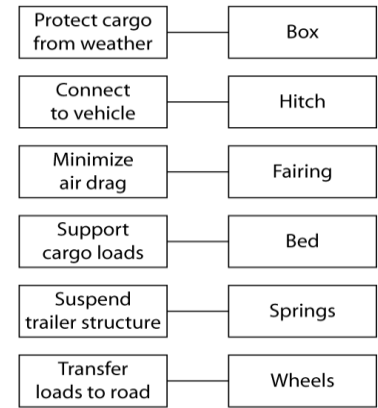
SOURCE:

Karl T. Ulrich, *Design: Creation of Artifacts in Society*. <http://ulrichbook.org/>

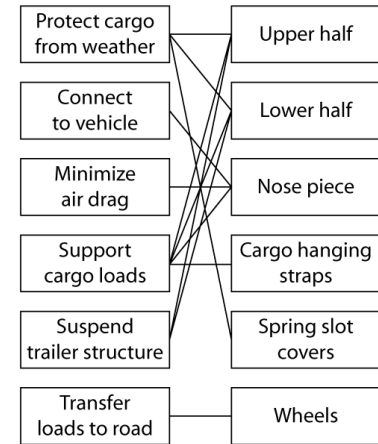
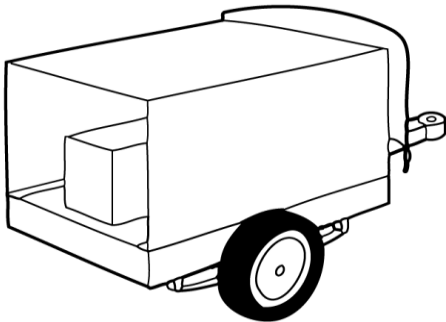
Modular vs. Integral Architectures



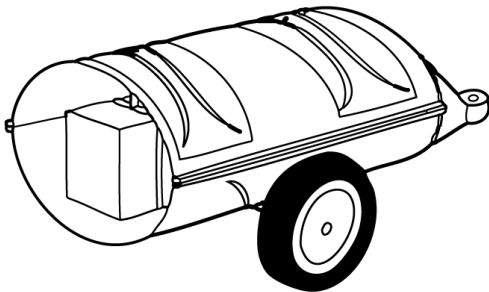
Function Diagram for a Trailer



Functional Elements Components

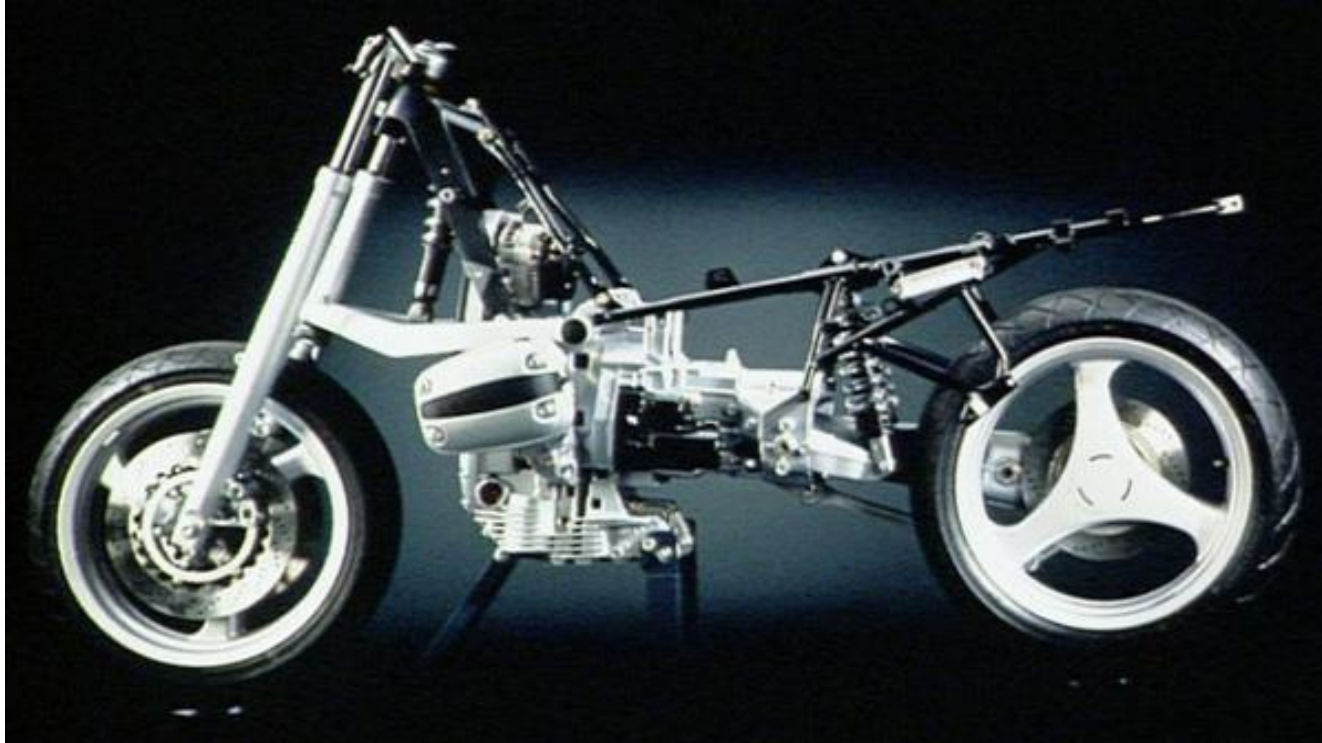


Functional Elements Components



SOURCE:
Karl T. Ulrich, *Design: Creation of Artifacts in Society*. <http://ulrichbook.org/>

Why Integral Architectures?



BMW RS1100 Engine/Transmission/Frame System

MORE:

Karl T. Ulrich, *Design: Creation of Artifacts in Society*. <http://ulrichbook.org/>

Customer Feedback and Product Improvement

One week in April with American Airlines



Home > American customer service

American customer service

How can we help?

Reservations and tickets

[Reservations and ticket changes »](#)

[AAdvantage® customer service »](#)

[Cars, hotels and activities »](#)

[Vacations »](#)

[Receipts and refunds »](#)

AAdvantage® program

[AAdvantage® account service »](#)

[Request miles »](#)

[Request missing partner miles »](#)

[Reactivate miles »](#)

- Separate refund process for ticket and seat upgrade.
- Paper vouchers for credits.
- Reposting FF miles for cancelled tickets.
- Bag left on plane, wrong instructions.
- Three wifi systems, one incompatible with monthly plan.
- Apparently....no product manager.

Frequently asked questions

Where can I get a receipt?

[Receipts and refunds »](#)

Product Improvement

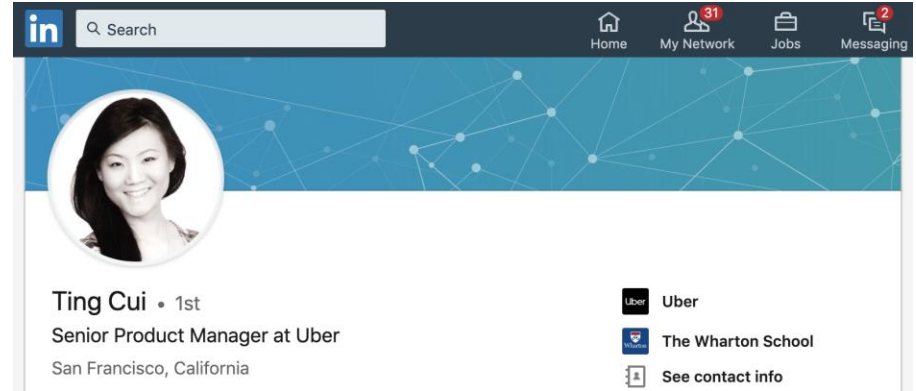
- End-to-end customer experience.
- Direct exposure to customers.
- Observational methods.
- Integrated feedback mechanisms.
- Feature prioritization and road map.



https://www.youtube.com/watch?v=weI0s_OA7Vs
<https://www.youtube.com/watch?v=5YGc4zOqozo>

Professional Capabilities Required for Product Managers

- Care about product.
- Focused on customers.
- Comfortable with ambiguity and lack of structure.
- Ability to influence without authority.
 - Use of data, analysis.
 - Technical knowledge and credibility.
 - Strong interpersonal skills.





Ben Filson • 2nd
Product Manager - Safety
San Francisco Bay Area

Experience



Nest

8 yrs 7 mos

- **Product Manager**

Nov 2017 – Present · 1 yr 6 mos

Palo Alto

- **Product Design Manager**

Dec 2013 – Present · 5 yrs 5 mos

Palo Alto, CA

Nest reinvents unloved but important home products, like the thermostat and smoke alarm. The company focuses on delighting customers with simple, beautiful and thoughtful hardware, software and services. The Nest Learning Thermostat™ and Nest Energy Services offerings address home energy consumption, and Nest Protect: Smoke + Carbon Monoxide... [See more](#)

- **Director of Product Design**

Mar 2013 – Dec 2013 · 10 mos

Palo Alto, CA

- **Lead Product Designer**

Oct 2010 – Mar 2013 · 2 yrs 6 mos

Palo Alto, CA

Pathways to a Product Management Role

1

Engineering degree – work in technical role, move into product management role in same company or industry.

2

Wharton or Engineering UG – recruit directly for PM roles (e.g., Amazon, Microsoft).

3

Work doing almost anything, then do MBA with internship or side projects related to product management – then recruit for PM (e.g., Amazon).

Note: A few companies (e.g., Google) typically only hire PMs with engineering UG and tech work experience.

4

Or...start a business – founders are typically the company's initial product managers.

Learning More

Sachin Rekhi (W05 ENG05) blog – <http://sachinrekhi.com/>

Product Management Insider (Medium) - <https://medium.com/pminsider>

(Radical) Product Vision Toolkit - <https://www.radicalproduct.com/>