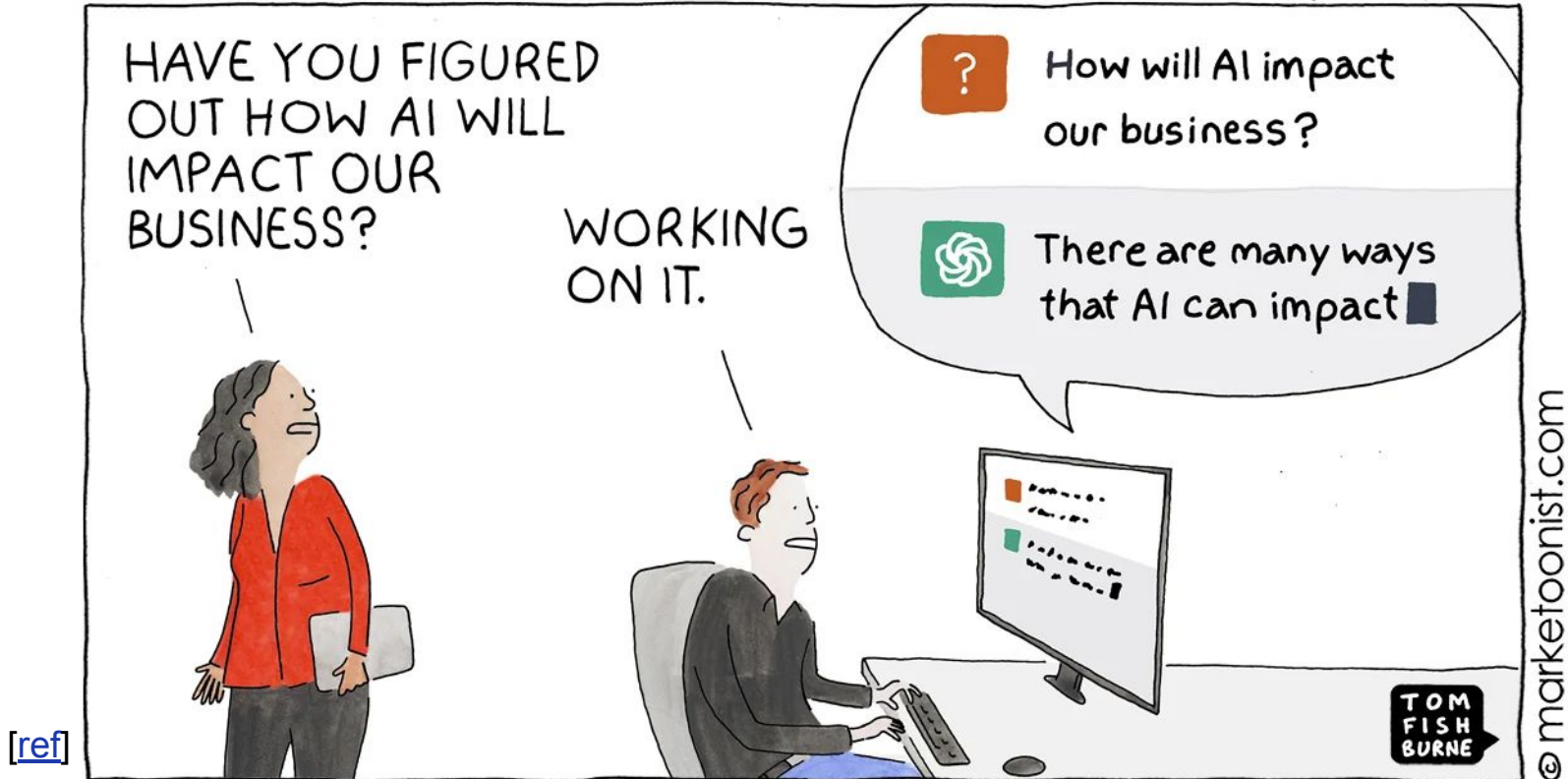


Building and Scaling with AI



SLAUSON&CO.

Summer School: Building and Scaling with AI 101

Dr. Irina Kukuyeva

July 15, 2025

Ultimate Goal: PMF + Return Fund

PMF = (1) business metric levels off above 0, and
(2) profit exponentially increases





Hiten Shah ✓

@hnshah



Startups don't die because of one big failure. They die because no one noticed the right thing soon enough. The user friction. The team friction. The answer was always there. They just didn't have the feedback loops to catch it in time.

10:58 AM · Jun 25, 2025 · **8,978** Views

[\[ref\]](#)

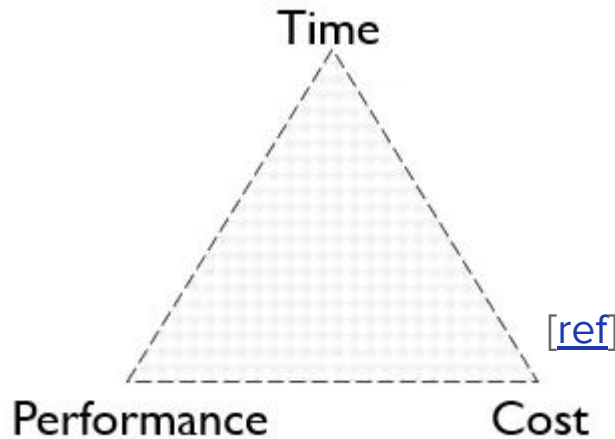
< HW: Ask co-founder(s) top 3 priorities >

Agenda

- Align
- Build (AI)
 - Move needle on business
- Scale
 - Build vs buy

→ Frameworks to Build + Scale 101

- Align
- Build (AI)
 - Move needle on business
- Scale:
 - Build vs buy



→ Frameworks to Build + Scale 101

- Align
- Build (AI)
 - Move needle of business
- Scale:
 - Build vs buy

Adapt as needed

AI Diligence | Mentor 100+ Start-ups/year



Led Global Teams | Invented, Implemented, Scaled AI



Ph.D. in Statistics



Jet Propulsion Laboratory
California Institute of Technology



FashionTech
eCommerce
Hospitality
FinTech
SaaS
IoT





If this is not true:

- Founder with Lived Customer Experience
- Start-up:
 - SaaS Platform – or has Software Component(s)
 - MVP (+ beyond)
 - Growth milestones in mind

4 Ways to Move Needle on Business

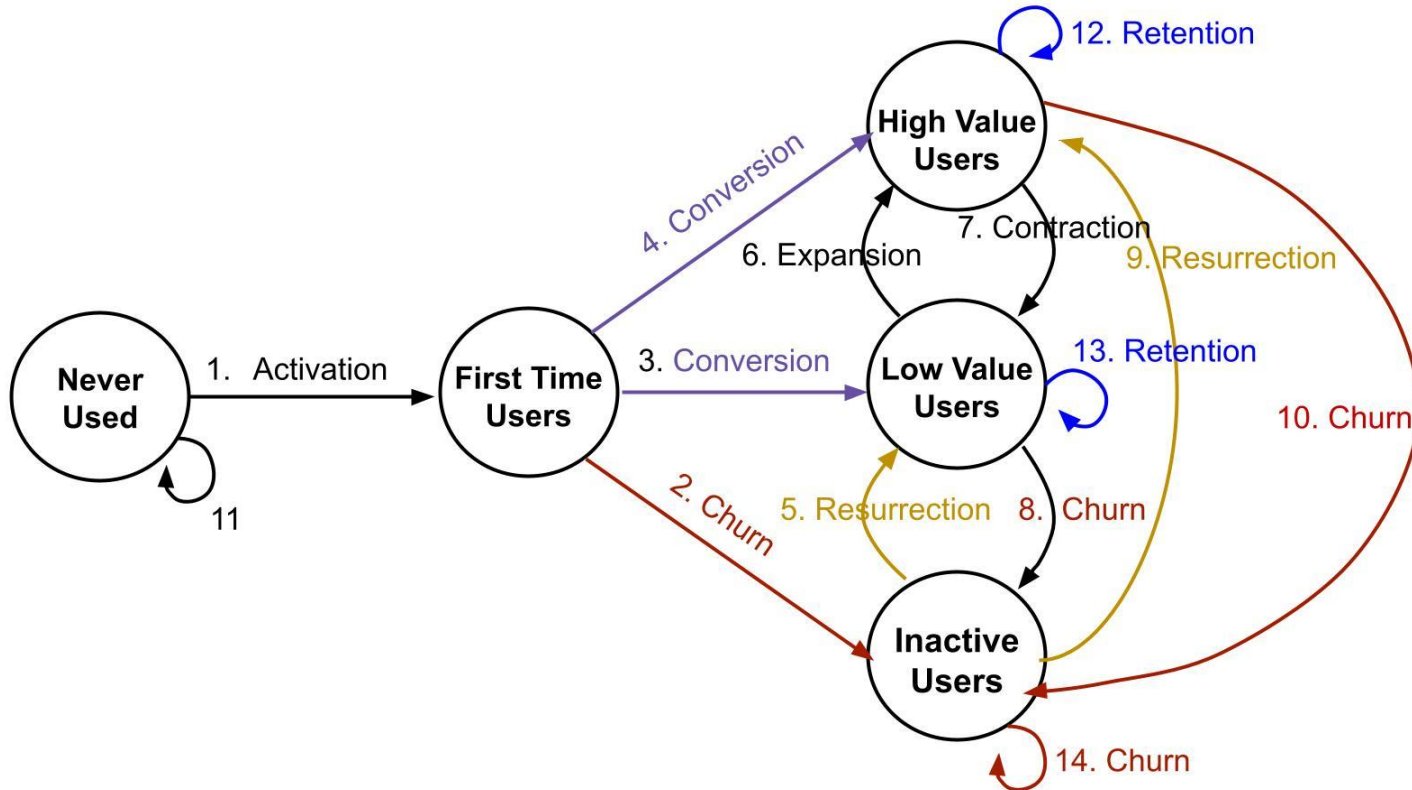
- Increase revenue
- Increase efficiency
- Reduce risk
- Improve quality

Scaling: Business 101

- Increase revenue
- Increase efficiency
- Reduce risk
- Improve quality

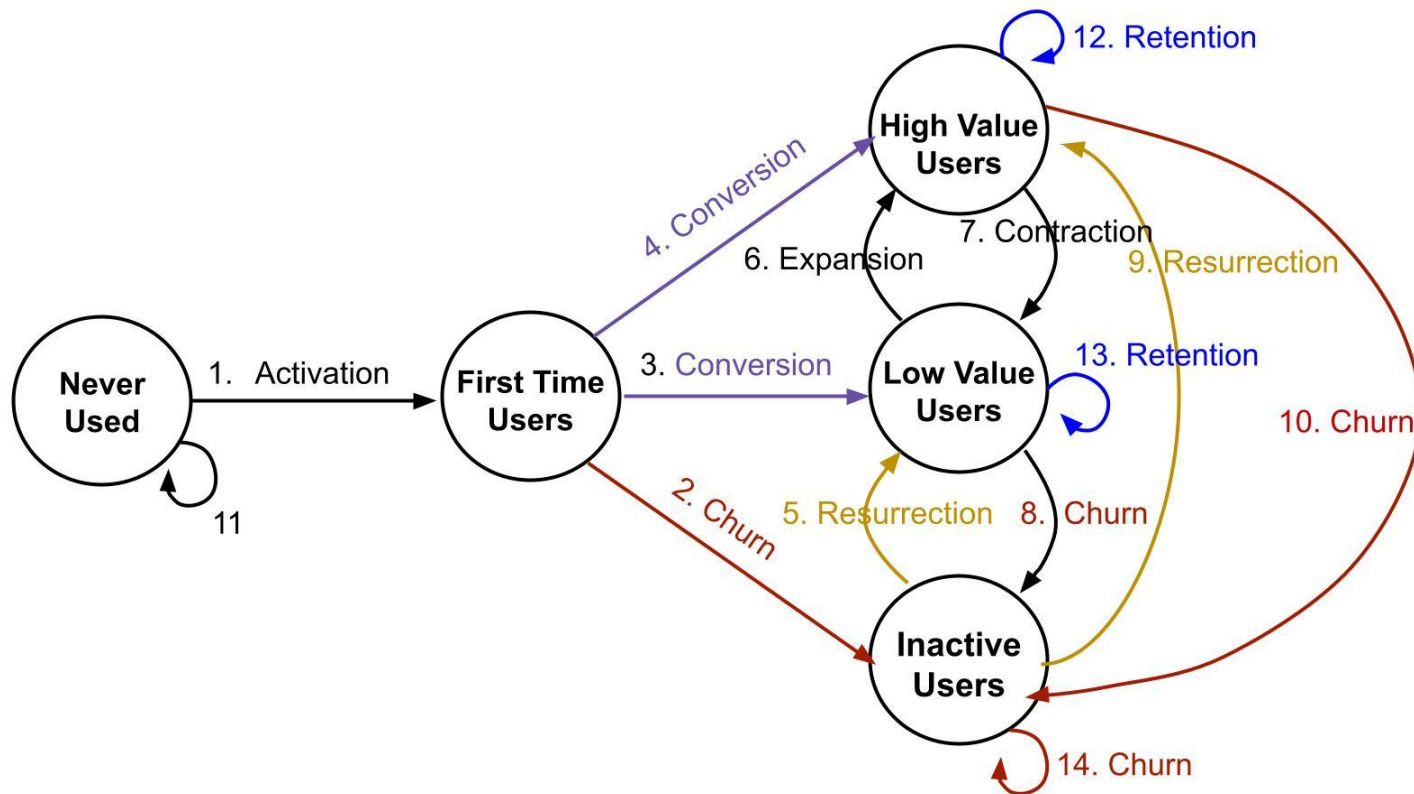
1 Goal: Identify + reduce points of friction

PLG: Identify + Reduce Points of Friction



PLG: Identify + Reduce Points of Friction

supply
demand
hardgoods
[Framework]



PLG: Identify + Reduce Points of Friction

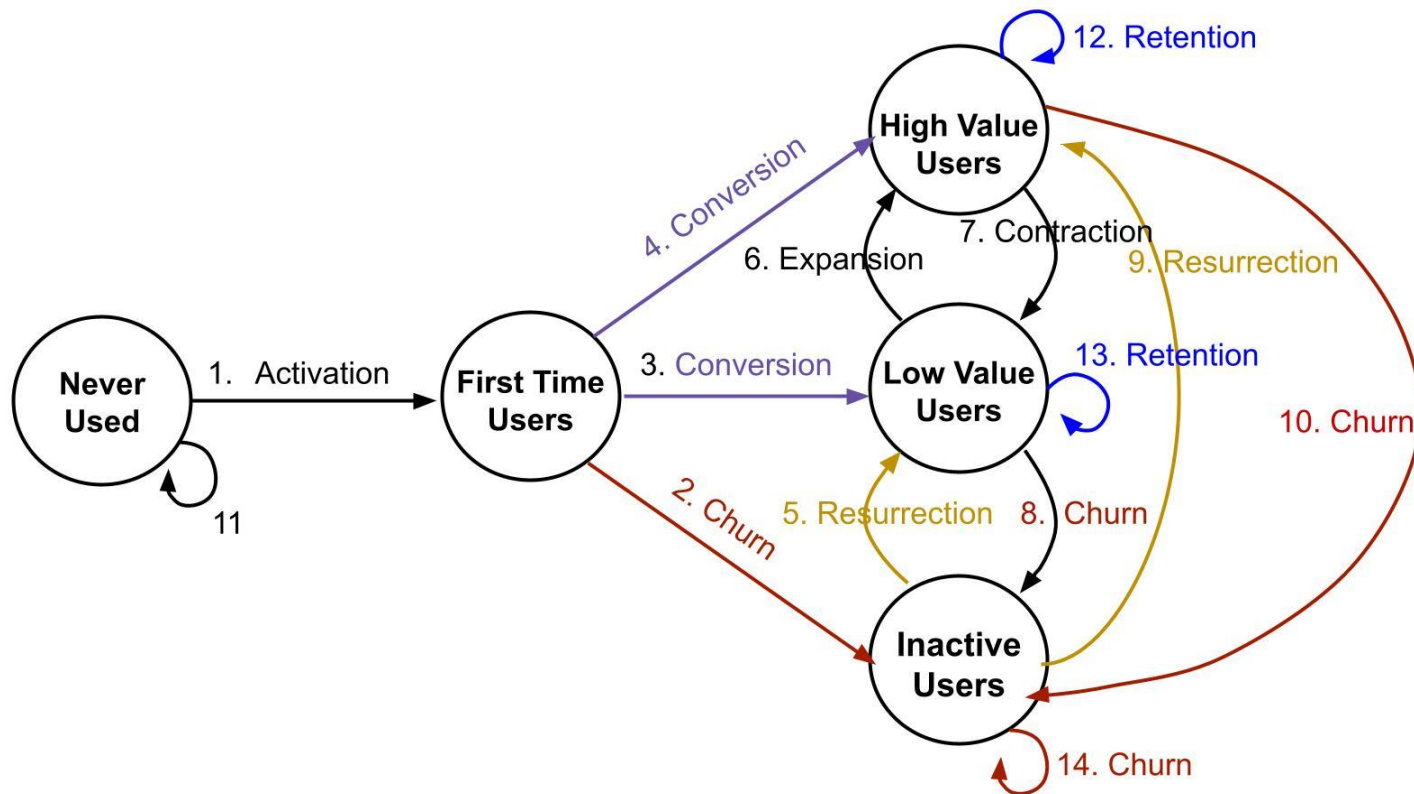
\$\$\$

Time to

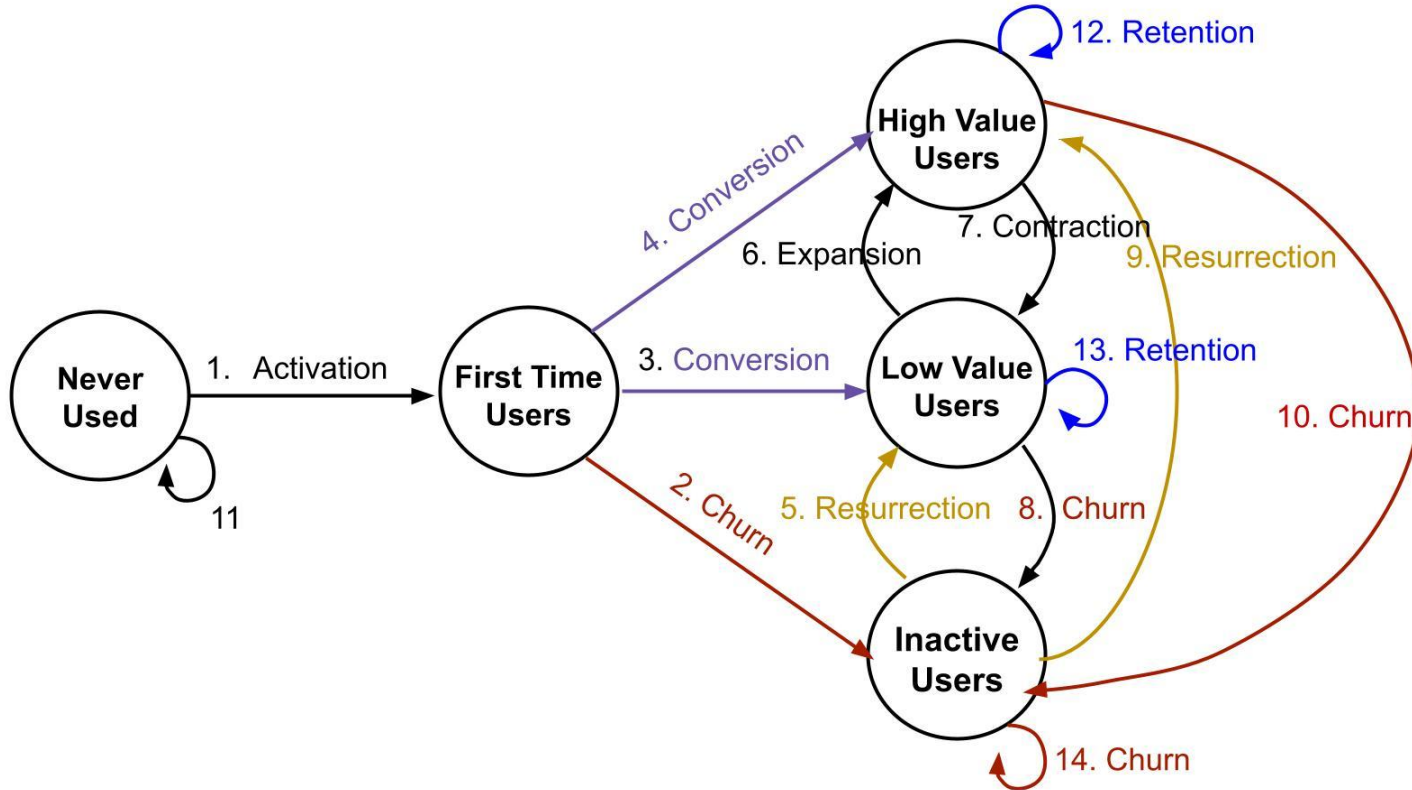
%

#

[Framework]



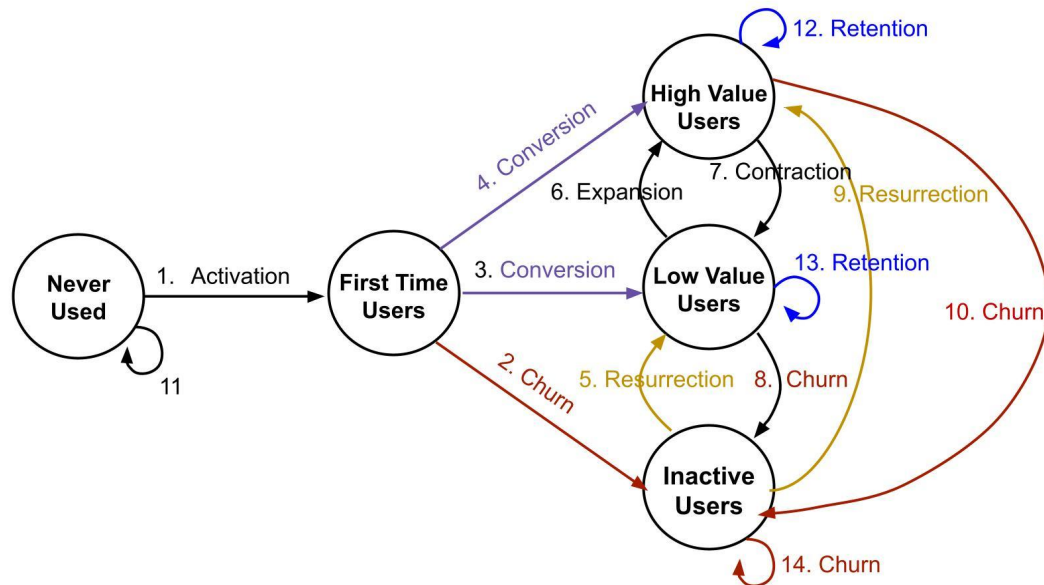
Most important line?



Scaling: Business 101

4 Focus areas:

- Get customers
- Convert [into paid]
- Retain
- Expansion/upsell



Get customers
Convert [into paid]
Retain
Expansion/upsell

< Cloud SaaS Startup EX>

Get customers
Convert [into paid]
Retain
Expansion/upsell

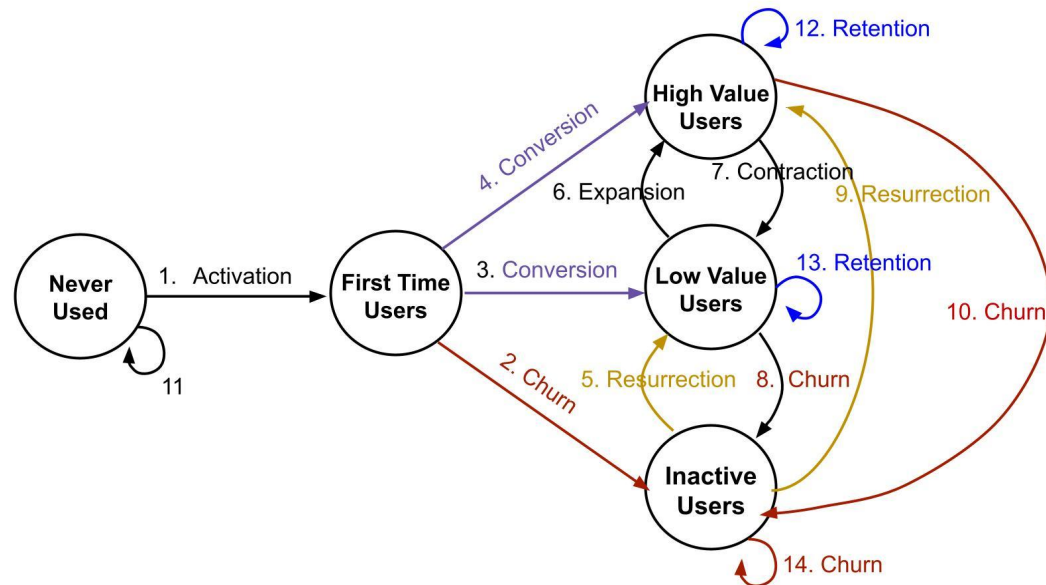
< Cloud SaaS Startup EX>

Bonus: *Prioritization + Alignment*

Scaling: Business – AI Strategy 101

4 Focus areas:

- Get customers
- Convert [into paid]
- Retain
- Expansion/upsell



1 Goal: Pattern to flag next time

Scaling: Business – AI Strategy 101

4 Focus areas:

- Get customers
- Convert [into paid]
- Retain
- Expansion/upsell

Lean Process

No/low-tech

1 Goal: Pattern to flag next time → Look-alike Model (LAM)

Scaling: Business – AI Strategy 101: LAM

- 1 of 4 focus areas on roadmap [[slide](#)]

Get customers

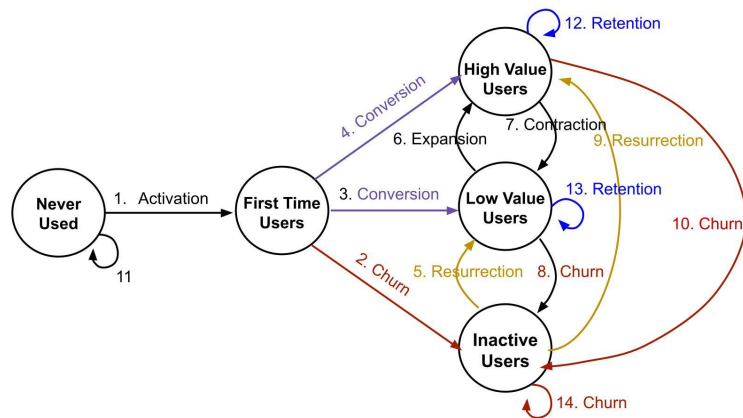
Convert [into paid]

Retain

Expansion/upsell

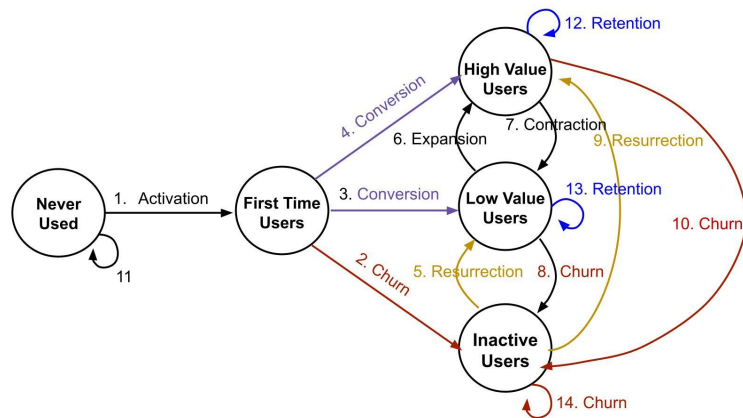
Scaling: Business – AI Strategy 101: LAM

- 1 of 4 focus areas on roadmap [\[slide\]](#)
- 1+ of 14 lines optimizing [\[slide\]](#)



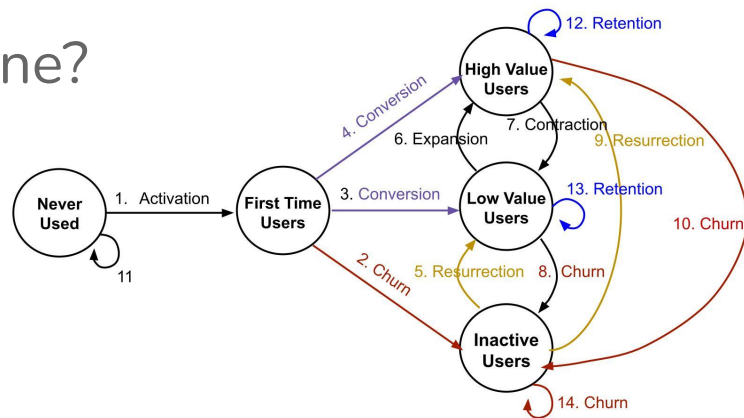
Scaling: Business – AI Strategy 101: LAM

- 1 of 4 focus areas on roadmap [slide]
- 1+ of 14 lines optimizing [slide]
- **All** touchpoints in last 30 days*



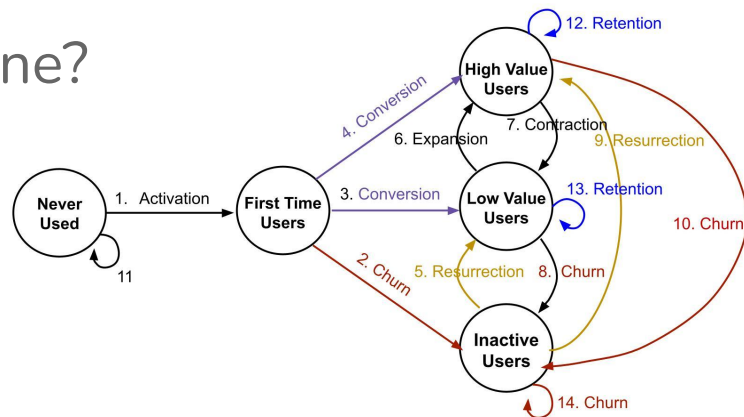
Scaling: Business – AI Strategy 101: LAM

- 1 of 4 focus areas on roadmap [slide]
- 1+ of 14 lines optimizing [slide]
- *All* touchpoints in last 30 days*
- Who are customers at both ends of line?



Scaling: Business – AI Strategy 101: LAM

- 1 of 4 focus areas on roadmap [slide]
- 1+ of 14 lines optimizing [slide]
- *All* touchpoints in last 30 days*
- Who are customers at both ends of line?
- 1 thing are/not doing differently?



Scaling: Business – AI Strategy 101: LAM

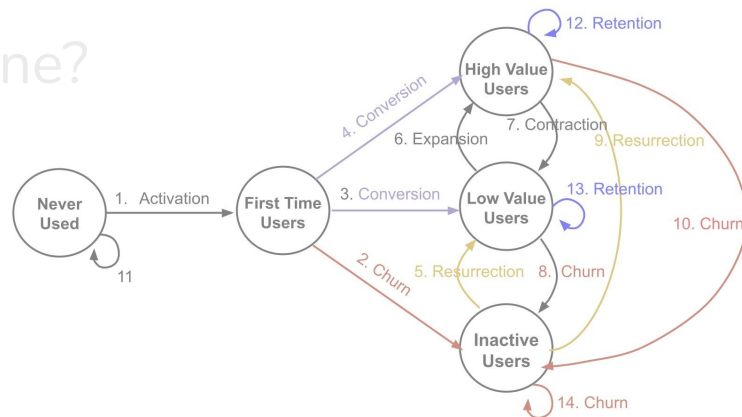
- 1 of 4 focus areas on roadmap [slide]

- 1+ of 14 lines optimizing [slide]

- *All* touchpoints in last 30 days*
Harder than it looks!

- Who are customers at both ends of line?

- 1 thing are/not doing differently?



Harder Than It Looks!

- No/little data!
- Can't tell who's who!
- No difference!
 - No guarantees! → Here's why + Time-box
- Can't merge!
 - Clean data doesn't exist! → Here's why
- <many other reasons>

Helps evaluate gaps!

Harder Than It Looks!

- No/little data!
- Can't tell who's who!
- No difference!
 - No guarantees! → Here's why + Time-box
- Can't merge!
 - Clean data doesn't exist! → Here's why
- <many other reasons>

Helps find network effects!

Harder Than It Looks!

- No/little data!
- Can't tell who's who!
- No difference!
 - No guarantees! → Here's why + Time-box
- Can't merge!
 - Clean data doesn't exist! → Here's why
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Harder Than It Looks!

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 - Clean data doesn't exist! → Here's why
- <many other reasons>

Scaling: Software



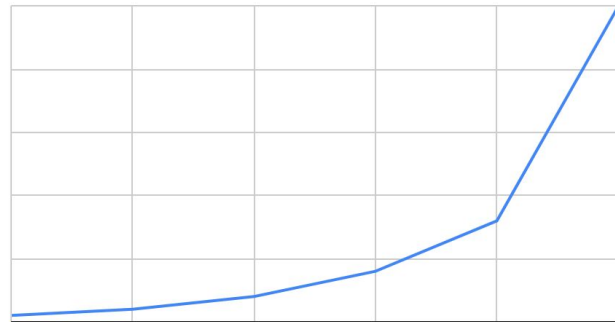
< FashionTech SaaS Startup EX>

< FashionTech SaaS Startup EX>

Tip: Diagram

Scaling: Software – Strategy 101

- End goal: (Pre)Seed: 6 months from now (101 vs 401)



Scaling: Software – Strategy 101

- End goal: (Pre)Seed: 6 months from now (101 vs [401](#))
 - 1 of 4 **outcomes** at % or # [[slide](#)]:

Increase revenue

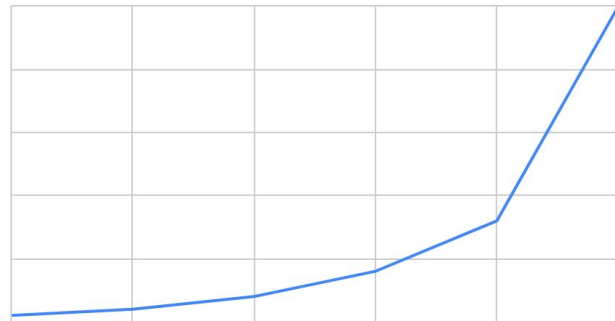
Increase efficiency

Reduce risk

Improve quality



< EX >



Scaling: Software – Strategy 101

- End goal: (Pre)Seed: 6 months from now (101 vs [401](#))
 - 1+ of 4 **focus areas** as \$, time, % and/or # [[slide](#)]:

Get customers

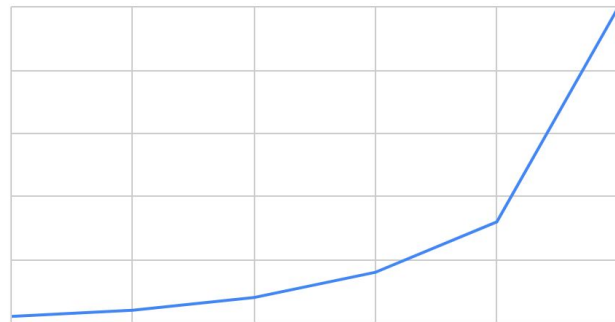
Convert [into paid]

Retain

Expansion/upsell



< EX >

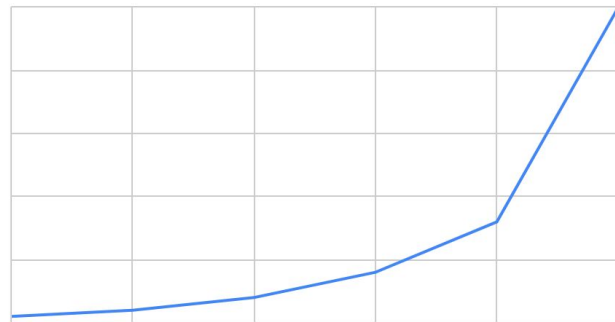


Scaling: Software – Strategy 101

- End goal: (Pre)Seed: 6 months from now (101 vs [401](#))
 - Other requirements: customer, business, software, etc.



< EX >

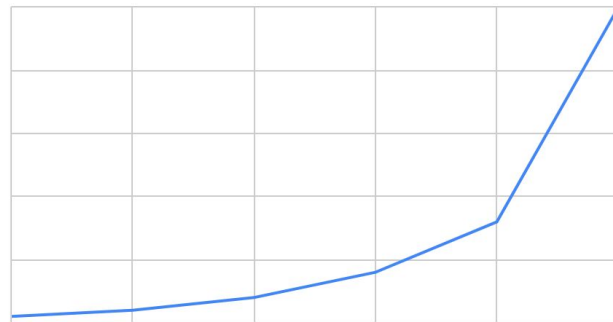


Scaling: Software – Strategy 101

- End goal: (Pre)Seed: 6 months from now (101 vs 401)
 - Other requirements: customer, business, software
 - Other support: people, infrastructure, tech, etc.

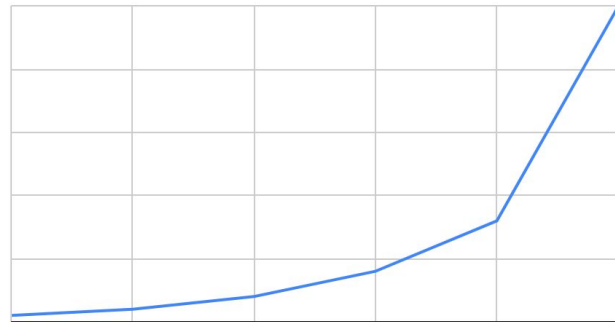


< EX >



Scaling: Software – Strategy 101

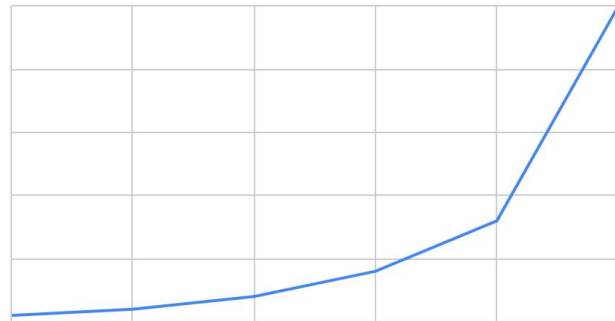
- End goal: (Pre)Seed: 6 months from now (101 vs 401)
 - Other requirements: customer, business, software, etc.
 - Other support: people, infrastructure, tech, etc.
- **Identify Gap:** what's working + not



Scaling: Software – Strategy 101

- End goal: (Pre)Seed: 6 months from now (101 vs 401)
 - Other requirements: customer, business, software
 - Other support: people, infrastructure, tech

→ **Identify Gap = 6 month roadmap**

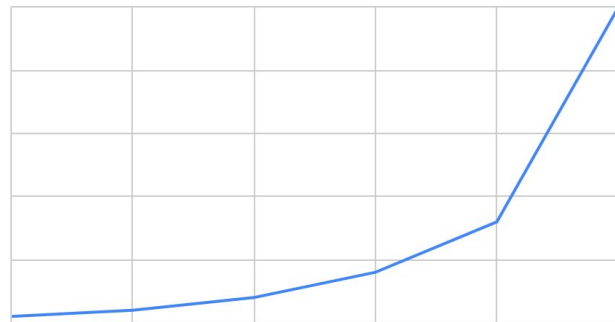


Scaling: Software + People – Strategy 101

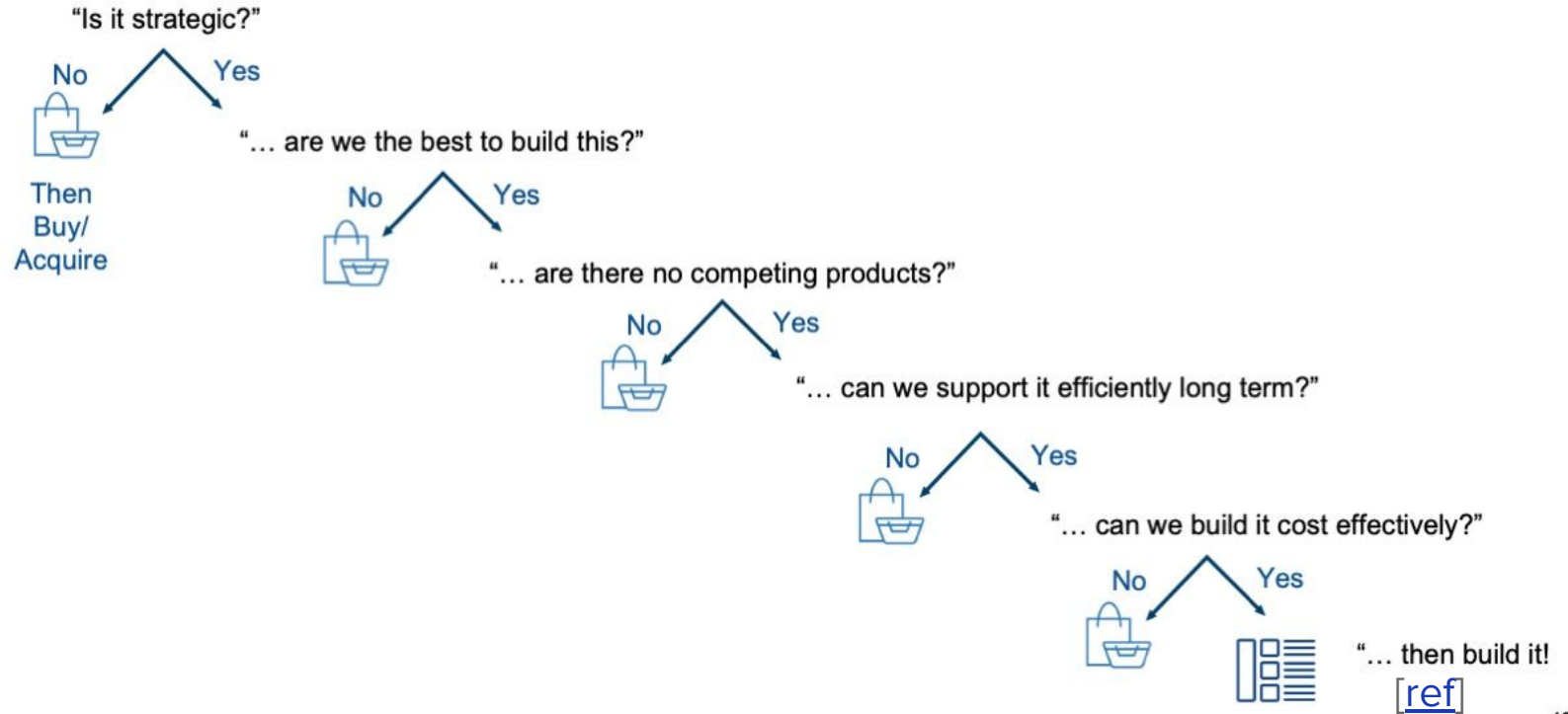
- End goal: (Pre)Seed: 6 months from now (101 vs 401)
 - Other requirements: customer, business, software
 - Other support: people, infrastructure, tech

→ Identify Gap = 6 month roadmap to get there

- Build vs Buy (next section)
 - If build → hire for milestones

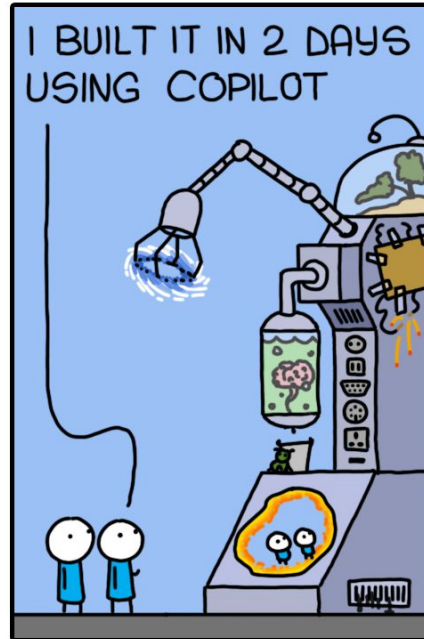


Build vs Buy (post-MVP)

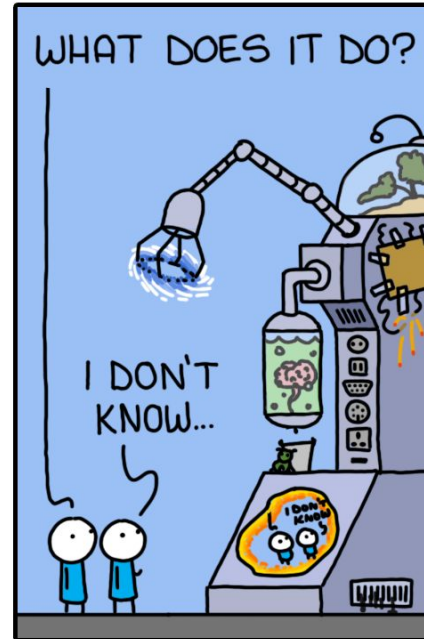


~~Cursor/Similar Build for You~~

AI ASSISTANT



MONKEYUSER.COM

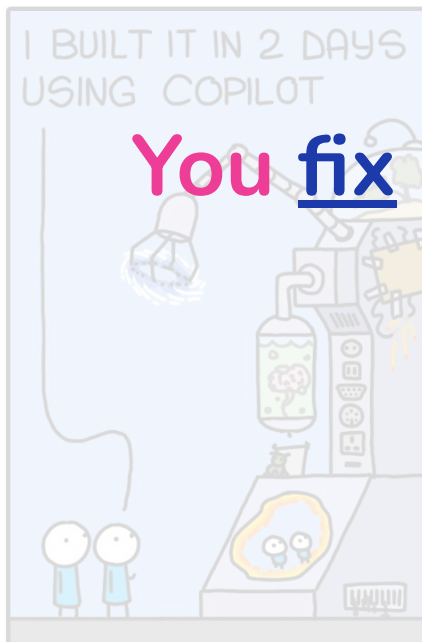


[ref]

~~Cursor/Similar Build for You~~

AI ASSISTANT

MONKEYUSER.COM



You fix at 3 AM!

[ref]

~~Cursor/Similar Build for You~~

- Build or (co)build via Cursor/similar?
 - Maintain + support? [[slide](#)]



~~Cursor/Similar Build for You~~

- Build or (co)build via Cursor/similar?
 - Maintain + support?
 - Complexity vs cost of wrong answer



Build vs Buy (post-MVP): DOs and DON'Ts

- Buy?

- Don't buy after demo!

<EX: HealthTech SaaS Startup: buy after demo>

Build vs Buy (post-MVP): DOs and DON'Ts

- Buy?

- Don't buy after demo!

<EX: HealthTech SaaS Startup: buy after demo>

<EX: LS SaaS Startup DD>

Build vs Buy (post-MVP): DOs and DON'Ts

- Buy?

- Don't buy after demo!

<EX: HealthTech SaaS Startup: buy after demo>

- Pilot tied to **milestone(s) + gap(s)**

- <EX FashionTech SaaS Startup: not buy>

Build vs Buy (post-MVP): DOs and DON'Ts

- Buy?
 - Require Service Level Agreement (SLA)
 - On-call support at 3 AM
 - Response time

Build vs Buy (post-MVP): DOs and DON'Ts

- Buy?
 - Require Service Level Agreement (SLA)
 - On-call support at 3 AM
 - Response time
 - Tied to 1 of 4 **outcomes** [[slide](#)]
 - Reason for buying services!

Build vs Buy (post-MVP): DOs and DON'Ts

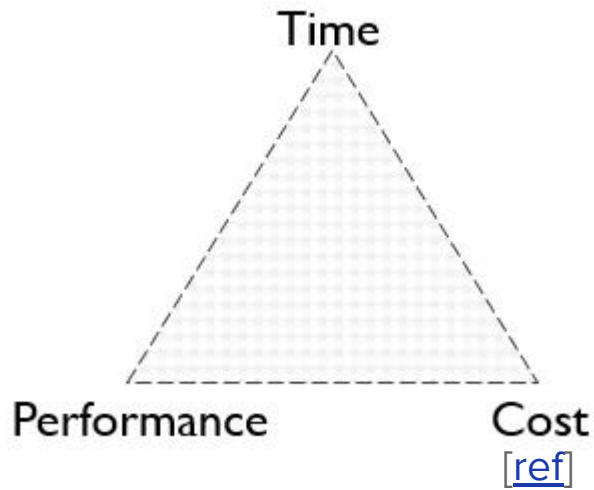
- Buy?
 - Require Service Level Agreement (SLA)
 - On-call support at 3 AM
 - Response time
 - Tied to 1 of 4 **outcomes** [slide]
 - Reason for buying services!
 - <EX Cyber SaaS Startup DD>

Build vs Buy (post-MVP): DOs and DON'Ts

- Build?
- Buy?
- Bridge?
 - **Buy** → gaps → **build** (to fill gaps) → maintain

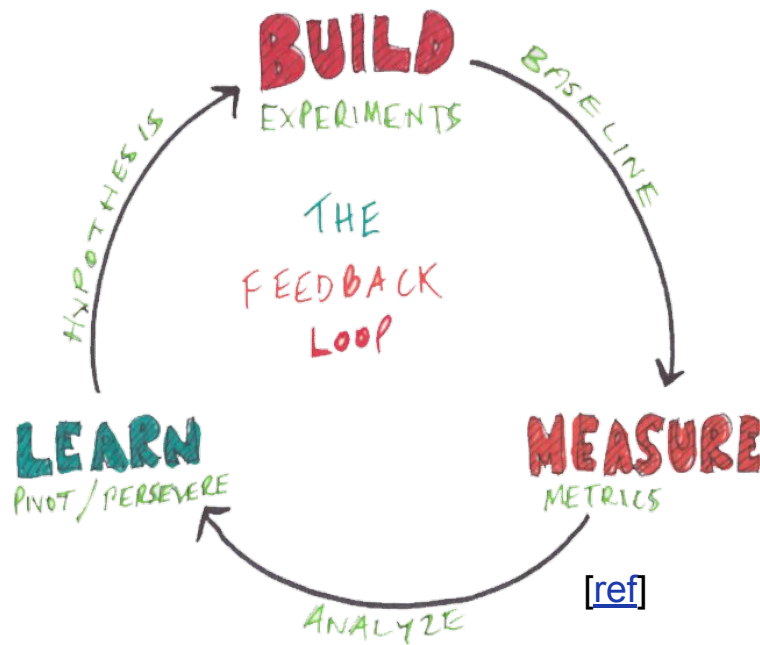
Summary: Build and Scale with AI 101

- Align
- Build (AI) for business outcomes
- Scale:
 - End Goals
 - LAM
 - Gaps
 - Build/buy/bridge
 - Repeat



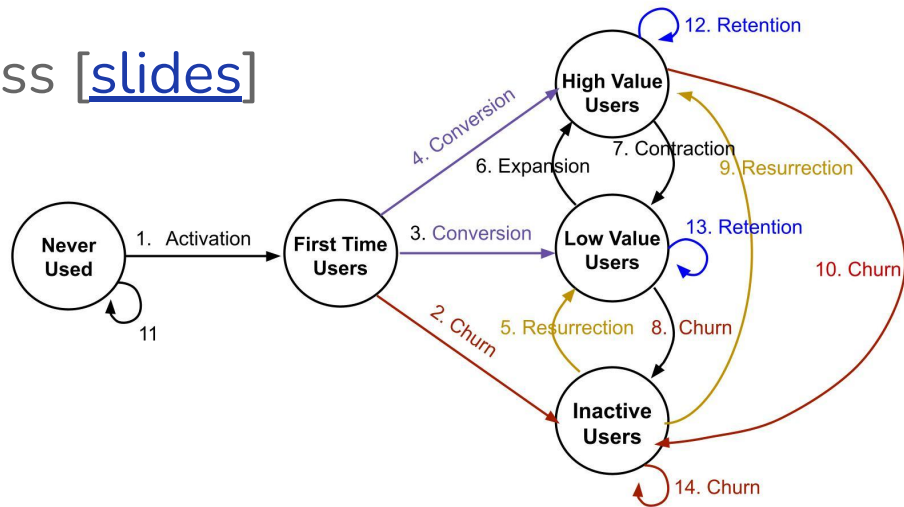
Summary: Build and Scale with AI 101

- Scale:
 - End Goals
 - Measure
 - Learn
 - Build/buy/bridge
 - Repeat



Homework 🤪

- Top 3 priorities w/ co-founder(s) [[slide](#)]
- State of business now [[slides](#)]
- Goal in 6 months [[slides](#)]
- LAM to move needle on business [[slides](#)]
- Gaps
- Decide to build/buy/bridge



Office Hours

- Slauson&Co Operator Network (S-CON)
 - S-CON Newsletter
- Accelerator [mentor](#) + FAQs on [blog](#)
- AMAs: announce on [LinkedIn](#) + [website](#)
 - July 22nd: [805 Startups](#)
- “Pick my brain” (\$\$): [Calendly](#)

Good luck! Questions?

ikukuyeva.com/community/presentations/building-and-scaling-with-ai-talk

Appendix

Scaling: AI Software – Strategy 201

What's your ML test score? A rubric for ML production systems

[Eric Breck](#) · [Shanqing Cai](#) · Eric Nielsen · Michael Salib · [D. Sculley](#) · Reliable Machine Learning in the Wild - NIPS 2016 Workshop(2016)

([ML Test](#), 2016*)

Talk: [Cutting Through the AI Hype: Tips to Prepare for AI Due Diligence](#) +

Talk: [AI Product Integration: The Good, The Bad, The Ugly + How to Navigate It](#)

Scaling: Business 201 – Feedback + New Product Ideas

EX: Amazon return

Why are you returning this?

Too small/short

Too large/long

Poor Condition/Presentation

Style not as expected

Fabric/material not as expected

Color/Pattern not as expected

Wrong item was sent

Item arrived too late

Inaccurate website description

No longer needed

Defective item

Product and shipping box both damaged

Better price available

Why are you returning this?

Style not as expected

Comments (optional):

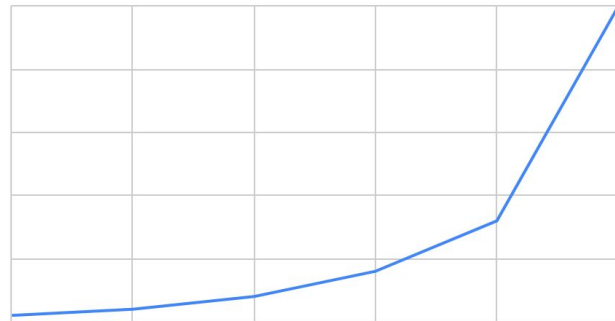
200 characters remaining.

NOTE: We aren't able to offer policy exceptions in response to comments. Do not include personal information as these comments may be shared with external service providers to identify product defects.

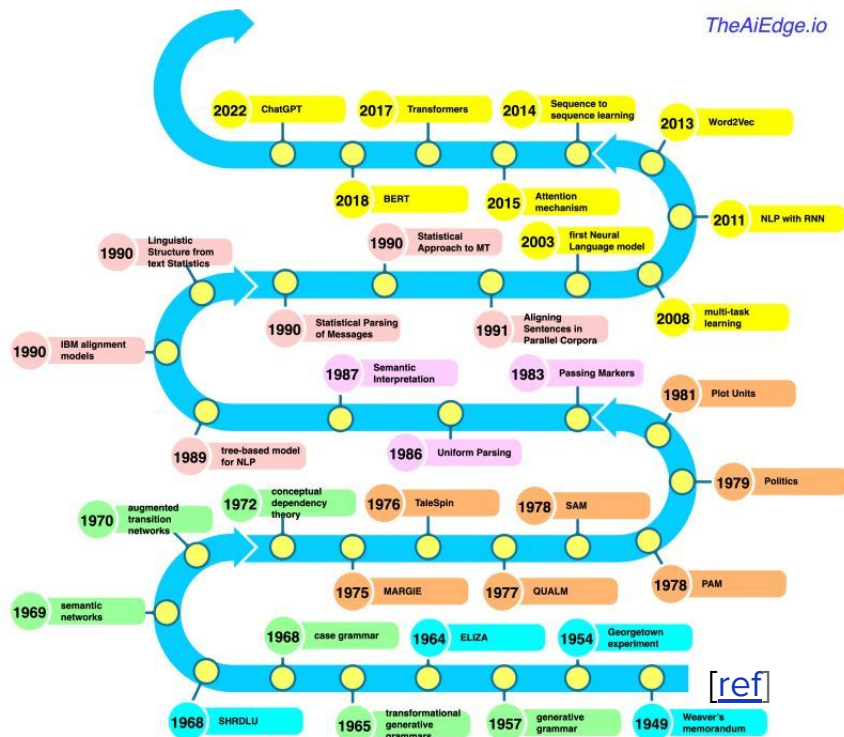
[Framework for data strategy for product-market fit](#)

Scaling: Software and People – Strategy 201

- At later stages, end goal = exit to return fund
 - Intermediate goals: growth milestones to exit
- Similar exercise [slides]



Building and Scaling GenAI



~~Building and Scaling GenAI~~

Ready for costs ???

OpenAI 2024 (est): **\$7B** [[DCD](#)]

~~Building and Scaling GenAI~~

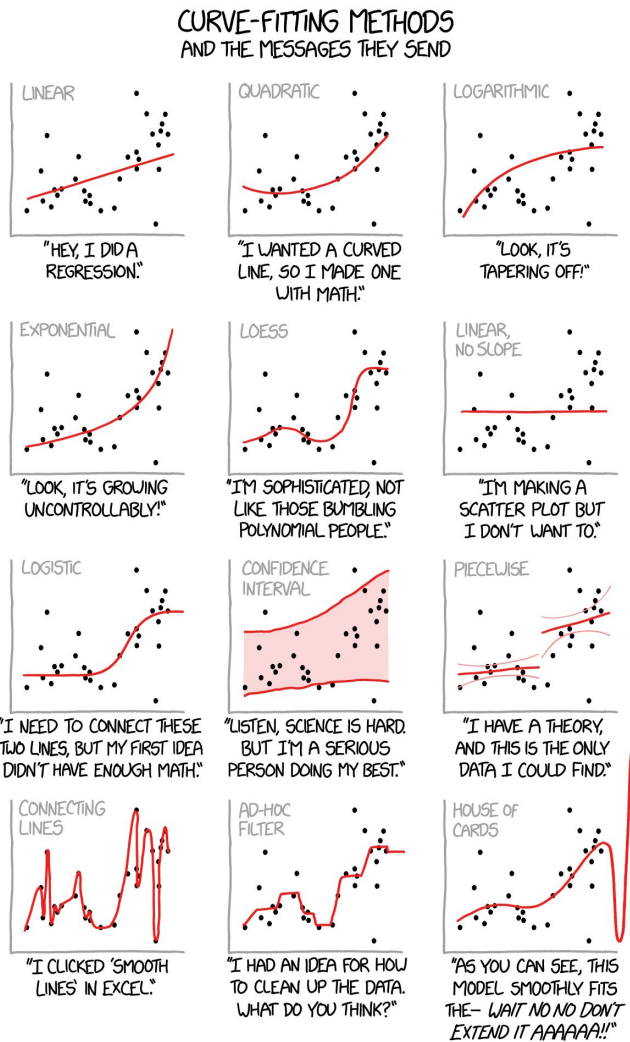
Hiring: AI Engineer

→ Tune 1B+ parameters

→ MS-level thesis*

*No guarantees + not real-time!

[ref]



Building and Scaling GenAI

Hiring: AI Engineer

→ Change LLM architecture

→ PhD-level thesis*

*No guarantees + not real-time!

[[ref](#)]



~~Building and Scaling GenAI~~

- FAQ = *most* popular “feature”?
- Need exact answer?

"Magic" LLM Models, Real IRS Penalties

[\[ref\]](#)

What Tax Form Errors Reveal about the Risks of Blindly Trusting LLMs —
and What It Means for AI Diligence

JUN 13 • IRINA KUKUYEVA PHD

Notes on Cursor/Similar

- Built on publicly-available code*
 - Tech debt in every code base
 - Bias: publicly available code → code quality?
 - Who makes public?
 - Age of repository
 - Tech stack changes
 - Other issues



Notes on Cursor/Similar

**Hot
Take**

- Design w/ (Eng) team
 - No throwing over wall
 - Started → own end-to-end

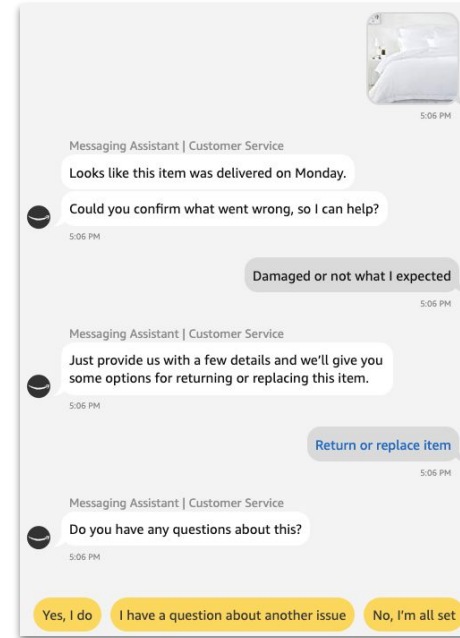
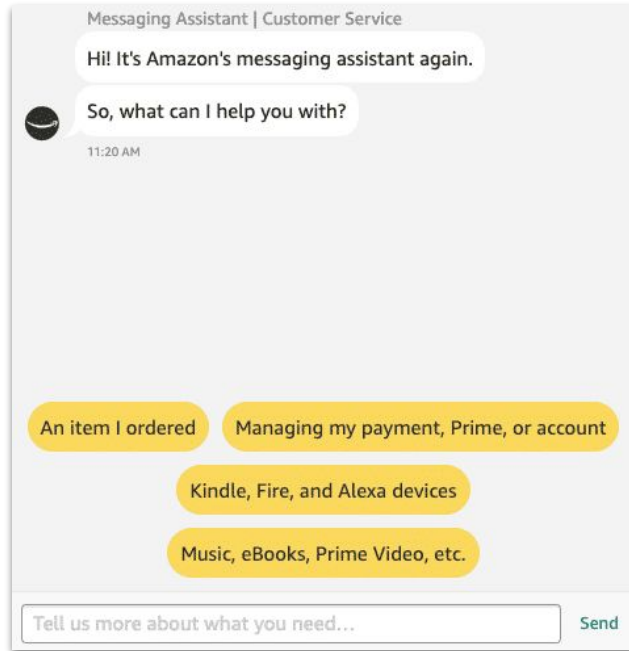
Email what ChatGPT drafted w/o edits?

[[ref*](#)]

YOUR CODE IS LIKE SOMEONE TOOK A
TRANSCRIPT OF A COUPLE
ARGUING AT IKEA AND MADE
RANDOM EDITS UNTIL IT
COMPILED WITHOUT ERRORS.



EX: Amazon Help Chatbot



⚠ To Chatbot or not: Add value? Route to CX with “something else” option?

- <https://www.helpshift.com/bot-wars-edition-1-amazon-com-chatbot/>

(Contradictory) Opinions on GenAI

- AI as Normal technology, by Columbia University

Hot
Take

- It's just math!

- CalTech's use of AI

- Levered beta is all you need, by Ethan Ding

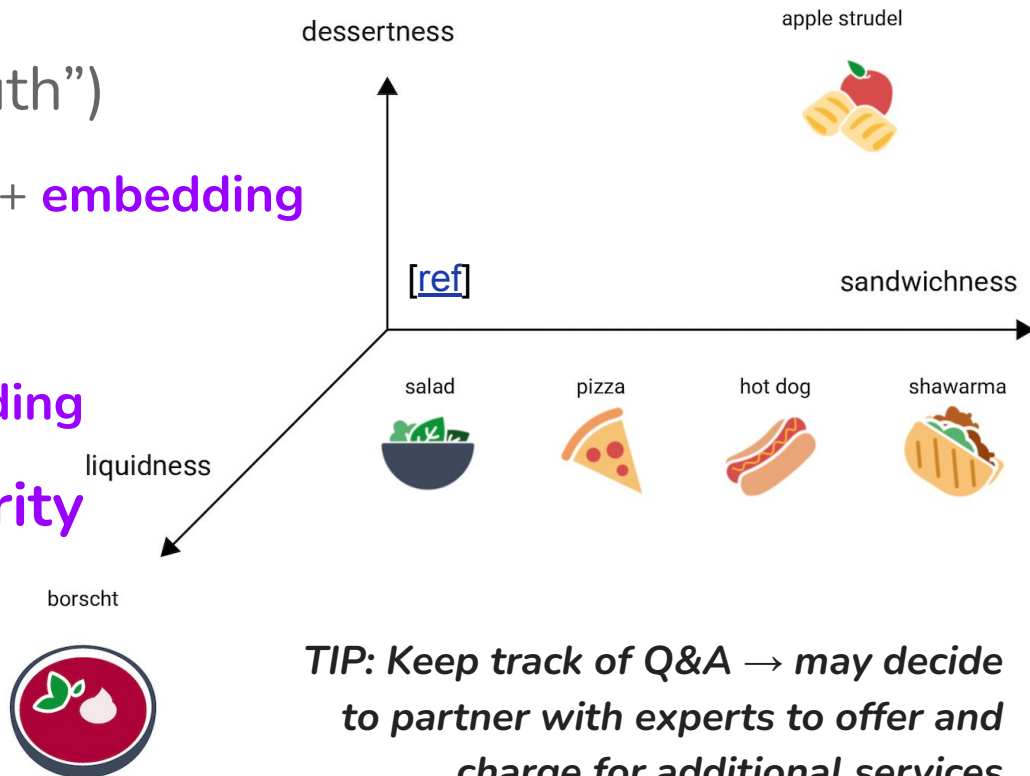
- I Revolted Against “Vibe Coding” — Until I Realized I’d Been Doing It All Along Confessions of a former Vibe Coding hater (who now vibes... cautiously), by Hailey Quach

Advice on GenAI

- [Hamza Khalid's resource of Prompt Engineering guides](#)
- [5 Paths to Launch AI Agents](#)
- ["How I AI"](#) portion of Lenny's Newsletter
- [Oxen.AI's Fine-tuning Fridays](#) and [past recordings](#)
- 6 [metrics](#) from Zapier for evaluating GenAI output

Retrieval-Augmented Generation (RAG)

- FAQs (AKA “source of truth”)
 - Text → Math: **chunks** + **embedding**
- (User) Prompt
 - Text → Math: **embedding**
- Top responses via **similarity**
- Responses → LLM



TIP: Keep track of Q&A → may decide to partner with experts to offer and charge for additional services

More Advice: Prioritization + Alignment

- [How to Prioritize when Everything is High Priority: the Data-Driven Approach](#)
- Column: [Your Business Has Lots of Ideas on What To Work On. Here's How To Decide on What's Next](#)
- John Cutler's [The 4 Prioritization Jobs \(And Why It Matters\)](#)
- Madlib to ["Tell me What you Want, What you Really, Really Want: How to Identify the Real Business Question"](#)
- Alt to ask forgiveness or permission: context + will do X by Y date if not hear back
- [AI hacks that we wanna steal from Notion](#)

More Advice

- 21+ PLG Strategies
- NFX recommends “AI-Native” over PLG GTM strategy

Hot Take ○ Agree RE product + community
○ My hot take to NFX’ “5 Levels of AI Spectrum”

- Metrics + Goodhart Law
- Plan for things to break