This Is What a Large-Scale Cloud Adoption Program Looks Like

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@rettori

The challenge is scale.

(and not auto-scaling)

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What Scale Means

JPMorgan Chase & Co.

- ~120bi Total Net revenue for 2020

- 11bi+ Firm's IT Budget

- **Asset & Wealth Management (AWM)**
- Consumer & Community Banking (Chase)
- Corporate and Investment Bank (CIB)
- Commercial Banking (CB)

Asset & Wealth Management

- 2.8 Tri USD Asset Under Management.

- ~600 Applications

- Every major market

Multi-Cloud Approach - AWS, Google Cloud, Azure, Private

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Incentives

Consider where you are - there is no greenfield, no app / team is a silo.

- 35k+ containers across kubernetes and cloud foundry across hundred of apps

- Workloads and app teams spread across the globe.

- "At least one of everything"

- Not on cloud does not necessarily mean 'not modern'.

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What is really the objective of an IT organization, in general terms?

Be respectful and diligent with your customers' data so as not to damage or negatively impact their reputation or yours. Security first.

Enable business to serve external and internal customers and users through the use of technology for better products and experiences.

Things business (internal client) will **not** ask:

- Build a resilient application.

- Migrate application from X to Y.

- Secure data

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Application teams should **want** to move to the public cloud more than they **have** to.

- There has to be enough excitement / incentives / clear notion of ROI around the initiative so that they are willing to bring such requirements to product. Time is the constraint.

- The large majority of teams already have 100% of their time committed. - It's not that they are 'sitting' there with 80% of capacity being used while that 20% is just waiting for some corporate IT program to kick in and consume it.

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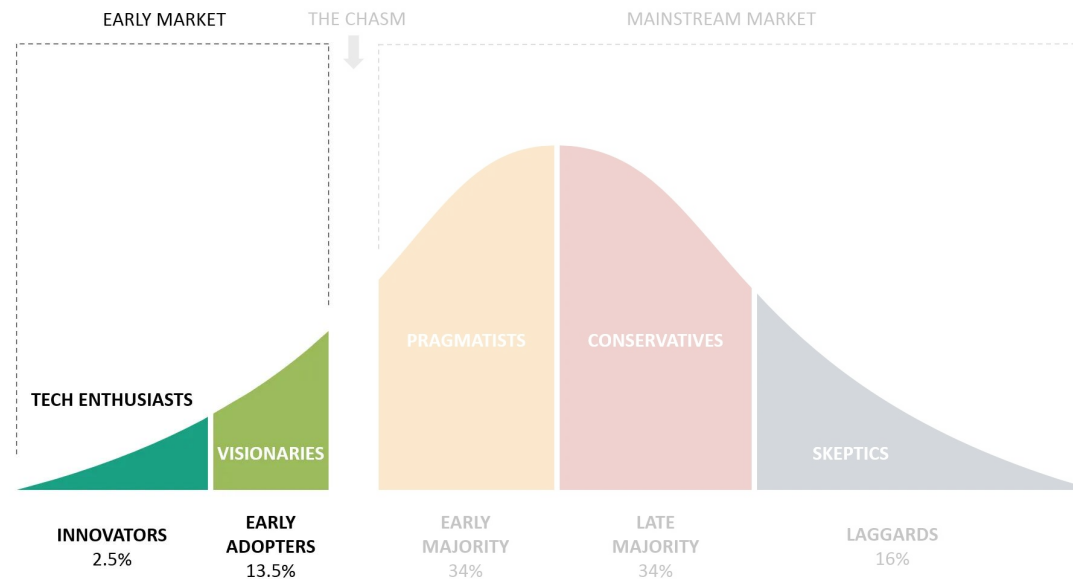## Acknowledge the Technology Adoption Lifecycle
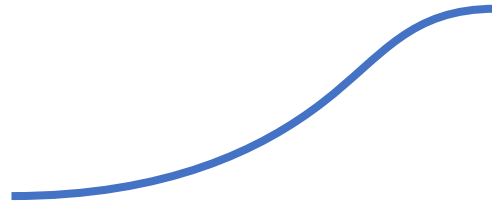
- Teams that went to production had to help the firm implement or test a new capability.

- Teams had to have a service enabled for their usage, in other worlds, they were the first ones to use it.

- Most of the '*how to's*' were not immediately available, so not only from a technical but rather 'practice' perspective, they had to perform work.

They are the innovators and early adopters!
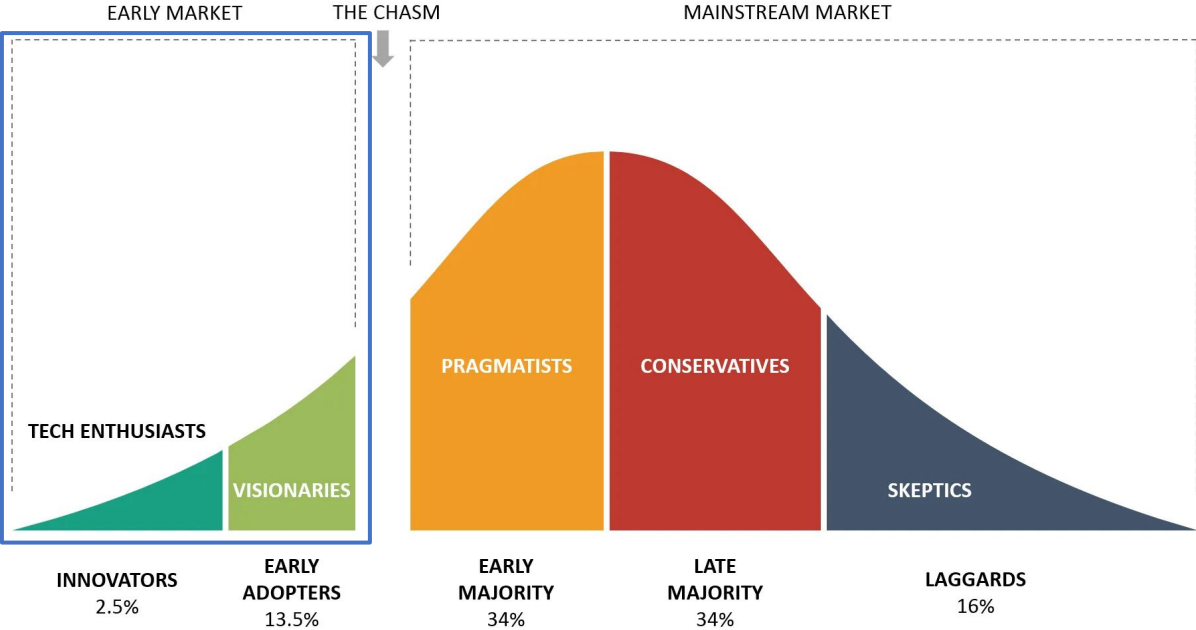
They are the innovators and early adopters.

Are willing to take the extra risks and invest the time to build the product.

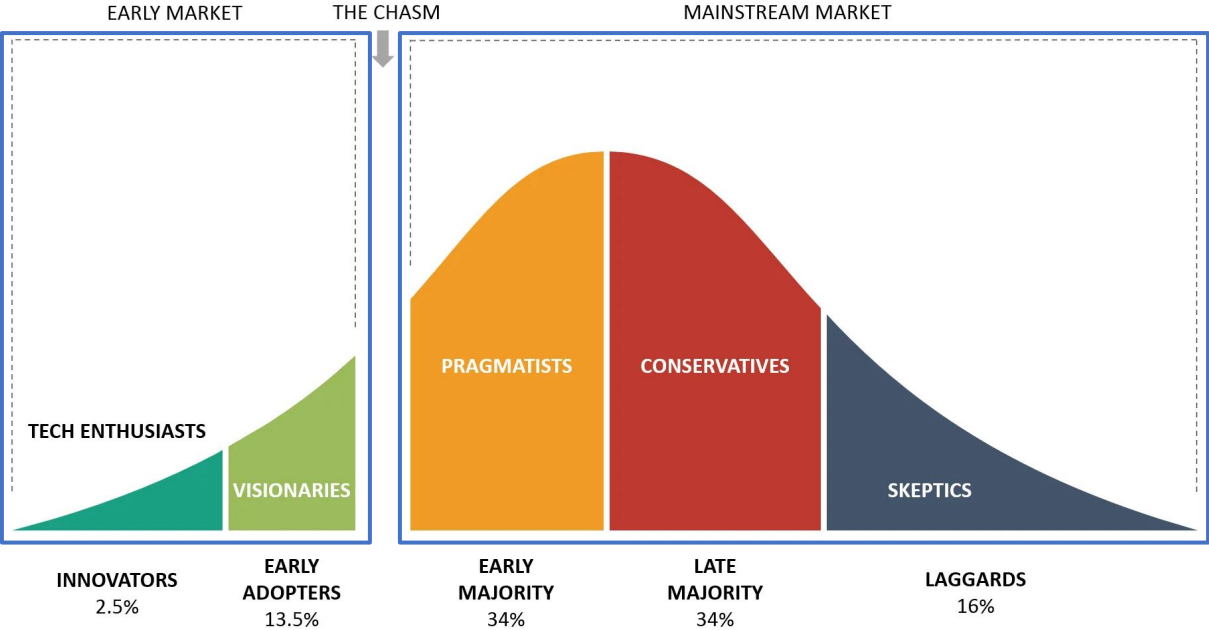Adopt technology for the sake of technology and for the potential scaled benefits of being there before others.

12-15% of the app teams taking the 80% of apps to the public cloud

What is acceptable for them ⟹

EARLY MARKET | THE CHASM | MAINSTREAM MARKET

TECH ENTHUSIASTS

VISIONARIES

PRAGMATISTS

CONSERVATIVES

SKEPTICS

INNOVATORS
2.5%

EARLY
ADOPTERS
13.5%

EARLY
MAJORITY
34%

LATE
MAJORITY
34%

LAGGARDS
16%

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Point 3

- How do you address the audience with the perception that the platform is not ready?
- Is much more risk-prone ?
- Needs much more peer validation?

Crossing the barrier is about dealing with uncertainty

When waiting for finished products or all the risk perception to be removed is not an option, what do you do?

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Due to our scale, we share challenges that the software industry has, but internally.

It's like we're our own industry.

What lessons learned in the industry can we leverage immediately?

Being Intentional Scale and Uncertainty

Scale Yourself and your Team

Addressing uncertainty as a 'Practice'

Acceleration Events

Scaling adoption while scaling the program team at a much lower rate.

Champions Teams

- group of people evenly distributed across your business unit (in our case AWM Tech).
- you can build them represent your team from technical perspective
- you can trust on them to represent their business area from a requirements and portfolio knowledge perspective
- they are the ones you want to train/enable first. Most often composed of early adopters and innovators.
- strong trainer mindset, and willing to be trained.
- they will be vocal, loud and complain, you want that.
- they will also be your partners.

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Being Intentional Scale and Uncertainty

Scale Yourself and your Team

Addressing uncertainty as a 'Practice'

Acceleration Events

Addressing uncertainty as a practice with focused initiatives

- Day 2
    - how do you operate applications on public cloud, how different are the practices, do I keep the same monitoring? Dashboard? What is the support policy? Both internal and external? Escalation Paths?
- Data
    - Data migration / mesh and pipeline strategies. Supporting movement of large sets of data or and associated pipelines
- SDLC / CICD
    - what changes between the current and the new model?
- Learning / Enablement
    - Building the 'tribal knowledge'
- Strategic Migrations
    - Active participation on large / complex projects, they will become your success stories
- Integration with Current Systems

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Being Intentional Scale and Uncertainty

Scale Yourself and your Team

Addressing uncertainty as a 'Practice'

Acceleration Events →

Highly focused engagements with all the parties that could make a decision.

- Activities to move workloads to the cloud are not often things you tackle through a few hours of work every week
- It's been easier to negotiate with the business a focused time (1-2 weeks) of team engagement to focus solely on public cloud migration.
- Support team for acceleration events.
  - When I meant all of the decision making, we meant all:
    - Firewall requests
    - SRE / Day 2
    - Vendor Consultants
    - Governance / Process
    - Security
    - Data Migration and Pipelines
    - ...

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Being Intentional Scale and Uncertainty

Scale Yourself and your Team

Addressing uncertainty as a 'Practice'

Acceleration Events

Our Acceleration Events, also known as cloud parties, have actually taken applications to production on public cloud in a matter of **days**, with a caveat:

All, and I mean all of the **decision making power** had to be **available** at an 'arm's-length', and we were strongly focused on fast decision making, because there will be hundreds of decision to be made.

American Financial Technology Awards

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Track the dollars.

(we're a bank, after all)

- For on-premises workloads or private cloud, 1 dollar is not '*necessarily a dollar*', as it is about employing people, potentially owning real estate to support your data centers, and acquiring hardware and software when needed.

- For the public cloud, a dollar is a dollar. You are writing a check, and that money is entirely going to someone else.

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Point 4

Cost Control and Waste Reduction

There is higher granularity of cost control in Public Cloud

- They are often 'hidden/included' with other costs for your on-prem applications.
- Oversubscribing vices tend to migrate to the public cloud as well.

Implement right-sizing and waste reduction initiatives

- Shift left the cost decision

Watch out for the 'bubble'

Your public cloud costs are increasing while you're not decommissioning your on-prem at the same rate.

While this might be a cost-play for you at the end, you need to plan for fact that for some time you're incurring both costs. **Budgeting for such consideration is a wise thing to do.**

Conclusion

Application teams should **want** to make the move more than they **have** to.

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Acknowledge the Technology Adoption Lifecycle

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Crossing the barrier is about dealing with uncertainty - **by design**

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Track the Dollars - **watch for the bubble**

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Thank you.

We're hiring!