



Device Management as a Platform: Why, What, How

Mac Admin & Developer Conference UK 2018

Yannis Lagogiannis
London School of Economics & Political Science



Yannis Lagogiannis

Apple Systems Specialist

London School of Economics & Political Science



@yan1212



@lagogiiy



www.linkedin.com/in/yannislagogiannis/

Agenda

Why should we consider the platform approach?

What are the characteristics of a platform?

How can we design a platform-like managed environment ?

Agenda

Why should we consider the platform approach?

Changing user-base.
Apple landscape.
Diffusion of innovation.

What are the characteristics of a platform?

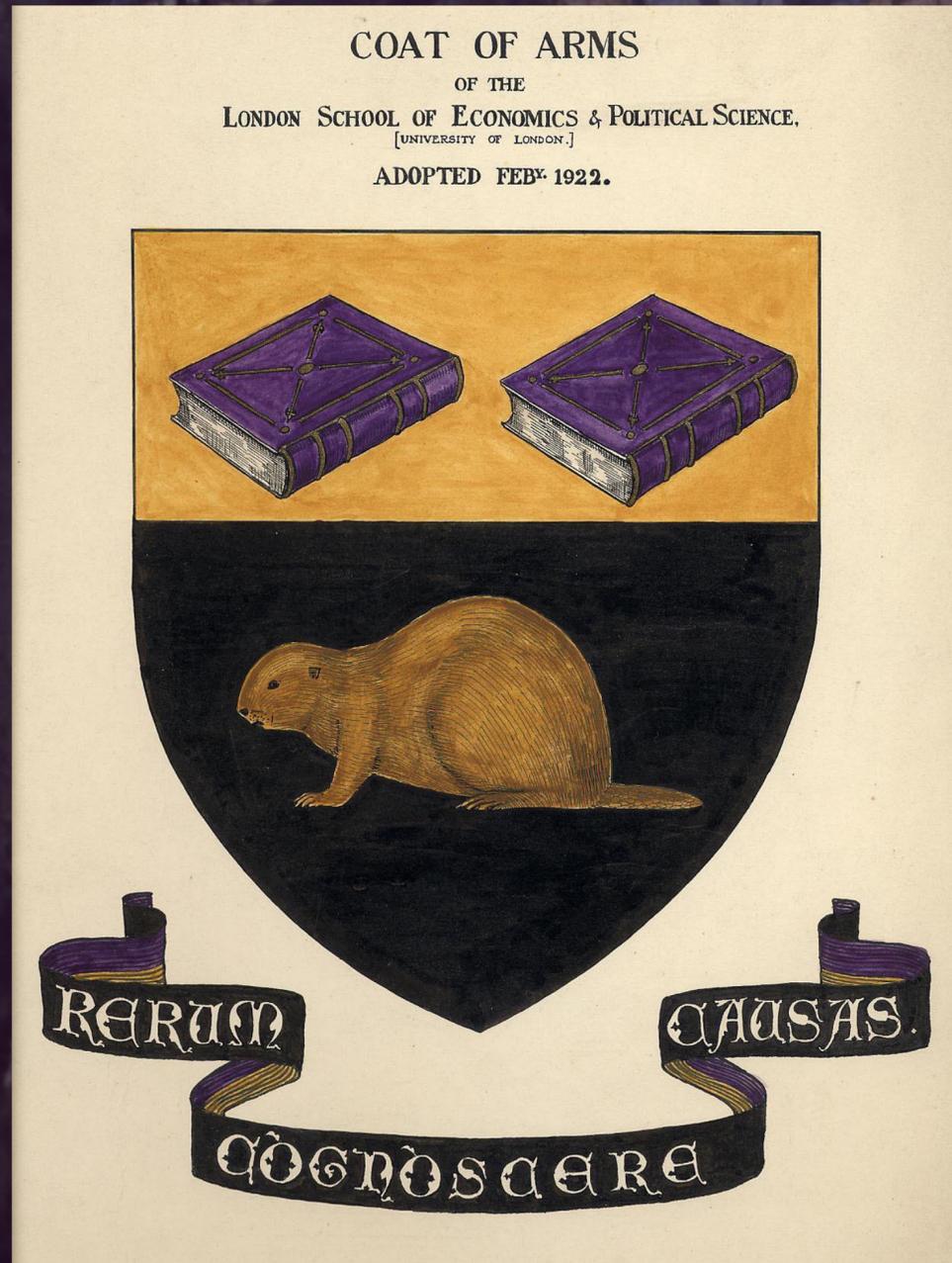
Enable. Broker. Value through participation.

How can we design a platform-like managed environment ?

Core interaction.
Value unit. Roles.
Governance.

Rerum Cognoscere Causas

To Know the Causes of Things



1. Why choose the platform model?

A new type of user

“Making the Web social in reality means making sociality technical”

José van Dijck

Author & Professor of Comparative Media Studies, University of
Amsterdam

THE CULTURE OF
CONNECTIVITY

A CRITICAL
HISTORY
OF SOCIAL
MEDIA



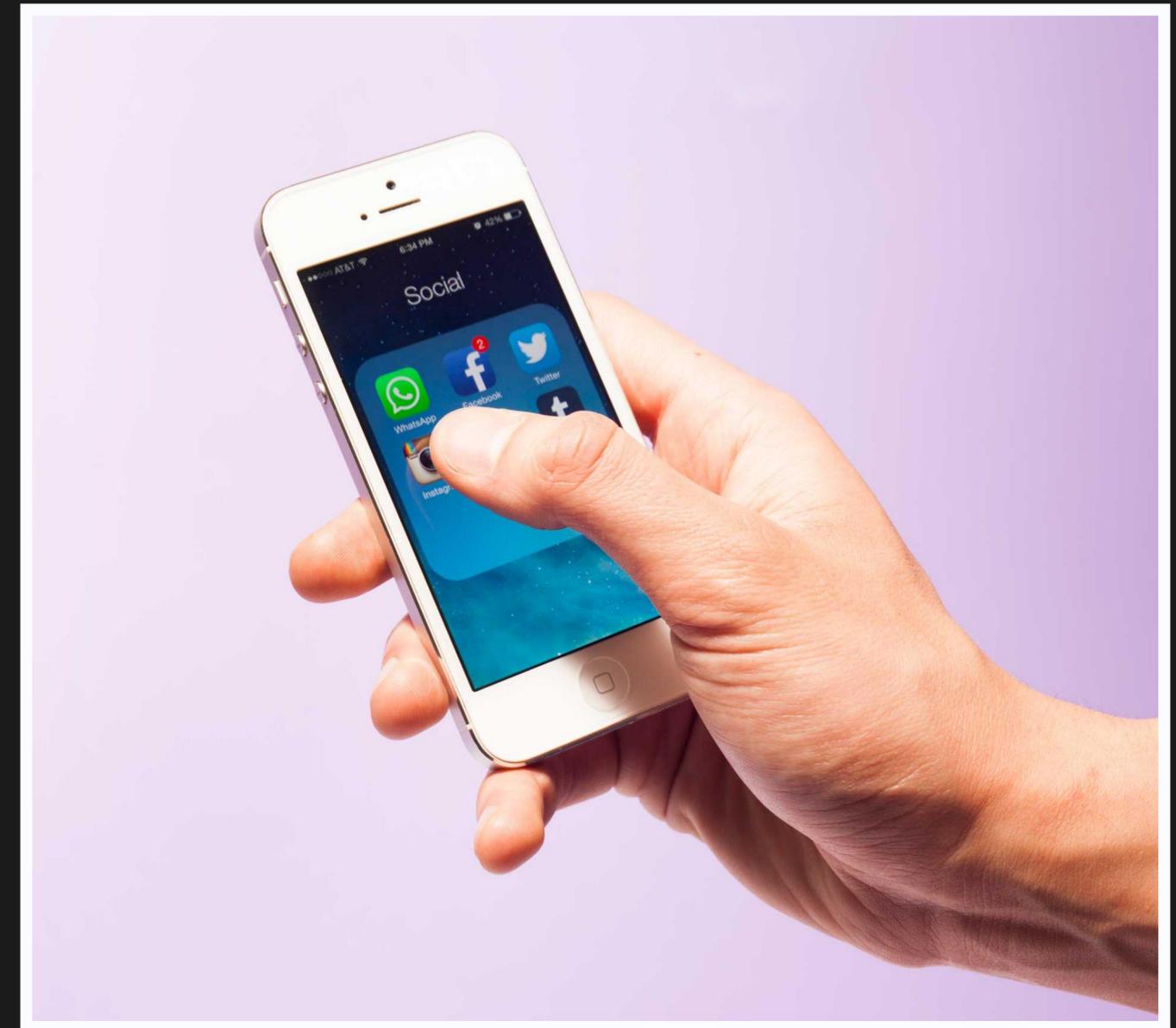
JOSÉ VAN DIJCK

The web is now truly **social**.



The web is now truly **social**.

New device form-factors have been one of
the primary **vehicles** of this transformation.



The web is now truly **social**.

New device form-factors have been one of the primary **vehicles** of this transformation.

Today's users are well-versed in **digital sociality**.



The web is now truly **social**.

New device form-factors have been one of the primary **vehicles** of this transformation.

Today's users are well-versed in **digital sociality**.

Computers are **not just for work** anymore.



A shifting landscape for Mac
admins.



iMac Pro

Secure Boot

No imaging

Trusted macOS

UAMDM

UAKEL



iMac Pro

Secure Boot
No imaging
Trusted macOS
UAMDM
UAKEL

DEP

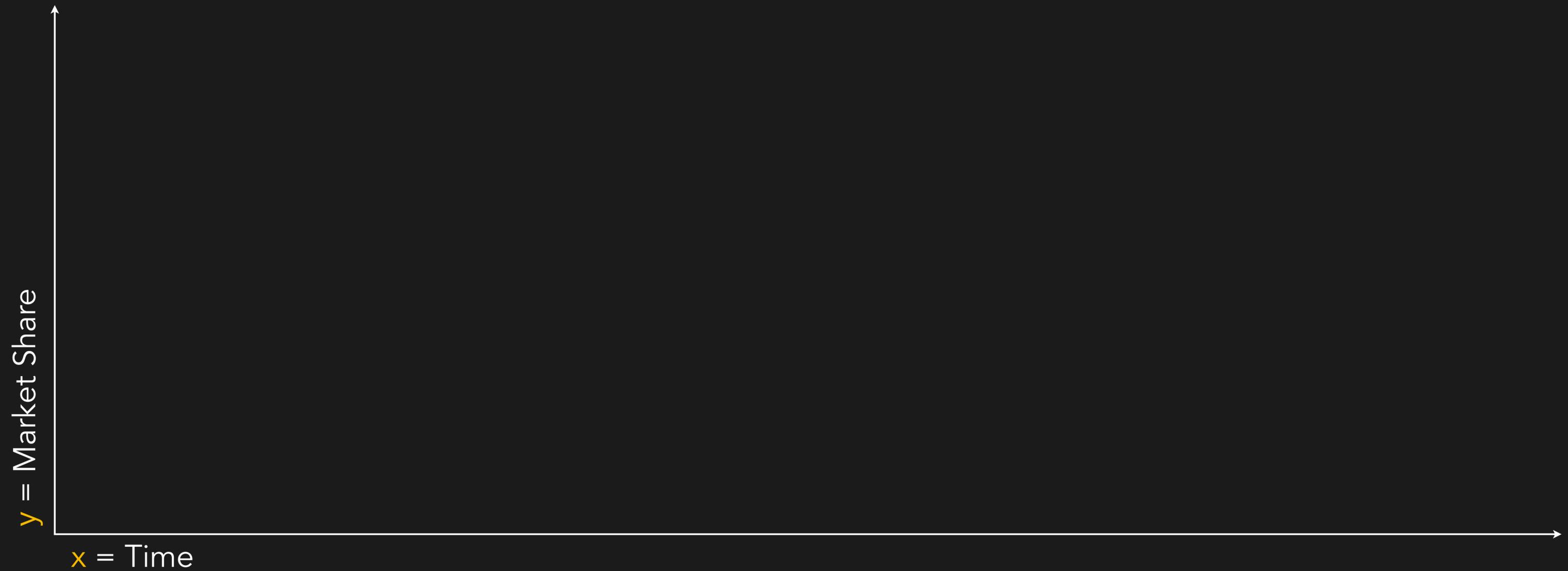


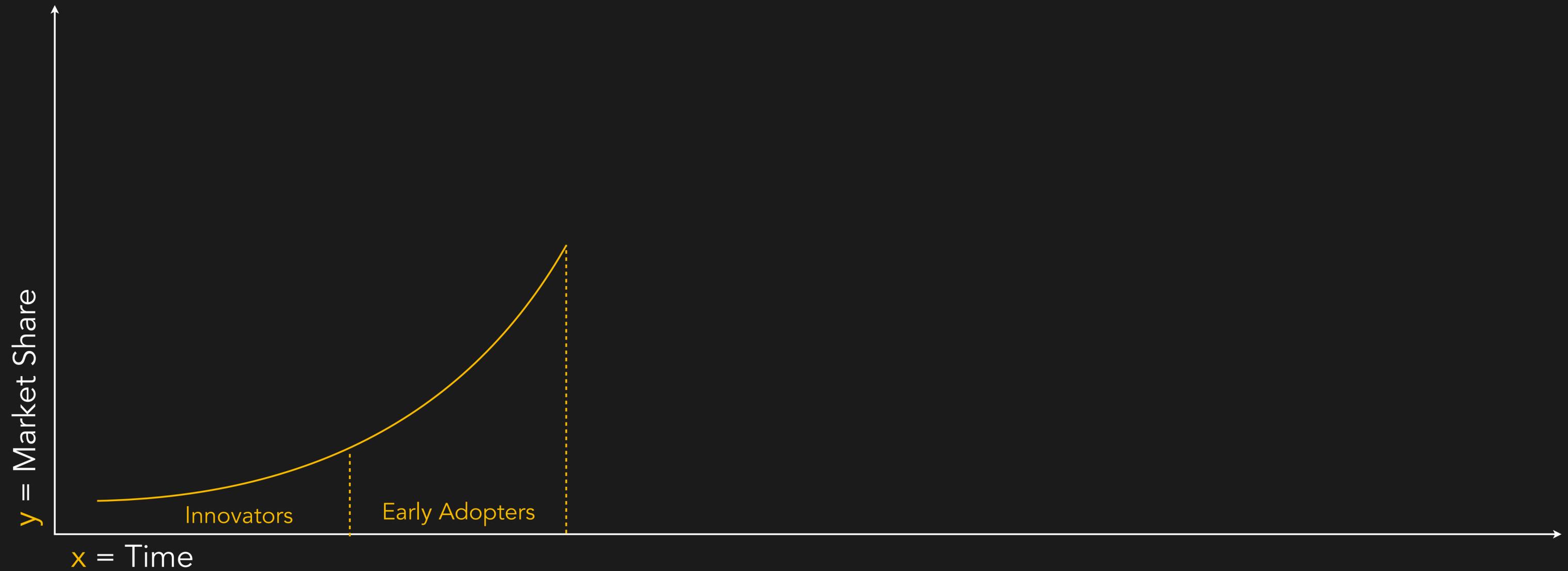
MacAdUK 2018 sessions (day 1)

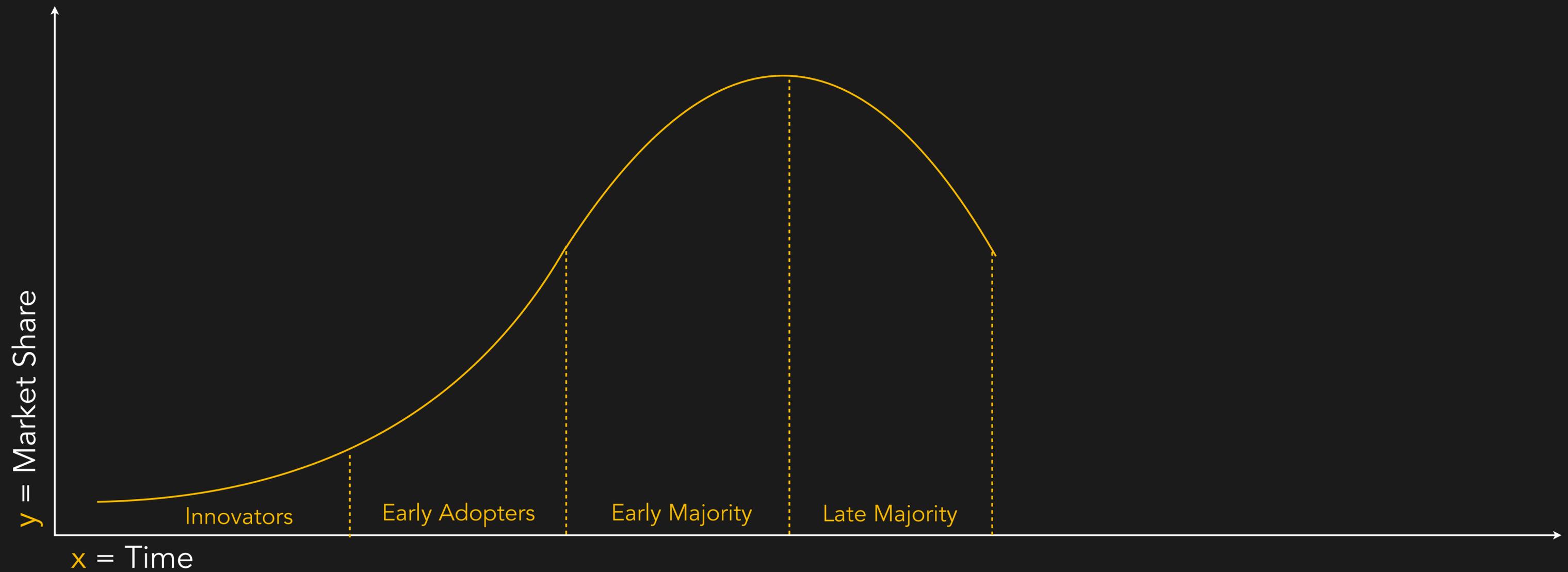
13 presentations > 8 focus on topics related to the changing landscape (i.e. device provisioning, user demands, security, shifting balance of power etc)

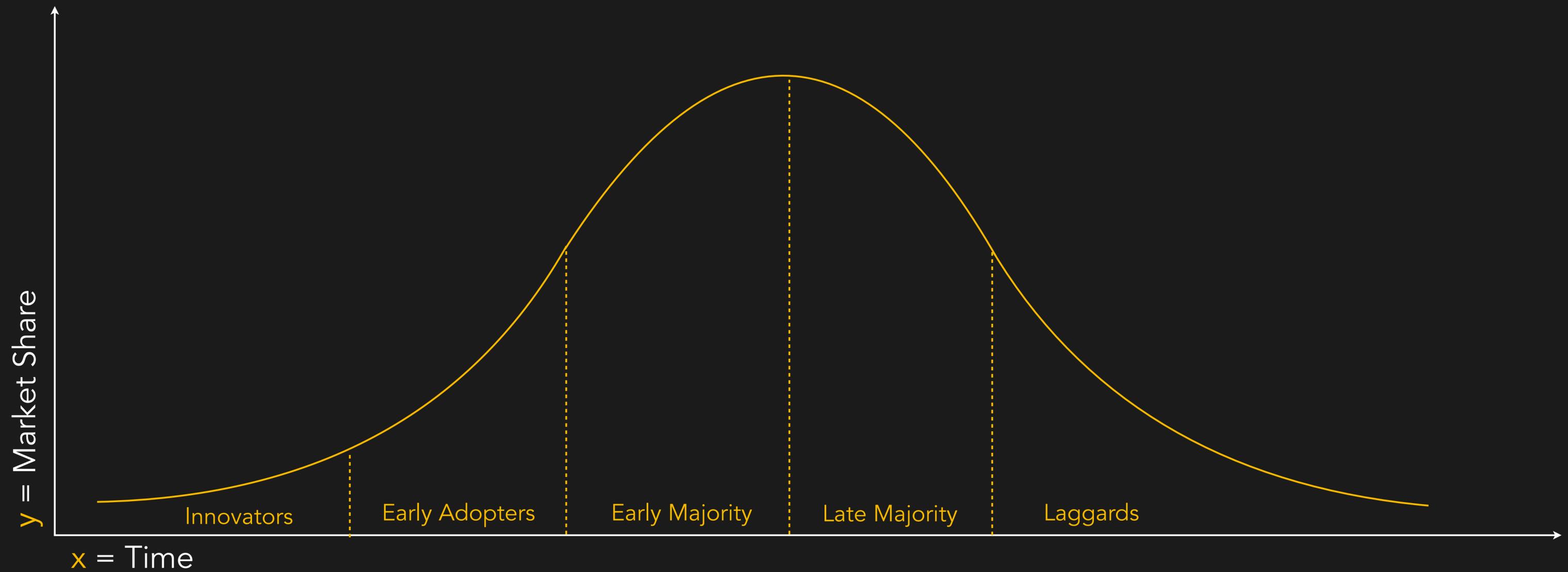


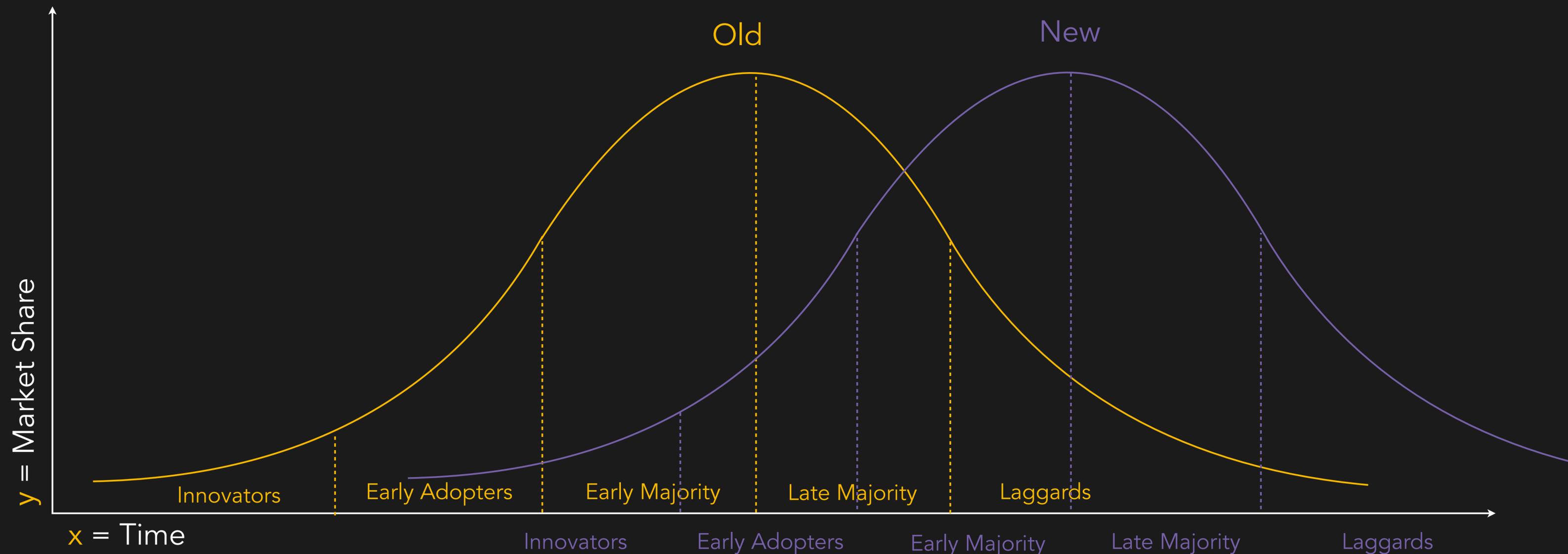
Opportune timing

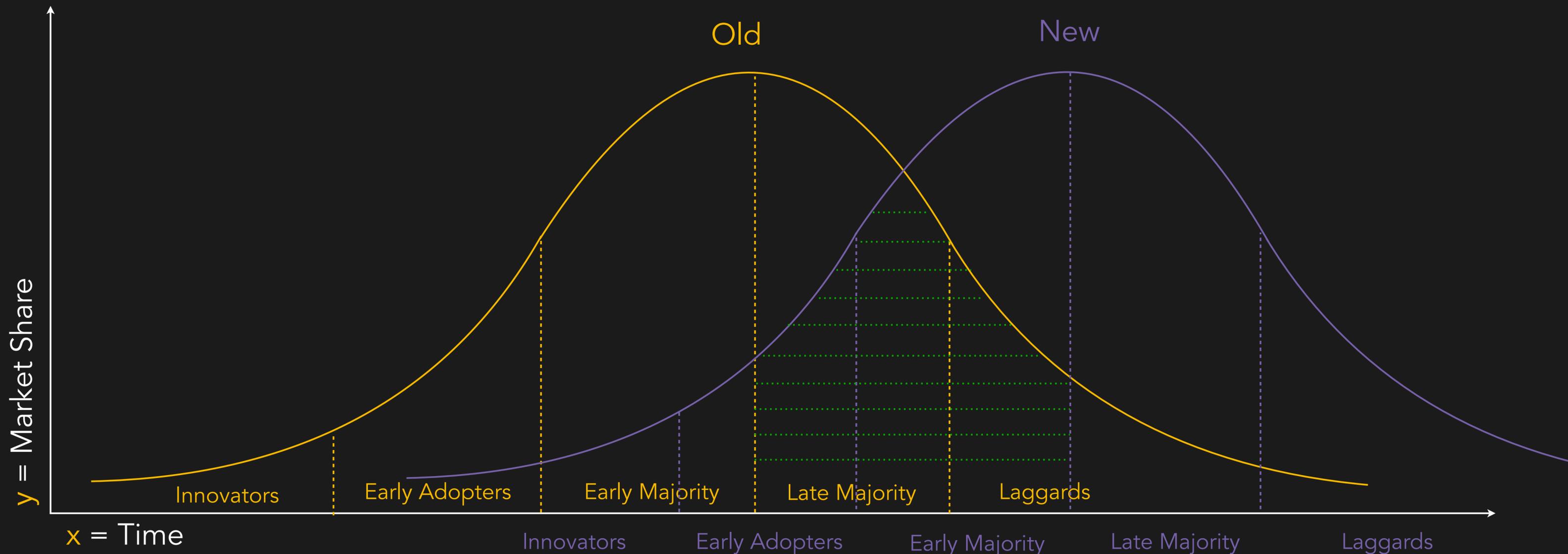


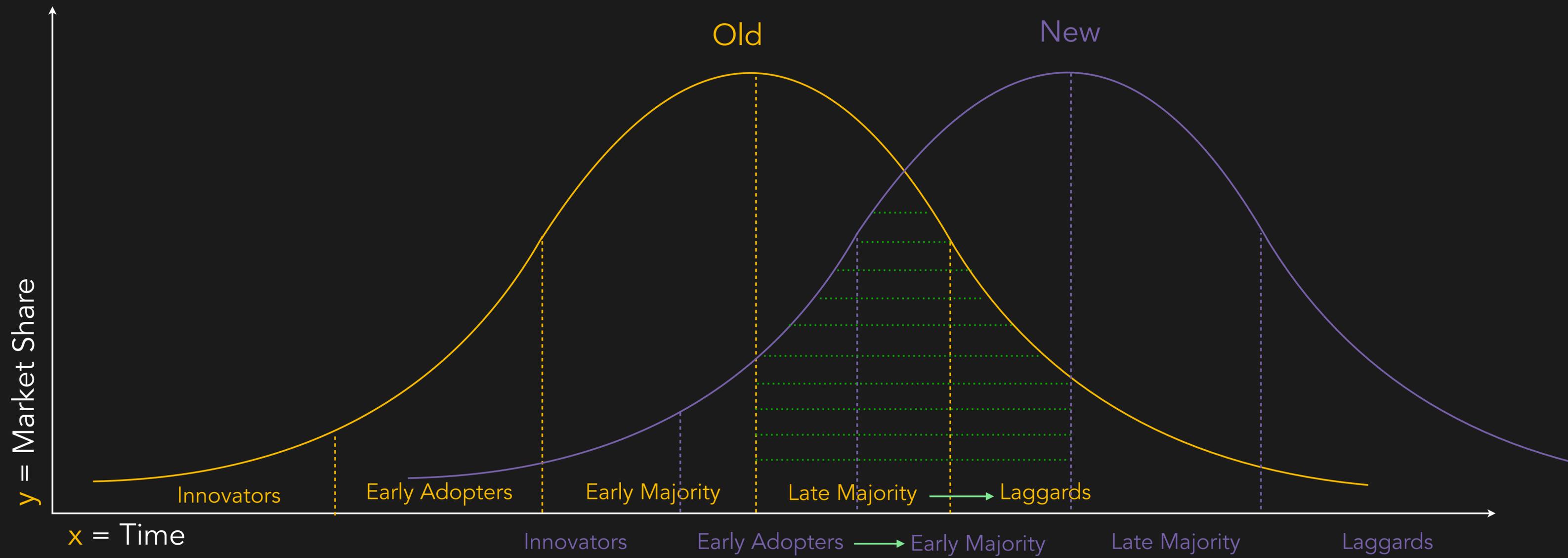




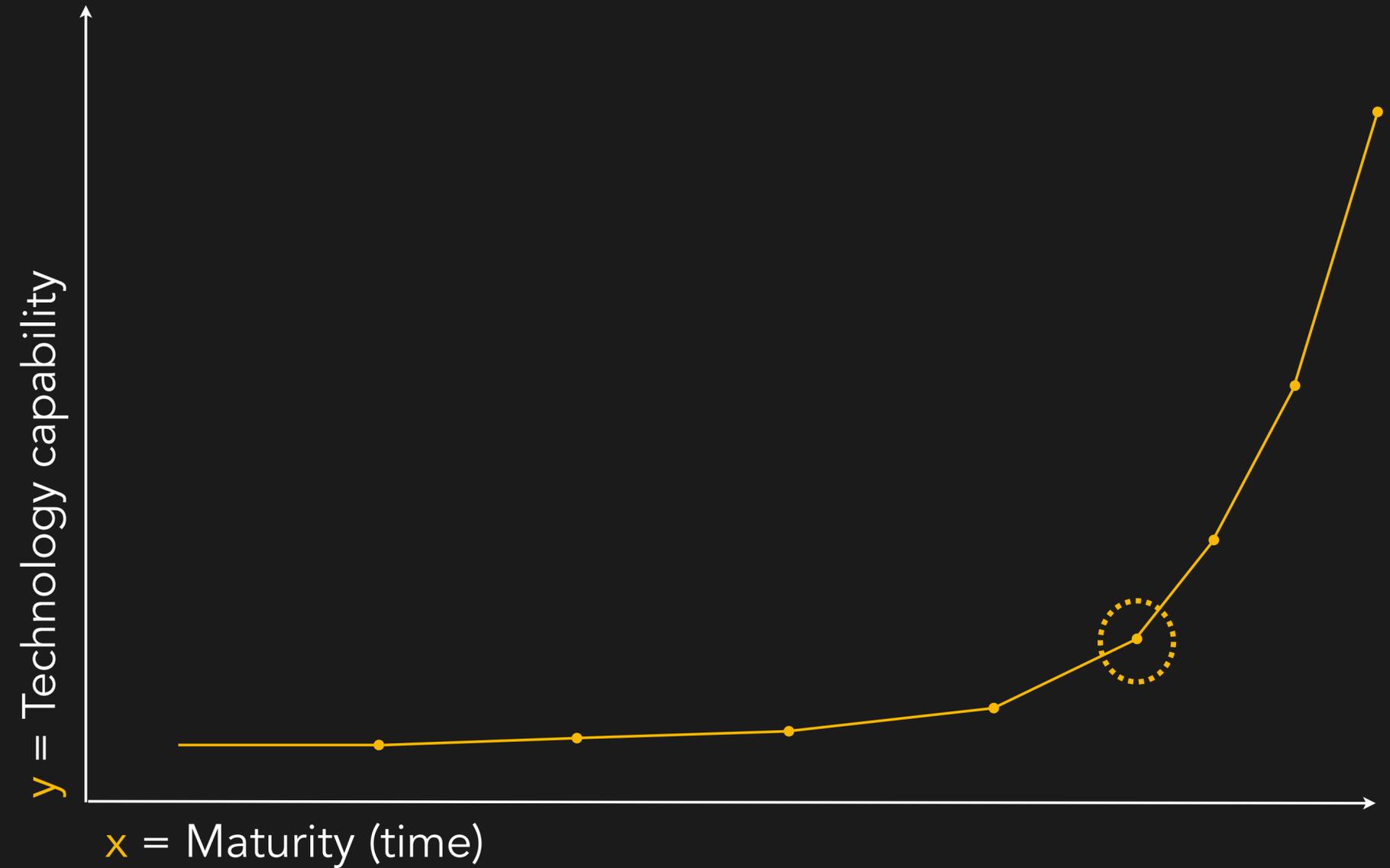




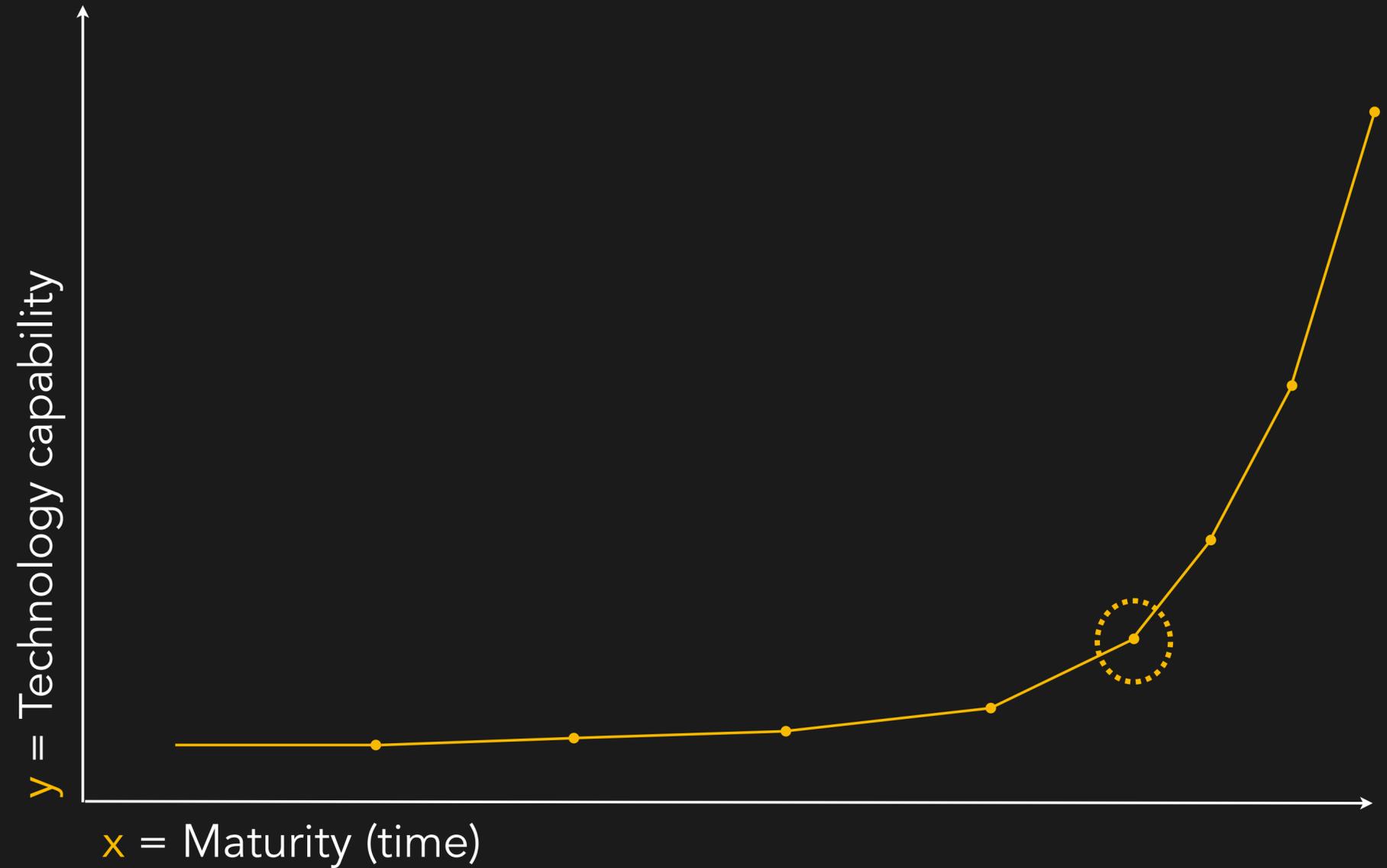




The optimum time for
enterprise IT to adopt new
technologies is after the
'knee' of the technology
curve

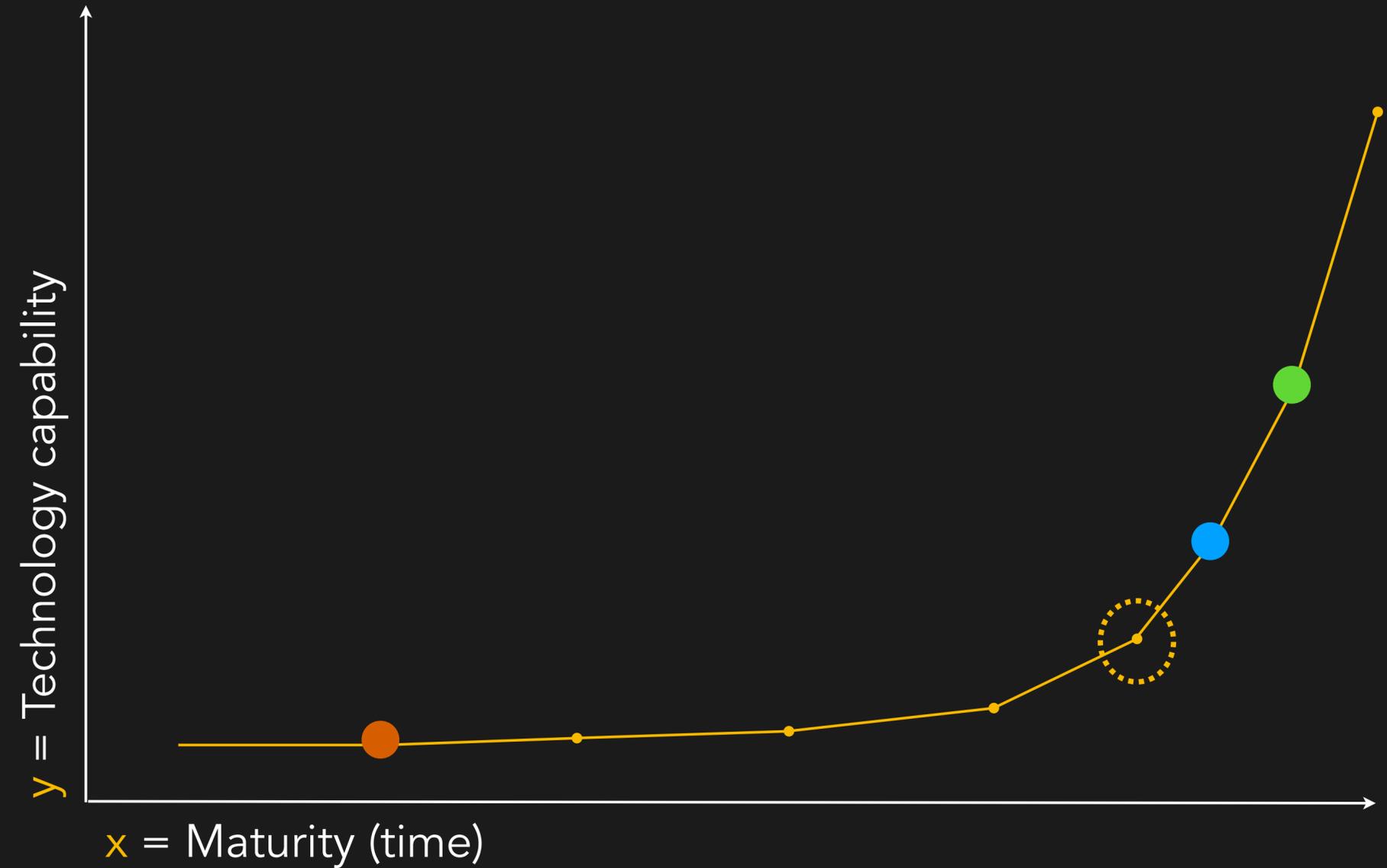


The optimum time for enterprise IT to adopt new technologies is after the 'knee' of the technology curve



The optimum time for enterprise IT to adopt new technologies is after the 'knee' of the technology curve

- DEP
- MDM
- UAMDM



IT is delivered **to** users



IT delivered **with** users

IT is delivered **to** users
IT dept. **owns** the stack



IT delivered **with** users
IT dept. **uses** the stack

IT is delivered **to** users

IT dept. **owns** the stack

IT systems are **engineered**



IT delivered **with** users

IT dept. **uses** the stack

IT systems are **integrated**

IT is delivered **to** users

IT dept. **owns** the stack

IT systems are **engineered**

The **value** of IT to the business is
cemented in the organisational
structure



IT delivered **with** users

IT dept. **uses** the stack

IT systems are **integrated**

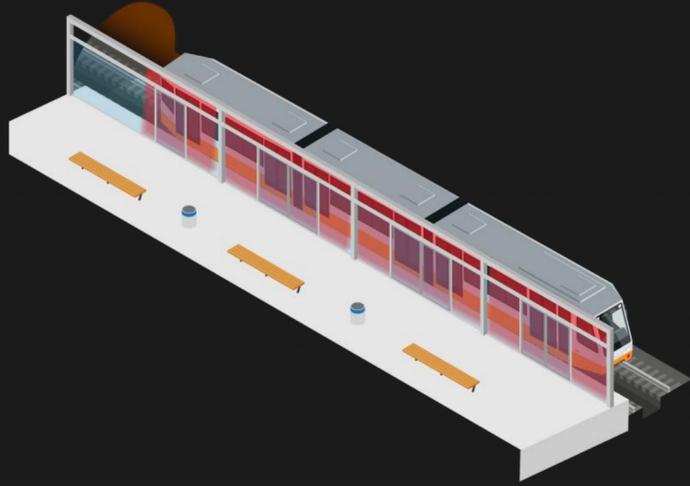
The **value** of IT to the business is
measured through user participation /
acceptance

In the rapidly-changing landscape of device management, the ability to adapt to new technological innovations and embrace user participation is fundamental.

Adopting a platform model can help deliver this in future.



2. What is a platform?



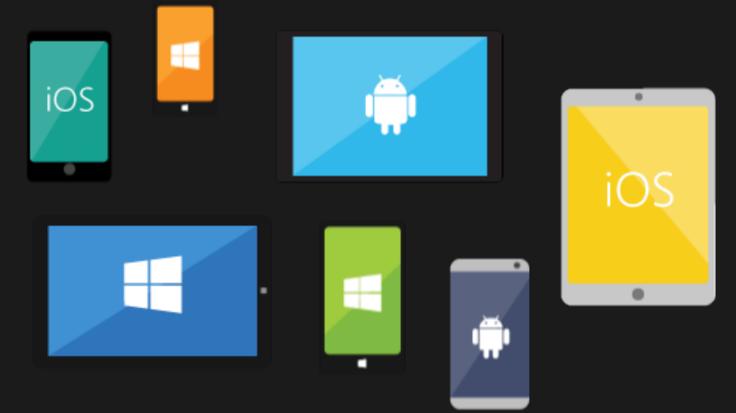
Broker,
facilitate



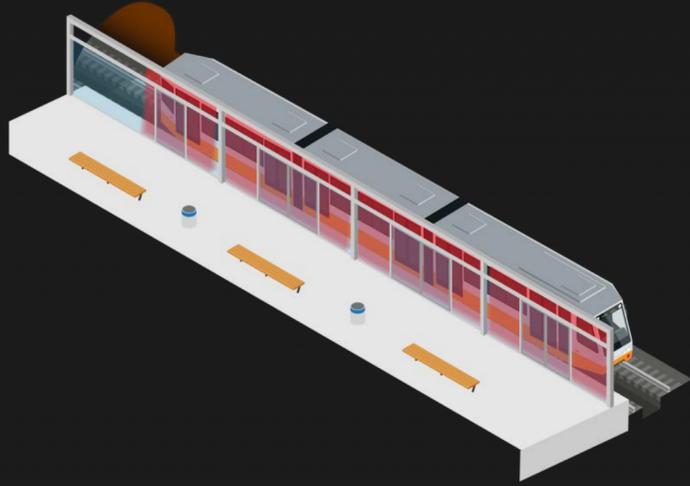
Enable,
empower



Invite/mandate
participation



Multisided value



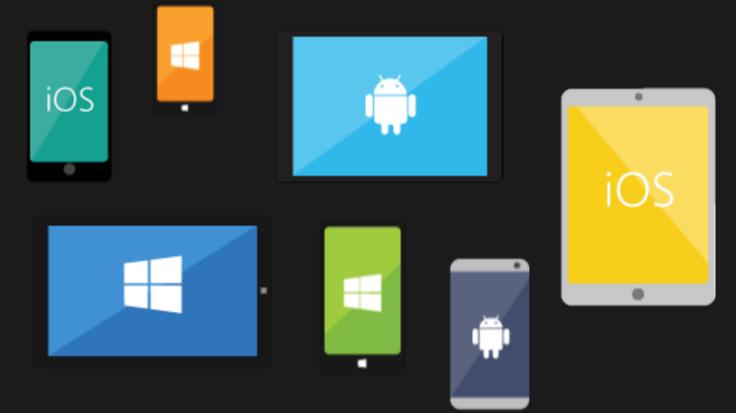
Multisided value



Invite/mandate
participation



Broker,
facilitate



Enable,
empower

Broker. Facilitator. Enabler

Platforms are **facilitators**, not the destination. They exist **'in-between'** the user and the service.



Platforms are **facilitators**, not the destination. They exist 'in-between' the user and the service.

Digital platforms act as the 'solid ground' upon which IT is delivered through **user participation**.

Well-designed digital platforms produce value through participation by means of striking a **balance of openness vs restriction**.

Download the latest development tools and SDKs.



iOS Apps



Mac Apps



Xcode

Become a member.

Enroll in an Apple Developer Program and get everything you need to develop and distribute your apps.

[Learn more >](#)



Participation and value

To generate **value**, platforms require **participation** not just features.

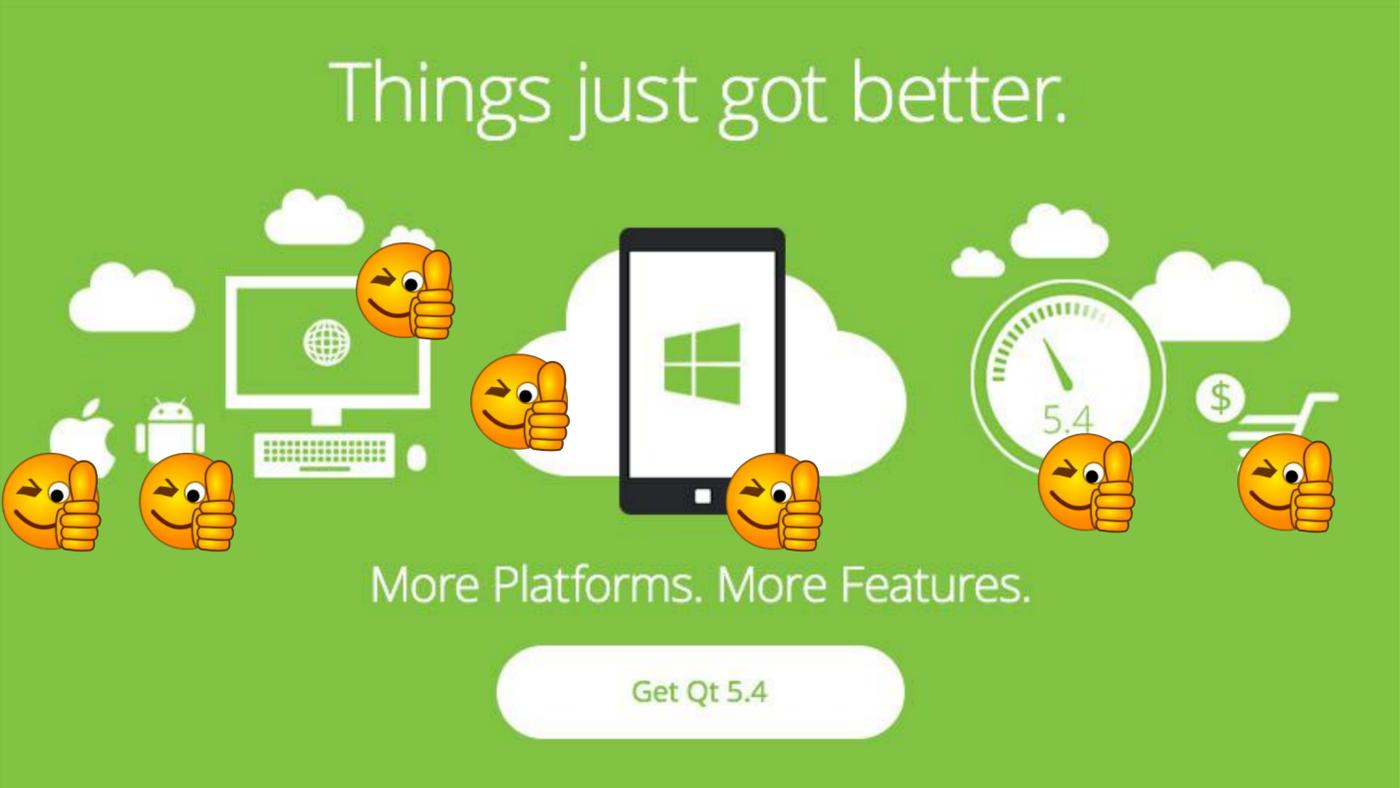
Things just got better.

A promotional banner for Qt 5.4. The background is a solid light blue. At the top, the text "Things just got better." is written in white. Below this, there are several white icons: an Apple logo, an Android robot, a desktop computer with a globe on the screen, a smartphone with the Windows logo, a speedometer with the number 5.4, and a shopping cart with a dollar sign. At the bottom, the text "More Platforms. More Features." is written in white. Below this text is a white rounded rectangular button with the text "Get Qt 5.4" in blue.

More Platforms. More Features.

Get Qt 5.4

To generate **value**, platforms require **participation** not just features.



Things just got better.

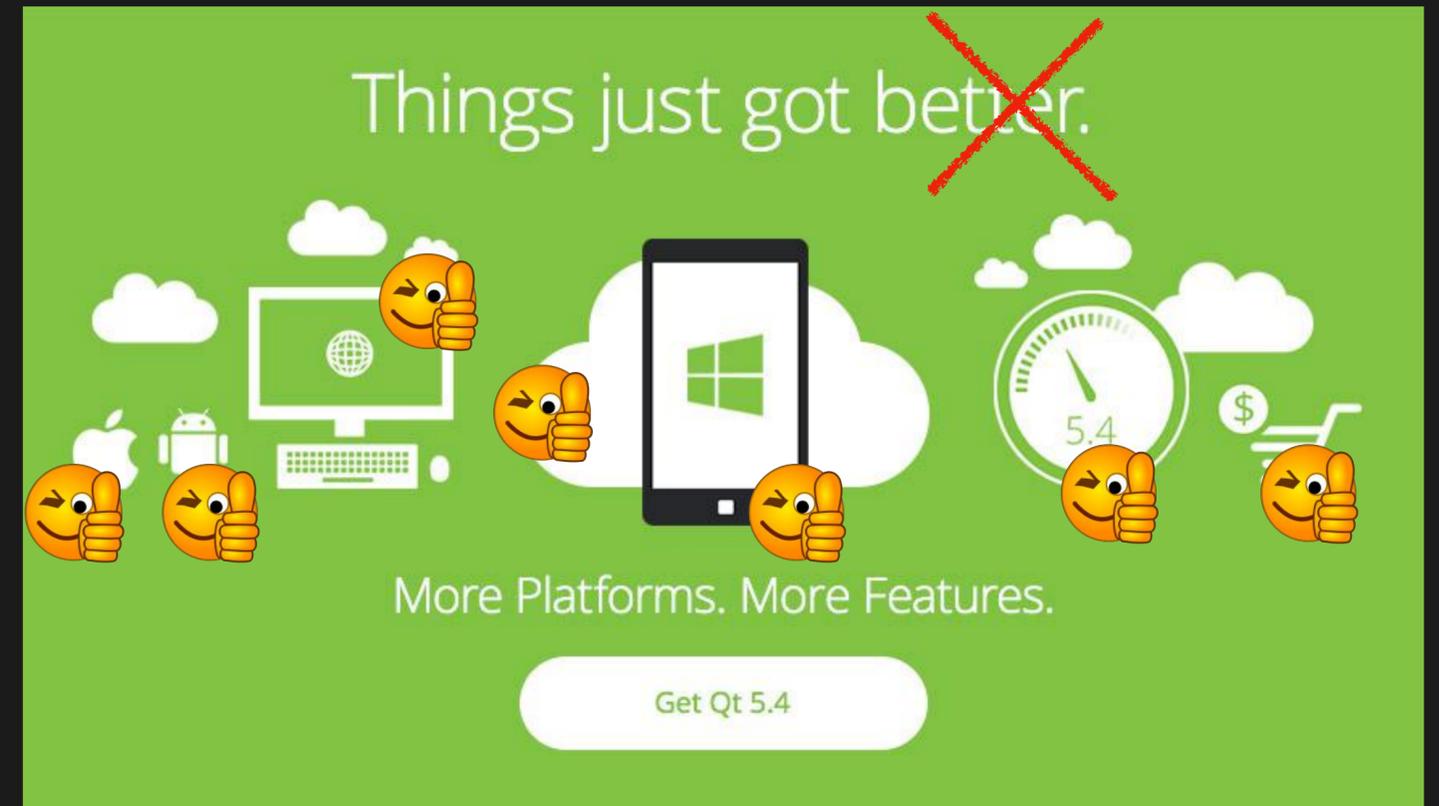
More Platforms. More Features.

Get Qt 5.4

The advertisement features a green background with white icons and text. It includes icons for various operating systems (Apple, Android, Windows), a desktop computer, a tablet, a clock showing '5.4', and a shopping cart with a dollar sign. Several thumbs-up emojis are scattered throughout the scene, suggesting approval and positive user experience.

To generate **value**, platforms require **participation** not just features.

~(ツ)~



To generate **value**, platforms require **participation** not just features.

Digital platforms provide **multisided value**.

The image shows a screenshot of the Facebook sign-up page. At the top, there is a blue header with the Facebook logo on the left and login fields on the right. The login fields include 'Email or Phone' and 'Password' with a 'Log In' button. Below the login fields are checkboxes for 'Keep me logged in' and a link for 'Forgot your password?'. The main content area is white and features the text 'Connect with friends and the world around you on Facebook.' followed by three icons and their descriptions: 'See photos and updates from friends in News Feed.', 'Share what's new in your life on your Timeline.', and 'Find more of what you're looking for with Facebook Search.'. On the right side, there is a 'Sign Up' section with the text 'It's free and always will be.' and several input fields: 'First name', 'Last name', 'Email or mobile number', 'Re-enter email or mobile number', and 'New password'. Below these fields is a 'Birthday' section with dropdown menus for 'Month', 'Day', and 'Year', and radio buttons for 'Female' and 'Male'. At the bottom of the sign-up section is a green 'Sign Up' button. Below the button, there is a link that says 'Create a Page for a celebrity, band or business.'

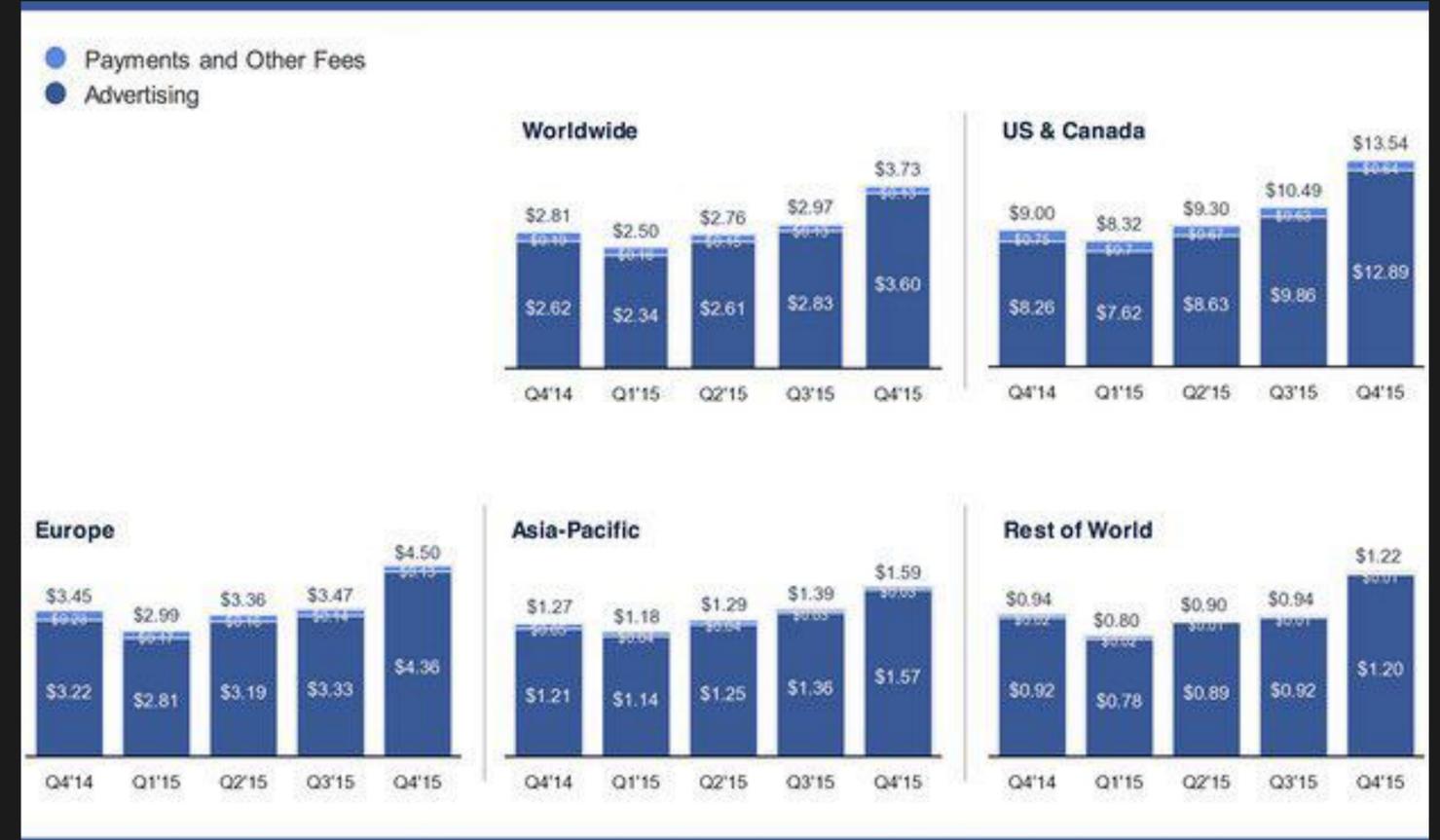
To generate **value**, platforms require **participation** not just features.

Digital platforms provide **multisided value**.

The image shows a screenshot of the Facebook sign-up page. At the top, there is a blue header with the Facebook logo on the left and login fields on the right. The login fields include 'Email or Phone' and 'Password' with a 'Log In' button. Below the login fields are checkboxes for 'Keep me logged in' and a link for 'Forgot your password?'. The main content area is white and features the text 'Connect with friends and the world around you on Facebook.' followed by three icons and their descriptions: 'See photos and updates from friends in News Feed.', 'Share what's new in your life on your Timeline.', and 'Find more of what you're looking for with Facebook Search.'. On the right side, there is a 'Sign Up' section with the text 'It's free and always will be.' and a red strikethrough line below it. The sign-up form includes fields for 'First name', 'Last name', 'Email or mobile number', 'Re-enter email or mobile number', and 'New password'. Below these fields is a 'Birthday' section with dropdown menus for 'Month', 'Day', and 'Year', and radio buttons for 'Female' and 'Male'. At the bottom of the sign-up section is a green 'Sign Up' button. Below the button is a link that says 'Create a Page for a celebrity, band or business.'

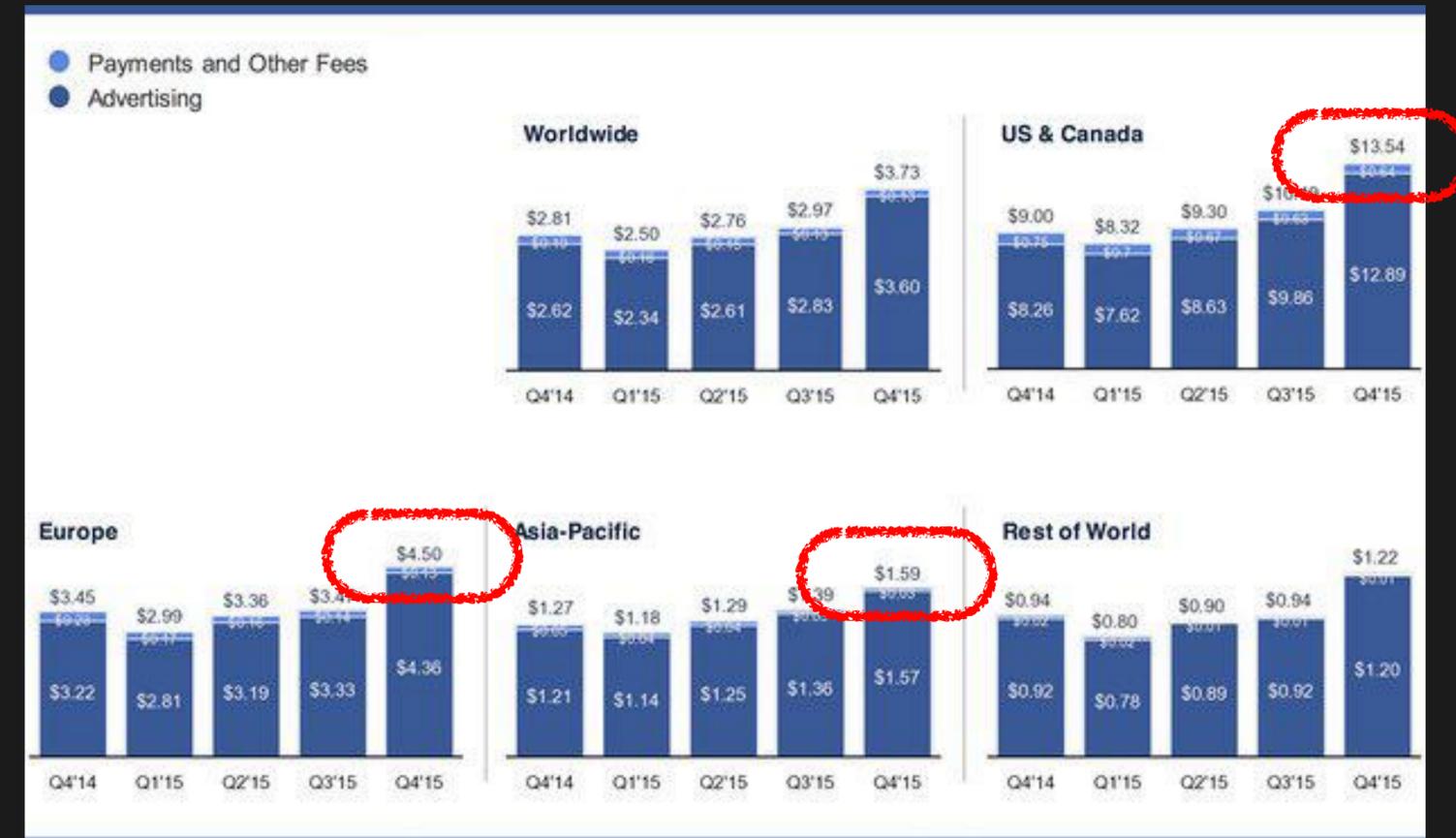
To generate **value**, platforms require **participation** not just features.

Digital platforms provide **multisided value**.



To generate **value**, platforms require **participation** not just features.

Digital platforms provide **multisided value**.



To generate **value**, platforms require **participation** not just features.

Digital platforms provide **multisided value**.

Multisidedness underpins the '**consumers as producers**' concept in digital platforms.



Doing device management as a platform is **not a technical problem** to solve

The technology is already out there, what changes is the approach towards **process, governance, attitude.**

To adopt a platform model, we want to:

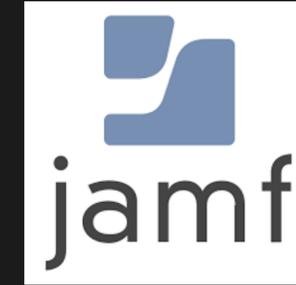
Be **inclusive** rather than **prescriptive** (include user-participation in the management process)

Aim for **technological alignment** with Apple and the wider industry

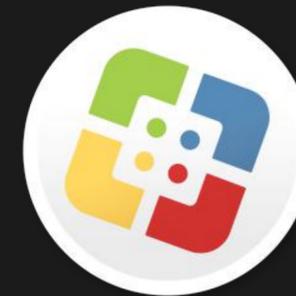
Generate multi-directional value through **generative** user participation (IT>user, IT>business, user>IT, user>Business)

You are (probably) already doing (some of) it

Consumers



Producers



3. Platform design principles



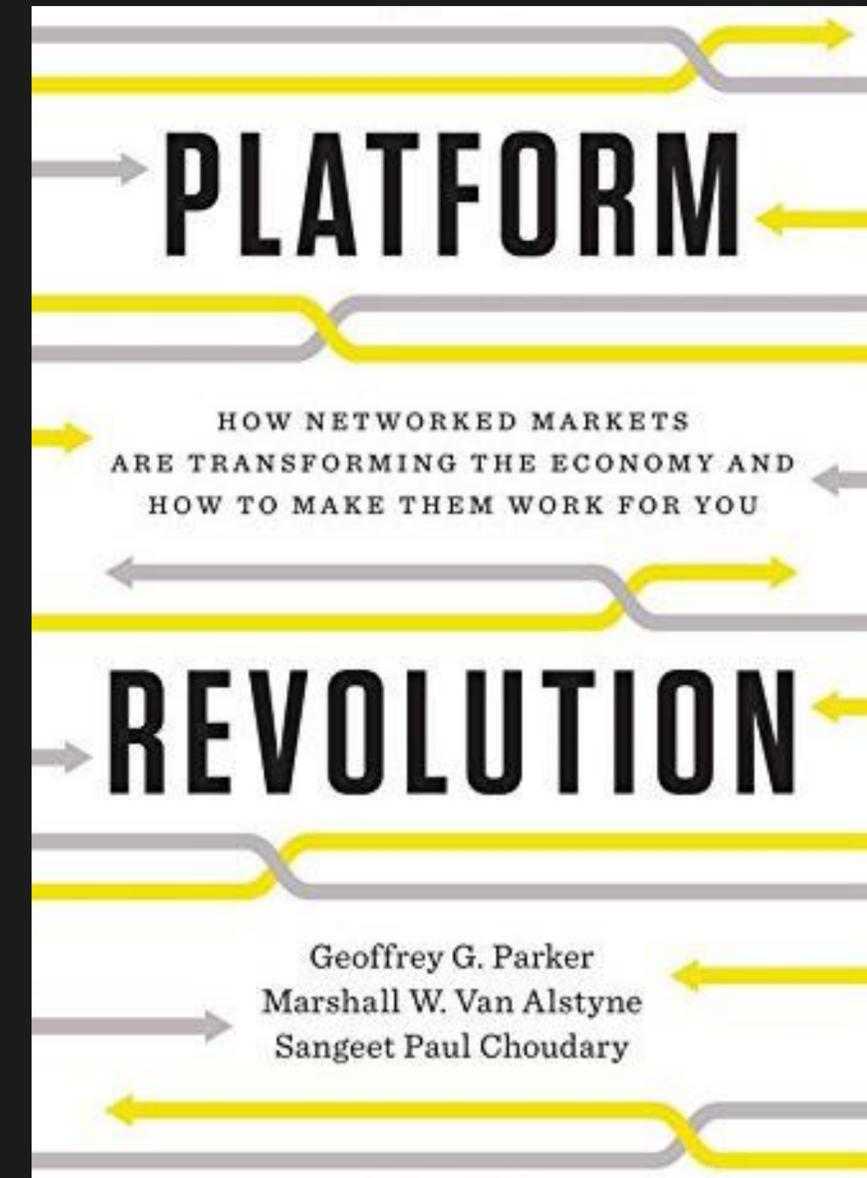
“The design of a platform should begin with its core interaction - one kind of interaction that is at the heart of the platform’s value creation mission”

Platform Revolution

Geoffrey Parker

Marshall W. Van Alstyne

Sangeet Paul Choudary



(Basic) Platform Design principles

1. A **Core Interaction** is a set of actions that participants perform repeatedly to gain value out of the platform (i.e. IT service desk vs self service)
2. The **Value Unit** underpins the core interaction (i.e. installing software, gaining access to resources, feeling empowered, sense of security & freedom to move)
3. The **platform roles** connect individual users with the overall purpose of the platform (consumers as producers, multisided value).
4. The **generative** (vs prescriptive) space in a platform depends on the balance of how open or closed the platform will be.

Value unit

Core interaction

Platform actions

Get new software

Use LSE Self
Service

Add device to managed
software schedule

Stay up-to-date

//

Act on new device state to
perform other related tasks

Perform
management tasks

//

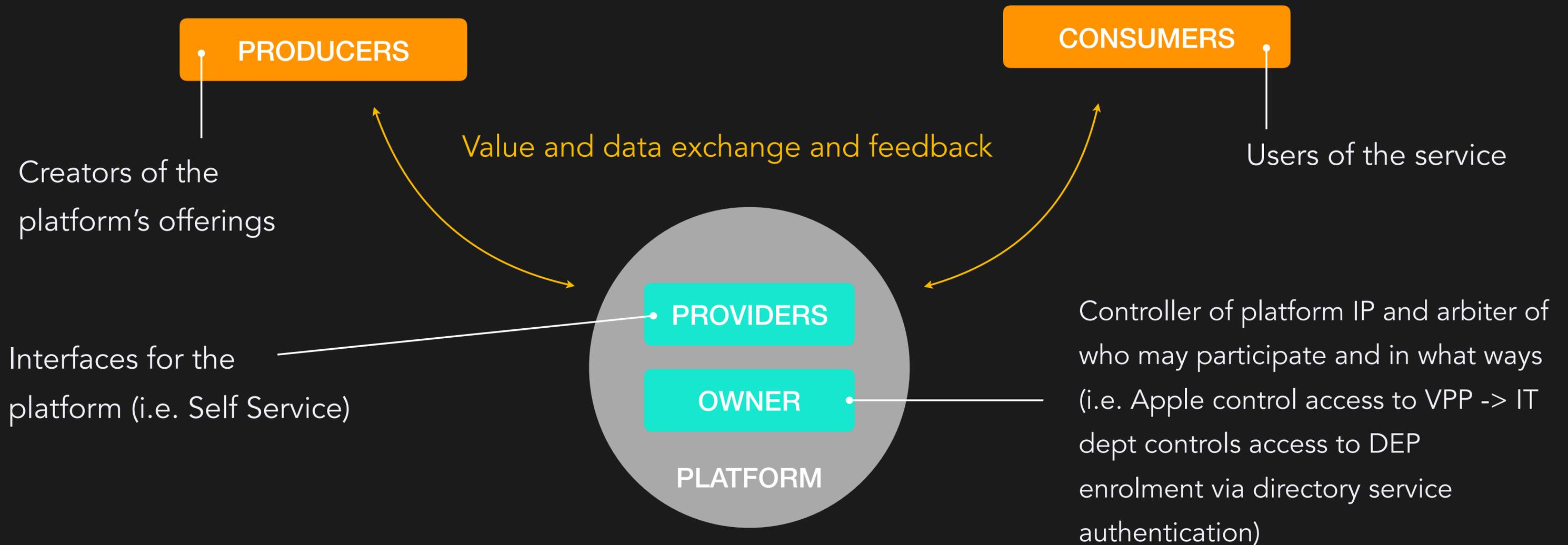
Ensure compliance
& security

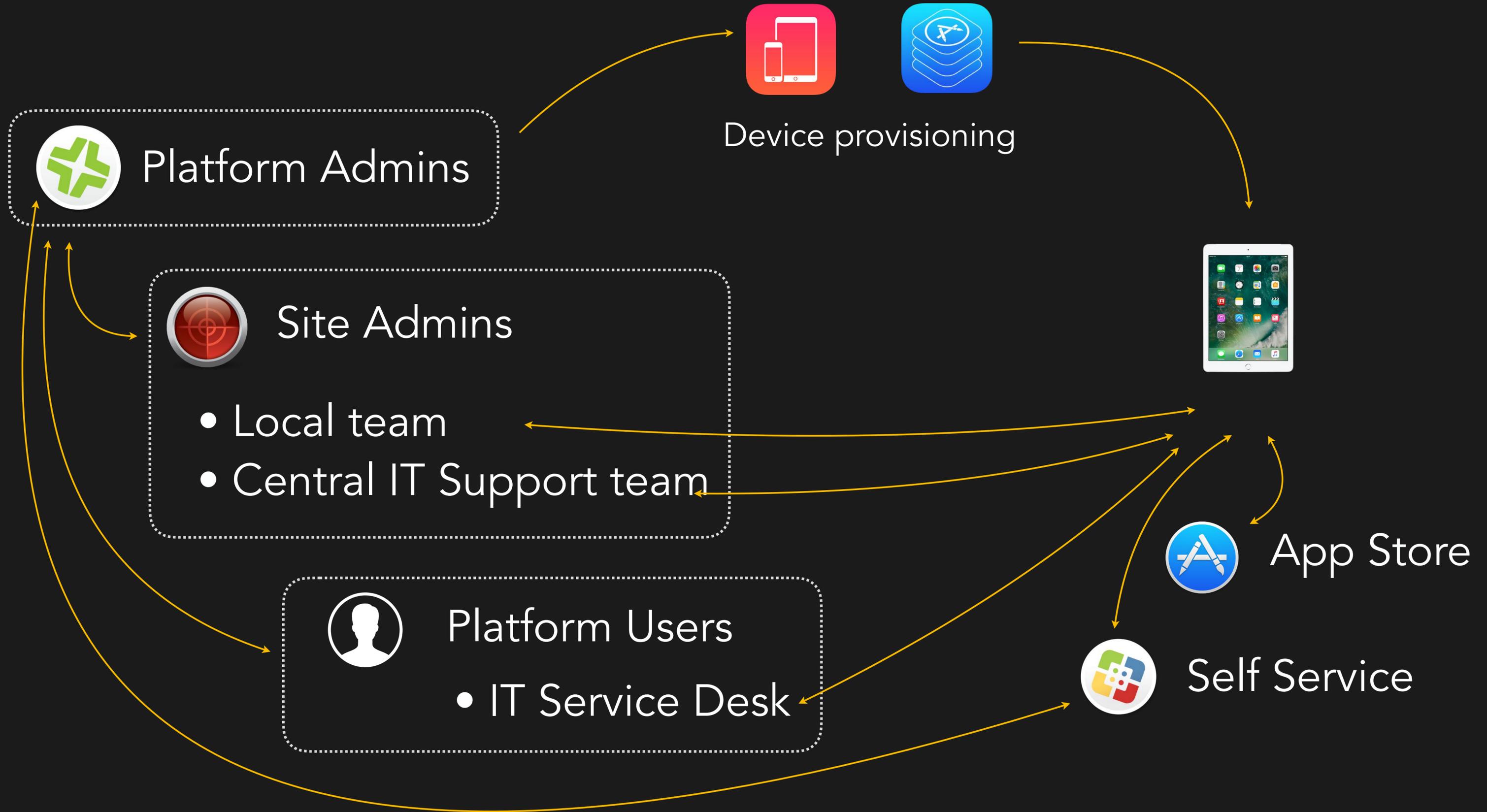
//

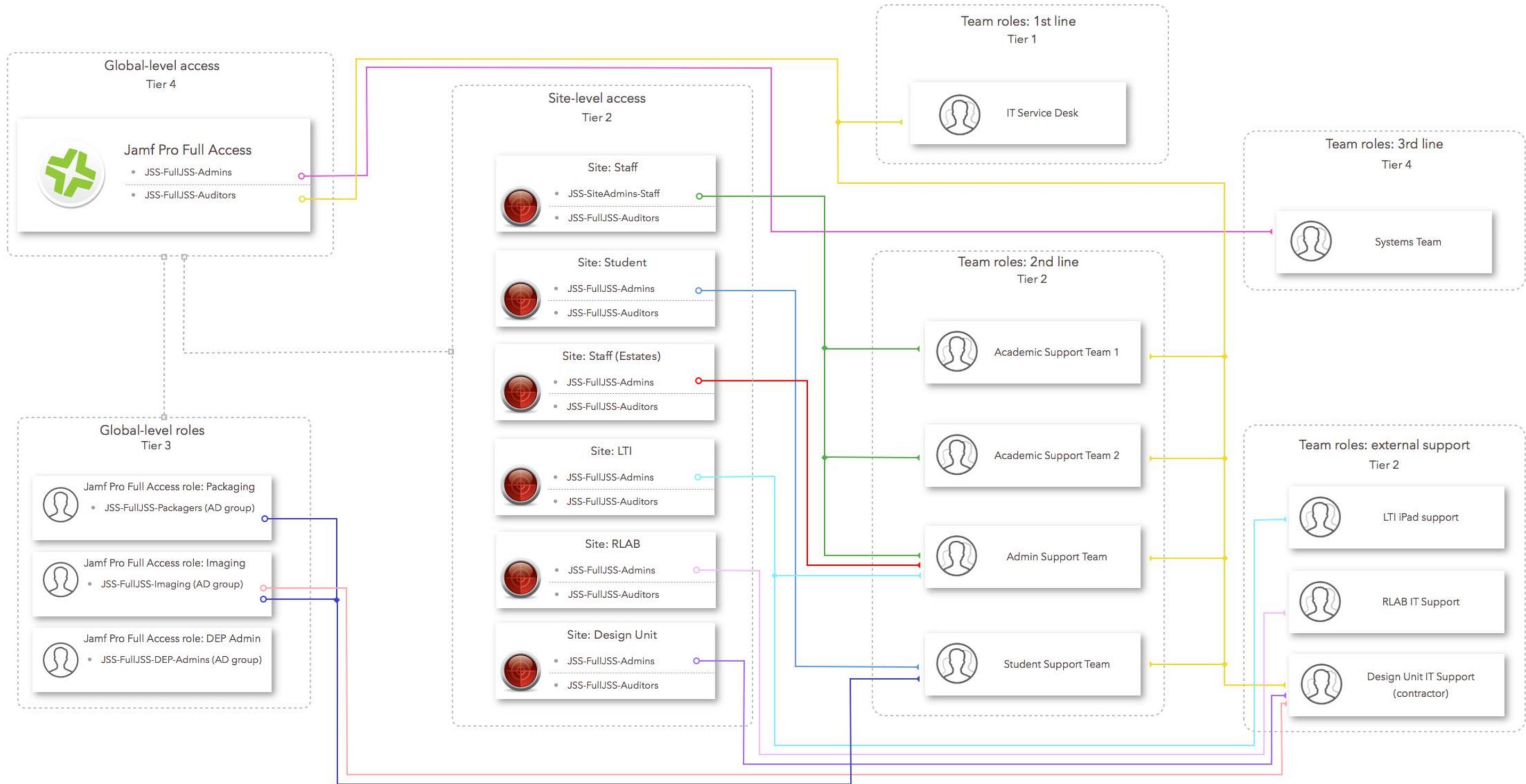
Use inventory data in
integration with other systems

Platform roles

A platform provides the **infrastructure and rules** for an environment that brings together **producers and consumers**. The players in the ecosystem fill four main roles but may **shift rapidly from one role to another**. Understanding the relationships both within and outside the ecosystem is central to platform strategy







Access & administration tiers

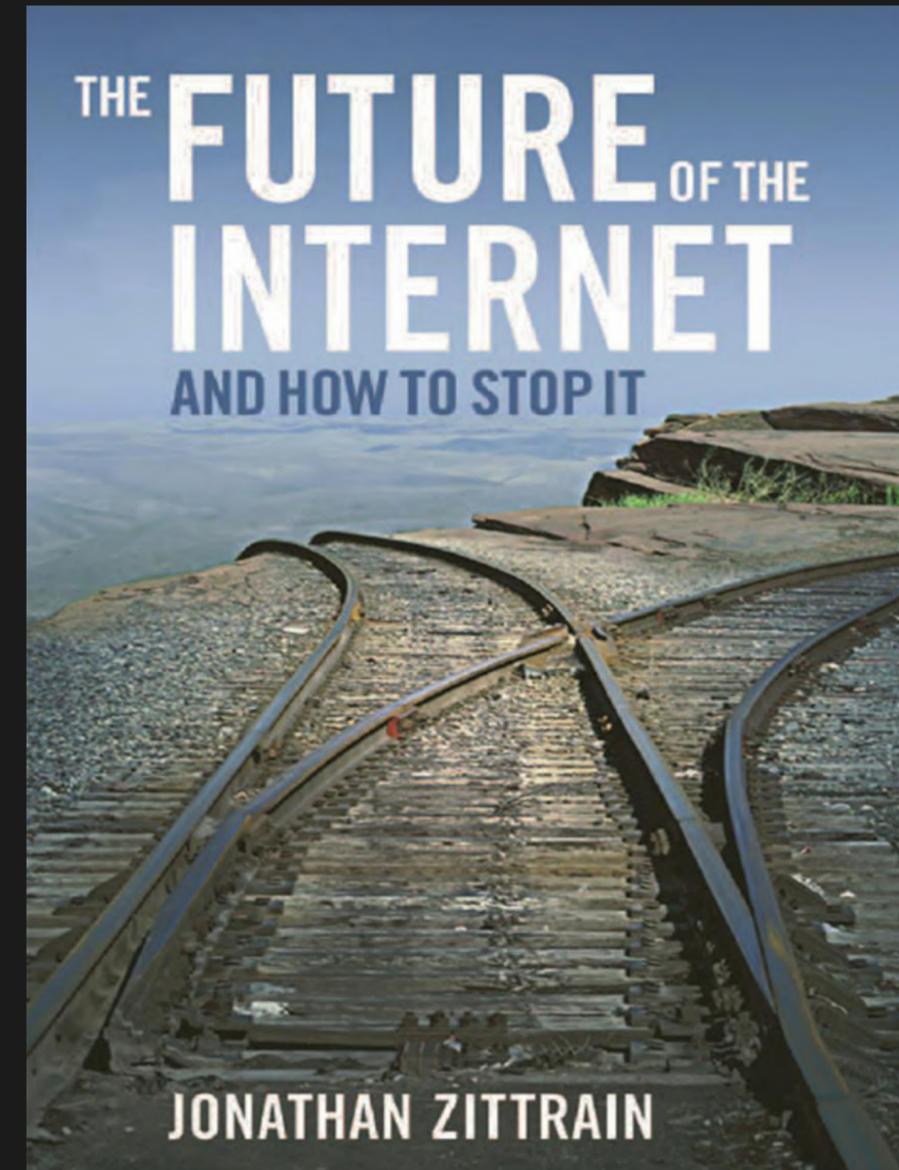
- Tier 1: Auditor access (Read-only access to Full JSS)
- Tier 2: Site administrator access (Custom admin access to a Jamf Pro Site)
- Tier 3: Role-based access (Custom admin access to Full JSS, corresponding to specific roles)
- Tier 4: Jamf Pro administrator (Admin access to full JSS)

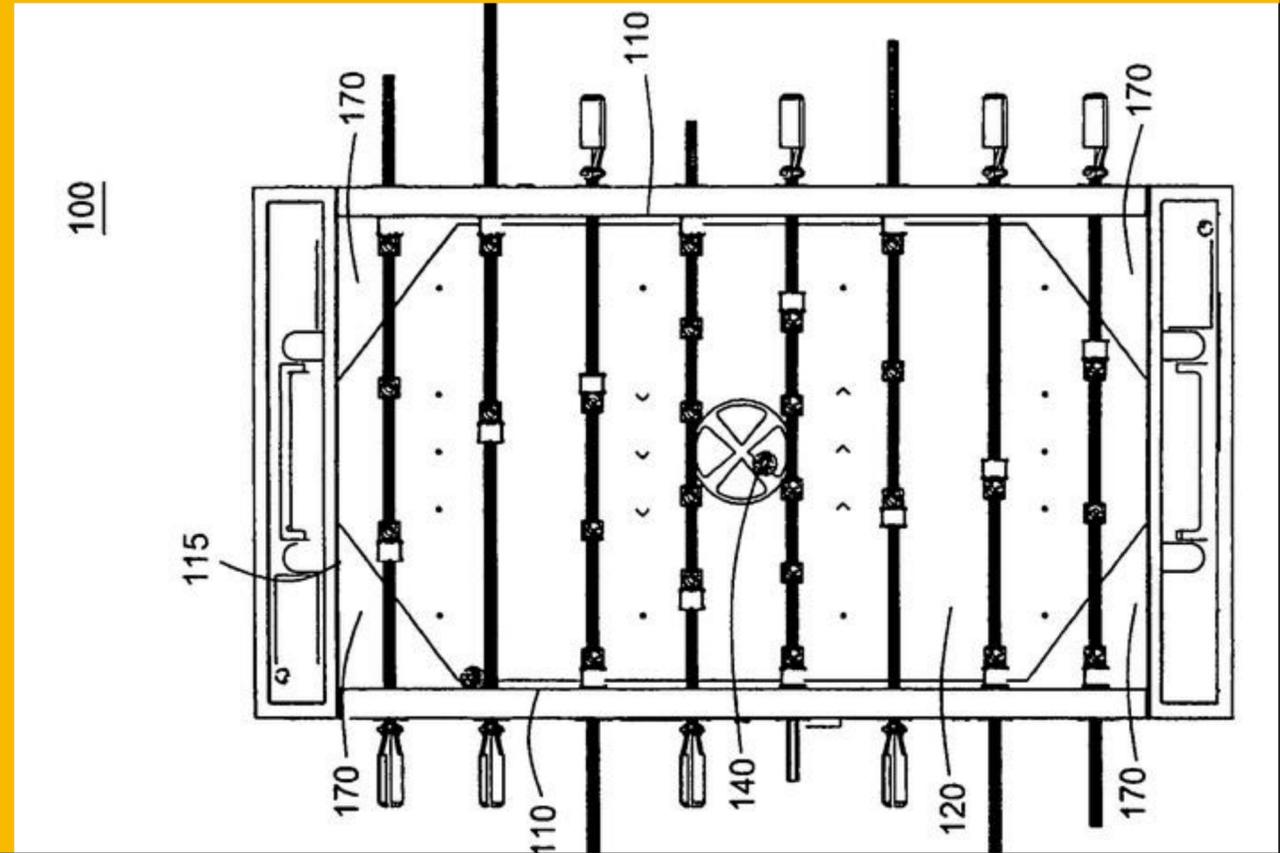
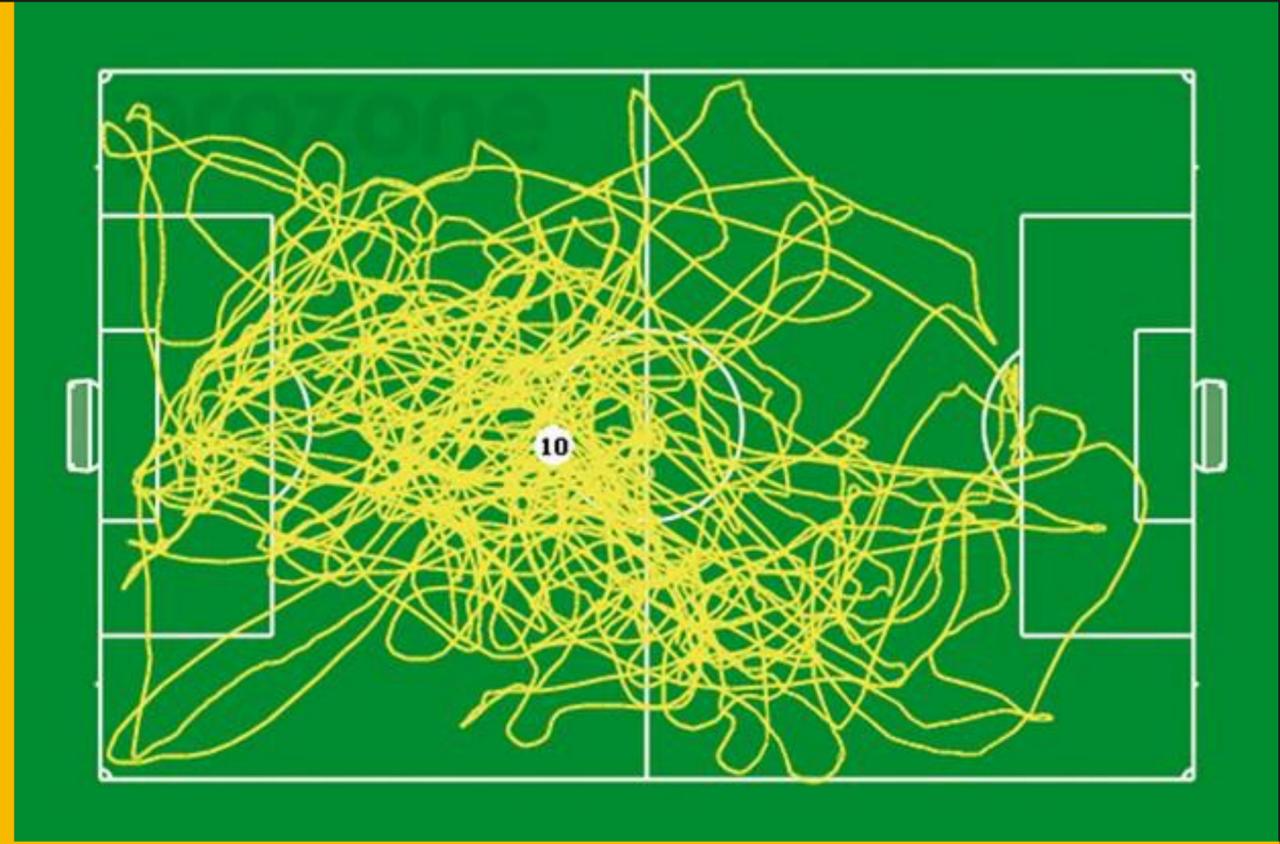
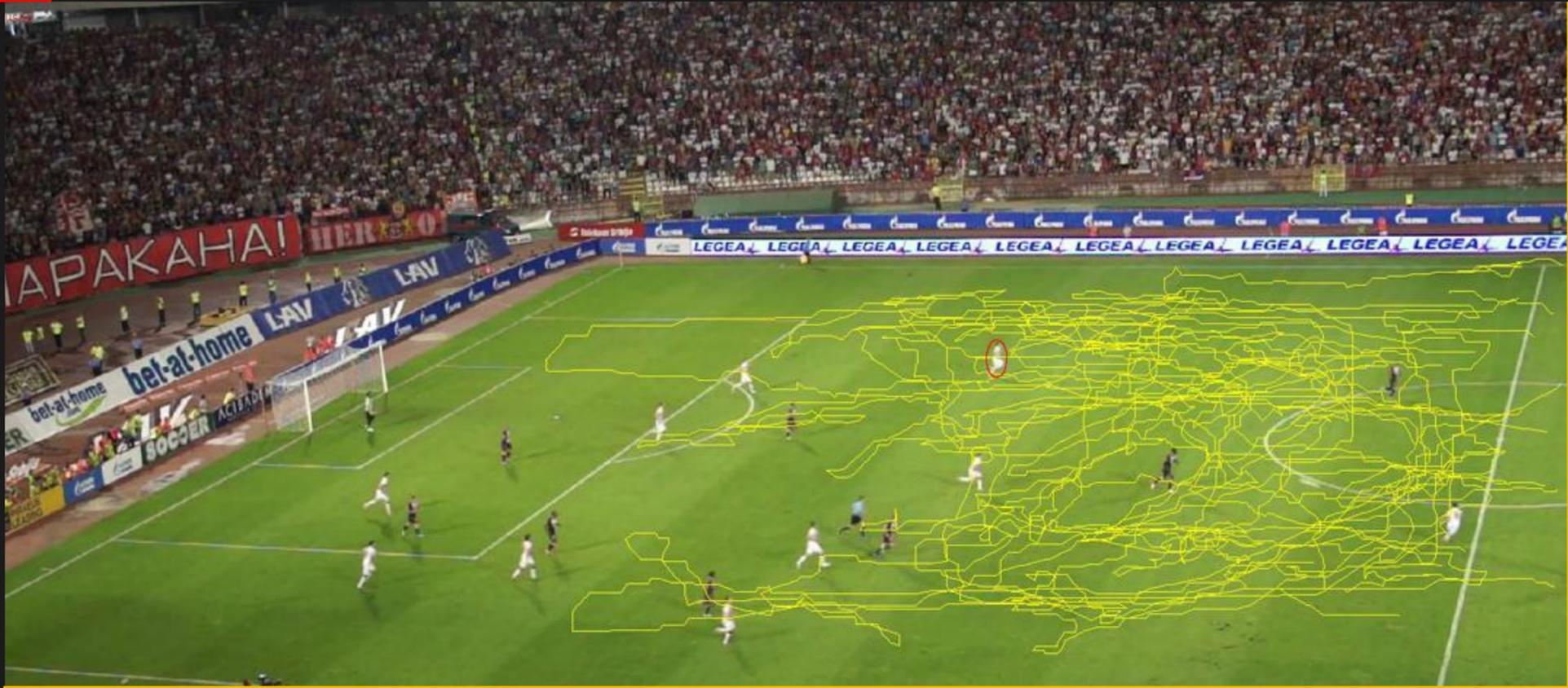
The generative space

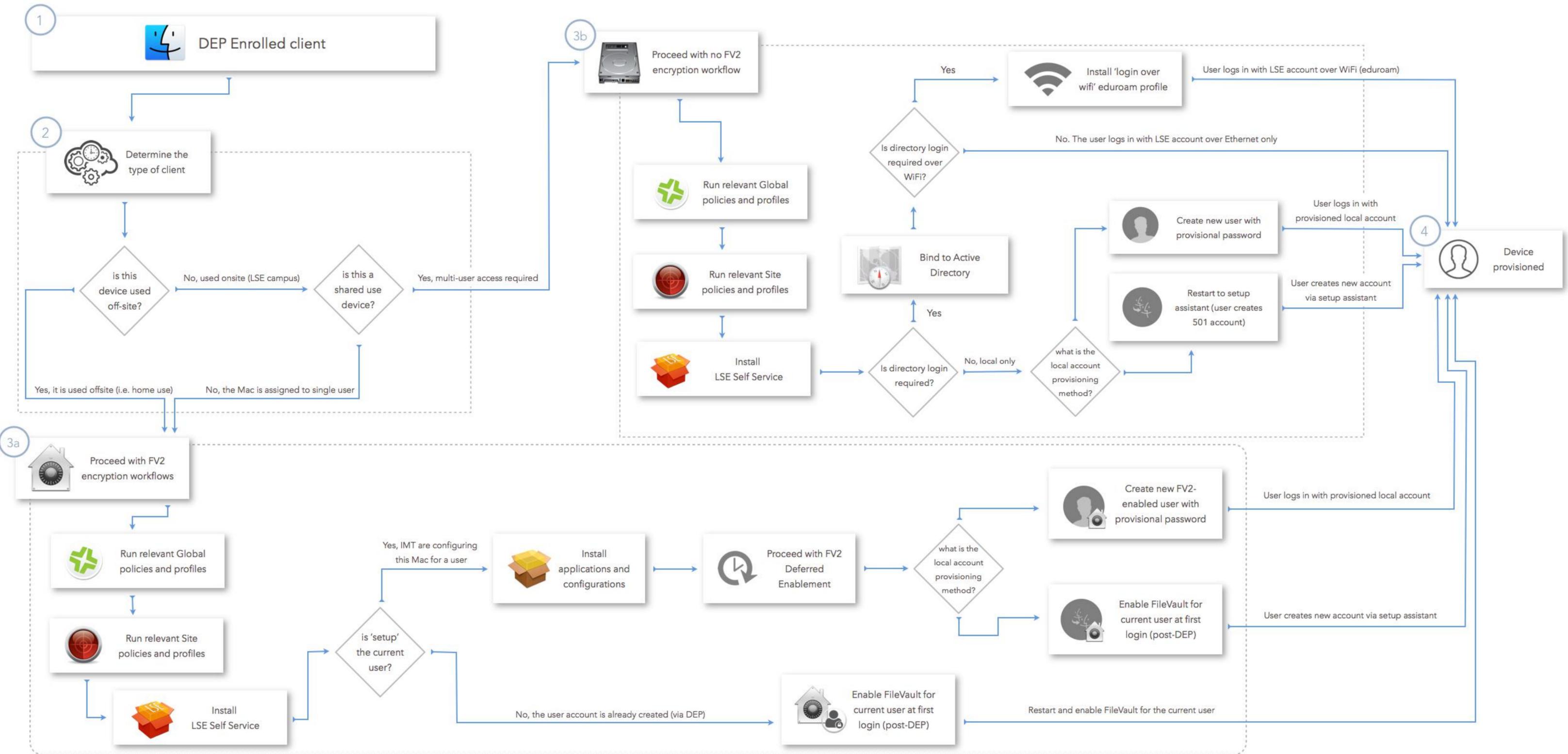
“Generativity is the ability of a technology platform or technology ecosystem to create, generate or produce new output, structure or behaviour without input from the originator of the system.”

Jonathan Zittrain

Professor of Internet law and the George Bemis Professor of International Law at Harvard Law School







“The stone age did not end because humans run out of stones. It ended because it was time for a re-think about how we live”

William McDonough

Architect, pioneer in sustainable and ‘Green’ architecture





Thank you!