A blueprint for digital platforms

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July 13, 2018
Platform?

- Consumers:
  - A
  - B
  - C

- APIs
  - 1:
    - External
  - 2:
    - Internal

- Platform services

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Self-serve: API as a product

- Discovery
- Docs, examples, "try it now"
- Self-service access
Not a platform (by our definition)
True platforms accelerate via **network effects**

platform services
1. Compelling value proposition(s)
2. Ways to communicate the value
3. Paved roads to onboarding
4. The spark to get the flywheel goin
When consumers are also producers
Internal platform ecosystems
Coupled internal + external platform ecosystems
Platform companies

A digital restaurant platform for innovation and execution agility

Building a consumer-centric digital platform to connect with customers

An immersive content platform

A customer experience digital platform

An experience-focused global platform for car rental

A platform of platforms
How?
How? Consider the application landscape...
Example: offer a **supplier management** service
Instead of exposing your internal API...
...design a **consumer-oriented API**
Build that API
The supplier management API product
How about a **richer** supplier management product?
Build that richer supplier management API product
Innovate on these productized capabilities
Other producers are attracted
New partnerships arise easily and independently
Every project creates reusable building blocks

"App store"
Self-serve assets
- eqpt monitoring
- invoices
- rich invoices
New projects reuse the blocks and add more

"App store"
Self-serve assets
- order status
- eqpt monitoring
- customers
- invoices
- rich invoices

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The pace accelerates and debt is retired

"App store"
Self-serve assets

- fraud
- order status
- onboarding
- eqpt monitoring
- customers
- invoices
- rich invoices
The pace accelerates and debt is retired

"App store"
Self-serve assets
- credit check
- payments
- customer 360
- fraud
- order status
- onboarding
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The pace accelerates and debt is retired
The architecture of a platform – and of the web

An application network:

- Emerges bottoms-up via self-service
- Provides visibility, security and governability at every API node
- Is recomposable: it bends, not breaks – built for change
Application networks are starting to converge
A global architecture for platforms
Graphs
Networks are also graphs

An Application Network Graph

A power grid graph

A social network graph

The internet graph
The social graph

Anna

likes

movies

commented on

posting

Jessica

created

David

likes

books

friend

likes

friend
The topograph onboarding customer calls customer API customer flow customer API spec implemented by offered by described by protected by OAuth policy customer flow
A typical topograph

- CRM
- credit services
- credit ratings
- risk assessment
- public records
- core banking
- card mgmt
- loyalty
- partners
- debit/credit card
- acct
- multi-accts
- reward
- social
- campaigns
- Facebook
- Twitter
- support rules
- support exp.
- onboarding
- customer360
- sync customer
- IVR
- statement mailing
- loan origination
- teller web
- support web
Every application...
...exposes an API sub-graph
Are the APIs consistent?
Have they changed in a breaking way?
What's inside a (composite) application?

- teller web
- customer 360
- onboarding
- CRM
- sync customer
- loan origination
- IVR
- statement mailing
- credit rating
- credit ratings
- risk assessment
- multi-accts card mgmt
- debit/credit card
- core banking acct support rules
- Facebook campaigns
- loyalty reward
- Twitter campaigns
- social support exp.
- support web
- risk user
- person name: string id: string
- risk level: riskLevel
- risk assessment
- to: credit services
- to: public records
- request transform enrich transform enrich response
- type: string
- SSN: US SSN
- confidence: percentage
- type: riskType
- level: riskLevel

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How is the data flowing?

- teller web
- customer360
- onboarding
- CRM
- sync customer
- loan origination
- IVR
- statement mailing
- credit rating
- credit ratings
- risk assessment
- public records
- credit services
- multi-accts
- card mgmt
- debit/credit
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- customer campaigns
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- social support exp.
- support web
- risk type: string
- SSN: US SSN
- confidence: percentage
- type: riskType
- level: riskLevel
- risk
- request
- transform
- enrich
- transform
- enrich
- response
- type: string
- id: string
- name: string
- addr: string
- to: credit services
- to: public records
- risk assessment
How is it flowing across the application network?
Thank you!