

# **III** Adaptive

# FDC3: Leveraging the Network Effect

## Who am I?

#### My history

- Started as a software developer in Cape Town, SA
- Have worked in the finance industry for 15+ years
- Everything from Delphi and ASP, WPF and Flash, to HTML5 and React

#### At Adaptive Financial Consulting

- Head of Desktop Strategy
- Worked on several industry-leading desktop platforms
- Advising clients on desktop technologies, collaboration and workflow

#### At FINOS

- FDC3 PMC Member
- Chair of the API Working Group



"Over the past 23 years, network effects have accounted for approximately 70% of the value creation in tech."

- Nfx

#### The Network Effect: Creating Value

- Study looking at 336 companies from 1994-2017 > \$1 billion
- 35% had network effects at their core, adding up to 70% of the value created
- Network effects have asymmetric upside
- Single most predictable attribute of highest value tech companies

# **Nodes and Links**

- Nodes = network participants
- Links = connections between nodes
- Depending on characteristics, networks scale exponentially in value



# **Reaching Critical Mass**

- There are different types of networks (e.g. physical, protocol, platform, data etc.)
- Networks need to reach a critical mass before realising their value



Size of Network

### **Establishing a Network: Microservices**

- Microservices are one way to establish lightweight nodes in a software network
- Services are linked via standardised communication: HTTP
- Allows breaking down complex systems into smaller parts
- Continued innovation in this area: Docker, Cloud, OpenAPI, etc.

### Advantages of a Decoupled Architecture

- High maintainability and testability
- Standardised communication patterns
- Independently deployable
- Organized around business capabilities
- Small, autonomous teams
- Evolution of technology stack

# **Architectural Evolution I**

	Monolith	Client-Server	Microservices
Front End		Frontend Team	Frontend Team
Back End	Application Team	Pookend Teem	Aggregation Layer
Database		Backend Team	Pricing Servi Ref Data Serv Auth Service

# **Architectural Evolution II**





#### **Frontend Networks**

- A componentized desktop
- Enabled by web technologies & desktop containers
- How do we define communication links between applications?
- Can we do it in a simple, standardised way that spans organisations?
- Enable us to leverage network effects and unlock value

# FDC<sup>3</sup>

Open standards for the financial desktop

- "Financial Desktop Connectivity and Collaboration Consortium"
- Started by OpenFin in 2017
- Contributed to the Fintech Open Source Foundation (FINOS)
- FDC3 1.0 specifications released in March 2019
- <u>https://fdc3.finos.org</u>



![](_page_13_Figure_0.jpeg)

# **Streaming Price**

#### **In Summary**

- Network effects are critical for unlocking value
- Microservices = decoupled HTTP-linked services
- Micro-frontends = decoupled FDC3-linked applets
- Open, connected applications are:
  - Powerful inside our organisations
  - Even more so, across our industry

![](_page_14_Picture_7.jpeg)

# Q&A

#### Follow me:

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