DIGITAL PLATFORMS ARE EATING THE WORLD

Prof. dr. Tom Evens, imec-mict-UGent

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imec

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The Golden Geeks

Netscape's Marc Andreessen

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3

"SOFTWARE IS EATING THE WORLD"

"We are in the middle of a dramatic and broad technological and economic shift in which software companies are poised to take over large swathes of the economy."

"More and more major businesses and industries are being run on software and delivered as online services — from movies to agriculture to national defense. Many of the winners are Silicon Valley-style entrepreneurial technology companies that are invading and overturning established industry structures. Over the next 10 years, I expect many more industries to be disrupted by software, with new world-beating Silicon Valley companies doing the disruption in more cases than not."

Marc Andreessen, The Wall Street Journal, 20 August 2011

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"SOFTWARE IS EATING THE WORLD"

"SOFTWARE IS EATING THE WORLD"

Media

Retail

Finance

Mobility

Telco

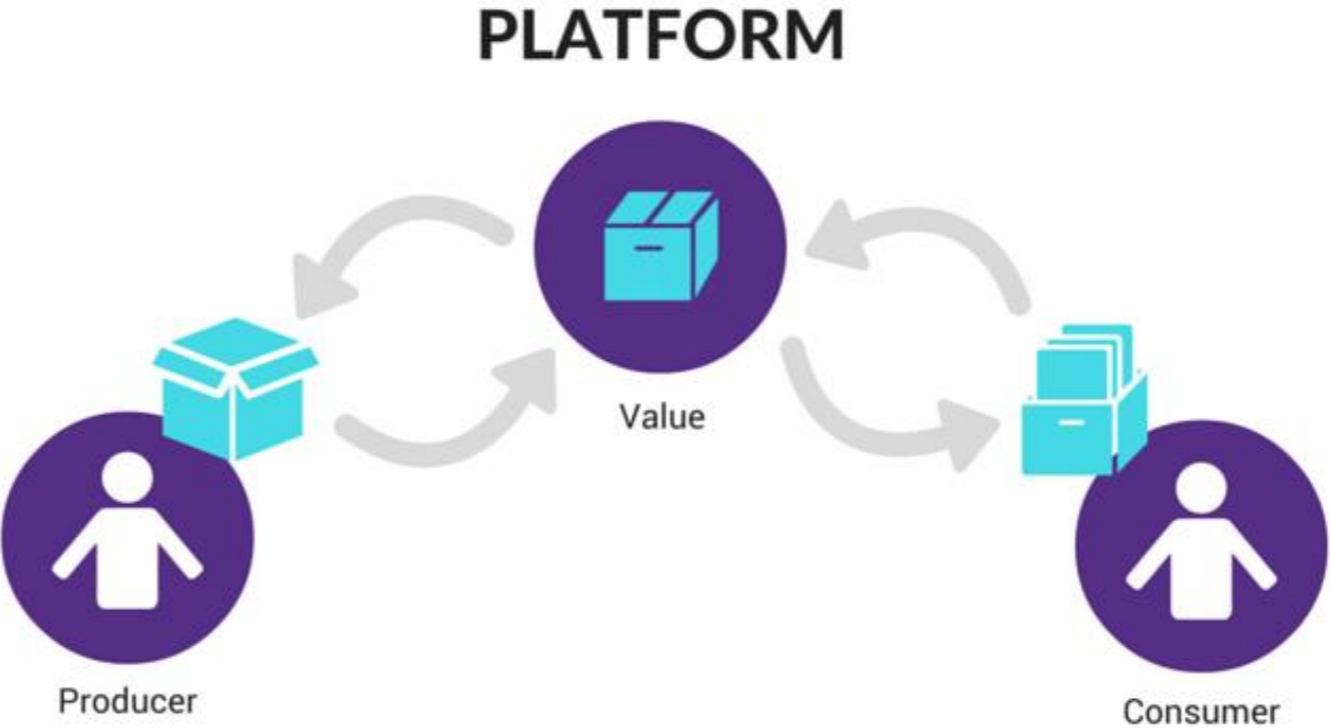**Travel**

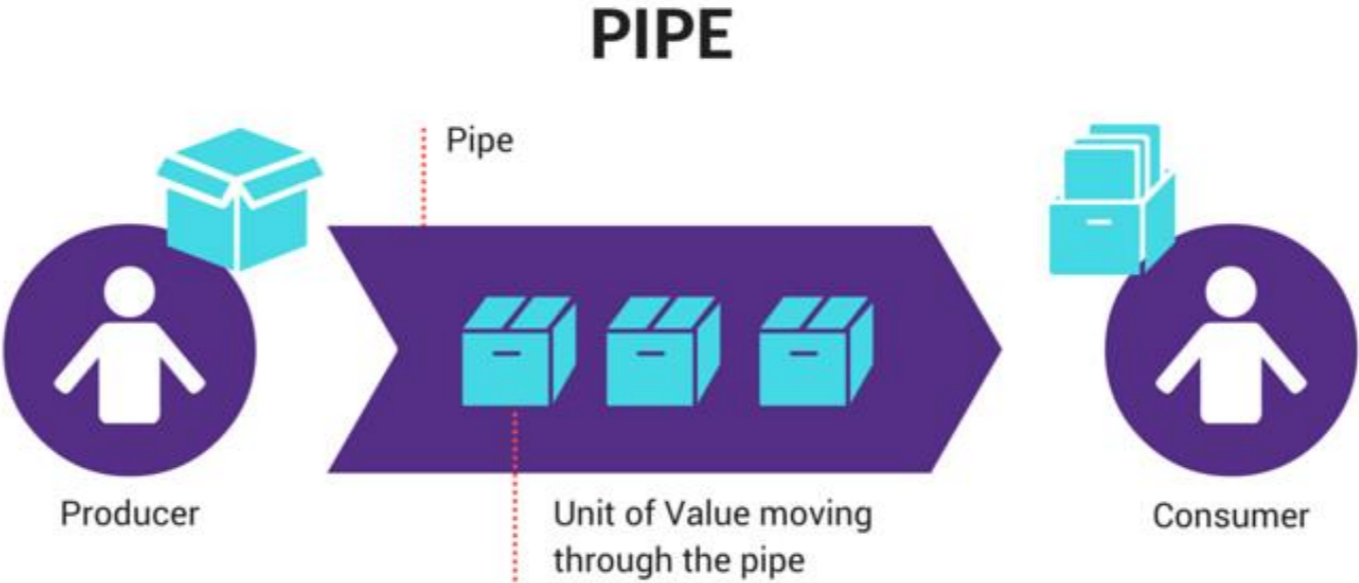**Education**

Health
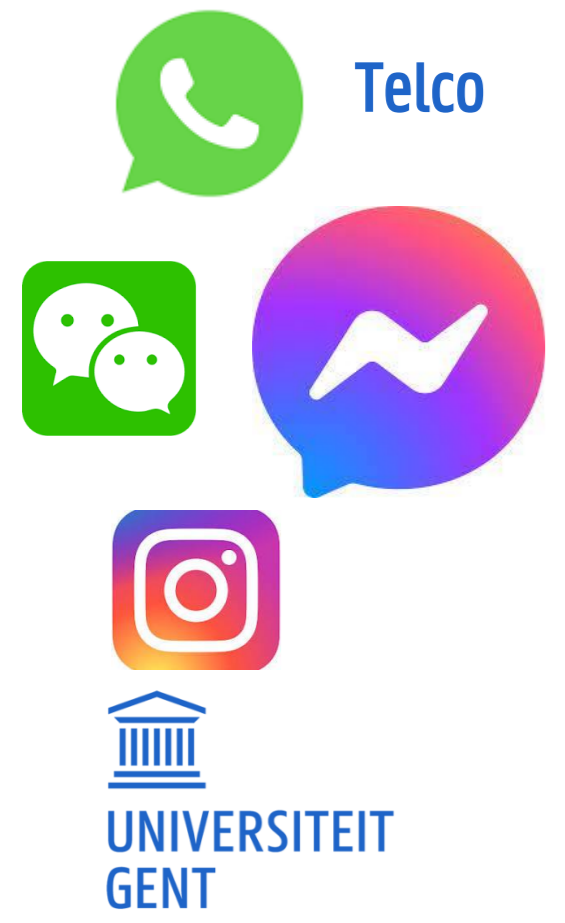
PLATFORMS AS BUSINESS MODELS

PRODUCTION

(product)

⬇

CONNECTION

(business model)

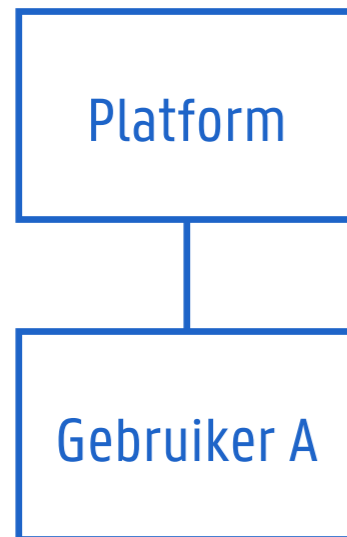# 1. A PLATFORM USES DIGITAL TECHNOLOGY

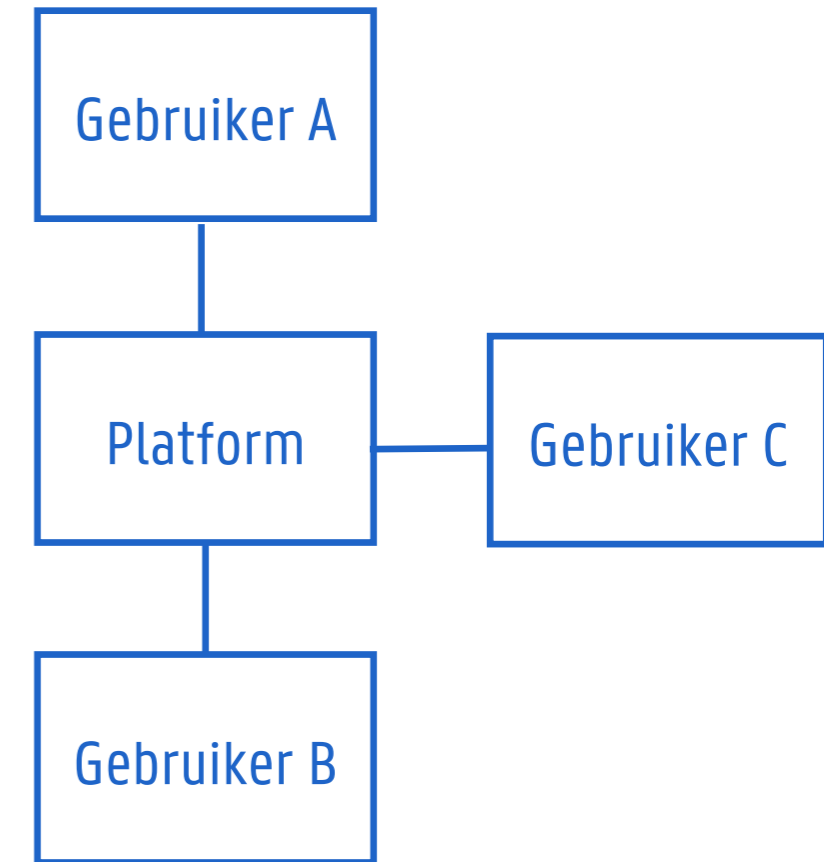# 2. A PLATFORM CONNECTS # CUSTOMER MARKETS

ONE-SIDED

Platform

Gebruiker A

TWO-SIDED

Gebruiker A

Platform

Gebruiker B

MULTI-SIDED

Gebruiker A

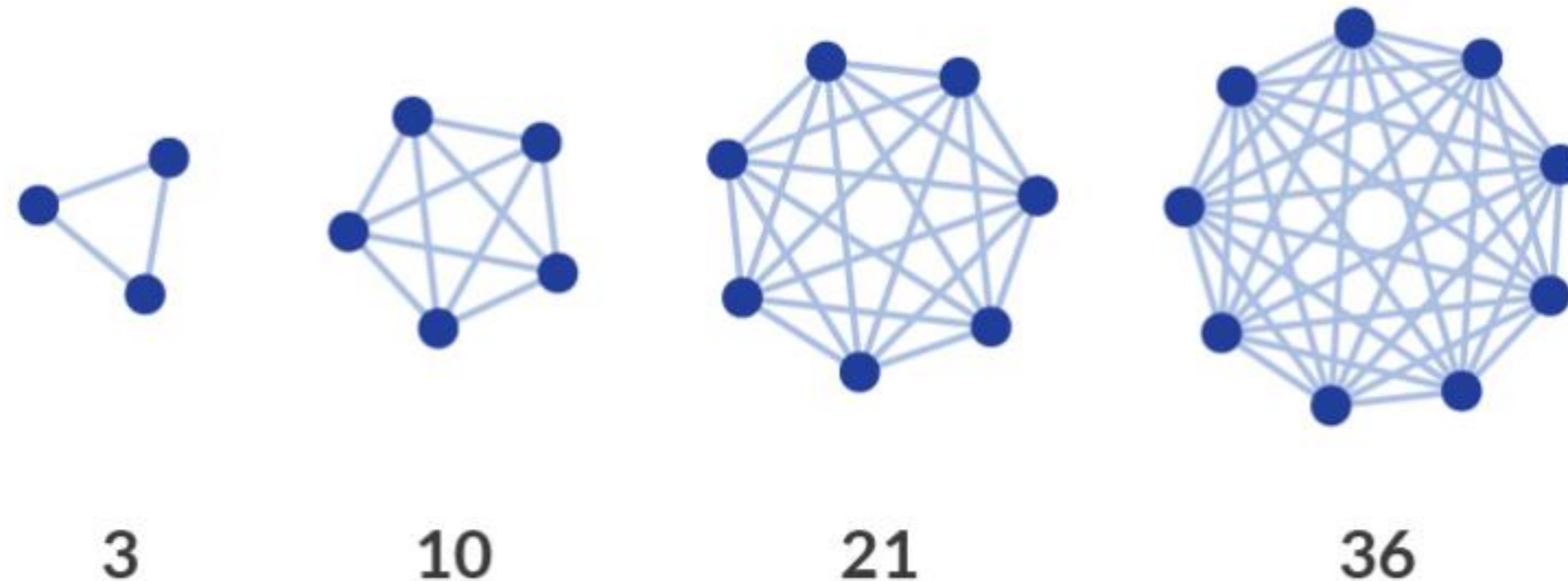Platform — Gebruiker C

Gebruiker B
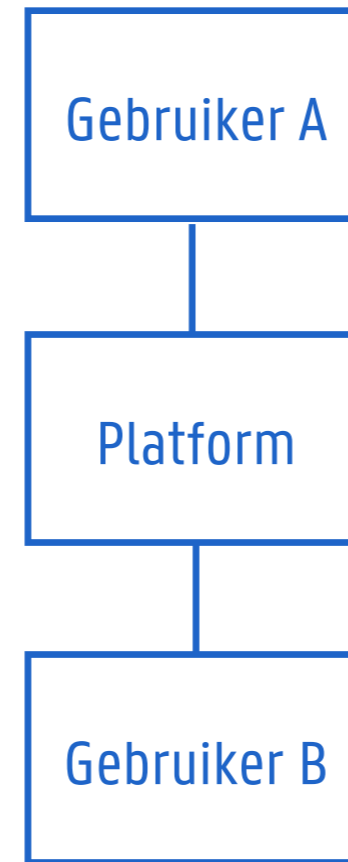
3. A PLATFORM SUFFERS A CHICKEN-AND-EGG DILEMMA

4. A PLATFORM CREATES NETWORK EFFECTS

— The more users connect to the platform, the more valuable the platform becomes (aka Metcalfe's Law)

— Ability to grow quickly as the utility increases as more users join the platform (scalability, exponential growth)

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David Parkins

'PLATFORM WARS': CONTROL A PLATFORM ECOSYSTEM

TREND 1: EXPANSION

— Expansion into other product categories and consumer markets

  — Lure users into the ecosystem, let the ecosystem grow

  — cf. platform colonialism

— Hungry for massive data (IoT, sensors, automation, AI)

  — Google Nest, Amazon Echo, Nike wearables

  — Ultimate understanding of consumer behaviour

— Platforms are addictive to data; users are their dealers...

— Successful business models at the expense of our privacy?

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TREND 2: POSITIONING

— Central position in the platform economy: extremely profitable

  — Everyone depends on your platform (gatekeeper/keystone)

— Control of operating system (underlying infrastructure)

  — Smartphone, tablet, tv-set, but also car, smart home systems
  (thermostat, fridge, doorbell), smart cities

— Control user interface (more intuitive)

  — Search, chatbots, AI, NLP, voice, AR/VR, payment systems, maps,...

— Risk: exploitation of your partners (suppliers and customers)

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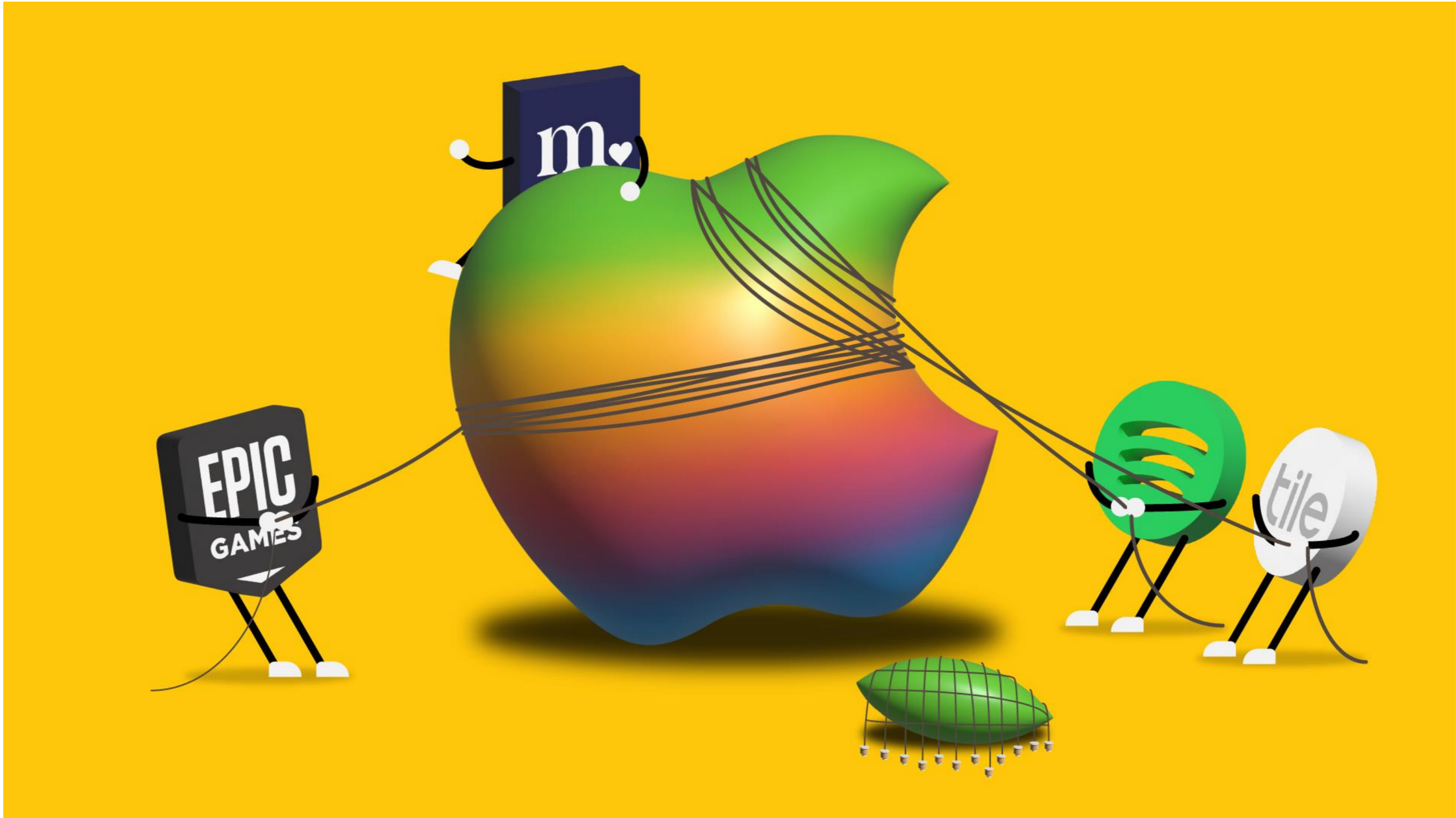
TREND 3: CONVERGENCE

— All platforms are building similar ecosystems

    — Difficult to distinguish between core and peripheral business

    — Self-driving cars, payments, medical applications,...

    — In media also music, video, games, advertising (cf. streaming wars)
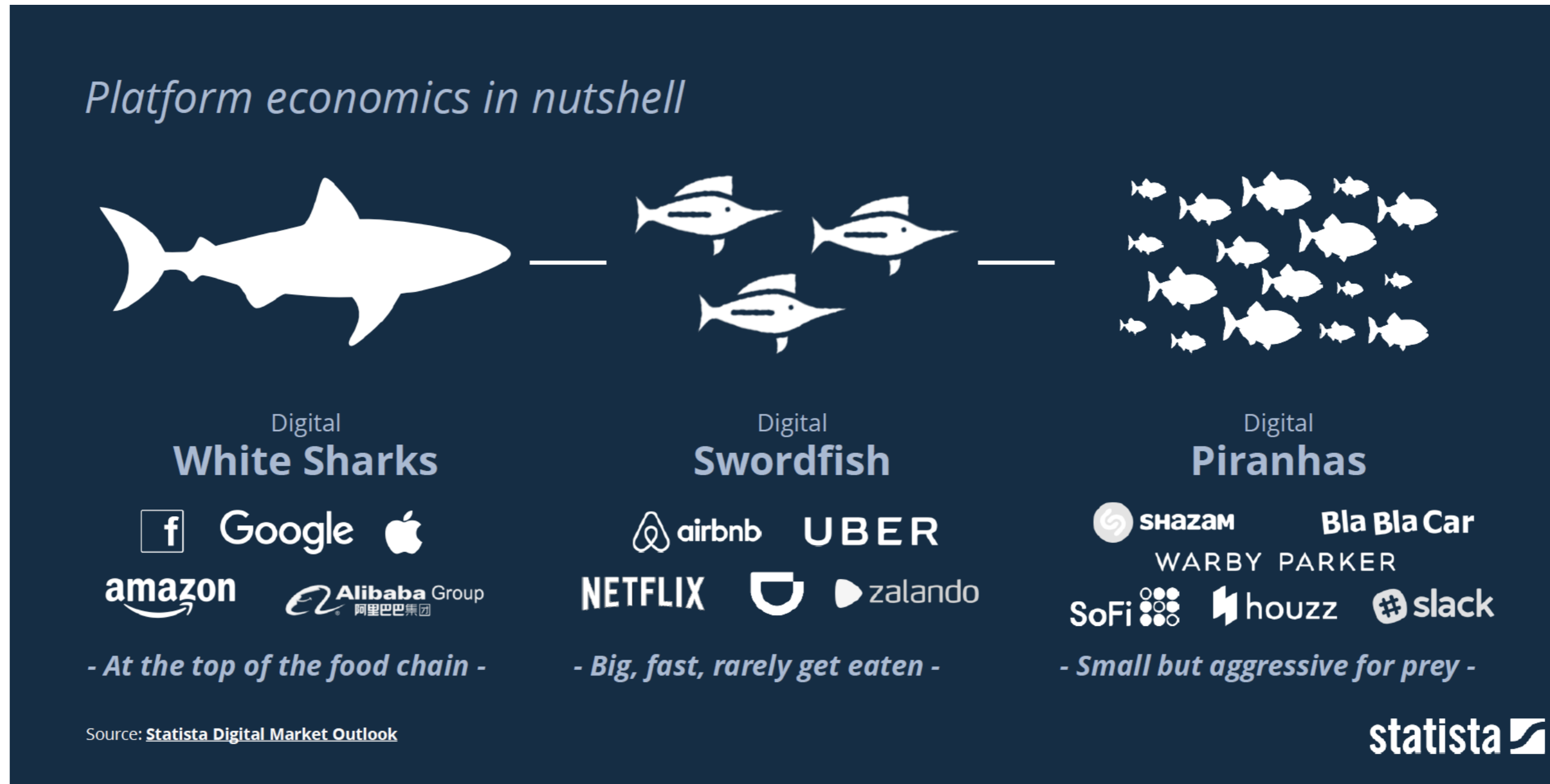
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TREND 4: SILOING

— Lock in users in vertical silos

  — Dependency on a platforms

  — Impossibility to switch platforms

  — Lack of data portability

— Success of a platform does not only depend on price or product, but the complementary services that add value to the ecosystem (e.g., number and quality of apps in App Store = ecosystem)

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'HOTEL CALIFORNIA'-EFFECT (CF. THE EAGLES)

WHY PLATFORMS ARE EATING THE WORLD

Platform economics in nutshell

Digital White Sharks — *At the top of the food chain* — Facebook, Google, Apple, amazon, Alibaba Group

Digital Swordfish — *Big, fast, rarely get eaten* — airbnb, UBER, NETFLIX, zalando

Digital Piranhas — *Small but aggressive for prey* — SHAZAM, Bla Bla Car, WARBY PARKER, SoFi, houzz, slack

Source: **Statista Digital Market Outlook**

statista

CONTACT

Prof. dr. Tom Evens

imec-mict-UGent

E-MAIL   tom.evens@ugent.be
WEBSITE   http://www.mict.be

@EvensTom
http://be.linkedin.com/in/tomevens

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