MIT IDE
Platforms: Review & Outlook

Peter C. Evans
Platform Strategy Institute
Platform Trends to Watch

- Rapid growth of creator platforms
- Europe continues to lag in platforms
- Platform-to-platform integrations
- Platform regulation
- XPlatforms
- Accelerator to Great Energy Transition
- B2B Marketplaces
- Race for platform talent
- Non-fungible Tokens (NFTs)
- Metaverse Platforms
- Super App Battles

Source: Platform Strategy Institute, 2021
Shell and IBM combined strengths to create the first B2B marketplace for the mining sector Oren marketplace that provides co-selling and ecosystem partnerships for mining solutions.
TikTok has taken the world by storm with more than 1.5 billion downloads on the App Store and Google Play and more than 500 million active monthly users. The largest demographic of TikTok users is between the ages of 16 and 24 but that is now changing with other age groups now engaging on the platform.

**TikTok for Business**

#1: Create Your Own Content on TikTok

#2: Curate and Share User-Generated Content on TikTok

#3: Advertise on TikTok

#4: Influencer-generated Content

Source: https://www.socialmediaexaminer.com/4-ways-to-use-tiktok-business/
Merchants – to – Platform integrations – scale with personalization

Platform-to-Platform integrations – scale with personalization

Merchants
1 million
175 countries

Prospects
Customers
Marketing/Sales

Continuous on-demand supply

Exploration
Integration
Deployment

experiences

TikTok Creators

Delivery

Shopify has established an integration with TikTok

TikTok has a massive network of creators to engage and create content.

Source: Platform Strategy Institute, 2021
Amazon is rapidly adding experiences to its platform
Experiences drive new network effects

Adding experiences to eCommerce

Amazon Live and Amazon Explore are new platforms that provide a diverse menu of live events and engagement points for sellers. These new platforms, introduced since 2019, add new opportunities for positive network effects that complement Amazon’s existing powerful flywheel.

<table>
<thead>
<tr>
<th>Year</th>
<th>Experience platforms</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td><strong>amazon live</strong></td>
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<tr>
<td>2020</td>
<td><strong>amazon explore</strong></td>
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</tbody>
</table>

Source: Amazon
Growth and structure of the emerging NFT industry

Blockchain innovation non-fungible tokens (NFTs) + marketplaces
$2.5 billion in NFTs sold in first half of 2021*

Source: Peter Evans & Pavel Kireyev

* NFT sales volume surges to $2.5 bln in 2021 first half, Reuters, July 6, 2021.
... Rise of the Super Apps

Deliveries
Alternative to traditional dining options including home-cooked food and dining in restaurants.

Express
Ride on the wave of e-commerce with parcel delivery services.

Mobility
Alternative to traditional modes of transport including trains, buses, and private cars.

Digital Advertising
Alternative to traditional advertising mediums including prints, television, billboards, classifieds.

Financial Services
- Digital Wallet & GrabPay Card: Displace cash transactions
- Insurance
- Invest
- Remittance
- Loans

PayLater Incumbents

VISA
MasterCard
Could the Super App battle brewing in SE Asia go global?

<table>
<thead>
<tr>
<th></th>
<th>Valuation</th>
<th>Ride sharing</th>
<th>Food delivery</th>
<th>eCommerce</th>
<th>Streaming Entertainment</th>
<th>Gaming</th>
<th>Financial Services</th>
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</table>

Source: Platform Strategy Institute, 2021
5 key platform trends to watch

- Industrial adjacency plays + platforms
- Creator economy + platform integrations
- Experience economy + platforms
- Blockchain innovation/ NFTs + platforms
- Coming Super App Battles
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Geoffrey Parker
Dartmouth & MIT
Much of what we know about platforms comes from B2C

<table>
<thead>
<tr>
<th><strong>B2C Examples</strong></th>
<th><strong>B2B Examples</strong></th>
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<tbody>
<tr>
<td>eBay</td>
<td>Siemens Healthineers</td>
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<td>Apple iPhone</td>
<td>Salesforce</td>
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<td>Google Android</td>
<td>Shopify</td>
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<td>Google Docs</td>
<td>HubSpot</td>
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<tr>
<td>Twitter, Instagram, Facebook, etc.</td>
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<td>Airbnb</td>
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<td>Uber</td>
<td>Sightmachine</td>
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Examples where B2B does not equal B2C

• Customer Needs and Sales Cycles
• Pricing and Cost Sensitivity
• Marketing Approach
• Product Knowledge
• Trust
• Data Ownership
• Interaction frequency (B2B<B2C<M2M)
Value Creation in Platforms

Where does value come from?

- Same-side Network and Collaboration Tools
- Cross-side Access (markets and ecosystems)
- Standalone from core

BDI Database of B2B Platforms in Germany

- Data-centric platforms
- Industrial IoT
- Data (transaction)
- Transaction-centric platforms
- Marketplace
- Supply chain/logistics
- Networking

https://issuu.com/bdi-berlin/docs/20191001_brochure_bdi_german-digital-b2b-platforms
BDI Database of B2B Platforms: Coded Companies by Value Type

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Stand Alone Value</th>
<th>Same-Side User Value</th>
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Supply Chain Mgmt =>
Marketplaces =>
Networking Type 1 =>
Networking Type 2 =>
Edward Anderson, Jose Lopez, Geoffrey Parker
How are firms adopting new technologies?

Data from interviews with executives and member organizations of the council

- Perspectives on Operating and Business Models
- Accelerating business Model Innovation
- Industry Transformation at Scale
2020 business model and operating model changes


Nitin Joglekar, Geoffrey Parker, Jag Srai
Broad Digital Transformation Archetypes
Pathways - quick wins, capability development, and business model innovation

1. EXPERIMENT & APPLY
2. ROLL OUT & CONNECT
3. CREATE & STACK
4. BUILD FOR OPEN FUTURE
5. TRANSFORM TO MARKETPLACE
6. TRANSFORM TO ECOSYSTEM

Nitin Joglekar, Geoffrey Parker, Jag Srai
Need different metrics for each type of investments

Will also need additional organizational capabilities

Nitin Joglekar, Geoffrey Parker, Jag Srai
Takeaways

• B2B platforms differ from B2C in some important ways
• Fundamental economics of value creation help us understand different systems
• Technology initiatives differ along dimensions of business model and operating model changes required
• Technology initiatives can be categorized by the number and type of actors involved
• Infrastructure investments can exhibit “worse before better” impacts
• Need to match metrics to type of initiative
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Pinar Ozcan
Saïd Business School
Oxford University
Platforms have avoided highly Regulated markets

In *Platform Revolution*, Parker et al (2016) give anecdotal evidence:

‘many of the most important aspects of our economy, our society and our lives – education and government, healthcare and finance, energy and manufacturing – appear largely unaffected by the rise of the platform’  
(p. 261)

Highly regulated industries may experience a delay / lack of platform entry due to:  
regulators favouring incumbents, locking industry against start-ups trying to offer new sources of value
NOT ANYMORE...

• Signs of disruption in healthcare, education, finance...
LET’S LOOK AT FINANCE...

How do we access our financial data?
Are WE the owner of that data?

"No, it's MY data!"
Open banking REGULATIONS for financial data sharing
RISE OF Single service fintechs
Sectoral Platforms rising in finance
Entrepreneurial Entrants
- Cheaper, more user-friendly services
- Customer Trust
- System Resilience
- Intl Growth

New Entrants w/ Existing Platforms (Amazon, Apple, Facebook, Google)
- Trusted Brand
- Resources
- Cheaper, more user-friendly services
- Fast Market Entry (Abundance of Complementors)

Incumbents
- Trusted Brand
- Resources for Tech
- Intl and Reg Experience
- IT Silos
- Cultural Silos
- Reg. Unevenness

Growth through Complementors

Growth through Platform Users
Tech Giants in finance: ‘Platform-as-a-Bank’
With Covid, AI is changing industries even faster...

industries are ‘colonized’ by digital platforms

partnering with big tech will be unavoidable...
‘digital COLONIZATION’ of THE HEALTH SECTOR

- Patients
- Pharma / Biotech
- Hospitals / Clinics / Specialists
- Doctors (GP Practices)
- Healthcare IT providers
- Medical researchers
- Healthcare device manufacturers
- Pharmacies
- Healthcare Conglomerates
- Insurance
- Amazon
- Google
- Apple
- Facebook
- Amazon
- Microsoft
- Amazon
- Google

Regulation of output products
Regulation of service providers
Thank you

profpinar@gmail.com
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Marshall Van Alstyne
Boston University & MIT
Hipster Antitrust – New Brandeis (Std Oil)

Lina Khan
FTC Chair

Tim Wu – Special Assistant to Pres for Tech

Challenge consumer welfare antitrust standard focused on prices – most platforms are free! – on basis of harms to innovation and competition
Recent Legislation

• Access Act (Scanlon)
  - To promote competition, lower entry barriers, and reduce switching costs for consumers and businesses online.

• American Innovation & Choice Act (Cicilline)
  - To provide that certain discriminatory conduct by covered platforms shall be unlawful

• Ending Platform Monopolies (Jayapal)
  - To promote competition and economic opportunity in digital markets by eliminating the conflicts of interest that arise from dominant online platforms’ concurrent ownership

• Merger Filing Fee Modernization (Neguse)
  - To promote antitrust enforcement and protect competition through adjusting premerger filing fees, and increasing antitrust enforcement resources

• Platform Competition & Opportunity Act (Jeffries)
  - To promote competition and economic opportunity in digital markets by establishing that certain acquisitions by dominant online platforms are unlawful
EU & US Approaches (China too)

**Bad Ideas**
- Break-up
  - Doesn’t address network effects
- Prohibition on Merged Data
  - Forbids value creation on nonrival asset
- Prohibition on entering adjacent markets
  - Forbids certain efficiency gains
- Prohibition on selling in own market
  - Forbids certain efficiency gains

**Good Ideas**
- Prohibit self-preferencing
  - Equal access ensures fairness & efficiency
- Interoperability
  - Enables joint use of nonrival assets
- Data Portability – biz like consumer
  - < yes / no>
  - In Situ is better
- Competing Governance Models
  - Enables value creation and competition
Should We Treat Platforms As Infrastructure?
# Problems of Data Portability

## Data Portability

- Porting data removes context. Your response to someone else’s post or their response to yours is lost. Platform keeps *their* data (Berlind 2018).

- Data decays. A 1x transfer represents a depreciating stock of information.

- Data removed from context is not actionable. Cannot *share* a benefit with friends. Cannot *receive* them either.

- Moral Hazard: Stores can selectively present their 1 and 2 star reviews

## In-Situ Access

- All context is preserved. Data provided by friends and 3rd parties remains intact.

- Access *in situ* grants use of recent flows and updates as well as the stock.

- Can safely cut off 3rd parties (don’t need to trust they deleted your data)

- Data *in situ* is actionable. Benefit can be shared across existing infrastructure.

- Full information is preserved. Risk assessment is more accurate
Centrality of APIs
RESEARCH FINDINGS:

Financial impact differs by type of API

<table>
<thead>
<tr>
<th></th>
<th>B2C APIs</th>
<th>B2B APIs</th>
<th>Internal APIs</th>
<th>APIs</th>
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</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>4%</td>
<td>66.2%</td>
<td>16.5%</td>
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</tr>
<tr>
<td>Cost</td>
<td>-5.4%</td>
<td>-7.4%</td>
<td>-22%</td>
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</tr>
<tr>
<td>Net Income</td>
<td>0.86%</td>
<td>38%</td>
<td>4%</td>
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<tr>
<td>Hack Risk</td>
<td></td>
<td></td>
<td>13.5%</td>
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</tbody>
</table>
How can we estimate CLV of a free customer or in network markets?

We can econometrically estimate CLV for a Free Customer or network value for other customers or total firm value based on customer equity.
New Research!

1) *In Situ* Data Rights: “Platform Mergers & Antitrust”  
   (Parker, Petropoulos, Van Alstyne)

2) APIs & Market Cap: “Exposure vs Efficiency of APIs”  
   (Benzell, Hersh Van Alstyne) [30 days]

3) CLV2: “How Users Drive Value in Two-Sided Markets”  
   (Zhou, Zhang Van Alstyne)

https://ide.mit.edu/publication-type/research-papers/
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Peter C. Evans (Platform Strategy Partners)
Geoffrey Parker (Dartmouth & MIT)
Pinar Yildrim (London Business School)
Marshall Van Alstyne (Boston University & MIT)