MIT IDE Platforms: Review & Outlook

Geoffrey Parker (Dartmouth & MIT)
Peter C. Evans (Platform Strategy Partners)
Marshall Van Alstyne (Boston University & MIT)





Business & Platform Responses to COVID

Demand disruption, supply disruption, or both

- Weather the Storm
- Rapid Pivot
- Ride the Wave

Adapted from:

Pandemic Stress-tests Platform Power

Evans, Parker, Van Alstyne

https://medium.com/mit-initiative-on-the-digital-economy/pandemic-stress-tests-platform-power-7a007719e17b

Winning the Race for Survival: How New Manufacturing Technologies are Driving Business-Model Innovation

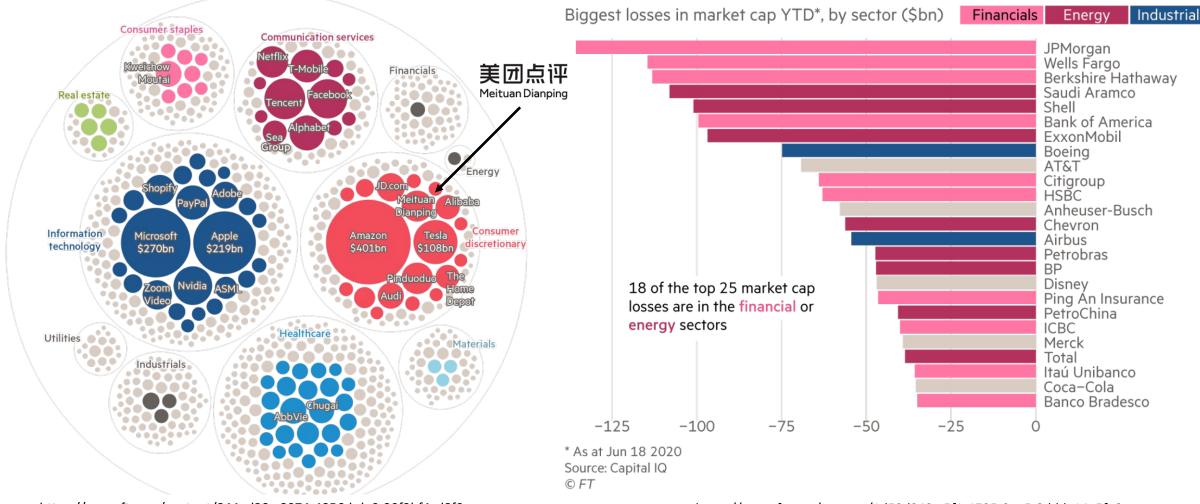
Joglekar, Parker, Srai

https://www.weforum.org/reports/towards-a-new-normal-new-design-rules-for-advanced-manufacturing-business-models

Pandemic Market Cap impacts across sectors

Platforms and tech see market cap gains up to \$401B

Finance and energy sectors lead losses up to ~\$130B



Source: Capital IQ https://www.ft.com/content/844ed28c-8074-4856-bde0-20f3bf4cd8f0

https://www.ft.com/content/1d52d243-c5f1-4725-9ea5-8ddda14a5fe8

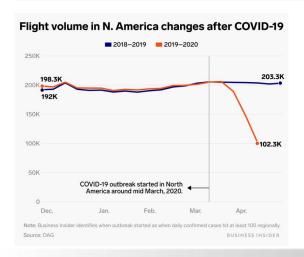


Negative Demand Shocks

Oil demand drop set to last throughout 2021 and beyond, warns IEA

International Energy Agency estimates appetite for crude next year will be below 2019 level as aviation sector struggles to recover

https://www.ft.com/content/0c70dcd7-548e-4ef7-9371-db9846556e58 **Anjli Raval**, Senior Energy Correspondent JUNE 16 2020



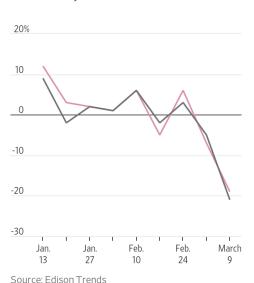
https://www.busin essinsider.com/airtraffic-duringcoronaviruspandemic-changeseffects-around-theworld-2020-4

Ridesharing Ructions

■ Uber ■ Lyft

Spending on Uber and Lyft rides fell as coronavirus spread

Weekly change in spending, nationwide



-20% https://www.marketwatc h.com/story/restaurantsand-hotels-devastated-bycoronavirus-face-long-Change in number of and-painful-recoverydiners at restaurants 2020-04-15 California New York Illinois -100% 3/13 3/18 3/23 3/28 2/22 2/27 urce: OpenTable, TD Securities

U.S. Restaurant Spending Has Plunged

https://www.wsj.com/articles/u-s-spending-on-ride-hailing-with-uber-lyft-falls-as-coronavirus-spreads-11584525600

Platform Pivot 1

Boston Food Trucks Are Struggling to Cope With the COVID-19 Pandemic

Shuttered college campuses and vacant business districts mean no one's flocking to food trucks right now

by Terrence Doyle | Apr 9, 2020, 3:45pm EDT



https://boston.eater.com/2020/4/9/21213493/boston-food-trucks-struggling-coronavirus-pandemic

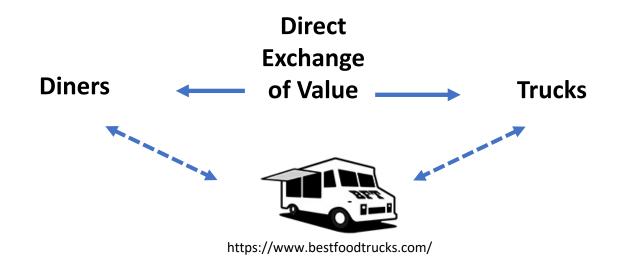
Why well-connected suburbs are suddenly the best place to run a food truck

Kai Ryssdal and Maria Hollenhorst

Jun 4, 2020

https://www.marketplace.org/2020/06/04/why-well-connected-suburbs-are-suddenly-the-best-place-to-run-a-food-truck/

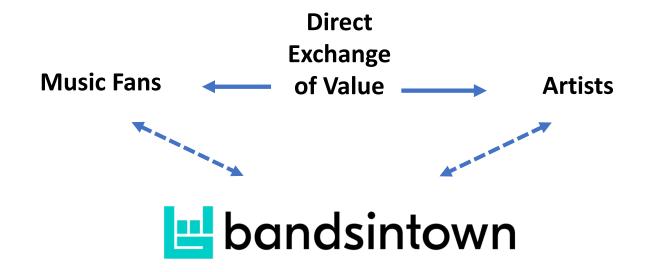
"... The truck goes there and they knock it out of the park. Food trucks are serving suburban communities that are very well connected, because they don't have to do advertisements or social media..."



Platform Pivot 2

Bandsintown transitioned from facilitating physical presence to digital.

The platform — with 58 million users and more than two million events listed each year — created new digital experiences to help music fans connect with their favorite artists while they quarantined.



Demand Up! Riding the Wave

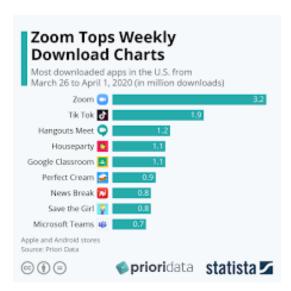
Instacart aims to add 250,000 more personal shoppers

Online grocery giant bolsters coronavirus protection, pay

for employees

https://www.supermarketnews.com/online-retail/instacart-aims-add-250000-more-personal-shoppers

Russell Redman 1 | Apr 24, 2020



Technology

Tech giants are profiting — and getting more powerful — even as the global economy tanks

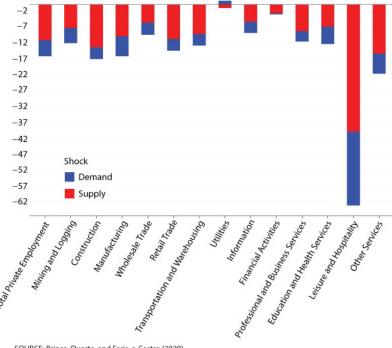
The global pandemic gives Silicon Valley titans a once-in-a-lifetime opportunity to expand their power, crush rivals and change their political fortunes.



https://www.washingtonpost.com/technology/2020/04/27/big-tech-coronavirus-winners/

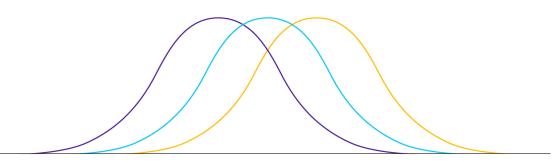
Supply Shocks

Figure 2
Shock Decomposition of the Growth of Hours Worked by Sector, April 2020



SOURCE: Brinca, Duarte, and Faria-e-Castro (2020).

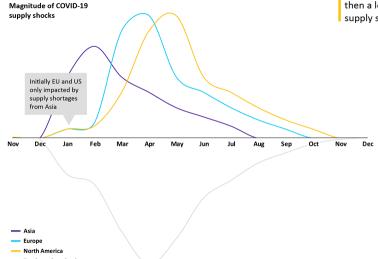
https://research.stlouisfed.org/publications/economic-synopses/2020/05/20/is-the-covid-19-pandemic-a-supply-or-a-demand-shock



Wave 1: Microchip factories in China shut down (initial supply shock). To protect against supply shortages, all affected customers tried to buffer inventory, amplifying the global shortage for microchips, a phenomenon known as the "bullwhip" effect.

Wave 2: A European supplier of car-control units gets hit by the impact of the Asian supply shock. Initially, supply shortages might be partially offset via alternative suppliers, but with the spread of the virus, local production is eventually completely shut down (European supply shock).

Wave 3: US car manufacturers requiring the control units feel the impact — they are first impacted by the lack of control units (the result of the European supply shock), then a local shutdown of production due to quarantine measures triggers a US supply shock.



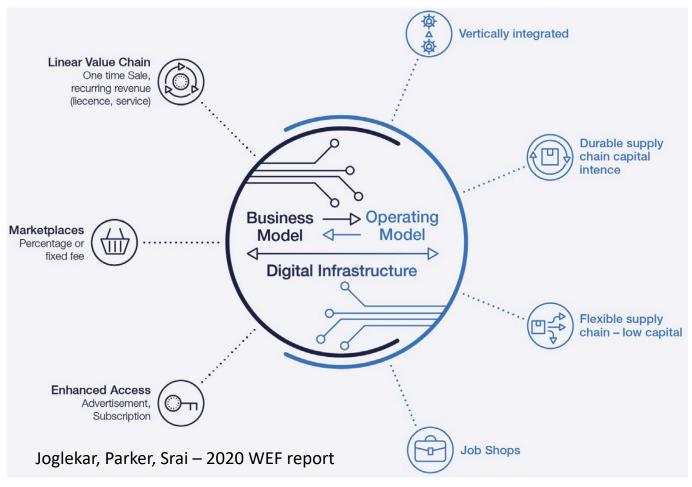
https://www.oliverwyman.com/ourexpertise/insights/2020/apr/covid-19-shocks-supply-chains.html

Pandemics and Resilience

- Resilience usually seen as a supply side story
- Traditional solutions:
 - Reserves or "reshoring" (locate supply closer to demand)
- This view is primarily an "insurance" lens
 - Organizations asked: What are you willing to pay for resilience?
- Firms that can make end-to-end connections from changed customer needs to their supply chains have fared much better (WEF study: Joglekar, Parker, Srai).

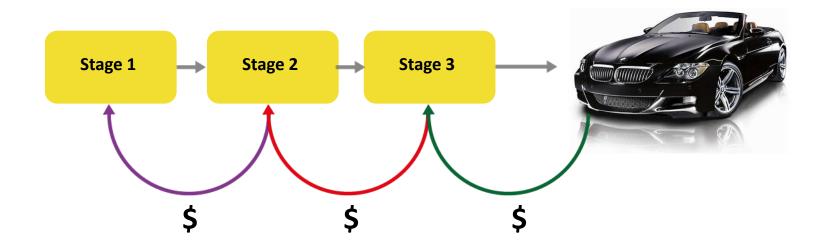
Efficient Resilience

- Separate business model from operating model
 - Get the right complements
- Platform business models differ from pipelines
 - Marketplaces (fees and cuts); facilitate (and get paid) for access



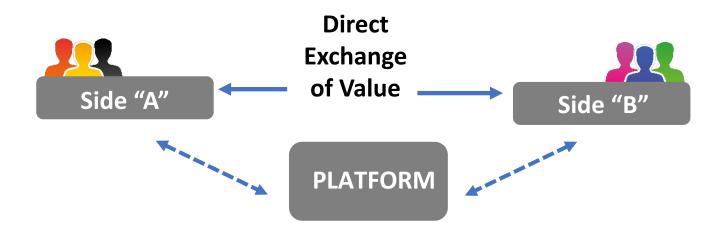
https://www.weforum.org/reports/towards-a-new-normal-new-design-rules-for-advanced-manufacturing-business-models#report-nav

Linear "Pipeline" vs. Inverted Platform Firm



Traditional Company

Supply chain control, optimization
Minimal Network Effects



'Inverted' Platform Firm

Relatively more value-add occurs outside the firm

Use data and rules to facilitate matching, encourage interactions, build network effects

Platform Business & Operating Model Advantages

More fluid demand and supply arrangements allow for:

- Ability to pivot
 - Quickly match existing supply to new demand
- Ability to scale
 - Quickly match new supply to existing or increasing demand

Massive data helps to "see better than competitors"

Of course, these cannot compensate for complete drop in demand

Next: Platform Talent 2020