Platforms Mean Business

Tomorrow’s business model meets today’s challenges
A Year of Business Reinvention

In 2021, it seems that whatever the business problem, platform markets offer a solution.

From unequal labor supply and demand to innovation and green energy, platform ecosystems are attracting new business partners, streamlining operations, and optimizing digital technologies.

As businesses try to emerge from COVID-19 shut-downs and shake-ups, integration with existing platforms is gaining acceptance in traditional industries. While challenges remain, platforms provide rapid access to new products and services, transparency, and global collaboration. Businesses no longer have to go it alone.

At the ninth annual MIT Platform Strategy Summit, industry experts described the expansion of B2C markets and also the growth of platforms in longstanding B2B industries. The virtual Summit attracted more than 500 top-level executives, academics, and analysts who came together to examine global trends and policies. They were able to network and listen to musical breaks thanks to platforms, too. "CEOs and tech leaders with the foresight to invest in digital platforms prior to the pandemic now find their businesses more agile and better able to pivot and adapt to change," according to Summit Co-chair Geoffrey Parker.

The shift to B2B platforms isn't new, but it has accelerated as a result of the dual disruptions of the pandemic and climate change. Incumbent industries, such as manufacturing and energy, must integrate technology-forward platforms into their business operations to compete, meet sustainability requirements, and remain profitable.

Concurrently, Asian platform innovation is exploding and offering a window into emerging trends. In the Western Hemisphere regulation and resistance have stemmed these models to some extent, but the emergence of Asian "super apps" will have lasting impact.

"Firms that implemented an end-to-end digital infrastructure were much more nimble and able to deal with disruptive supply and demand. It gave them the option to deal with pandemic-driven disruption."

Geoffrey Parker
Professor, Dartmouth College
Digital Fellow, MIT IDE
Summit Co-Chair

RELATED RESEARCH

For more details on the topics covered at the Summit, check out these five research papers and others at ide.mit.edu.

- Platform Pricing and Investment to Drive Third Party Value Creation in Two-Sided Networks
  Anderson, Parker, and Tan

- Preparing the Next Generation of Platform Leaders
  Evans, Parker, Van Alstyne, and Finkhousen

- How Users Drive Value in Network Markets
  Van Alstyne, Zhang, and Zhou

- How APIs Create Growth by Inverting the Firm
  Benzell, Van Alstyne, and Hersh

- Platform Mergers & Antitrust
  Parker, Van Alstyne, and Petropoulos

CONTENTS

03. The Platform Economy: An Ever-Changing Map
03. B2C Platforms Make Way for B2B
04. Regulation Aims at Monopolies
04. Fintechs and Digital Banks
05. Supply and Demand Shocks Reverberate
06. Platforms Fuel the Great Energy Transition
07. A Conversation with Kai-Fu Lee
08. Competition via Business Model Innovation
09. Platforms Settle Into the Steel Industry
10. Takeaways and Trends
10. Platforms in Play at 2021 Summit
10. Thanks + Acknowledgments

Watch video of the 2021 MIT Platform Summit
Summit Co-Chair Geoffrey Parker noted that much of what we know about platforms comes from B2C markets, such as eBay, Apple, Twitter, and Airbnb. But B2B platforms are growing at a rapid rate as illustrated by companies like Siemens, Shopify, Salesforce, and Hubspot. Parker offered several strategies for successful B2B platform investment. It’s okay to experiment and test the waters as part of a deliberate, broader rollout, he said, but think about building open networks that will transform your marketplace as well as the wider ecosystem.

Parker also added that current ROI metrics can’t accurately measure today’s platforms since they are long-term investments that require a new set of value measurements to monitor growth, user engagement, and co-innovation created with partners.

As the platform economy has expanded, it has also become more complex to map. Summit Co-chair Peter Evans said it’s helpful to consider trends in three buckets: What we are seeing now; what we’re beginning to see, and what is on the horizon.

One significant trend is the movement of major industrial companies into adjacent markets via platform strategies. The Oren Partnership between Shell and IBM to create a B2B marketplace for the mining sector, is a prime example. Direct platform partnering offers both sides broader networks and data access while simplifying transactions, Evans said.

Another trend is a growing number of large-scale platform-to-platform integrations. Take Shopify and TikTok, for example. The two mega platforms joined forces so that Shopify’s 1.75 million merchants can leverage TikTok to gain direct access to TikTok creators. This opens up a new marketing approach for Shopify merchants as well as access to one of the fastest-growing and attractive global consumer networks. TikTok currently boasts 1.5 billion downloads, and 500 million active users—an immense opportunity for marketers to reach young consumers.

As for trends we are beginning to see, Evans pointed to the rise of platforms that mint and sell non-fungible tokens (NFTs). These tokens are a blockchain innovation that offers a license to digital art, a music file, or anything unique that can be stored digitally. NFT marketplaces let creators sell blockchain-enabled NFTs to consumers, and allow consumers to auction or trade NFTs on a growing number of NFT marketplaces, such as OpenSea, Nifty Gateway, SuperRare, and NBA Top Shot. Participants have traded more than $2.5 billion in NFTs in the first half of 2021, and Evans anticipates that the market will broaden in the next 18 months to two years to reach more mainstream consumers.

Longer term is the global spread of “super apps.” The significance of these multi-purpose apps, Evans argued, is the bundling of whole markets within integrated apps. For the provider, it’s a way to deliver more services and attract a much larger user base, while customers gain ease-of-use. These apps got their start in China, Southeast Asia, and Africa and there are early moves by Western companies to adopt a super app strategy, including Jerry in the U.S. and Revolut in Europe.

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Until recently, financial data lacked interoperability by design, and resided only in financial institutions to protect user privacy,” said Pinar Ozcan of Saïd Business School. “But as the value of data grows, regulation must dictate how data is shared and accessed.”

The Rise of Open Banking
Open banking provides a safe way for customers to share data through APIs, according to Ozcan. “Now, we can grant access to third-party apps that analyze our data and make investment or purchasing recommendations.” Single service fintechs are beginning to ‘attack’ big banks with online offerings, she said. Nevertheless, it’s still very expensive to enter the financial market today, and earning customer trust takes time. As a result, many small fintechs may find digital bank platforms to be an appealing entry point. Small companies may also find big tech firms offer an attractive option for financial market entry. For instance, Amazon has created a basic lending service for small- to medium-sized businesses, while Google is approaching the market with a data capture and analysis strategy, according to Ozcan. Facebook, meanwhile, is investing in peer-to-peer financing, providing financial services to rural areas where people have phones but little access to a bank.

Ozcan also expects big tech firms to enter the healthcare market as IT providers. Once they have access to consumer data, they can invest in areas such as prediction services that will help healthcare providers. Data access could give tech platforms an advantage over niche players in healthcare as well as fintech.

Antitrust concerns are top-of-mind, but definitions are getting muddled in Washington, D.C., according to Summit Co-chair Marshall Van Alstyne. “Some want to remove friction and give everyone equal access to data, while others want to introduce friction to give users privacy,” he said. Instead, discussions should focus on platforms as infrastructure and how that infrastructure should be regulated.

Van Alstyne said there are merits both for and against considering platforms as infrastructure for regulatory purposes. The positive effect is that it would grant freedom of access to everyone and would not discriminate. The negative: “It does not consider an internet economy of platforms based on network effects,” he said.

It’s becoming clear that previous antitrust criteria, such as below-marginal cost pricing and restricting output, don’t apply well to platform models, Van Alstyne said. Platform prices are often free—for example, Google doesn’t restrict search and Facebook doesn’t restrict posts. Additionally, traditional goods are supplied by rival manufacturers but that’s not the case when it comes to data, since it can be shared and create value for multiple parties.

To foster competition while embracing the benefit of network effects, Van Alstyne proposes a new “in situ” data right that allows users to bring algorithms to their data wherever it is resident. For instance, putting decision rights in the hands of users would let them allow Amazon to recommend books based on Facebook friends, or allow Facebook to recommend friends based on Amazon reading preferences.

Van Alstyne also offered attendees a brief summary of new MIT IDE research that’s examining how digital transformation creates value. The study explored whether internal or external uses of APIs predict greater market capitalization. The results show that firms that open external-facing APIs grew an additional 36% over 16 years relative to firms that did not use APIs.

In effect, firms adopting a platform strategy and enlisting third-party developers grew at a faster pace. This huge upside does have one downside risk, Van Alstyne noted: Public APIs experienced a much greater risk of data breach.

View the working paper, “How APIs Create Growth by Inverting the Firm” to learn more.

Regulation Aims at Monopolies
“Regulation is coming for big tech and we should absolutely expect more changes on the horizon.”

Banking on Fintech
Digital platforms attract new customers and providers.

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“The service providers in healthcare are not changing, however the power is shifting to big tech because they are the ones that keep the data...they use the data to provide prediction services that will help healthcare providers.”

Pinar Ozcan
Professor
Saïd Business School
Oxford University
The past year has proven to be a mixed economic bag for platform companies. The pandemic led to a “negative demand shock,” meaning that there were significant decreases in demand for markets such as the travel and restaurant industries, according to MIT IDE research group leader John Horton. Hard-hit Airbnb, for example, experienced almost a complete loss in revenue during the first few months of the pandemic due to travel and social distancing restrictions. On the other hand, some platform businesses exploded as people stayed home and relied on e-commerce and food delivery services such as Uber Eats and DoorDash, which saw a surge in business. Meanwhile, many workers were suddenly faced with unemployment, remote work, or working under high-risk in-person conditions. For example, Uber drivers are still required to wear masks and many have installed dividers to mitigate the risk of exposure to the virus. At the same time, some workers adapted well to platform and gig-style jobs, which led to a positive supply of remote laborers for high-demand, online services. The net result, according to Horton’s research, was a lower supply of workers and an increased demand for B2C platforms. Platforms like Uber found themselves stretched thin and service quality suffered, since fewer drivers meant longer wait times or no available rides for consumers.

5 KEY LABOR TRENDS

John Horton offered five trends and action items for platforms rebounding from the past year.

Offer higher wages

Businesses may have to raise wages to compete and maintain service quality.

Think long-term

Don’t ignore the second law of demand—the long run is more elastic than the short run. Even if your company saw little or no impact from the pandemic, you still may experience ripple effects longer term.

Urban shifts

People will likely spread out from cities, which could impact platforms (like ridesharing services) that thrive on condensed geographical areas.

New norms

New norms will form around platform service integration and remote work.

Expect fluctuations

Supply and demand will continue to fluctuate and then balance out over the next year.

Research shows impact of pandemic on platform markets.
Energy leaders explain how their companies have implemented platform models and what promises lie ahead.

**Platforms Fuel the Great Energy Transition**

Energy giants such as Shell are turning brown and grey energy green with the help of platform business models that ease the transition. B2C models are leveraging the increasingly rich data layer being established around energy systems for consumer-friendly apps.

Paul Browning, president and CEO of Mitsubishi Power Americas, said that Mitsubishi works hard to accelerate the introduction of new green technologies.

"We can use platform thinking to accelerate the introduction of new green technologies."

Paul Browning
Kai-Fu Lee heads Sinovation, a venture capital firm that develops next-generation Chinese high-tech companies. With more than $2.5 billion in assets under management, Sinovation is based in Beijing, Shanghai, Nanjing, Guangzhou, and Shenzhen. It invests in more than 400 tech companies across China, and in early stage startup companies in the U.S.

When it comes to platforms, Lee sees U.S. platform competitiveness ending in multiple apps co-existing in a market such as Yelp, Door-Dash, and OpenTable. By contrast, in China only one super app wins out in fierce market competition. Lee noted, for instance, that he spends 80% of his time on one app, WeChat, where users can video chat, text, use social media, get the news, pay bills, and access services.

The Chinese government is looking at how to regulate these super apps, but Lee believes that technology trends and breakthroughs will continue to develop rapidly causing existing power apps to be replaced by new leaders. At this pace, platform market monopolies have yet to last, he said.

“When you have tenacious, hungry entrepreneurs, they will keep everybody on their toes, so it really doesn’t stifle innovation.”

Kai-Fu Lee

3 SIGNS OF PLATFORM MARKET SHIFTS

**Investing**
Lee looks for killer apps on which platforms can be built over time. “I look for user interest in the app and how sticky it is,” said Lee. That will lead to the next platforms.

**Influencers**
Celebrity influence is growing in China, as is the role of social media in marketing and business environments.

**Pace of Change**
Lee didn’t anticipate how fast new AI and platform technologies would be invented and replicated globally. He advises others to be agile and to rapidly adopt digital technologies.
How can traditional firms compete with platform giants?

Emma McGuigan: They have to remember their strengths—they know their industry and what customers want. The challenges traditional businesses have compared to platform companies is keeping up with change.

But companies that were born on a platform have a disadvantage, too: they can’t cover every industry with the same depth. For example, healthcare around the world has gone through tremendous disruption over the last 18 months. Healthcare businesses may never be as good as a platform company at managing data, but they know their industry better.

Sophia Velastegui: You have to leverage your knowledge while taking advantage of existing infrastructure. Platforms like Microsoft provide components that can strengthen your technology capability and help you go to market much faster.

What kinds of platforms are you seeing and what are some challenges?

Bruno Zerbib: When building a market strategy in the energy sector we have to figure out how to make our products efficient in a sustainable world. Sustainability requires more intelligence, more analytics, more AI. We use data to turn commodity into specialty services.

ThembaLihle (Themba) Baloyi: Many governments struggle with the idea of using AI, they struggle with using platforms as a mechanism. The biggest barrier is building partner trust. In government services there’s an obsession with data ownership... they are not sufficiently nimble because of that. On the other hand, the business community always wants to move at the speed of light. How do we solve big strategy problems in the government sector?

How can a platform strategy emerge from the bottom of an organization?

Velastegui: Corporate culture in the engineering division matters more than ever. I have been fortunate to be in companies where strategy was created from the bottom up. Platforms germinated among the engineers and thought leaders, and then it was decided to test within the company or to create startups. The company has to foster that. And ultimately, if you want to scale up for a larger user base, top level support is needed.

McGuigan: Within a big organization you can create a pilot, you can nurture something, you can trial it, and you can do that from the bottom up. But if you really want to have reusability and transference across the whole organization... that must be done, sponsored, and directed from the top down. You’re not just talking about engineering; it’s about engaging the culture and shifting the behaviors to a very different way of thinking.

Can a platform strategy emerge from the bottom of an organization?

Marshall Van Alstyne
Professor, Boston University
Visiting Scholar, MIT IDE
Moderator

Emma McGuigan
Global Lead, Intelligent Platform Services
Accenture

Sophia Velastegui
CTO, AI for Dynamics 365
Applications
Microsoft

ThembaLihle (Themba) Baloyi
Founder, Discovery Insure
Co-founder, Sithega Holdings

Bruno Zerbib
Executive VP, Chief Platform and Technology Officer
Schneider Electric

“Becoming more data-centric is about creating the right kind of data management platforms. You have to create something that can adapt, scale, and evolve.”

Bruno Zerbib

How do you keep the finance folks satisfied when transitioning to a platform model?

Zerbib: Platforms materialize over time; it is a multi-use value proposition. You are not saving money at first, but as you start rolling out multiple applications for that platform, and multiple use cases, an economic case can be made. You have to avoid the “tunnel effect,” telling people it will be profitable at the end of, say, three years. Instead, build the minimum viable amount of platforming needed to support the first use case and show that there is value at the end of the very short tunnel.

Panel Discussion

Competition via Business Model Innovation

Besides creating new business opportunities, platforms can actually spur innovation within organizations and industries. Experts explain some steps that platforms can take.
The ongoing adoption of platform models by traditional firms has the potential to radically alter global businesses even though B2C platforms grab more headlines. A pioneering example is Klöckner & Co SE. In a conversation with Gisbert Rühl, who recently stepped down as CEO after 16 years at the helm, Summit co-chair, Geoffrey Parker, probed the motives and results of Klöckner’s new business model.

Rühl spoke about how the century-old steel industry leader overcame resistance from employees and customers. Klöckner, which was founded in 1906 in Duisburg, Germany, was in need of a business overhaul in 2014. “The problem we faced was that our prices were very comparable to competitors and margins were always under pressure,” said Rühl. “We started to think not only about new products—which was typical—but about a new business model.”

Platforms Settle Into the Steel Industry


“The CEO has to drive digital transformation because it is so profound. When the CEO is not behind it, then it has absolutely no chance, especially not within a traditional company.”

Gisbert Rühl

The company pondered tough questions about its future and whether “steel distribution and service centers, with all the changes caused by the internet, would be the same in 10 years. And we came to the result that it would not.” The new direction was to transform Klöckner into a platform-type company. But implementing this strategy required a radical cultural change internally and externally, Rühl said. Traditional finance metrics—that the board of directors watched closely—no longer applied. It took about five years before clear financial benefits were realized.

“At the beginning, we thought that building and implementing a platform was a technological [challenge],” he said. “But we quickly became aware that without a cultural change, without our people, this transformation and the implementation of a platform, would not be possible.”

Klöckner offered courses in digital technology to raise the “digital IQ” of its workforce and to overcome some of the resistance to change. In addition, Rühl and his team experimented, ignoring typical long-term planning processes. “We started to say, let’s try it out. And if it works, good, and if not, then we have to pivot.”

Addressing Customer Pushback

When the company first steered customers to online services, they balked at the idea of open platforms and collaborating with former competitors. There was internal opposition, as well. Only when customers slowly realized new conveniences and faster transaction times, did they begin to use the new platform model.

“My experience is very clear that leadership has to come from the top,” Ruhl said. “The CEO has to drive the transformation because it’s so profound.” Moreover, executives have to stay in close contact with customers during times of change to show dedication to the business, according to Rühl.

“Putting the customer first, always asking what can be done better, where are the pain points, and learning throughout the journey were the biggest eye openers for me,” he said. This approach permeated everything the company did from then on. About three years ago, Klöckner split off the platform venture from the main business to attract more partners and investors. Ruhl emphasized that “digital transformation is much more than a strategic program. In the end, you have to change everything—especially the culture of the company.”
Deep Networking

The surge in virtual events offers several benefits, including accessibility, higher attendance, and lower costs. At the same time, a significant drawback is the loss of networking opportunities that come at in-person events. This year, the MIT Platform Strategy Summit utilized the services of Twine, a virtual networking platform that allows attendees to increase interactivity and engagement.

“We are always striving to make the Summit an informative and rewarding experience and that means innovating,” Summit Co-chair Peter Evans said. “The data and mapping show that the virtual networking we offered this year was a hit and stimulated 12 hours of engagement that would not have happened otherwise.”

Platinum Tunes

This year we reached out to Songtradr to identify two artists to perform during the Summit. Songtradr is the world’s largest B2B music licensing marketplace, connecting artists who produce music with agencies, film and TV, apps and games, and others looking to buy music. The platform hosts more than 800,000 artists.

Summit Performers

Alice Pisano
Alice Pisano broke onto the music scene in 2019 with her heart-warming EP, Celebrate Life. The title track has amassed more than 3.6 million streams on Spotify. Alice was born in Italy and now lives in London.

David Davis
David Davis won NBC’s Songland for “Everything It Took To Get To You” by Ben Platt. The winning song charted at #1 on the New Pop Chart and #2 on the Pop Chart. David grew up in Chicago and now lives in Los Angeles.

The Songtradr team introduced the Summit performers.

Thank you

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