How do companies create value from digital ecosystems?

As part of its strategic partnership with Viva Technology, McKinsey & Company is publishing a series of articles looking at seven areas of technology that are potentially the most disruptive: Quantum computing, Cybersecurity, Connectivity & 5G, Cloud computing, AI, Digital ID, and Biotechnologies; as well as two major shifts for society: Future of work and Digital ecosystems.
How do companies create value from digital ecosystems?

Ecosystem strategies can generate significant value both by growing the core business and by expanding the portfolio into new products and services.

By Miklos Dietz, Hamza Khan, and Istvan Rab
Industry lines are blurring and value chains are consolidating into ecosystems

While ecosystem-building has been a red-hot topic in the business world in recent years, the COVID-19 crisis has amplified the importance of digital interactions and will likely further accelerate the adoption of digital-ecosystem business models. Our global consumer sentiment surveys indicate that the spike in online sales will continue to some extent even after the crisis is over, and that 71 percent of consumers are ready for integrated, ecosystem offerings. Business-to-business interactions are changing too. For example, in April 2020 in the US, 80 percent of business-to-business sales teams had shifted to remote working, and businesses rated digitally-enabled interactions with business-to-business customers as being twice as important as traditional methods, a 30 percent increase compared to the start of the crisis.

Most global companies are now actively considering the ecosystem business model given its value-generation potential: growing the core business, expanding the network and portfolio, and generating revenues from new products and services. The integrated network economy could represent a global revenue pool of $60 trillion in 2025 with a potential increase in total economy share from about 1 to 2 percent today to approximately 30 percent by 2025.

How can companies define an ecosystem strategy to fit their needs?

Leading companies are increasingly offering an interconnected set of services—from Alibaba offering a broad ecosystem of lifestyle services (including retail, payments, credit scoring), to Apple launching an AppleCard with Goldman Sachs (expanding on ApplePay), and BMW/Daimler creating a shared mobility ecosystem with a number of startups (Car2Go, moovel, Mytaxi) under the Your Now brand.

However, we still see that many companies that have tried to replicate the ecosystem successes of tech giants like Google and Amazon have struggled.

Because ecosystems are complex, defining the right approach to capture maximum value from them is challenging. We recommend that companies determine their ecosystem strategy by assessing market characteristics and trends as well as their “fit” within specific ecosystems. Companies also need to assess their value-creation agenda — whether it is to grow the core business, create new products and services, build an end-to-end solution for a new segment, or improve operational efficiency.

7. The findings and insights presented in this article are substantially based on the report How the best companies create value from their ecosystems, McKinsey & Company, November 2019, McKinsey.com.
How can companies capture the value of ecosystem strategies?

Companies can capitalize on key value levers, in line with their value-creation agenda, and we see three archetypes emerging (Exhibit 1).

**Archetype 1: Growing the core business through partnerships or building an ecosystem from scratch**

Companies in this archetype derive value from earning improved revenue from core products and services and merchant-funded platform usage. At first, the ecosystem enables the company to sell more existing products to more customers. Once the ecosystem is established, and reaches the desired scale, the company can provide more extensive service offerings. It can also use its platform to attract merchants, which it can charge for using it, creating more value.

In March 2013, Danske Bank launched its MobilePay app as a P2P payment solution to acquire more customers. The app is free to all consumers, not just the bank’s customers, and collects fees only from merchants for transactions. Today, D&B Hoovers estimates MobilePay A/S revenue at $23.1 million, 80 percent of which comes from transaction fees (improved revenue from core services), and the rest from monthly fees merchants pay for value-added services (merchant-funded platform usage).8

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### Exhibit 1

Different archetypes elevate top-line and bottom-line from different sources.

<table>
<thead>
<tr>
<th>Key value levers</th>
<th>Archetype 1: Growing the core business</th>
<th>Archetype 2: Expanding the network and portfolio</th>
<th>Archetype 3: Building an end-to-end solution</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved revenues from core products and services</td>
<td>✓</td>
<td></td>
<td></td>
<td>New customers, improved loyalty</td>
</tr>
<tr>
<td>Customer-paid new products and services</td>
<td></td>
<td>✓</td>
<td></td>
<td>Maximized potential of an existing revenue pool</td>
</tr>
<tr>
<td>Merchant-paid platform usage</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>Sales of back-end solutions</td>
</tr>
<tr>
<td>Third-party-paid data monetization</td>
<td></td>
<td></td>
<td>✓</td>
<td>Registration/listing fee</td>
</tr>
<tr>
<td>Increased operational efficiency</td>
<td></td>
<td></td>
<td></td>
<td>Decreased costs per unit</td>
</tr>
</tbody>
</table>

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8 *How the best companies create value from their ecosystems*, op. cit.

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How do companies create value from digital ecosystems?
~$60 trillion

global revenue pool potentially concentrated in an integrated network economy by 2025

Archetype 2: Expanding the network and portfolio on the platform, generating revenues from new products

Companies in this archetype derive value from mining higher customer lifetime value. Companies can capture value from many sources including customer-funded new products and services, merchant-funded platform usage, and third-party-funded data monetization.

Telefonica, a European telco, has been actively leveraging its customer data and insights to develop new IoT (Internet of Things), digital content, and healthcare services. In July 2019, for example, the company partnered with Tunstall Healthcare, an international UK-based provider of digital health and connected care solutions and services, to develop services for remote patient management.10

Tencent has successfully pursued multiple value sources. Its two social networking products, QQ and WeChat, generate revenue from merchant fees for e-commerce, payment, digital content, and advertising services as well as from customers who pay for value-added services. New consumer products and services now constitute over 50 percent of Tencent’s total revenue. The contribution of third-party-funded data monetization to its total revenue is now 20 percent, while merchant-funded platform usage accounts for 25 percent.

Archetype 3: Building an end-to-end solution to serve business customers and improve operational efficiency

Businesses that optimize their existing infrastructure and technology—and then offer them to other companies—create new revenue streams and lower their operational costs through economies of scale.

Amazon’s AWS created value for Amazon by extending its internal capabilities to other parties and lowering Amazon’s IT investment and maintenance costs. A recent AWS Partner Network blog post noted that AWS had cut the prices it charged to customers, including Amazon, 67 times from 2006 to the end of September 2018. AWS became Amazon’s biggest source of operating profit, accounting for about $7.3 billion in operating profit or 73 percent of Amazon’s 2018 total.11

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10 Company Telefonica press releases, July 2019.
11 Annual report for the fiscal year ended December 31, 2018, Amazon.com.
What core capabilities do companies need to create value in an ecosystem?

We observe six core capabilities among successful ecosystem players (Exhibit 2).

1. Advanced analytics
Analytics capabilities are a competitive advantage regardless of the role a company plays in an ecosystem. Any business that lacks advanced-analytics capabilities will struggle to remain relevant. Advanced-analytics excellence also requires open, modular tech/data capabilities.

A large Asian Telco successfully leveraged advanced analytics to build a world-class monetization business. In only three years, it built an ecosystem integrating a range of digital platforms and solutions to meet the needs of the following players:

- **consumers**, with digital platforms offering music, series, movies and lifestyle content;
- **merchants**, with mobile payment, digital customer-relationship management, digital loyalty-program solutions and an online-to-offline platform on which they acquired more than 300,000 merchants;
- **enterprises**, leveraging customers’ data and internal advanced-analytics capabilities to provide analytics as a service to enterprises across most industries;
- **talent**, selling solutions such as a digital academy to upskill talent in the digital era.

2. Agile development and operations
Leveraging agile-development principles and creating customer-focused, scalable operating and delivery models can meet customer expectations for more efficient services.

For example, in 2015, **ING**, the Dutch banking group, began shifting its traditional organizational structure to become more agile, improving time to market by 37 percent, cutting application-development costs by 60 percent, and decreasing new customer onboarding time from 20 days and three branch visits to a single five-minute process.11

3. Governance that allows for a portfolio of bets
Agile organizations deploy governance mechanisms that bolster innovation and foster a client-oriented mindset. Examples include Singtel’s venture-capital arm, Google’s internal incubator, and Tencent’s ‘internal competition.’

**Tencent**’s internal competition is a good example of building a biological governance model. This model imitates the evolutionary theory of survival of the fittest by allowing different solutions to compete. Two of the most prominent products in Tencent’s ecosystem, the social networking service WeChat and the mobile game Glory of the King, were developed using this mechanism.

4. A strong middle platform that organizes core capabilities and maximizes synergies
First adopted by internet companies such as **Alibaba**, a broader middle platform in which different businesses share customer information, is one way that companies can harness their big data capability. Thanks to its cross-business data-sharing platform, Alibaba leverages customers’ data from the **Hema Supermarkets** app, the offline retail store under Alibaba, to increase the accuracy of its customer purchase-behavior information by 20 to 30 percent.

5. Entrepreneurial talent
Any ecosystem’s success depends on the quality of its talent, particularly for traditional companies entering a very different market environment. To get the talent they need, companies should strive to hire the right types of people, retain those with the potential to become future leaders, and build an entrepreneurial culture.

**Tinkoff Bank** focused on talent to drive its entrepreneurial transformation. The bank teamed up with the Talent and Success Foundation to establish a new development hub in Sochi and has also announced the launch of an R&D center at Skolkovo that will focus on blockchain-based solutions and crypto-economics research to boost its financial ecosystem. Tinkoff has developed a

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10 Company website and press releases.
6. Partnership

Collaboration is critical for success within an ecosystem. LEGO has extensively leveraged partnerships to expand its brand and keep it relevant for evolving audiences. In 2009, it partnered with Disney to produce toys and video games and recently, it partnered with Nintendo to launch LEGO Super Mario, featuring an interactive LEGO Mario figure. The company also has longstanding partnerships with other well-known brands such as Batman, Harry Potter, and Ninjago. In April 2020, the LEGO Group announced yet another collaboration—an exclusive global partnership with Universal Music Group to launch a new suite of music-based LEGO products in 2021. Putting all these capabilities together, companies should be ready for the challenge and the opportunity of the ecosystem revolution.

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**Exhibit 2**

**Priorities across innovation portfolio.**

<table>
<thead>
<tr>
<th>Universal capabilities</th>
<th>Archetypal capabilities</th>
</tr>
</thead>
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<td>Advanced analytics</td>
<td>Governance that allows for a portfolio of bets</td>
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<td>Strong middle platform</td>
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<td></td>
<td>Entrepreneurial talent</td>
</tr>
<tr>
<td></td>
<td>Partnership</td>
</tr>
</tbody>
</table>

**Archetype 1:** Growing the core business

**Archetype 2:** Expanding the network and portfolio

**Archetype 3:** Building an end-to-end solution


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14 Tinkoff Bank website and press releases, tinkoff.ru/eng/.

15 LEGO website and press releases, lego.com.
Success of early ecosystem plays proved that ecosystem strategies could generate real value, motivating new startups and incumbents to follow. While a few years ago ecosystems were thought to be relevant for only a few industries and regions, in the last two years we have seen dominant ecosystem players, startups and incumbents, accelerate their activities, all over the world. This trend is likely to intensify in the wake of the COVID-19 crisis as digital interactions are an important step-change in both business-to-business and business-to-customer activities: consumers are looking for more end-to-end journeys across products and services, and organizations are looking to rapidly reinvent their value proposition for the 'next normal'. However, going after that opportunity requires strategic focus, and choosing the approach that best fits the organization, to unlock the full potential of an ecosystem strategy.

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