How the best companies create value from their ecosystems

Authors and acknowledgements

Joydeep Sengupta

Senior Partner, Singapore
joydeep_sengupta@mckinsey.com

Vinayak HV

Senior Partner, Singapore
vinayak_hv@mckinsey.com

Miklos Dietz

Senior Partner, Vancouver
miklos_dietz@mckinsey.com

Violet Chung

Partner, Hong Kong
violet_chung@mckinsey.com

Xiang Ji

Associate Partner, Shanghai
xiang_ji@mckinsey.com

Lingxiao Xiao

Associate Partner, Shanghai
lingxiao_xiao@mckinsey.com

Luke Li

Consultant, Shanghai
luke_li@mckinsey.com

How the best companies create value from their ecosystems

McKinsey has published several articles about economic ecosystems in recent years. We define ecosystems as a set of connected digital services that enable users to fulfill multiple needs on a single platform. In our 2017 Global Banking Annual Review, "The phoenix rises: Remaking the bank for an ecosystem world," we showed how traditional banks could become more profitable by implementing ecosystem strategies. For some banks, this meant building partnerships and monetizing data. Others created their own platforms and increased their return on equity (ROE) by capturing market share in non-core markets.

Our second ecosystem playbook, *Winning in a world of ecosystems,* published in April 2019, answered three fundamental questions:

— Why should you develop an ecosystem?

— What is the best approach?

— How do you win?

That playbook introduced three categories of ecosystem players: builders, orchestrators, and participants. To create value, these players selected either a single or a combination of these categories to pursue.

Developing ecosystem strategies has become a priority for many global companies. However, we know that many professionals in the industry remain confused by the complexity of the ecosystem environment and daunted by the challenge of generating value from their ecosystem investments.

In our view, the critical understanding needed is that different types of players should pursue different approaches. This begins by aligning their strategy with one of the three archetypes — 1. growing the core business; 2. expanding the company's network or portfolio; 3. building end-to-end solutions — that best fits their business and its capabilities. Once they decide on an archetype

(or a combination of them), they can assess their performance with appropriate metrics and more importantly they could be able to monetize through five key value levers, such as improved revenues from core products, services, and merchant-funded platform usage (archetype 1.), new customer-funded products and services, merchant-funded platform usage, and third party-funded data monetization (archetype 2.), new products and services and increased operational efficiency (archetype 3.). All of these metrics will ensure their strategy is on the right track.

In this report, we explain how different players can capture value and assess their success, depending on their scale and core assets. In doing so, we answer three questions:

— *How should we evaluate the success of our ecosystem value creation strategies?* We've identified four types of ecosystem players: local champion, large incumbent, digital startup, and internet giant. These four types of players can measure the success of their efforts against the archetypes, (or paths to value-creation) they choose by using strategic or economic metrics. Which assessment criteria they employ should depend on which archetypes they pursue.

— *What types of value do ecosystem strategies create?* The sources of value ecosystem players create vary according to the archetype (or archetypes) they choose, and how their strategies evolve.

— *What are the key capabilities companies need to capture ecosystem value?* Six capabilities help business leaders obtain ecosystem value: 1. advanced analytics, 2. agile development and operations, 3. governance that supports a broad portfolio of businesses, 4. a strong middle platform, 5. entrepreneurial talent, and 6. robust partnerships.

The goal of this playbook is to help management teams generate greater value in their ecosystem strategies and guide them through the process.

How to assess the success of ecosystem value-creation strategies

Because ecosystems are complex, defining the right approach to capture maximum value from them is challenging. We recommend that a company uses its goals and core assets as the basis for choosing the right strategy and deciding how to measure its performance. This section explains which assessment criteria and metrics to apply depending on the types of players and the archetypes they choose.

Most global companies already have begun their efforts towards building an ecosystem strategy, and capital markets have recognized their value. Companies in the banking and insurance, technology and retail sectors are the most active in developing ecosystem value propositions, according to McKinsey's research on over 550 companies.

However, ecosystems come in many shapes and sizes. They contain different business models and encompass complex economics. This complexity explains why most of the followers that have tried to replicate the ecosystem successes of companies such as Google and Amazon have struggled. By looking at four different players, we will show how each of them can create value successfully and differently.

Four types of players and their path to value creation

As noted, our research has identified four types of ecosystem players by their respective scale and core assets: local champion, large incumbent, digital startup, and internet giant (Exhibit 1, next page). We defined scale as the size of the customers a player served in its primary market and separated the core assets of traditional incumbents from those of internet companies because the core assets of companies in traditional industries (e.g., financial services, retail, and telecom) tend to be tangible products and services while those of internet companies are intangible: IT infrastructure, data, and digital channels.

The growth trajectory of each type of player will differ and they may choose different paths to value creation:

1. Local champion
These are regional players in traditional industries. Their ecosystem strategy is to create value by attracting new customers with their core products. Because of competition from digital providers, it is getting harder for them to attract new customers through old channels such as bank branches or retail stores. As a result, many of them seek to acquire new core-product customers quickly by leveraging their ecosystem partners' digital channels.

For example, the Bank of Nanjing in China since 2017 has built partnerships with online lending platforms like Du Xiaoman Financial and 360 Finance to acquire new customers for its consumer finance services. According to the bank's 2018 annual report, its number of retail customers has doubled between 2016 and 2018.

2. Large incumbent
These are large-scale players in traditional industries. Their ecosystem strategy is to create value by acquiring new customers with their core products while cross-selling new, non-core products. Despite their large customer bases and active sales channels, they also face competition from digital providers. If they don't develop new use cases for their core products and increase cross-selling, they could lose both new and existing customers to internet players.
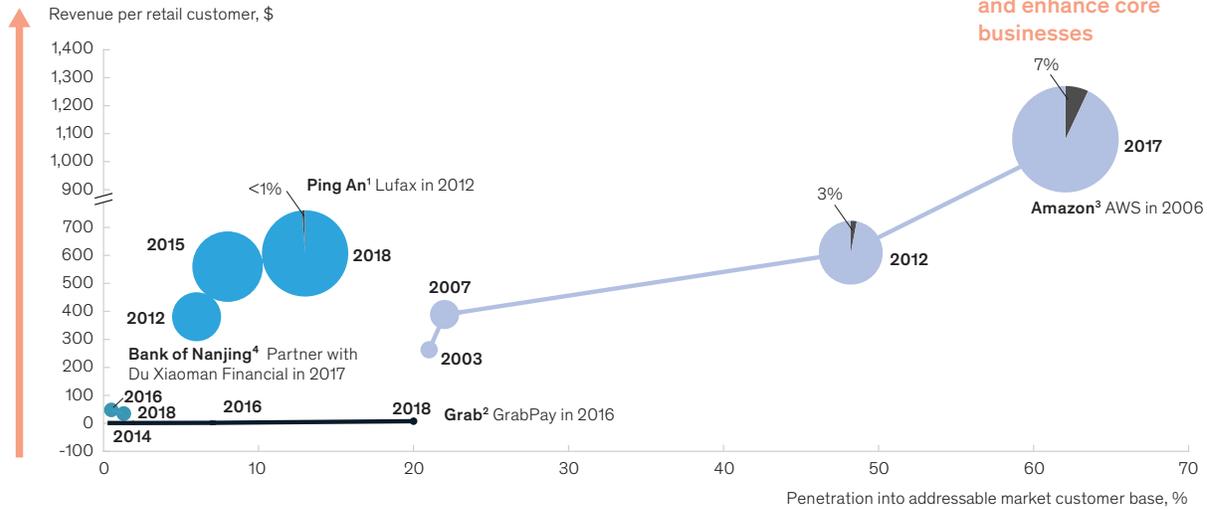
Exhibit 1

Four types of businesses pursue different paths to value creation based on their scale and core assets.
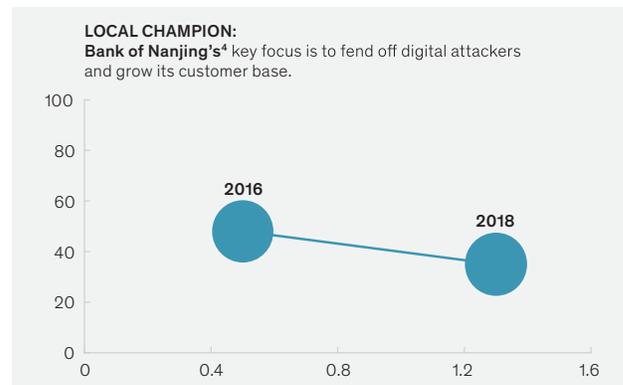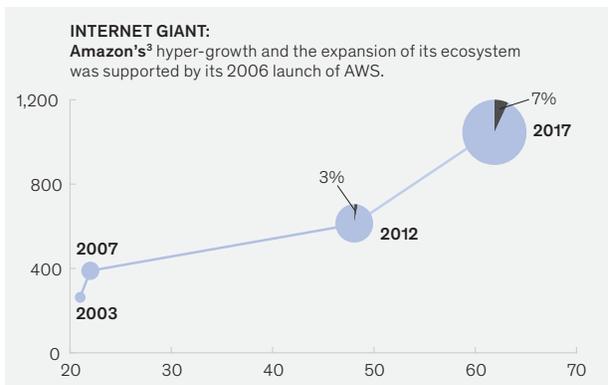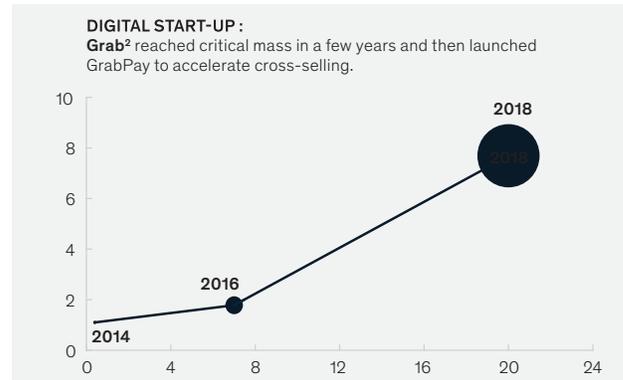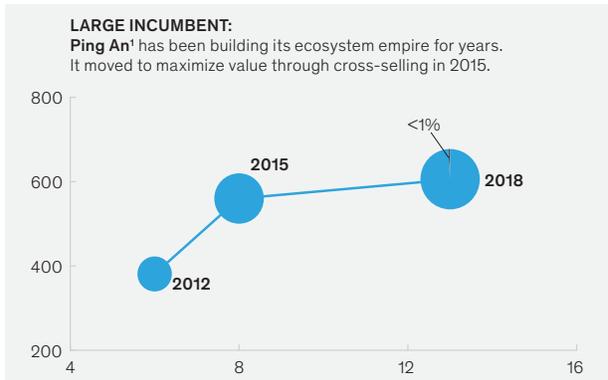
● Internet giant ● Digital start-up ● Large incumbent ● Local champion ● Revenue % from IaaS, SaaS, and PaaS; size represents total revenue

II. Expand the network and offerings to existing customers

III. Build an end-to-end solution to serve business customers and enhance core businesses

Revenue per retail customer, $

Ping An[1] Lufax in 2012

Bank of Nanjing[4] Partner with Du Xiaoman Financial in 2017

Grab[2] GrabPay in 2016

Amazon[3] AWS in 2006

Penetration into addressable market customer base, %

I. Grow the core business through partnerships or build ecosystem from scratch

LARGE INCUMBENT:
Ping An[1] has been building its ecosystem empire for years. It moved to maximize value through cross-selling in 2015.

DIGITAL START-UP :
Grab[2] reached critical mass in a few years and then launched GrabPay to accelerate cross-selling.

INTERNET GIANT:
Amazon's[3] hyper-growth and the expansion of its ecosystem was supported by its 2006 launch of AWS.

LOCAL CHAMPION:
Bank of Nanjing's[4] key focus is to fend off digital attackers and grow its customer base.

[1] Penetration rate is based on total number of retail customers as a percentage of China's population; Revenue per customer is estimated based on annual report and expert interview.
[2] Penetration rate is based on total number of registered users as a percentage of total population of Southeast Asia.
[3] Penetration rate is calculated by dividing estimated number of active users on Amazon by number of online shoppers in US; AWS revenue used as a proxy to calculate revenue from IaaS, SaaS, and PaaS.
[4] Penetration rate is based on total number of retail customers as a percentage of China's population.
Source: Company annual reports and websites; press search; expert interviews

With 1.3 million insurance agents, Ping An Group is a leading insurer in China. The group built a digital ecosystem to help acquire new customers and enable cross-selling. The Ping An ecosystem encompasses a variety of essential services, including financial services, healthcare, auto services, real estate, and smart cities. It has also incubated several technology companies, such as Lufax (2012), an online finance marketplace for consumer lending and wealth management, and Ping An Good Doctor (2014), a healthcare platform for individual users.

Through the platform, new customers can use Ping An Good Doctor to buy the company's insurance products, while existing insurance customers can use Ping An's platform to pay for Ping An Good Doctor services. From 2012 to 2018, the number of Ping An's retail customers more than doubled, and Ping An's Good Doctor services now cover 15 percent of the Chinese population. Total revenue grew by more than 200 percent, based on the company annual reports and an interview with an expert on the company's finances. In recent years, Ping An established OneConnect under its Financial Services Ecosystem and HR-X under Smart City to commercialize its internal capabilities and serve business clients.

3. Digital startup
The ecosystem strategy for startups focuses on creating value by acquiring new customers, cross-selling new products and expanding core offerings. They tend to build scale with limited products or services and then diversify their offerings by participating in an ecosystem.

Grab, for example, was founded in 2012 to offer ride-hailing services. In mid-2015, it started to provide food delivery, digital content, and payment services. As a result, its downloads have tripled, and revenue has increased by more than ten times from 2016 to 2018.

4. Internet giant
These are established internet companies with large customer bases and mature data and infrastructure capabilities. They use all three archetypes to create value: they acquire new customers with their core products, cross-sell new products, and build end-to-end solutions. By diversifying their products and services, they increase the number of customer touchpoints, which helps broaden their customer base and capture larger shares of their customers' wallets. They also leverage their data and infrastructure capabilities to provide solutions to new customer segments.

Amazon, for example, launched a series of self-reinforcing businesses that increased its ability to cross-sell new products like Kindle (2007) and Echo (2015). The company also acquired new customers by purchasing Whole Foods in 2017. From 2007 to 2018, its customer base quadrupled, and its revenue-per-customer nearly tripled. At the same time, Amazon set up Amazon Web Services (AWS), which offers cloud services to other companies while improving the operational efficiency of Amazon's core business. Launched in 2006, AWS accounted for 7 percent of Amazon's revenue in 2017, according to the retail giant's annual report.

Key assessment matrix for evaluating value creation
Businesses, considering their scale and core assets, pursue one or a combination of several archetypes to value creation. This section describes each archetype in detail and how to best assess the success of each with case examples (Exhibit 2, next page).

1. Growing the core business through partnerships or building an ecosystem from scratch.
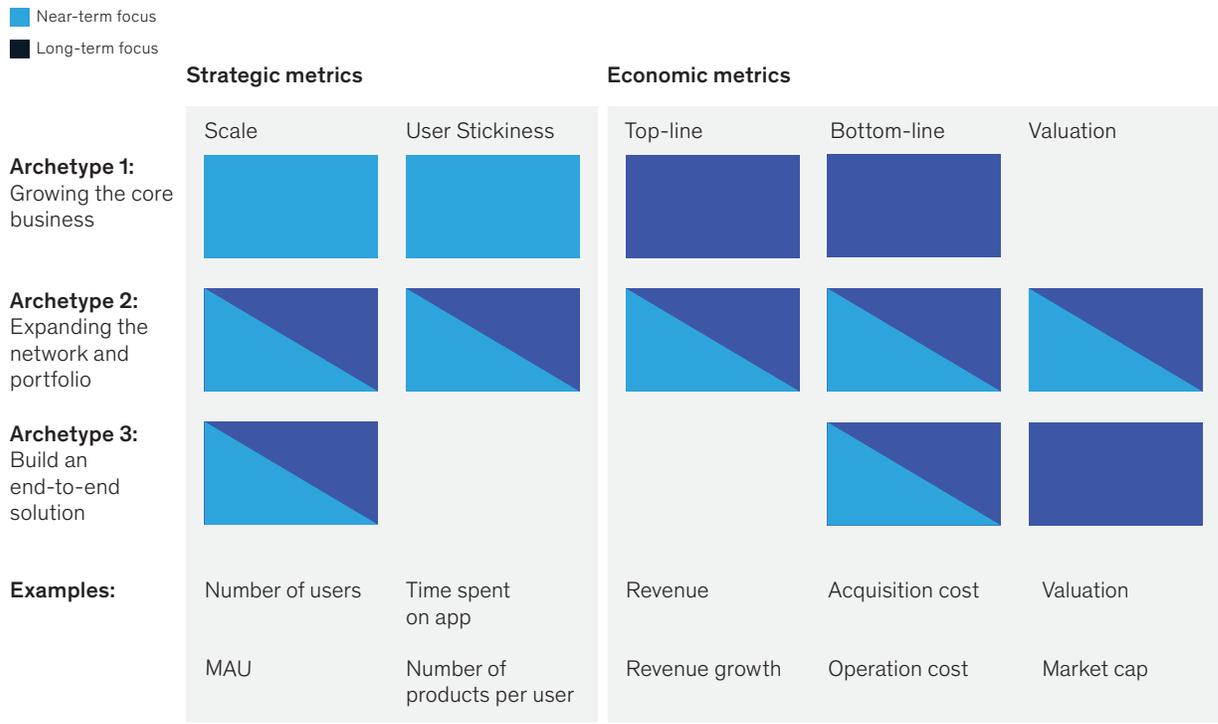Under this archetype, the player has multiple product offerings with strong value propositions. Many of these organizations are in traditional industries with traditional product channels (e.g., bank branches and retail stores). But competition from digital players like Ant Financial and Taobao has weakened their channel power. To fight these incursions, traditional players have set up ecosystems to help them acquire new customers and deepen their relationship with existing ones.

Although large-scale product owners can create their own ecosystems—such as Danske Bank's MobilePay and State Bank of India's YONO marketplace—small regional players often lack the required technological capabilities and can't afford the price of failure. Partnering with strong-channel companies to increase the accessibility and attractiveness of their core products is a safer alternative. Two examples include Bank of Nanjing's partnership with online consumer finance platforms such as Du Xiaoman Financial and Shinsei Bank's partnership with T-Point.

Assessment metrics
Both strategic (e.g., scale and user stickiness)

Exhibit 2

Different archetypes focus on different assessment criteria.

■ Near-term focus
■ Long-term focus

	Strategic metrics		Economic metrics		
	Scale	User Stickiness	Top-line	Bottom-line	Valuation
Archetype 1: Growing the core business	Near-term	Near-term	Long-term	Long-term	
Archetype 2: Expanding the network and portfolio	Near/Long-term	Near/Long-term	Near/Long-term	Near/Long-term	Near/Long-term
Archetype 3: Build an end-to-end solution	Near/Long-term			Near/Long-term	Long-term
Examples:	Number of users	Time spent on app	Revenue	Acquisition cost	Valuation
	MAU	Number of products per user	Revenue growth	Operation cost	Market cap

Source: McKinsey Analysis

and economic (e.g., revenue and acquisition cost) metrics are essential for these smaller players. A player that partners with a strong channel company to acquire new customers must grow its top-line while making sure its customer acquisition cost is lower under the partnership. If a player builds an ecosystem by itself (usually a large-scale player), its first step is to win and retain customers. After scaling up rapidly, it can capture more economic benefits. Ecosystem players first should focus on strategic metrics (e.g., scale and user stickiness), and financial metrics (e.g., revenue) only after the ecosystem achieves scale. For example, Danske's MobilePay started as a free P2P payment solution, building its customer base and user stickiness, and then gradually started to generate revenue from merchants through transaction fees and other value-added platform services.

2. Expanding the network and offerings to existing customers.

Internet companies with a large regional or global client base enter an ecosystem to increase user stickiness and grow their existing customers' lifetime value through cross-selling. Market success stories suggest that businesses unlock the value of cross-selling in two ways. One, they pursue initiatives that increase the number of customer touchpoints. For example, users will spend more time on an app if they can use the platform both to make payments and order food. Second, they incorporate cross-selling into the customer journey. For example, Alibaba, a China-based e-commerce giant, offers payment, logistics, and other services to merchants listed on its e-commerce platform. However, leveraging ecosystems for cross-selling can be quite challenging, especially for traditional financial institutions that tend to serve focused needs.

A player's current growth stages and long-term goals can help it gauge whether to launch its services in-house or through other ecosystem players. When these companies launch a new

product or service, they tend to start by subsidizing it for customers and charging merchants extra. When WeChat founded WeChat Pay in 2014, retail customers could withdraw from the digital wallet free of charge; merchants paid a fee ranging from 0.6 to 2 percent of the amount withdrawn. After two years, customers started paying a fee after the free lifetime withdrawal allowance of $140 was used up.

Customer-focused companies like Grab can readily cross-sell more products to users. Grab first partnered with local taxi drivers to provide ride-hailing services. Later, it launched GrabFood (food-delivery), GrabExpress (door-to-door delivery), and GrabBike (bike sharing). It also expanded its non-transportation services, offering microloans and micro-insurance to local consumers without bank accounts through GrabPay, which uses their digital payment histories to verify credit worthiness.

New-generation business-to-business companies like Zilingo have accumulated many local clients during their initial growth stages in emerging markets. Zilingo then started identifying customer pain points to generate more revenue and distinguished itself further in Southeast Asia's crowded market by connecting businesses across the entire supply chain. To speed its growth, it also partnered with third parties that provided logistics, loans, and payment services.

Assessment metrics
These players expanding their networks need to track strategic metrics such as user scale (the number of active users) and user stickiness (the time they spend on the app and the quantity of products or services purchased per user session). Local players tend to focus more on top-line economic metrics like valuation, revenue, transaction volume, and average revenue per user. Large companies track this as well, but also stress bottom-line metrics like profitability and cost-income ratio.

For example, Grab evaluates its monthly active users, daily and monthly active usage, the number of products per user session, and revenue. Zilingo assesses scale, revenue, and valuation. WeChat focuses on user-stickiness metrics like time spent on the app and products per user. In its annual reports, Tencent discloses user scale, the revenue produced by each business stream in its ecosystem, and profitability.

3. Build an end-to-end solution to serve business customers and enhance core businesses.
By developing ecosystems beyond their core businesses, companies can tap new customer bases by packaging solutions derived from their internal capabilities. Three defining characteristics of companies that build end-to-end solutions are 1) innovative products and services delivered through their existing value chains, 2) customer segments that cut across boundaries between retail customers and businesses, and 3) the ability to translate the benefits of the ecosystem to the core business by increasing customers, intelligence, and operating efficiencies.

For example, Ping An, by expanding beyond its core insurance business to healthcare consultations, auto sales, real estate, and banking services now reaches 576 million online customers and 196 million financial customers. Ping An OneConnect, a typical example of an end-to-end solution in financial services, serves over 3,700 financial institutions with technology solutions across sales, product development, risk management, and operations. On the business side, Ping An's HR-X was launched in 2018 to provide HR solutions for businesses.

Assessment metrics
Scale, valuation, and bottom-line metrics are critical for assessing the success of new revenue streams for builders of end-to-end solutions. Together, they reflect the potential value captured from business and retail customers. Businesses should also evaluate how the expanded offerings help their core businesses both strategically (e.g., enhanced customer intelligence) and economically (e.g., lower operational costs).

For example, AWS, launched in 2006 to support the hypergrowth of Amazon's e-commerce business, quickly grew into a market leader in cloud services, solving the issue of the IT infrastructure barrier to Amazon's growth. Until 2013, Amazon used strategic metrics like scale to demonstrate AWS's success, such as the number of its customer and partner conference attendees in 2012. It started reporting AWS's revenue in 2013, an economic metric. Two years later, for the first time, it released quarterly revenue, growth, and operating margin. In 2018, Amazon reached $1 trillion in market value and AWS is the company's biggest profit producer.

Capturing the value of ecosystem strategies

Once business leaders have determined which archetype they will pursue and which metrics they will use to measure success, they need to identify methods to elevate their performance. This section shows how businesses within each of the three archetypes can capitalize on five key value levers.

Key value levers

Ecosystem strategies generate value from five sources: improved revenues from core products and services, customer-funded new products and services, merchant-funded platform usage, third party-funded data monetization, and increased operational efficiency.

1. Improved revenues from core products and services

In this value source, the ecosystem boosts core product revenue by reducing the cost of customer acquisition. The ecosystem can also decrease churn and increases customer loyalty to the core business. Further, advanced analytics can help companies make the most of the opportunities within their existing revenue pool by improving both traditional and ecosystem operations. For example, by expanding into healthcare consultations, auto sales, real estate listings, and banking services, Ping An enhanced its core insurance business.

2. Customer-funded new products and services

Ecosystem strategies often focus on extending a company's business scope into adjacent opportunities. One way to generate new revenues from an existing customer base is to roll out new products from high-frequency, low-value usage to low-frequency, high-value usage. Using internal capabilities to sell an infrastructure solution to other businesses can also generate new sales from new sources. For example, Amazon's continued investments into new opportunities have helped it become a platform of self-reinforcing businesses.

3. Merchant-funded platform usage

As an ecosystem increases its number of active users, the platform becomes more attractive to merchants. This generates more revenue for the platform owner through registration or listing fees and commissions paid by merchants. For example, Scout24 operates many-to-many car and property marketplaces with value-added services in many European countries. Its consumer services platform distributes third-party services to its current customer base, accounting for 19 percent of the company's total revenues in 2018.

4. Third party-funded data monetization

As an ecosystem gathers customer data that merchants can use to improve advertising targeting and develop new business offerings, the company providing the solution can charge for targeted placements, preferred listings in search results, and access to raw data. John Deere, which manufactures agricultural, construction, and forestry machinery, is transforming itself from a heavy-industries company to a technology company. By offering a suite of digital services for farming in one package, John Deere consistently outperforms the market and captures new customers because of its data-driven ecosystem strategy.

5. Increased operational efficiency

The ecosystem can lower operational costs by helping players achieve economies of scale by combining existing assets with the resources of multiple organizations from across various sectors.

How each archetype captures value with different value levers

Each archetype (Exhibit 3, next page) derives value in specific ways:

— *Archetype 1 (Growing the core business)* derives value from improved revenue from core products and services and merchant-funded platform usage.

— *Archetype 2 (Expanding the network or portfolio)* derives values from mining higher customer lifetime value. It can capture value from many sources, including customer-funded new products and services, merchant-funded platform usage, and third party-funded data monetization.

— *Archetype 3 (Building an end-to-end solution)* uses a B2B infrastructure solution to capture value from new products and services purchased by business customers. It can also create value by improving its operational efficiency via economies of scale.

Archetype 1. Growing the core business to earn more value and become an attractive platform for merchants

The value sources for Archetype 1 include earning higher revenues from core products and services and merchant-funded platform usage. At first, the ecosystem enables players to sell more existing products to more customers. Examples include the State Bank of India, which added insurance and investment products to its YONO marketplace; the Bank of Nanjing, which partnered with digital platforms like Du Xiaoman Financial to sell its consumer finance services to more customers, and Shinsei Bank, which gained 20 percent of its new customers through its partnership with T-Point. Danske Banks' MobilePay (Exhibit 4, next page) is also an excellent example.

If the player has already built its ecosystem, it can

Exhibit 3

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

	Improved revenues from core products and services	Customer-paid new products and services	Merchant-paid platform usage	Third-party-paid data monetization	Increased operational efficiency
Archetype 1: Growing the core business	✓		✓		
Archetype 2: Expanding the network and portfolio		✓	✓	✓	
Archetype 3: Build an end-to-end solution		✓			✓
Examples:	New customers, improved loyalty Maximized potential of an existing revenue pool	Sales of back-end solutions Sales of new products and services	Registration/ listing fee Commission fee	Advertisements Access to data	Decreased costs per unit Synergies among assets and resources

Source: McKinsey Analysis

provide more extensive service offerings once the system reaches the desired scale. It can also use its platform to attract merchants, which it can charge for using the platform, creating more value.

Example: Danske Bank's MobilePay
In March 2013, Danske Bank launched its MobilePay

app as a P2P payment solution to acquire more customers and rapidly scale the service. The app is free to all consumers, not just the bank's customers, and collects fees only from merchants for transactions and add-on features like invoice management, subscription services, and loyalty

Exhibit 4

Archetype 1: Growing core business to earn more value and becoming an attractive platform for merchants.

New scenarios	Innovation priorities	Time to reach impact	Key strategic impact	Key economic impact
Payments	Danske Bank launches MobilePay, a P2P payments solution	4 years	**>200 million** transactions per year	**>$1 billion** monthly payment value
Online shopping	SBI creates YONO, a marketplace for financial products and other services (eg, taxi, shopping)	1 year	**~10 million** transactions per year	**>$40 million** monthly disbursements of personal loans
Point program	Shinsei Bank partners with TPoint to accumulate points on banking products/services	3 years	**20%** new customers through T-Point program	**+450%** T-Point shopping credit[1] volume
Online lending	Bank of Nanjing partners with digital consumer finance platforms (eg, Du Xiaoman Financial)	2 years	**~60%** consumer finance customers through digital platforms	**>50%** acquistion cost reduced

[1] Purchase a product with installment payments.
Source: Company annual report, investor presentation, press search; D&B Hoovers; expert interview

program membership. It has invited more than 70[1] banks to join the platform and expanded into the Finish market in 2018.

In September 2019, MobilePay, along with six other mobile-payment systems, launched a new European mobile-payment association. The association's leaders aim to make mobile payments across borders possible by uniting 25 million mobile-payment users,[2] more than one million merchant acceptance points, and over 350 partner banks.

Danske's 2018 annual report claims MobilePay has more than five million users in the Nordic countries, including nine out of ten smartphone users. Among Danes, MobilePay is considered more indispensable than Facebook, according to AudienceProject Insights 2019. And it reaches far beyond the bank's customer base. According to Danske's corporate website, 70 percent of those who use the app are not Danske Bank clients. 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 products and services), and the rest from monthly fees merchants pay for value-added services (merchant-funded platform usage).

Example: SBI YONO
Launched in 2017, the State Bank of India's YONO (SBI YONO) marketplace, an omnichannel ecosystem, offers banking, insurance, and investment products, as well as shopping experiences. In February 2019, the bank released a presentation to analysts of its Q1FY20 results showing that YONO now has ten million registered users and nearly four million digital savings accounts. According to SBI's 2018-19 annual report, YONO is the fastest-growing channel for personal loans, with over $40 million in monthly disbursements – growth that has boosted the bank's revenue from core products and services. SBI's Chief Technology Officer Shiv Kumar Bhasin recently told a trade publication that by 2020 the bank aims to generate 25 percent of its revenue from digital channels, including the YONO platform.[3]

Archetype 2: Expanding the network and portfolio on the platform, and generating revenues from new products
The ecosystem players generate higher value

through merchant-funded platform usage, third party-funded data monetization, and new products and services. Most of these players began benefitting from merchant-funded platform usage before creating the ecosystem but have added more features to increase user stickiness and average revenue per user (ARPU). As transaction volume per product or service grows, the company can develop more products and services.

Ecosystem players can also capture value by monetizing the enormous amount of data they collect, including personal information, online user behavior information, and offline location data. By using machine learning and artificial intelligence (AI) to capture the full potential of their user-interactive platforms, they can also recommend more effective targeted advertising placements to merchants and create new business products and services.

These players also tend to expand their ecosystems from high-frequency, low-value usage to low-frequency, high-value usage (Exhibit 5, next page). WeChat, for example, grew from being the most popular social networking platform (high-frequency, low value) to being a payment, entertainment, e-commerce, and transportation services provider (lower frequency usage but higher-value). Grab strengthened its transportation services and then branched out into food, digital content, and finance. As the ecosystem expands, the value sources and their share of overall returns are likely to change.

Example: Tencent
Tencent has successfully pursued three value sources simultaneously, according to an analysis of its annual reports. As a mega internet-ecosystem player, its two social networking products, QQ and WeChat, generate revenue from the fees it charges merchants for e-commerce, payment, digital content, and advertising services as well as from customers who pay for value-added services such as online games and music subscriptions.

In 2004, Tencent's main revenue streams came from new consumer products and services and merchant-funded platform usage. The revenue from merchants included mobile and telecom value-added services (VAS) and internet VAS, which accounted for 95 percent of Tencent's total revenue.

By 2007, third parties supplied increasing data

[1] Nils Urbach and Maximilian Roglinger, Eds., *Digitalization cases: How organizations rethink their business for the digital age,* Springer, September 2018.
[2] MobilePay founding member of new European mobile payment association.
[3] Nivedan Prakash, "SBI steps up digital acceleration with YONO," Express Computer, December 17,2018.

monetization value, and online advertising had grown by 20 percent. In 2008, Tencent launched a range of multiplayer online and casual games, which raised its standing in the online gaming industry. After years of planning and execution, Tencent started to reap the benefits of its strategy to build a diverse product portfolio that leverages its massive online platform.

For Tencent, online games and its ecosystem of literature, video, music, news, and comics now represent 30 percent of its total revenue. TME is the leading online music entertainment platform in China, with the country's most popular music apps. Newsfeeds, short videos, and mini videos boost traffic on the media and distribution platforms.

Because of this ecosystem, new consumer products

and services now constitute over 50 percent of Tencent's total revenue. At the same time, the company has improved data-monetization by connecting more advertisers across more platforms. Tencent also completed a system revamp of news advertising in early 2018. The contribution of third party-funded data monetization to its total revenue is now 20 percent, while merchant-funded platform usage (fintech and business services) accounts for 25 percent.

Archetype 3: Building end-to-end solutions to capture value from new consumer products and services and improve operational efficiency
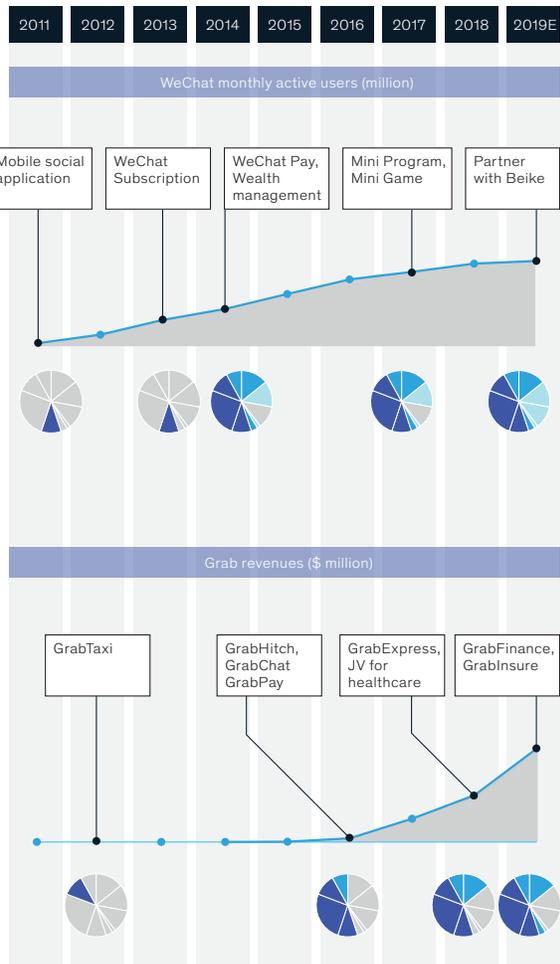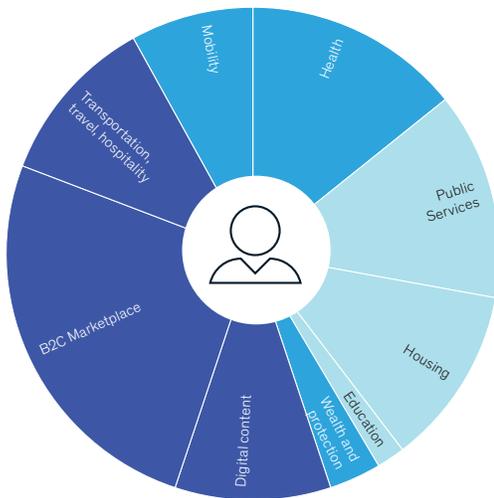Businesses that optimize their existing infrastructure, technology and then offer them to other companies create new revenue streams and lower their operational costs through economies

Exhibit 5

Archetype 2: Expanding the network and portfolio to create potential new-product revenue.
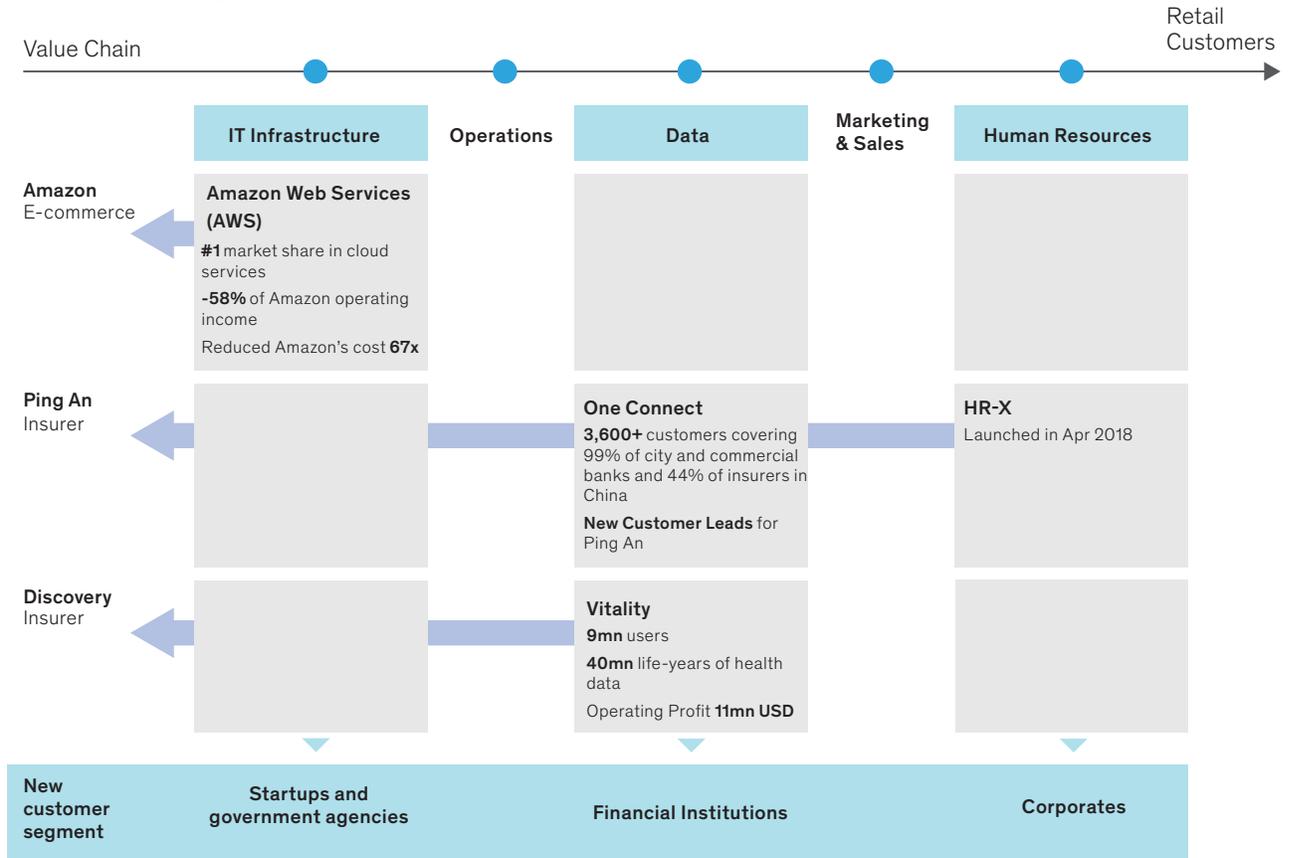
Capture more revenue per user by expanding product offerings along the client journey[1]

1 Size of area reflects the comparative revenue size of industry ecosystem.
2 Daily usage for a client.
3 Mixed usage for a client.
4 Lower-than-monthly usage for a client.
Source: Company annual report, press research

Exhibit 6

Archetype 3: An end-to-end solution to capture value from customers-paid products and services and improved operational efficiency.

Value Chain

Retail Customers

	IT Infrastructure	Operations	Data	Marketing & Sales	Human Resources
Amazon E-commerce	**Amazon Web Services (AWS)** **#1** market share in cloud services **-58%** of Amazon operating income Reduced Amazon's cost **67x**				
Ping An Insurer			**One Connect** **3,600+** customers covering 99% of city and commercial banks and 44% of insurers in China **New Customer Leads** for Ping An		**HR-X** Launched in Apr 2018
Discovery Insurer			**Vitality** **9mn** users **40mn** life-years of health data Operating Profit **11mn USD**		
New customer segment	**Startups and government agencies**		**Financial Institutions**		**Corporates**

Source: Company annual report, investor presentation; McKinsey Analysis

of scale. They also package their capabilities into solutions that help other companies reduce costs and gain access to supporting technologies and rich data.

For example, Ping An set up two services: OneConnect, to offer end-to-end solutions to financial institutions, and HR-X, to offer HR solutions to corporations. By serving customers not traditionally targeted by Ping An as an insurance company, OneConnect and HR-X helped met the needs of new customer segments.

Discovery, a South Africa-based insurance company, transformed its wellness-based expertise and proprietary knowledge into a digital behavioral platform called Vitality through partnerships with insurers (Exhibit 6).

Example: AWS by Amazon

Amazon's AWS created value for Amazon by extending its internal capabilities to other parties and diluting Amazon's IT investment and maintenance costs. A recent AWS Partner Network (APN) blog post[4] said that AWS had cut the prices it charges to customers, including Amazon, 67 times from 2006 to the end of September 2018. Because it is the back end of Amazon's digital content and other e-commerce services, AWS also helps boost the scale of Amazon's e-commerce business and expand its ecosystem.

After evolving for more than a decade, AWS now offers more than 100 products and services to businesses ranging from start-ups to government agencies. It generates revenue from fees for the use of its products and services, and now provides

[4] Aaron Rallo, "New Research From TSO Logic Shows AWS Costs Get Lower Every Year," September 24, 2018, aws.amazon.com.

end-to-end solutions with a broad set of services, including computing, storage, databases, Big Data analytics, networking, security, developer and management tools, and Internet of Things, as well as mobile and enterprise applications. The solutions are simple to implement and offer high security, elasticity, scalability, and flexibility. AWS also provides pricing models that allow customers to adapt to changing market and customer needs without investing upfront capital. They include:

— On-demand: Paying for computing or database capacity with no long-term commitments or upfront payments.

— Dedicated instance: Running in a virtual private cloud on hardware dedicated to a single business customer.

— Spot instances: Buying spare computing capacity with no upfront commitment at a discounted hourly rate.

— Reservations: Paying for capacity ahead of time.

These models are based on three pricing factors: computing, storage, and outbound data transfer. Here are examples of how AWS charges for each:

— With AWS Lambda, developers can run code without supporting or managing servers. Users pay for computing capacity based on the number of requests across all functions and the time it takes to execute them.

— Amazon S3 Glacier is a cloud-storage service for data archiving and long-term backup. The price of the data storage component starts at 0.004 cents per gigabyte per month, according to a June 2018 AWS pricing document.

— AWS Snowball is a data transport solution that uses secure appliances to transfer large amounts of data into and out of the AWS cloud. Users pay a service fee for the outbound data transfer and the cost of shipping the appliance.

Six core capabilities for creating value in an ecosystem

This section highlights the six capabilities we observed among successful ecosystem players. Although business leaders can choose different strategies based on their circumstances, these capabilities form the building blocks of best-practice ecosystems. The section also features interviews with C-suite executives about their successes and challenges in implementing their strategies.

How each archetype can leverage different core capabilities

All six capabilities are critical for ecosystem players. They include universal capabilities: advanced analytics, and agile development and operations, and archetypal capabilities: robust governance that allows for a portfolio of bets; strong middle platforms (between the upper layer of operations and marketing and the lower layer of data governance and development) that organize core capabilities and maximize synergies; entrepreneurial talent, and partnerships.

Specifically, each archetype (Exhibit 7) need to primarily develop different core capabilities:

— *Archetype 1 (Growing the core business)* should emphasis on developing advanced analytics, agile development and operations and partnership.

— *Archetype 2 (Expanding the network or portfolio)* should emphasis on developing all of six capabilities of advanced analytics, agile development, governance that allows for a portfolio of bets, strong platform, entrepreneurial talent and operations and partnership.

— *Archetype 3 (Building an end-to-end solution)* should emphasis on developing advanced analytics, agile development, governance that allows for a portfolio of bets, strong platform, and entrepreneurial.
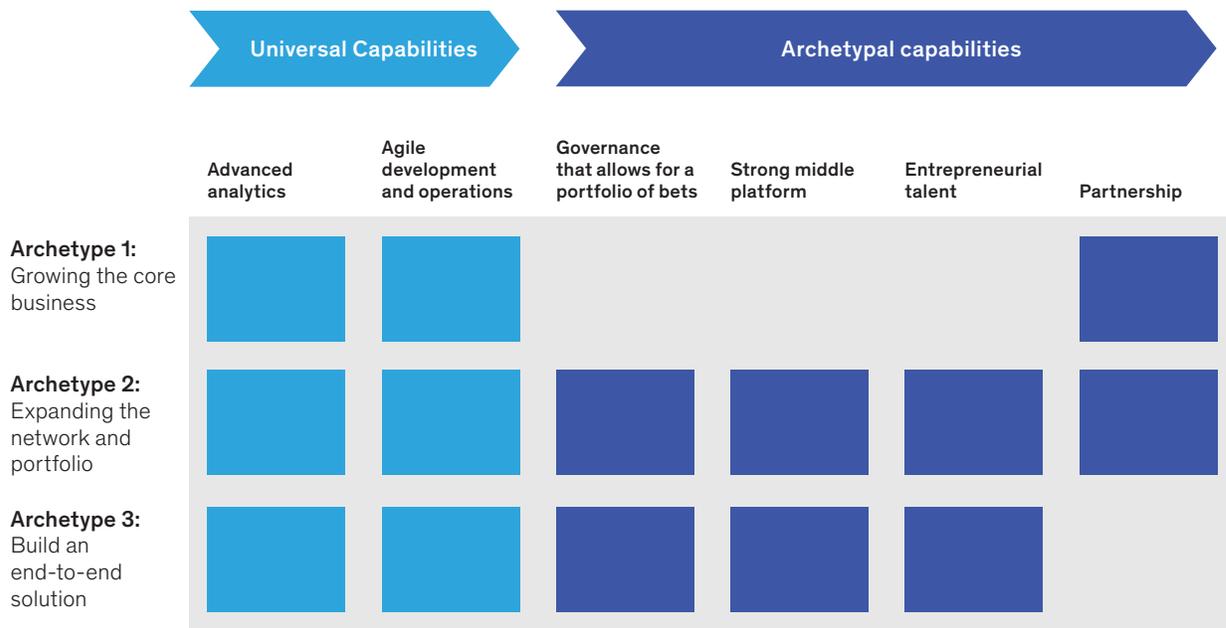
1. Advanced analytics

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.

Example: OneConnect by Ping An
Leveraging Ping An's internal advanced analytics, OneConnect turns the company's internal data intelligence into solutions and sells them to small and mid-size financial institutions. Since its launch in 2015, OneConnect has built a technology-as-a-service platform. The platform provides cloud-native technology solutions that integrate financial services industry expertise with market-leading technology. To help its customers extract insights, OneConnect:

— *Provides customer analytics and a targeted marketing module for precision marketing.* OneConnect uses data analytics models with over 30 multidimensional tags. These tags include financial status and social relationships to help financial institutions expand their relationships with existing customers and acquire new ones.

— *Uses a credit analytics engine to empower the credit decision-making process.* OneConnect processes over 4 million credit risk assessments a day and updates and refines its blacklist database and risk management algorithm. The refinements have helped the company develop a series of credit-assessment modules. They

Exhibit 4

Priorities across innovation portfolio.

	Universal Capabilities		Archetypal capabilities			
	Advanced analytics	Agile development and operations	Governance that allows for a portfolio of bets	Strong middle platform	Entrepreneurial talent	Partnership
Archetype 1: Growing the core business	■	■				■
Archetype 2: Expanding the network and portfolio	■	■	■	■	■	■
Archetype 3: Build an end-to-end solution	■	■	■	■	■	

Source: McKinsey GTB Survey

also have helped OneConnect build an end-to-end retail banking risk management solution that helps retail banks streamline their loan businesses, improve their credit analytics, reduce delinquency risk, and enhance post-lending performance.

— *Employs AI and advanced analytics to automate the entire claim-processing procedure.* OneConnect's auto insurance operations and services solution include more than 100,000 vehicle models and 29 million parts. It processes about 11,000 auto insurance claims a day for small and medium insurers and helps them curb their losses, fight fraudulent claims, and improve service quality.

2. Agile development and operations

Many traditional businesses rely on ecosystem strategies to meet customer expectations and cope with the pressure for more efficient services. They have learned that leveraging agile-development principles and creating customer-focused, scalable operating and delivery models can bring their aspirations to life.

Example: ING
ING, the Dutch banking group, has adopted ecosystem strategies in multiple markets. For example, ING and Ideabank provide accounts-receivable management, factoring accounting, and cash-flow analysis to SMEs. In 2015, ING 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 and account onboarding times from 20 days and three branch visits to a single five-minute process.

Some of ING's changes include:

— *Embedding value creation in a broad set of smaller businesses.* ING transformed its headquarters into 13 tribes composed of 150 people, each responsible for one product or customer group.

— *Encouraging greater collaboration across IT and business functions.* Within each ING tribe, squads of no more than nine employees with different skills are assigned to tackle clearly-defined problems and reach client-based objectives.

— *Adopting trial-and-error approaches.* ING conducts early testing through small pilot programs, which are then improved and scaled quickly. It releases new software every two weeks rather than in five to six big launches a year.

— *Empowering its employees across levels.* ING has introduced new roles and tasks, such as tribe leaders and agile coaches, and adjusted its performance management to focus on both individual performance and team goals.

— *Creating a simple, open-technology infrastructure.* ING uses a modular IT architecture that provides micro-services and ensures that processes are digitized from end to end.

3. Governance that allows for a portfolio of bets

A typical ecosystem expansion starts with a high-frequency use case. But it's hard to meet clients' needs while promoting innovation and creating best-selling products. Examples of how agile companies are designing governance mechanisms that bolster innovation and foster a client-oriented mindset include:

Singtel's venture capital arm
— *Using external investment as an innovation engine.* Singtel established Innov8 as its venture capital fund. Innov8 is also a gateway for startups to leverage the resources, expertise, and customers of the Singtel Group while proving it with access to insights and emerging technologies.

— *Organizing an external startup competition that leverages internal resources.* Launched in 2016, Innov8 Connect is a program that brings startups and Singtel together to address Singtel's business challenges. Singtel posts challenges such as IoT solutions for smart public infrastructure, and takes part in the evaluation process. Startups are invited to pitch solutions to those challenges to Singtel management, which can commercialize successful solutions and leverage them with its customer base.

Google's internal incubator
— *Promoting innovation and delaying the required*

payback. Google set up its Google X (now X Development) lab in 2010 to find solutions for its failed projects and create breakthrough technologies to solve big problems. The lab does not provide specific topics for innovation but pushes its researchers to make products that are useful to the world. Employees can use Google X's financial resources to fund the research so projects do not have to deliver short-term results.[1]

Tencent's internal competition
— *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.

Example: Tencent
Key practices in biological governance include:

— Providing a fair, competitive environment. Several teams with the same focus and equal internal resources work on a project simultaneously.

— Testing the products in the real market. All products undergo rounds of internal testing and market validation in the early stages. Only the fittest (or best) products survive.

— Creating a product pool to compete as a group. With this approach, Tencent doesn't need a particular team to beat the market consistently. Instead, it creates a product pool to help ensure the market bestsellers always emerge.

4. A strong middle platform that organizes core capabilities and maximizes synergies.

As a company's products and use cases grown, efficiency may suffer, and it may need to revisit its organizational structures. First adopted by internet companies like Alibaba, a broader middle platform, in which, for instance, different businesses share customer information, is one way that organizations can harness their Big Data capability. This approach requires gathering an organization's most critical and frequently used datasets to reduce errors and

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[1] Derek Thompson, "Google X and the Science of Radical Creativity," *The Atlantic,* November 2017, atlantic.com.

C-suite Opinion: Royal Bank of Canada's bottom-up strategy and long-term approach to ecosystem investment

McKinsey: What is the rationale behind RBC's decisions to build "in house", invest, or form strategic partnerships?

Mike Dobbins, Chief Strategy and Corporate Development Officer at RBC: It starts by focusing on areas that are adjacent to banking or are opportunities for banking. We have chosen to focus on five areas: home, mobility, health and wellness, B2B, and lifestyle – all of which have connections to banking.

There are a lot of components to a large ecosystem, so we normally look at which ones are most important for our strategy and we prioritize the order in which we develop them. We then decide if it makes more sense to build a solution, partner with someone or, in some cases, buy an existing business. In most cases, however, we have chosen to build in house because there was no product currently in market that met our needs.

In some cases, we have chosen to invest in or form partnerships with companies that have successful products already in the market that could be incorporated into one of our ventures to offer a truly differentiated value proposition.

And then finally, in some cases, we've acquired companies when they have built what we are looking for and present good synergies for both our ventures and RBC. As a large organization with millions of clients, we can help accelerate the growth of an acquired company.

McKinsey: How does RBC empower portfolio companies? Do you share your customer base with them or provide any data or infrastructure to enable them?

Mike Dobbins: We empower portfolio companies through our investment fund and through our accelerator, RBC Reach.

For the investment fund, we invest in more mature companies that align with our strategic goals and we help them grow through a commercial partnership. RBC has 13 million customers in Canada, representing a large portion of the country, so we are helping them to bring new and innovative solutions to our clients.

In the accelerator, we provide more support to enable early-stage companies, including a space to work, coaching and access to experts who have an unparalleled understanding of Canadian consumers and businesses. It's a good opportunity to get to know the founders, the product and the market, and determine if there are ways we can work together.

McKinsey: Can you share key learnings and challenges from RBC's in-house ecosystem experience?

Mike Dobbins: RBC focuses on five ecosystem areas, and there are individual venture solutions aligned with each area. To create ventures, we try to discover a pain point that affects a large population and could be solved in a way that makes us truly differentiated. Many ventures turn out to be somewhere adjacent to banking. It is not a requirement, but it is something we are looking for.

One of the learnings is that we don't use the word *ecosystem* very often within the environment, but we use the term *venture*. Our belief is that at the early stage, ventures have to be small and incredibly focused on what they are trying to achieve. For example, there are six ventures in our home ecosystem area. One venture is a payment product for home renters. We also have a venture in home search, one that assists with home purchase, one that is a moving concierge, one in service reminders and one in renovation. You could argue that all of them combined together is an ecosystem. However, we want each of them at an early stage to work independently to create scale in their particular space, and after a period of time, we will determine if it makes sense to bring them into a more holistic home ecosystem.

Mckinsey: This is an inspiring strategy choice as all the other players are trying to build top-down but you are trying bottom-up.

Mike Dobbins: Yes, we are trying to increase agility by working lean with small teams and small budgets. If we find product-market fit, we work to quickly grow the team and provide the resources the venture needs to scale. If we don't find it, we can just cut the venture without significantly affecting the overall organization. In other words, we focus on the parts, knowing that if we are successful, the parts can always come together to create something bigger. But if we start with something bigger, it could take us a long time to get to market.

Mckinsey: What is the measure of success? How is value created for the bank as a whole?

Mike Dobbins: How ventures create value depends on the nature of the venture. Some ventures are looking for direct monetization. For other ventures, we expect them to create connections to help RBC acquire new banking clients and deepen our relationship with existing banking clients, so their path to monetization is further down the line. It would be great if RBC's market share grows dramatically as a result of our ventures.

We don't put all the emphasis on short-term value, but we invest for long-term value. It takes time for a venture to scale up after going to market, but in the meantime, we try to keep the burn rate low and be as agile as we can.

McKinsey: In what scenario would you want to change your monetization model?

Mike Dobbins: You need to choose the optimal path between profit and growth. So depending on the stage of a venture, you may need to be willing to undertake a period of less return for the sake of building brand and building scale. But other than that, you need to figure out the value proposition of your services in the competitive market. We aren't prescriptive of when we would change, but we try to be optimal in each stage of the journey.

Because we are a big bank, there are always cross-selling opportunities. As I think about growing ventures, they bring us new clients with whom to discuss banking, but they also help to differentiate our banking offer from others.

McKinsey: What do you think are the key operating principles for your ventures?

Mike Dobbins: You have to be very aware of the difference between the venture and the overall Ventures strategy. A venture should have an identity, and it should have people behind it who understand what we are trying to achieve and are passionate about it. So the first principle is about choosing the right people working on each individual venture. Second, you need to align with the entire team about what you are trying to achieve at the top of house in order to start working without unnecessary friction. Finally, the whole team needs to be onside, and everyone must embrace the problem statement we are trying to solve for the long-term growth and differentiation of RBC at a time of great change.

Mike Dobbins
Chief Strategy & Corporate Development Officer, Royal Bank of Canada

Mike is responsible for working with RBC's Group Executive to develop RBC's overall strategic plan as well as providing leadership for mergers and acquisitions. Mike also heads RBC Ventures, a group focused on creating solutions that go beyond banking to build and deepen relationships with Canadians in new and innovative ways.

redundancy and streamline the data available to the public. This concept has inspired traditional financial institutions to create middle platforms and maximize the synergies in their ecosystems.

Example: Alibaba

To capture more value from its data and resources, Alibaba set up a dual middle platform architecture (for data and shared business functions) that supports the front office by:

— *Unifying internal data standards.* This guaranteed that the data in different use cases are consistently defined. It also reduced data management work by making data reusable and reducing the number of data indicators and database tables from tens of thousands to thousands.

— *Providing a unified middle layer of publicly available data and modularized tools.* Every business unit could access data more efficiently because the middle layer consolidates information and eliminates redundancies. The ability to reuse this data can significantly reduce the time and cost of new product development.

— *Simplifying the development process.* Alibaba standardized and categorized all its business data and models into categories for future reuse. They also clarified the division of labor among engineers and increased collaboration. That made R&D more efficient because engineers no longer need to understand every detail of a process.

Hema Supermarkets, the offline retail stores under Alibaba, by analyzing a customer's past purchase history, platform behaviors, and personal information, can better understand the customer and create better marketing promotions. As customers finish their payment through the Hema app, the new data uploads to the data-sharing layer, the middle platform, thereby increasing the accuracy and utility 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.

Example: Ping An

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. Ping An is a good example of how a traditional insurance company used talent to pursue an entrepreneurial transformation while continuing to improve its internal capabilities. During the process, Ping An incubated several unicorn companies within its ecosystem, such as Ping An Good Doctor, OneConnect, and Lufax. The insurer's talent strategy focuses on creating:

— *Strong technical capabilities.* Ping An built two overseas research centers. The company has employed more than 101,000 technology employees, 32,000 R&D employees, and 2,200 scientists. It attracts technical talent through its big data and business use case platform and its investment in the R&D department. It also launched a new incentive program to retain talent by providing annual stock options to 30,000 to 40,000 employees, particularly those with top technical skills.

— *Self-motivated leaders.* Ping An uses a top-down hiring approach that selects candidates based on their entrepreneurial characteristics. Using a scientific hiring model, it identifies self-motivated, achievement-oriented candidates. To inspire innovative teams, Ping An makes sure its senior managers possess an entrepreneurial spirit. Its managers regularly rotate to different departments and positions to develop the skills and experiences they'll need to navigate future challenges.

— *Startup-like performance management.* Ping An has a startup-like incentive scheme that ties compensation to performance through rewards and stock options. Its zero-based performance management process bases next year's target on market potential, creating a culture in which no one can coast on their past successes, and everyone feels encouraged to take new risks.

6. Partnership

Some traditional incumbents think an ecosystem will have value only if they create everything themselves. However, our research shows that withan an ecosystem collaboration is critical to a company's success.

Example: T-Point

T-Point is a subsidiary point-redemption system of the Culture Convenience Club (CCC), which runs Tsutaya, a nationwide chain of Japanese video-rental shops and bookstores. Through T-Point, both Tsutaya and non-Tsutaya consumers can earn

C-suite Opinion: Creating an innovative culture to attract the right talent

McKinsey: How does Ping An attract technical talent?

Fangfang Cai, Chief HR Officer of Ping An Group: We rely on six characteristics to attract talented science and technology practitioners:

1. massive datasets for scientific research covering nearly 576 million users and five ecosystems
2. abundant opportunities to apply science and technology in hundreds of cities and millions of businesses
3. extensive R&D investment in science and technology
4. an established talent base enabled by eight research institutes and 50-plus technology labs for scientific and technological innovation around the world
5. our track record of 30 percent compound annual growth rate over the past 16 years, a high venture success rate, and over 18,050 patents
6. individual successes participating in national talent programs and winning national awards

McKinsey: Ping An used many external senior and middle-level managers, especially for creating technology subsidiaries like OneConnect. What is the right mix of corporate talent and external experts?

Cai: We don't have a preferred ratio. We use three types of talent to optimize team building and achieve our strategic goals: team members who are full of energy and good ideas but lack expertise or industry experience; traditional industry experts with experience, knowledge, connections, and industry insights who need to strengthen their crossover vision and cross-industry development; and senior managers who serve as a bridge between the new team members and industry experts. Some are from top international consulting firms and specialize in strategic planning and combining traditional businesses with technology to bring everyone's ideas to life.

McKinsey: What technical capabilities and personalities must candidates have to integrate with a team?

Cai: The talent Ping An recruits usually fits in well, including 90 percent of senior management. Ping An does this by:

1. Finding the right talent. Candidates must be an expert in a particular field and possess strong learning capabilities to create new value from Ping An's existing businesses and resources. They should aim high and start low, meaning they need excellent strategic planning ability, a farsighted perspective, the ability to make precise judgments on industrial outlook, and can implement the changes they envision. They need to be able to execute and lead change. Also, our HR-X Smart Human Resources Integration Platform uses an intelligent-recruitment funnel to help us find suitable talent quickly. It employs a series of intelligent tools, including 24 groups of positive- and negative-capability labels, a personal post-portrait model, and Big Data background checking.
2. Creating systems that promote and ensure internal fit. New senior managers have clear responsibilities and objectives in top-level planning. We provide them with the resources and teams to get familiar with the company's strategy, culture, and organization so that they can integrate quickly and succeed.

McKinsey: How does Ping An retain existing talent and help them adapt to its transformation from a traditional company to an innovative one?

Cai: Ping An's talent retention and training programs focus on three priorities. The first is instilling Ping An's "crisis and tolerance culture" in recruits by encouraging them to learn and grow on their own initiative. The second is training talent across multiple dimensions. For example, we have a training system called HR-X that can identify an individual's weaknesses and learning needs and match them with personalized learning resources based on his or her role, performance, interests, and so on. We also have customized learning plans and rewards for the top 20 percent performers. The third priority is providing individuals with growth opportunities. We are continually expanding our businesses and creating new fields, strategies, and

platforms. Our job-rotation program allows employees to take advantage of these opportunities.

McKinsey: How does Ping An encourage employees to innovate and strive for excellence?

Cai: Our performance design emphasizes innovation, maintaining our sense of crisis, and pursuing excellence at both the corporate and the individual level. On the corporate performance level, we benchmark against the market, the plan, and prior performance. We reward those who have maintained growth and created new value. We invite external organizational experts to help us perform better. We also have a rolling budget instead of the annual budget plan. Our corporate-planning department monitors performance, which enables employees to innovate with a high degree of freedom, while also stopping them quickly if their progress disappoints. It invests 1 percent of its annual revenue ($1.4 billion) in science and technology R&D for innovation exploration.

On the individual level, employees are required to document new performance, contribution, innovation, and improvement in their annual reviews. We also promote and demote employees based on their performance. It allows for bold innovation and encourages employees to learn from failures. Our performance is directly linked to a bonus that reflects the real value contributed by our employees and encourages them to innovate. Our intelligent performance-management systems link corporate strategy with individual strategies to ensure they are consistent with corporate strategy.

Fangfang Cai

Chief HR Officer, Ping An Group

Fangfang Cai is the Executive Director, Vice President and Chief HR Officer of Ping An Group. Fangfang is also the Executive Vice President of Ping An Institute of Finance and sits on the board of Ping An Bank, Ping An Life, Ping An P&C, Ping An AM and several other holding subsidiaries.

Fangfang joined Ping An in 2007 and served as the deputy CFO and Head of the Planning Department from 2012 to 2013.

and redeem points based on membership-card purchases. T-Point achieved its desired scale by forming partnerships with convenience stores, restaurants, and banks. While CCC's core business of video rental shops and bookstores is struggling amid competition from Amazon, Netflix, and YouTube, T-Point generates 40 percent of CCC's operating profit, with revenues from commissions, advertising, marketing analytics, and consulting services . It created these collaborative initiatives by:

— *Identifying the right partners.* Some companies find it hard to choose between partners with high-frequency, low-value scenarios such as convenience stores, and those with low-frequency, high-value scenarios such as real estate businesses. T-Point has worked with both types of partners as it expanded. In 2003, it created its point ecosystem and scaled up rapidly, initially partnering with those in high-frequency transactions: gas stations, cafés, and department stores. By the time it established its alliance with FamilyMart, one of Japan's biggest convenience store chains in 2007, T-Point had 20 million users. At that point, it expanded its partnership strategy to high-value, medium- to low-frequency businesses such as auto sales and banking. Banks serve as an essential partner in supporting the ecosystem by providing auto loans to ecosystem users. In recent years, T-Point also developed a "T-life dominant" initiative that covers all types of alliances, regardless of whether the partner has a low-frequency rate or a low-priced product.

— *Finding a win-win solution.* T-Point allows medium- and small-sized businesses to issue point cards independently, even though it would be impossible for these companies to pay the costs of the operation on their own. This allows them to acquire and retain customers at lower prices. T-Point also provides "reciprocal customer transfer" by launching joint campaigns between its partners (e.g., a car rental company and gas stations). But this type of deal may not appeal to large companies such as FamilyMart and Softbank. For such large-scale partners, T-Point has lowered its commissions. Its partners (FamilyMart, SoftBank, and Yahoo) share in T-Point's profit through their equity investments, which are 15 percent, 17.5 percent, and 17.5 percent of T-Point, respectively.

— *Commercializing data capabilities to serve partners better.* As its ecosystem evolved, T-Point built a database of customer information derived from its 70 million users and the 1 million shops in its point system. It can now better meet the needs of its partners by providing marketing solutions and consulting services. For example, T-Point has a tool called DB Watch that enables its partners to see how many customers haven't visited the store for three months, as well as information on co-sales from partner stores. Ecosystem partners can use this data to improve merchandizing. T-Point also provides targeted advertising and consulting services for food manufacturers, helping them develop products based on distribution data.

Example: Didi Chuxing
Founded in 2012, Didi Chuxing began offering a single consumer transportation platform for taxi-hailing and car rental. Its partnership model includes:

— *Identifying the right partners at different stages of its evolution.* Launched as a ride-hailing app in partnership with local taxi operators, Didi expanded to include private cars, carpooling, and car rental services to satisfy the needs of customers with different price sensitivities. As part of that effort, it partnered with rental car companies like eHi, which provided vehicles and helped recruit and train drivers for Didi. In recent years, Didi has partnered with CHJ Automotive, a local automobile start-up, to produce smart electric cars explicitly designed for ride-hailing, thus reducing trip costs.[2] In 2018, along with 31 auto- industry partners, it launched the Didi Auto Alliance.[3] The alliance is an integrated transportation-service initiative that combines auto leasing and sales, auto financing, auto service, fleet operations, and car-sharing. The Alliance aims to provide a cheap, on-demand alternative to vehicle ownership in the world's largest auto market.

— *Finding win-win solutions.* Successful, long-term partnerships must benefit both sides, something Didi's alliances with 12 electric-vehicle manufacturers accomplished. It can source vehicles from third-party rental platforms in which electric vehicle manufacturers invest. At the same time, manufacturers can

[2] Sarah Dai, "Tesla challenger CHJ Auto teams up with Didi to build ride-sharing cars," *South China Morning Post,* April 16, 2018.
[3] Shunsuke Tabeta, "Didi forms global alliance for car sharing," *Nikkei Asian Review,* April 25, 2018.

cut excess inventory and expand their sales channels, which will be especially important for these manufacturers during their transition to producing new electric vehicles.Didi also shares profits with its partners through joint ventures. In 2019, it set up a joint venture with the Volkswagen Group to develop a ride-hailing fleet and provide car-rental services. The new company is 60 percent owned by Didi and 40 percent by Volkswagen. Didi also received a $600-million investment from Toyota. As part of the deal, the two companies will set up a joint venture with GAC Toyota Motor.[4]

— *Empowering partners with data capabilities.* Didi helps its partners by allowing them to leverage its large customer base and data capabilities. It can share its customer feedback with auto manufacturers to inform vehicle development.

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[4] Catherine Shu, "Toyota invests $600 million in Didi, with the two setting up a new joint venture for driver services," TechCrunch, July 25, 2019.

C-suite Opinion: Providing partners with more capabilities

McKinsey: Who are the strategic partners in your ecosystem?

Jesse Yang, Vice President of DiDi Chuxing: We have developed partnerships with companies in four industries: auto manufacturing, travel, technology, and financial services. For example, we've partnered with China Southern Airlines to offer air tickets and transportation service packages.

McKinsey: Tell us more about your collaboration with OEMs.

Yang: The low concentration of companies in the automotive industry prevents us from having exclusive business collaboration agreements. Thus, we need to establish and maintain relationships with more than one company. Our ideology is to provide them with more capabilities by sharing our data and technology. Instead of selling solutions, we share our whitepapers on these topics to let them study the data and see how well we deliver. In return, they are more willing to cooperate with us.

Didi dominates the ride-hailing and ride-sharing market, which should result in having significant influence over the vehicle market. Based on our estimate, there are more than 5 million commercial vehicles in ride-hailing markets, many of which might need an update every 4 to 5 years. As a representative of those commercial vehicle owners, we would not only have bargaining power over suppliers but can also propose vehicle design needs. For example, new energy vehicle warranties only protect batteries for eight years or 120,000 km, which is far less than a commercial operation needs. We negotiated with the warranty providers and extended the limits to 170,000-180,000 km over five to six years.

As a result of our collaboration with auto manufacturers, we envision four stages of future transportation development:

— Stage 1: Share data and traffic, and serve as a gateway to selected partners, most of which will be auto subsidiaries that also established ride-hailing services.

— Stage 2: Launch a joint venture with auto manufacturers to promote the application of self-driving technologies.

— Stage 3: Engage in car design and production by sharing data about the needs of customized commercial self-driving cars.

    Stage 4: Act as self-driving-system-solution suppliers, cooperating with self-driving car makers.

McKinsey: As an internet company, what challenges do you face working with traditional industry players?

Yang: Automotive manufacturers are used to entering partnerships on the demand side. In most collaborations with us, however, they are the supplier, and it usually takes time for them to make that adjustment. The product life cycle of traditional auto manufacturers is six months to one year, whereas it's one month at most for internet companies. But as long as we agree on the same goal, both sides work hard to put aside differences and travel on the same path.

McKinsey: What leads to successful collaborations?

Yang: First and foremost, two parties must share the goal of improving the future of the automotive industry with big data and advanced technology. Secondly, a market-oriented firm that has an open-minded culture and a more agile management structure will be much easier for an internet company like us to work with. Finally, the conviction and support of their leadership is a prerequisite for success.

McKinsey: What advice can you give small- and medium-sized players that want to become partners in your ecosystem?

Yang: We have worked with a large number of small companies as suppliers and we would first value their deep expertise in a specific field. Some SMEs might mistakenly try to provide a total solution to big enterprises. However, small players should understand that their potential partners are already well-organized and only want to strengthen their capability in a specific field. Second, for us to best collaborate, it's easiest if small players offer a standardized solution that could be adaptable to our system. Some companies worry that a standardized product will tempt the bigger partner to buy it from a competitor. But if you start thinking this way, you will have already lost us.

Jesse Yang

Vice President, DiDi Chuxing

Jesse Yang is Vice President of DiDi Chuxing. Jesse joined DiDi as head of the strategic cooperation department.

Since 2017, Jesse has led the newly established Automobile Asset Management Center and the Wave (Car Rental) Division.

Navigating the journey

To make ecosystems work, companies must decide how they want to value and assess their progress. Companies need to select the path that best matches their scale and core assets and build the capabilities they need to pursue their ecosystem strategy.

As leaders think about the best ways to create the future, they need to:

Treat ecosystems as a top priority.
Today's companies not only compete with traditional industry players but also with customer-focused internet companies like Tencent and Alibaba. These internet companies have ecosystems that offer customer services that could (and probably will) make conventional channels obsolete.

Pursue the best value-creation strategy for your situation.
We advise leaders to base their ecosystem strategies on the type of company they are and their aspirations for the business. Local champions focus on getting new customers for their core products; large incumbents prioritize both customer acquisition and cross-selling. Digital startups use new product offerings to widen their customer base through cross-selling, while internet giants diversify their products to increase their share of their customers' wallets. They might also build end-to-end solutions that commercialize their internal data capabilities, serve new customer segments, and reduce costs for their core business.

Use stage-based performance management approaches to track results.
Few ecosystems are profitable on day one, particularly when you are building one. It is unrealistic to expect a quick return, and you may hurt team morale by doing so. We advise leaders to use different KPIs depending on the three stages of ecosystem development:

— *Launch stage:* Focus on tracking the quality of the business concept and plan with KPIs designed to evaluate the strength of the team's vision and relationships, timely development and launch of the prototype, and the initial customer experience.

— *Growth stage:* Concentrate on growing the customer base for future monetization rather than the blind pursuit of profits. KPIs could be based on the number of monthly active users, customer growth rate, and frequency of use, etc.

— *Scale stage:* Evaluate profitability and the potential to expand. KPIs include revenue growth/contribution to core, profitability, valuation improvement, and valuation of new business.

Build and re-examine capabilities early.
The six capabilities we have presented — advanced analytics, agile development and operations, governance that supports broad portfolios, robust middle platforms, entrepreneurial talent, and partnerships — are best practices in developing ecosystems that create higher value. We advise leaders to regularly assess and reevaluate their capabilities in each of these categories to build or acquire what they need to succeed.

As the digital age continues, more and more companies will develop ecosystems to compete for consumer and B2B dollars. We hope this report helps business leaders choose the right path for capturing value.