

Insurance beyond digital: The rise of ecosystems and platforms

Insurance companies have the opportunity to create new sources of revenue by rethinking their traditional roles and adopting an ecosystem mind-set.

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Insurance Practice January 2018

An ongoing drive toward digitization has put the insurance industry on the verge of a paradigm shift. The pace of change has accelerated thanks to tremendous increases in the volume of electronic data, the ubiquity of mobile interfaces, and the growing power of artificial intelligence. In the early years, companies that digitized were at the forefront of the industry. Today, digitization has permeated every level of the competitive landscape. Society's growing reliance on digital technologies is not only reshaping customer expectations but also redefining boundaries across industries. Insurers cannot avoid this phenomenon: as traditional industry borders fall away, the future of insurance stands to be greatly influenced by platforms and ecosystems.

A platform is a business model that allows multiple participants (producers and consumers) to connect to it, interact with one another, and create and exchange value.¹ The most successful companies in the digital era, including Alibaba, Amazon, and Facebook, were all designed on platform business models. An ecosystem, meanwhile, is an interconnected set of services that allows users to fulfill a variety of needs in one integrated experience. Consumer ecosystems currently emerging around the world tend to concentrate on needs such as travel, healthcare, or housing. Business-to-business (B2B) ecosystems generally revolve around a certain decision-maker—for example, marketing and sales, operations, procurement, or finance professionals.

This article examines the rise of ecosystems and the trend's implications for insurers. To succeed in ecosystems, insurers will have to take a hard look at their traditional roles and business models and evaluate opportunities to partner with players in other industries. They must also understand how ecosystems will shift value pools and change the nature of risk. Adopting an ecosystem mind-set will be an arduous journey for many insurers, but those that understand this evolving landscape can take the first steps to creating new revenue sources.

Ecosystems will account for 30 percent of global revenues by 2025

Extensive use of digital technologies in everyday life has become the new normal. It is common to vacation in Airbnbs, to hail an Uber from a cell phone, and to order dinner via GrubHub or Seamless. Apple is now much more than a technology manufacturer, and Facebook is a way of life. Customers wake up to a world in which their every need can be addressed through their smartphones. Putting customers at center of every digital activity has not only scaled adoption but also allowed companies to capture previously unimagined value. Seven of the ten largest companies by market capitalization are ecosystem players—Alibaba, Alphabet, Amazon, Apple, Facebook, Microsoft, and Tencent—and that only hints at the power of digital.² Uber, founded in 2009, now operates in more than 630 cities across 80 countries,³ Airbnb amassed an inventory

¹ Sangeet Paul Choudary, Geoffrey G. Parker, and Marshall W. Van Alstyne, "Pipelines, platforms, and the new rules of strategy," *Harvard Business Review*, April 2016, hbr.org.

² "FT 500: The world's largest companies," *Financial Times*, accessed November 13, 2017, markets.ft.com.

³ "Uber's mission is to bring transportation—for everyone, everywhere," "Finding the way, creating possibilities for riders, drivers, and cities," and "International sites," Uber, accessed November 15, 2017, uber.com.

of one million rooms a staggering 50 years faster than Marriott did, and WeWork has sublet ten million square feet of office space globally since its inception in 2010.

Through digital ecosystems, companies are betting big on opportunities that have the potential to realign global markets, thus ushering in an era of “sectors without borders.” The benefits of digital ecosystems won’t be distributed evenly, however. McKinsey research shows that while digital technology propels some companies to become clear market winners, it depletes corporate earnings and overall value for many others.⁴

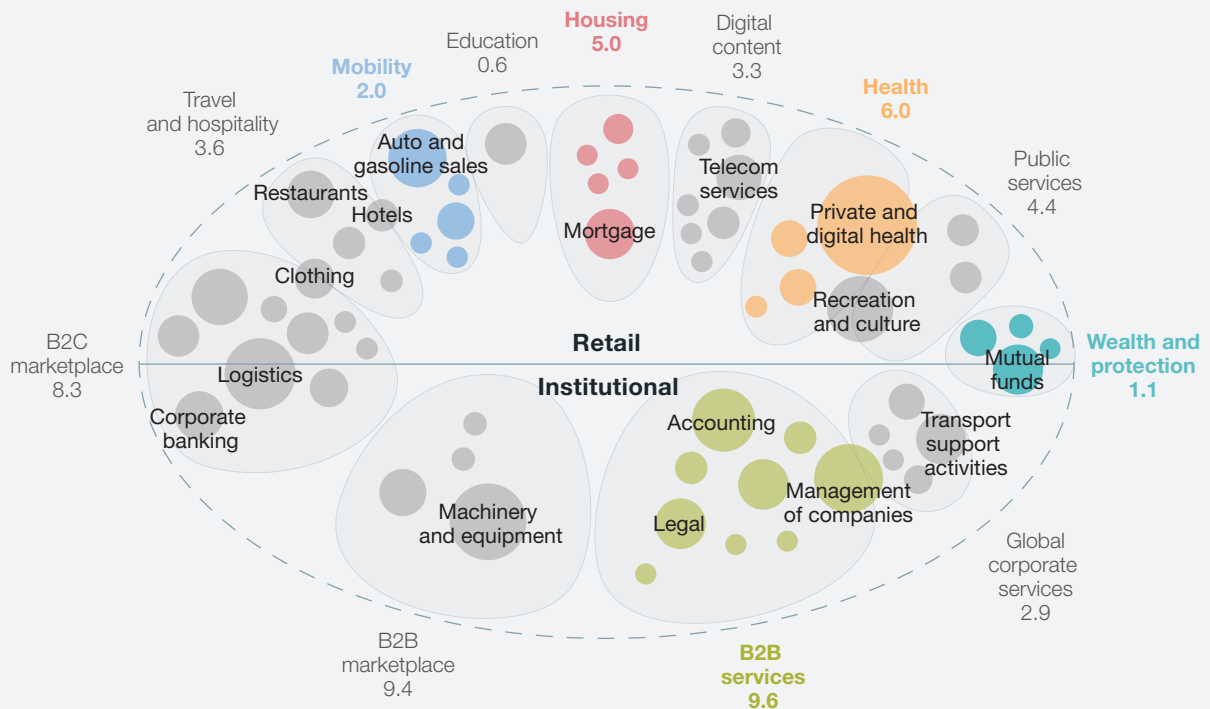
By 2025, as this revolution gains speed, McKinsey expects 12 distinctive and massive ecosystems to emerge around fundamental human and organizational needs (Exhibit 1).⁵ These 12 ecosystems

⁴ Jacques Bughin, Laura LaBerge, and Anette Mellbye, “The case for digital reinvention,” *McKinsey Quarterly*, February 2017, McKinsey.com.

⁵ Venkat Atluri, Miklós Dietz, and Nicolaus Henke, “Competing in a world of sectors without borders,” *McKinsey Quarterly*, July 2017, McKinsey.com.

Exhibit 1 New ecosystems are likely to emerge in place of many traditional industries by 2025.

Ecosystem illustration, estimated total sales in 2025,¹ \$ trillion



¹ Circle sizes show approximate revenue pool sizes. Additional ecosystems are expected to emerge in addition to those depicted; not all industries or subcategories are shown.

Source: IHS World Industry Service; Panorama by McKinsey; McKinsey analysis

will account for \$60 trillion in revenues by 2025, or roughly 30 percent of all global revenues. The actual shape and composition of these ecosystems will vary by country and region, both because of the effects of regulations and as a result of more subtle, cultural customs and tastes. In this new world, while insurance could be featured as the risk-mitigation service for each of these 12 ecosystems, there's no reason why insurance companies could not constitute their own subecosystems that cater to individuals and institutions (see sidebar "How ecosystems could help cyberinsurance prosper"). The ecosystems most relevant to the insurance industry—and that thus represent the most salient entry points—include mobility, housing, health, wealth protection, and B2B services.

Ecosystems typically provide three types of value:

1. They act as gateways, reducing friction as customers switch across related services.

Facebook Messenger, for example, enables users to shop, check into a hotel, message a friend, read the news, and chat with a doctor—all through a single interface. Users need not toggle between portals, manage separate log-ins, or spend mental energy maintaining multiple services.

2. They harness network effects. Google Nest, the maker of an ecosystem of smart-home products, provides its customers with a monthly report card that illustrates their energy use and compares it with that of their neighbors to give the numbers context. At the same time, the company creates value for utility providers by providing consolidated information about demand to help them optimize production.

3. They integrate data across a series of services. One healthcare-data company extracts high-fidelity data from the healthcare ecosystem and applies it to patients' lives to improve human health.⁶

Insurers in digital ecosystems

For insurers, shifting from an industry to an ecosystem perspective requires a significant change in how they define their role in the economy. Currently, insurers act primarily as risk aggregators. They have a passive and limited relationship with customers, which increases their exposure to disintermediation, disaggregation, commoditization, and invisibility. If insurers were to lose their distribution and customer relationships, they would be left with few options to reinvent their business models. Adopting an ecosystem perspective—reevaluating the traditional business model and considering partnerships with players both within and outside the industry—could reinvigorate insurers' digital strategies.

Role of the new insurer

Insurers can play multiple roles in an ecosystem. For example, the personal-mobility ecosystem offers a range of opportunities to expand into areas such as vehicle purchase and maintenance management, ride-sharing, carpooling, traffic management, vehicle connectivity,

⁶ "Using data and technology to improve healthcare ecosystems," July 2017, McKinsey.com.

How ecosystems could help cyberinsurance prosper

In 2016, the annual global cost of cybercrime reached \$575 billion, with 26 percent of organizations reporting a material loss of at least 10,000 records due to a breach. The average cost of a cyberattack in the United States is \$7 million.¹

In an executive survey conducted by McKinsey and the World Economic Forum, 65 percent of respondents agreed with the statement, “The risk of cyberattack is a significant issue that could have major strategic implications over the next five years.”² Yet while cyberrisk has long been among the top ten business risks across industries, cyberinsurance—which can cover data destruction, theft, identity recovery, business interruption, and post-incident public relations, among other things—is far from attaining maturity, primarily due to three factors:

- 1 Limited robust, publicly available data for underwriters
- 2 Rapidly evolving scale and scope of cyberattacks
- 3 Danger of compounded future losses

Covering cyberrisks could put insurers in a precarious situation in which a traditional approach to risk aggregation might prove inadequate. If insurers were to adopt a broader view of risk prevention through partnerships, they could orchestrate risk management in a cyberrisk ecosystem that includes not only insurers but also cloud providers, cybersecurity specialists, and enterprises with confidential customer data. This cyberrisk ecosystem could overlap with a broad spectrum of other ecosystems—most of which are still in the early stages of building resilience to cyberattacks.

Insurers tend to think of coverage as their only cyberinsurance product, but they could establish a robust infrastructure by building partnerships with all the stakeholders. These alliances would enable insurers to move both up the value chain to prevention (using readiness diagnostics and preventive recommendations) and down the value chain to post-breach response and support (from specialist providers in case of attacks). Both of these value-added service streams could build an insurer’s comprehensive role in risk prevention, response, and management.

¹ “Internet security threat report,” Symantec, April 2016, symantec.com; “2016 cost of cyber crime study & the risk of business innovation,” Ponemon Institute, October 2016, ponemon.org.

² David Chinn, James Kaplan, and Allen Weinberg, “Risk and responsibility in a hyperconnected world: Implications for enterprises,” World Economic Forum in collaboration with McKinsey & Company, January 2014, McKinsey.com.

and parking. As a result, insurers have a range of opportunities to expand their roles (see sidebar “Ping An: Ecosystem orchestrator”). Mobility is in the midst of a significant tech disruption, with Lyft and Uber leading the charge in on-demand services, and giants such as BMW entering the fray with car-sharing club DriveNow. In addition, Apple, Google’s Waymo, and Tesla are competing to automate cars one function at a time. Most of the traditional automotive players seem to be at a disadvantage in the mobility industry and face a pressing need to reimagine their roles. Some are starting to see opportunities to move toward an ecosystem mind-set. For instance, Toyota has invested \$1 billion in the Toyota Research Institute, which seeks to use artificial intelligence to address issues across the mobility ecosystem. The institute articulates its mission as follows: “We are dedicated to making automobiles safer, more affordable, and more accessible to everyone, regardless of age or ability, and to expanding the benefit of mobility technology beyond automobiles, for example to in-home support of older persons and those with special needs.”

A look at today’s connected-car ecosystem illustrates the benefits and risks that lie ahead for auto insurers. Innovation has caused significant disruption, resulting in the emergence of four natural stakeholders in the ecosystem: original equipment manufacturers (OEMs), high-tech players, insurers, and telecom providers. As mobility evolves, first movers will have the opportunity to transition from stakeholders to orchestrators in three key areas: customer relationships, network and service management, and analytics. (And for an example from the agriculture industry, see sidebar “John Deere: A pioneer in agriculture ecosystems.”)

Insurers already have a strong foundation in mobility thanks to their current customer base, distribution power, and stock of personal data from auto insurance policies.⁷ To position themselves as true ecosystem players and to fend off moves by other stakeholders, insurers need to build capabilities in a number of areas, including mobile sensors, analytical tools, and customer interfaces. For example, insurers have made significant inroads using telematics, but profit pools are still under threat due to stiff competition. As more OEMs conceptualize line-fitted telematics devices and ride-sharing providers such as Uber grow ever stronger in network management, it is incumbent on insurers to move from risk aggregation to risk prevention. At the same time, executives must understand that while insurance products and related security services will always be at the core of the insurance business, services such as telematics are a way of developing meaningful customer relationships.

Insurers could work with OEMs higher up in the value chain to develop products that address the added risks auto manufacturers might bear as the market embraces autonomous vehicles. As individuals relinquish control over their vehicles during driving, insurers could shift coverage from personal lines to commercial lines, hence widening the scope of engagement. A stronger relationship with OEMs and high-tech players could allow insurers to assimilate risk into existing offerings: pay-how-you-drive and pay-as-you-drive modeling, loyalty and gamification, emergency and breakdown services, crash assistance, and theft reporting.

⁷ Markus Löffler, Christopher Mokwa, Björn Münstermann, and Johannes Wojciak, “Shifting gears: Insurers adjust for connected-car ecosystems,” May 2016, McKinsey.com.

Ping An: Ecosystem orchestrator

Ping An, a giant Chinese insurer with more than one million employees and agents, has expanded its reach to offer healthcare consultations, auto sales, real estate listings, and banking services to more than 350 million online customers through a single customer portal called the One Account. This new activity also generates customer traffic for Ping An's core services and has helped the company become the world's most valuable insurance brand.¹ Ping An serves an enormous and dynamic consumer market, making the company a directionally relevant example for global insurance organizations that seek to replicate its success in other markets.

¹ "Ping An becomes the world's most valuable insurance brand," Brand Finance, accessed November 14, 2017, brandfinance.com.

Ping An as an ecosystem orchestrator



Source: McKinsey analysis

John Deere: A pioneer in agriculture ecosystems

As a tractor-manufacturing company founded close to two centuries ago, John Deere is an unlikely contender for the role of digital-ecosystem pioneer. However, the company's approach, from selling products to offering digital solutions to increase farmer profits, has truly set it apart. Starting with smart capabilities catering to the needs of farmers, the company introduced a complete farming solution that offers services including John Deere Farm Connect, a field- and water-management provider that combines data with services such as predictive maintenance, tracking and geo-fencing of assets, and improved dispatching.

With these innovations, John Deere optimized product usage while quadrupling search-engine traffic to its redesigned website and increasing lead generation for dealers. Deere has also expanded its focus from the tractor industry to agriculture ecosystems: the acquisition of Blue River Technology, a leader in applying machine learning to agriculture, demonstrates that cutting-edge technology is a part of Deere's core strategy.

Given John Deere's emotional connection and proximity to the customer and access to sensor data, it is well positioned to understand user risk and offer protection and assurance to the customer directly. Indeed, Deere's portfolio currently includes asset insurance sold directly to the customer. As an orchestrator of the agriculture ecosystem, John Deere might consider using its understanding of the industry to help players across the value chain assess, mitigate, and manage risk.

Partnerships will be critical

As ecosystems enable and necessitate a focus on risk prevention, forging partnerships will be a critical priority. For reference, executives need look no further than their recent efforts to partner with Internet of Things (IoT) providers, which they pursued in an effort to offset their disadvantage from a lack of customer touchpoints and engagement. Insurers should embrace a similar mind-set to assemble fruitful alliances.

The industry has already seen a number of high-profile partnerships between established insurers and tech and analytics start-ups. Progressive, for example, partnered with Zubie, a vehicle-tracking and engine-diagnostic device, to give customers visibility into how their driving habits affect their premiums. Nest partnered with Liberty Mutual to help offset the cost of a Nest Protect smoke detector and offer a monthly discount on homeowners insurance in the United States. Manulife is collaborating with Indico Data Solutions to develop a deep learning tool that analyzes unstructured financial data. Digital Partners (DP), a global venture established by Munich Re to win the confidence of and subsequently partner with insurance disruptors, is nurturing an ecosystem that supports the development of start-ups, including Trov, an on-demand insurance provider, and Wrisk, an insurtech venture that delivers motor, travel, and home insurance directly through smartphones.

Insurers have been targeted in all parts of the value chain by insurtech companies as much as by other industry players. Although these newcomers are populating every part of the value chain (Exhibit 2), their focus to date has been on the more easily accessible slivers of the industry—mainly distribution, particularly in property and casualty insurance.⁸ Since innovation from insurtechs actually aims to contribute to the insurance value chain (except distribution for large players), insurance executives should view potential partnerships with insurtechs as positive.

The rise of ecosystems involves multiple firms coming together in symbiotic relationships to achieve greater value for themselves than they could capture alone. For example, in its bid to participate in the health ecosystem, Apple launched the Healthkit open platform, which offers Apple device users the option to share their health and activity data across affiliated applications on their smartphones. This integration allows users as well as participants

⁸ Tanguy Catlin, Johannes-Tobias Lorenz, Christopher Morrison, and Holger Wilms, “Facing digital reality,” March 2010, McKinsey.com.

Exhibit 2 Where insurtechs are focusing

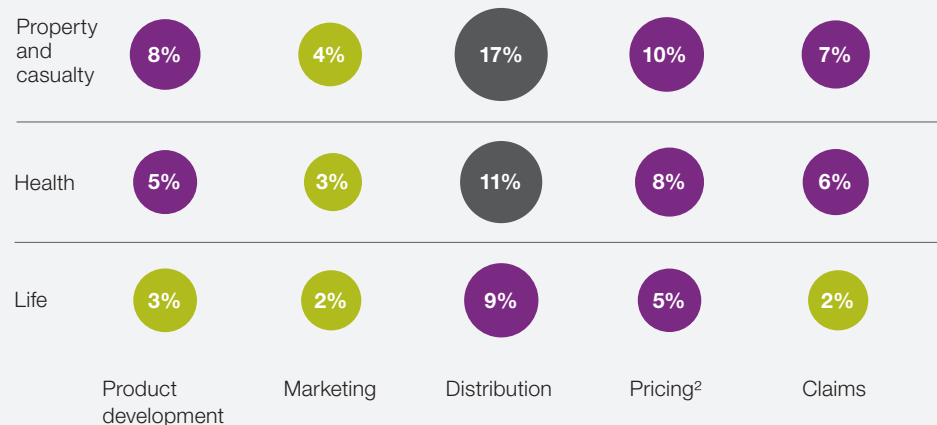
Number of innovations as % of total in the database¹

Share of innovations in insurtech database

■ <5%

■ 5–10%

■ >10%



¹~500 best-known commercial cases registered in the database (excluding wealth management–related innovations).

²Includes underwriting and policy issuance.

Source: Panorama by McKinsey

from the world of medicine—including physicians, researchers, hospitals, and developers of healthcare and fitness apps—to access valuable data to inform patient care, research studies, marketing, product development, and so forth.

Shifting value pools

Although digital leaders have made incursions into different industries based on their ability to own the technology pathway, other focused efforts could offer openings for insurers as they evaluate ecosystems.

Ownership of the customer relationship

Distribution has been the target of disruption primarily because digital natives have successfully demonstrated that ownership of the customer relationship is a stepping-stone to an ecosystem play. The core of the insurance industry is highly regulated, which gives insurers a competitive advantage due to their regulatory skills and huge capital requirements. In 2015, *The Economist* observed a similar trend with banks and fintech companies: “If fintech doesn’t kill banks, it might instead sap the sector’s profitability. A future as a sort of financial utility—ubiquitous but heavily regulated, unglamorous and marginally profitable—is hardly a gratifying outcome for banks.”⁹

Ecosystem players such as Amazon and Google are well positioned to permeate the distribution part of the insurance value chain. And they have shown intent. Google launched its Google Compare aggregation tool in UK and US markets in 2012 and 2015, respectively. Google shuttered Compare in 2016, but the tool might have become a threat with more time and marketing. A leading analyst firm anticipates that Google will remain active in the insurance industry, complementing its foundational, ad-based service with a new offering that leverages more of its core skills.¹⁰

While Google’s search engine has already mastered the human-computer interface and changed the customer landscape forever, Amazon’s Alexa is set to capitalize on the next frontier of interaction—voice. Companies such as Liberty Mutual have already started launching Amazon Alexa tools in the US market. These tools allow users to obtain insurance estimates and advice on common seasonal home and auto issues. Amazon Protect, which provides extensions to manufacturers’ warranties for items like mobile phones or washing machines bought on Amazon’s website, launched last year in Europe.¹¹

Strong customer relationships not only directly contribute to the user experience but also provide access to customer information—the Holy Grail of data and an absolute necessity in

⁹ S.P., “Why fintech won’t kill banks,” *Economist*, June 17, 2015, economist.com.

¹⁰ Kimberly Harris-Ferrante, *Google to end Google Compare but not its focus on insurance*, Gartner, February 29, 2016, gartner.com.

¹¹ “Amazon seeks staff in European insurance push,” *Reuters*, November 10, 2017, reuters.com.

the ecosystem world. Insurers can harness consumer adoption of IoT to create opportunities for better and more frequent customer interactions (for example, through wearables) and improve efficiency through sensor-based automation (such as trigger-based claims payments and apps).

Risk engine and analytics

Insurers have strong analytics capabilities compared with their peers in other industries; analytics has been a core component of the traditional insurance business model. Digital ecosystems offer traditional insurers valuable opportunities to use analytics to evolve and expand their business models. They could facilitate the evolution of existing insurance businesses by advancing risk assessments, for instance, by considering safety measures such as connected-home solutions. Insurers can also use analytics to enhance pricing and risk-accumulation control.

As different businesses generate growing volumes of data, risk management will continue to demand increasing amounts of data modeling and advanced analytics. Because of their established analytics capabilities, insurers in new digital ecosystems can provide analytics-as-a-service to other industry players. This offering could include predictive-modeling and optimization services that enable faster and smarter business decisions across all industries within the entire analytics value chain.



Although the inclusion of new addressable markets could offset lost revenues, insurers must take a more holistic view of the developments and opportunities.

Changing nature of risks and new markets

The risks that need to be insured are changing significantly for two primary reasons. First, uncertainty will be reduced as tracking and predictive technology improves. For example, connected cars have fewer accidents and breakdowns, predictive maintenance reduces business interruptions, and wearables help ensure a healthier lifestyle. Second, substantial changes in risk distribution and actuarial models (for example, due to an increasing number of long-tail risks) are further aggravating this trend. A resulting demutualization could shift the focus to predicting and managing the risks of individuals rather than communities.¹² As a consequence, premiums can be expected to come under pressure, reducing what have traditionally been rather stable revenue streams. Although the inclusion of new addressable markets could offset lost revenues, insurers must take a more holistic view of the developments and opportunities available.

South African insurer Discovery has set the gold standard for insurers in the wellness ecosystem with its Vitality platform. Today, millions of users track their health using Vitality and participate in activities to earn loyalty points with Discovery's extensive network of partners, including British Airways, Emirates, and Europcar. Discovery's analysis of three years' worth of platform data found that performance tracking reduced health risks by 22 percent. The insurer was able to penetrate international markets through the platform by partnering with AIA across all of Asia, Generali across continental Europe, and in several local markets such as with Manulife in Canada, Ping An in China, and Sumitomo in Japan, resulting in 31 percent annual growth in international markets.

Ecosystem players have the capability to scale at a far faster rate than companies could in the past. Alibaba's Yu'eBao has become the world's largest money market fund, at \$165 billion under management, just four years after its launch. The fund started by encouraging millennials using Alibaba's Alipay, an online virtual wallet, to invest the "spare change" that tends to collect in between adding money to the wallet and making payments from the wallet. These small investments add up, helping users to build Yu'eBao, which is Mandarin

¹² Simon Behm, Markus Löffler, Christopher Mokwa, Björn Münstermann, and Thomas Schumacher, *Insurers need to plug into the Internet of Things—or risk falling behind*, September 2016, McKinsey.com.

for “online treasures.” Currently, 99.72 percent of Yu’eBao investors are individuals, who use the Alipay mobile app to deposit savings into Yu’eBao. One of the primary reasons Yu’eBao was able to become the world’s largest fund, surpassing JPMorgan’s US government money market fund (\$150 billion), was that Alibaba’s millions of users viewed Yu’eBao as a complementary service of a trusted brand.

Ecosystem strategy can facilitate the expansion of insurers into adjacent and completely new areas of business by using complementary services. Options include offering innovative hybrid solutions in insurance and services offerings with partners from other industries (for example, predictive maintenance, smart parking, and preventive care). Insurers could also enhance their risk engineering by harnessing insights based on sensor data from other industries. Last, insurers could draw on their analytics expertise to offer proprietary data and analytics solutions to third parties—for instance, through data marketplaces.

Devising and implementing an ecosystem strategy will require sustained dedication and commitment. Executives aiming to kick-start an ecosystem strategy should focus on a couple of areas. First, not all of the total value at stake is going to be up for grabs for all players in the distribution economy. Therefore, all players must identify and prioritize the ecosystems in which they can play and win. Second, an ecosystem strategy requires strong performance across multiple dimensions, including culture, technology, and customer engagement. Insurers should determine the critical capabilities that will act as differentiating factors in an ecosystem and assess whether their organization has sufficient horsepower in these areas.

A huge opportunity for insurers who can react fast

The rise of ecosystems is simultaneously one of the greatest opportunities, biggest threats, and most daunting challenges of digitization. Not all industries and players are equally well suited to pursue this opportunity, and companies that dive in might not be able to capture all of the value at stake. Large, at-scale insurers are somewhat better suited to evolve into orchestrators. However, this wave of ecosystems does provide a chance for some players to realign priorities and initiatives and leapfrog the competition in the process.

Becoming an ecosystem player requires far more than technology investments alone. Instead, insurers must take a 360-degree view of the organization across multiple dimensions to ensure that their investments align with the requirements. Answering several key questions can help shape the discussion:

Strategy: Where does ecosystem strategy rank in the organization’s priorities?

Customers: How does the organization’s customer ownership, access, and engagement look?

Partnerships: Does the organization have a strong network of partners that will allow it to extend beyond traditional industry boundaries?

Technology: Is technology seen as the fuel for the organization's strategy?

Talent: Is the organization positioned to attract and retain the most innovative and entrepreneurial talent?

Culture: Are customers at the center of everything that the organization does?

The rise of ecosystems is the natural result of digitization. Organizations with adaptability at the core of their design and strategy will be poised to use it to their advantage. Evolution has taught us that it is not the strongest species that survive, but the ones most responsive to change. ■

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The authors would like to acknowledge the contributions of colleagues Miklos Dietz, Gaurav Kalani, Istvan Rab, and Miklos Radnai to this report.

January 2018

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Cover image: Matjaz Slanic/iStock/Getty Images Plus

Printed in the United States of America.