

# **PART A**

## **Aligning Organizational Ecosystems to be Fit for Purpose**

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**In the first of a two-part series, we explore how firms are reaping the benefits of leveraging a network of external resources for enhanced performance and innovation, but only when their organizational ecosystems are strategically aligned and fit for purpose.**

Managing organizations to be highly aligned and capable of implementing their chosen strategy is an age-old challenge. It has only become harder now that many firms and public sector organizations embrace ecosystem principles in their organizational design.

Because they are more open, flexible, and integrated than the industrial-age hierarchy, ecosystem-based organizations can leverage external resources (think partners) to offer customers enhanced value upstream (think novel product and service development) and downstream (think flexible delivery) than they ever could be if relying upon internal resources alone.<sup>i</sup> However, published research indicates that up to 75% of ecosystems are considered failures.<sup>ii</sup> The leaders we speak to acknowledge the considerable potential of ecosystem thinking for their businesses but also express concern over the complexity of organizing along such lines.

We studied a sample of leading international and Japanese firms with a stated ecosystem strategy to understand how they strategically align their organizational ecosystems

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to be fit for purpose and high performing (see research methods section). Strategic alignment, in this context, refers to the careful arrangement of the different components of an organizational ecosystem — from its purpose (its *raison d'être*) to its strategy and structure — required to leverage external resources for strategic value successfully.<sup>iii</sup> Each component represents a strategic choice. Ecosystem leaders must select from various options the one that suits their circumstances best. All components should be highly aligned, ideally.

Whether to create or to participate in ecosystems, our study helps managers work through these critical strategic choices and improve their chances of success. First, we organize ecosystem purpose, strategy, and structure into first, second, and third-order strategic choices. Second, we present a practical framework to help ecosystem leaders choose between their various options at each stage. The first and second-order choices are the focus of this article, Part A. Third-order choices and the unique implementation challenges presented by organizational ecosystems are the focus of a second linked article, Part B.

Good choices establish an organizational ecosystem (ecosystem) as a functioning equilibrium capable of high performance, regardless of field. Poor choices create misalignment and dysfunction, perhaps explaining the reported high failure rate.

## **First Order Choice — For What Purpose?**

Firms within our study sought to leverage external resources for one or more of the following three strategic reasons: a) enhanced technical innovation, b) enhanced customer offerings in the form of product and service design and delivery, and c) enhanced channels to market. Broadly, these correspond to upstream and downstream innovation.

Consider the example of blue-chip multinational IBM. IBM has had a long journey with its ecosystem, now considered a single business division and its fastest growing. As part of a wider corporate realignment, IBM renewed its emphasis on its partner ecosystem and

Kate Woolley to provide a single point of leadership. IBM also doubled down on technology and consulting services, spinning out its managed service business to form Kyndryl, arguably to allow it to focus on its ecosystem and to remove managed services as a business and avoid causing tension with prospective partners.

The IBM ecosystem serves three key purposes centered around exploiting external resources to achieve strategic outcomes that would not be possible by relying upon internal resources alone. These include partners selling IBM technology (via a channel business), partners building on or with IBM technology (project-based partnerships), and strategic service partners who use IBM technology to build a bespoke managed service solution for their clients or to enhance their existing service offerings. In other words, IBM has one ecosystem operating under one leader but actively pursues three different ecosystem strategies simultaneously.

For a long time, IBM has operated an external network in the form of its channel business (think reseller network). Comprising thousands of vendors, the channel business aims to provide an efficient channel to market for IBM technology products. As part of a broader corporate realignment, IBM has doubled down on creating strategic partnerships with other industry-leading firms to pool resources and offer new and enhanced services to the market. Woolley says, *“I think of partner ecosystems as one of the most powerful forces in technology. That’s where companies come together to solve the toughest business problems”*.<sup>iv</sup>

Or consider the example of the Development Bank of Japan (DBJ), a wholly-owned subsidiary of the Japanese Ministry of Finance. Created immediately post World War 2 to facilitate Japan's economic and social reconstruction, DBJ occupies a unique role in Japanese society, and its remit extends internationally, with offices in London, Singapore, Beijing, and New York. Through loans, investment, asset management, and advisory services, DBJ

supports the development of nationally important industries, infrastructure, technologies, and social concerns. For instance, during COVID-19 and the dramatic decrease in travel and the potential collapse of the inbound tourism sector, DBJ provided emergency loans to small and large businesses to help them weather the storm, even in cases where it was unprofitable.

In the long term, a key role of DBJ's financial experts is to create and support ecosystems between different industry actors to encourage economic development. For example, DBJ convenes various aviation industry players, from airlines, unions, manufacturers, airports, and regulators, to transform the sector to be more sustainable in line with stated national targets for compliance with UN Sustainability Development Goals. DBJ represents a focal organization, sitting atop an ecosystem of potentially disparate industry actors and encouraging collective action to transform an entire sector to be more environmentally sustainable through aligned incentives, reduced information asymmetry, technological collaboration, and collective action.

However, Japan has a tradition of embracing ecosystem principles in all sectors. Shiseido, a leading Japanese cosmetic company, was a pioneer among the Japanese firms in creating its ecosystem back in the 1990s to tap into state-of-the-art French fragrance knowledge through informal collaboration with fragrance experts in France.<sup>v</sup>

Whatever the reason for adopting ecosystem principles, it should be clear and compelling to all concerned, including (perhaps especially) external stakeholders, including partners and clients. Every year, IBM invests considerably in enhancing the value of its relationships and networks across its entire ecosystem to create alignment with its purpose. Its primary vehicle is an event, 'IBM Think'. Before Covid-19, the IBM Think conference hosted audiences of 40,000 people in one location annually. Today, it is a hybrid event, including a smaller global in-person event for 5,000 invited employees, partners, clients, and

even competitors; and a ‘Think on Tour’ series of events in key geographies designed to bring “*IBM, partners and clients together locally in the market where they do business*”.

IBM Think creates a ‘melting pot’ environment for its stakeholders to engage with the technology company and its upstream and downstream ecosystems, including innovation partners, strategic partners, and an extensive reseller network. According to Simon Meredith, Principal in Strategic Partnerships at IBM, the “*Assumption of protectiveness is misplaced*”, even with competitors, because the explicit purpose is to engage, learn, and co-create. Therefore, trust is essential in ecosystem working to develop strategically valuable social capital, reduce the transaction costs of collaborating with external parties at scale, and mitigate the risk of conflicting interests.

Consider four things about your own organization: Does relying upon internal resources, while simpler, represent a capability trap? Do you need to leverage external resources to be competitive? If so, for what purpose? Is it to develop a network as an additional marketing channel(s) (i.e., primarily a sales network)? Or is it to capture knowledge for upstream product and service innovation, as in the case of Shiseido? Or is it to develop downstream capability to deliver enhanced products and services to your customers and clients, such as IBM strategic partnerships? Of course, it can be all three.

## **Second Order Choice — Which Ecosystem Strategy?**

Once an organization has committed to embracing ecosystem principles, the second-order management challenge is to choose which ecosystem strategy represents the best option for going about doing so. In our experience, ecosystems are often referred to generically under a single concept. A better way is to recognize that there are different types of ecosystems, each representing a distinctive strategy with unique implementation challenges.

Within our sample of companies and wider research, we identified four principal ecosystem strategies according to their openness to external actors and whether they were vertically or horizontally integrated. A critical risk is that failing to recognize these different types may lead managers to sleepwalk into creating, maintaining, or participating in ecosystems that are suitable for their purposes.

**Closed and vertically integrated ecosystems** are, as the name would suggest, a designated group of specialized partnering organizations operating within a closed network under the supervision of a dominant focal organization. The focal organization appoints constituent members and coordinates efforts against explicitly mandated targets and standards. The purpose is to ensure efficient performance delivery against required standards in efficient and predictable ways.

The McDonald's supply chain is a good example of this type of ecosystem in action. Serving over 70 million customers worldwide daily, it is vertically integrated into every link of its supply chain to ensure it efficiently matches supply with demand. Whilst there are thousands of third-party suppliers supporting McDonald's operations around the world, the firm relies upon a closed network of several long-standing partnerships with key suppliers. For example, the Martin-Brower Company has formed a key part of the US supply chain, delivering supplies to all of McDonald's 15,000 restaurant locations in North America for decades.<sup>vi</sup>

Sharp's "black box" strategy in the 1990s also falls into this category. The Japanese consumer electronics firm enjoyed a significant competitive advantage in LCD-TFT technology in the 1990s by internalizing the production of its LCD-TFT TV and the LCD-TFT panels, including partner operations, inside the firm on its huge production site in Kameyama, Mie-Prefecture. Sharp created its own closed and vertically integrated ecosystem of technical innovation and manufacturing, which was designed to isolate itself

from other rival firms to avoid technology leakage.<sup>vii</sup> Regardless of physical footprint, this type of “closed” ecosystem is well established, and partnerships are often long-lived and highly stable.

**Closed and horizontally integrated ecosystems** focus closely on membership of their ecosystem but encourage many more horizontal connections between the focal organization and network members and between network members directly. The role of the focal organization is less supervisory, and the nature of partnering is less transactional. It is more about nourishing connections between ecosystem partners for upstream and downstream innovation purposes.

An early example of this type of ecosystem strategy is the fast-moving consumer goods company Nestle. Nestle has pursued a strategy of acquiring complementary firms as well as setting up research and development centers worldwide to act as dispersed “antennas” to sense and source local market knowledge and creativity. Acting as a focal point for this distributed network is Nestle’s R&D coordination unit, which coordinates, exchanges, and encodes locally acquired new knowledge in its product innovation and then pushes new products out to sales and marketing functions in those same geographically dispersed end markets.<sup>viii</sup>

One of the interesting challenges with closed horizontal ecosystems is that they may involve partnering between companies that might previously have been — and still can be — competitors. Such ‘Frenemy’ (i.e., friends who are also enemies) arrangements are common in ARM (described later) and its close and long-term manufacturing relationship with its biggest competitor, Intel.

IBM’s key strategic partners include deep commercial collaborations with hyperscalers (think Amazon Web Services), infrastructure partners, and global consultancies such as Ernst & Young. All strategic partnerships operate under a single internal

organizational structure, the IBM Ecosystem, and one leader, Woolley. To reduce competitive conflicts and greater freedom for ecosystem engagement, IBM divested itself of its managed infrastructure business, Kindryl, as mentioned previously. A second challenge is to find the right partners and invest in the resources necessary to form and capitalize upon productive relationships.

**Open and vertically integrated ecosystems** are much more open than their closed-vertical counterparts, resembling marketplaces more than supply chains. The focal organization acting as a platform maintains a dominant supervisory role within the ecosystem, but membership is much more open and scalable, with potentially many thousands of external actors interacting with the focal organization and its customer, if not with each other.

The Apple App Store is an obvious example. The purpose is to draw upon the creative resources of many thousands of developers to offer Apple product users enhanced choice over applications available through the App Store and through which they can personalize the functionality of what would otherwise be a standardized (albeit smart) device. Apple and Google, its main rival, control over 95% of the app store market outside of China, worth an estimated \$6.3 trillion.<sup>ix</sup> Other platform firms, from Uber to the Amazon marketplace, also use digital platform technology to efficiently match supply (from many thousands of drivers or sellers, respectively) and demand from customers.

In the internal context, such arrangements are prevalent in the form of global value chains (GVCs), in which the different stages of production activities are performed across different countries, each of which may be its own supporting ecosystem made up of local partners, suppliers, and innovators, to match local market customer requirements. Firms often disperse value chain activities ranging from R&D, design, production, and marketing for this purpose.<sup>x</sup>



Extending the logic of openness even further, some ecosystems are highly decentralized and geared around tapping into the wisdom of the crowd. Consider the example of the Linux community, with its many thousands of contributors. Being a crowd-sourced development, the Linux computer operation system relies upon individual developers to contribute their time and expertise to a common endeavor for free. The incentive is to create something new, and participation is voluntary and collaborative. In that sense, Linux is open to a virtually unlimited external talent pool.

Compared with the first two “closed” types, this more open type of ecosystem is a more recent strategy, and the subject of considerable focus, especially in terms of the digital transformation agenda.

**Open and horizontally integrated ecosystems** are characterized by their openness to many and diverse network actors and the horizontal nature of their connection. Horizontal Open ecosystems resemble communities, where the focal organization provides the environment for the discretionary effort of the many associated partnering individuals and organizations to lead upstream and downstream innovation within a field of technology or industry.

Consider the example of the technology company ARM. ARM chips power 80% of the world’s smart devices, everything from phones to tablets to the emerging Internet of Things. Its strength is its ability to harness the power of its network resources, in the form of knowledge, human capital, technological expertise, and innovation capability, to design the most powerful and efficient (think low power consumption) chips available to the market. And yet, ARM employs only 7,500 people, mostly located at its HQ in Cambridge, UK, where it originally started life in a converted farm building in the ‘Silicon Fen’ cluster of high-tech start-ups around Cambridge University. But despite its modest headcount, ARM has over 20,000 external partners within its global innovation ecosystem.<sup>xi</sup>

The same principles can apply but in a physical location. Woven City is the Toyota Motor Company's (Toyota) purpose-built innovation community located in the city of Susono near Mt Fuji, Japan. Analogous to Silicon Valley in the US or Silicon 'Fen' in the UK, of which ARM is a product, Woven City is, by design, an open ecosystem integrating the delegated efforts of many thousands of partnering companies. They operate side by side, physically and virtually, to further Toyota's goal of realizing radical new mobility technologies.

Sosei Group Corporation is a holding company of biopharmaceutical companies specializing in drug development. Sosei Group enters into license agreements primarily with US, EU, and Japanese companies to market the licensed drugs in Japan and find alternative usage on such drugs. Sosei, in its foundation era, chose to locate itself in the UK to engage in R&D collaboration with local universities and venture firms to tap into the innovation ecosystem in the UK.<sup>xii</sup> Similarly, Takeda, a leading Japanese pharma, adopted this type of ecosystem by deciding to engage in drug discovery through open partnerships worldwide.<sup>xiii</sup>

IBM's "Collaboratory" strategy also falls into this type of ecosystem strategy, for the company engaged in open innovation even without setting up its own R&D labs through active collaboration with universities, government, and commercial partners within host country ecosystems. Open and horizontal ecosystems represent the most recent and the most complex type to emerge in theory and practice.

## **Summary**

Each of the four ecosystem strategies presented here is distinctive in its own right. Each presents managers with unique strategic advantages. So, which is best? It depends upon requirements, of course. Consider, in your own case, how open and integrated do you need your ecosystem(s) to be?

If your purpose is to develop an efficient supply chain, a closed and vertical strategy may be most appropriate. Or, if it is to create a platform to fuel a market around your product or service, open and vertically integrated is the best option. Or, if it is to create an innovation community highly aligned with your product development cycle, a select group of highly integrated strategic partnerships might be best.

Whichever ecosystem strategy is chosen, each also presents managers with unique implementation challenges. Each form of ecosystem must be structured appropriately if it is to perform its strategic function capably as intended. Designing an ecosystem structure to be fit for purpose is an additional — and critical — alignment consideration and the focus of Part B of this series: *Designing Organizational Ecosystems & Overcoming Barriers to Implementation*.

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## **Research methods**

The authors' research on ecosystem alignment originated from a multi-year action research study of firms in multiple sectors commencing in 2019, including a one-month sabbatical by one of the authors observing operations within a sample company. The study includes ARM (technology), the Development Bank of Japan (finance, public sector), IBM (technology and consulting), NTT DATA (telecommunications and payments), Shiseido (cosmetics), and Takeda (pharmaceutical). A variety of methods were used to develop deep-dive case studies. First, the authors conducted semi-structured interviews with key executives, including repeat interviews, to check findings and develop a longitudinal perspective. Second, executive workshops were used to map organizational ecosystems according to the stated strategy. Third, additional insights from documentary analysis were used to support primary findings. Finally, various supplementary public domain and published research examples were analyzed to develop a wider multi-sector perspective.

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