New roads to the health innovation ecosystems of tomorrow

December 2020
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What role will you play in the transformation of health care?

The state of health care is rapidly evolving toward a consumer-centric model where technologies play an increased role in how consumers’ unique preferences are understood; how their individual context is perceived; and how their care needs, protocols, and medicines should be designed to shift from a state of sick care to health care. This precise understanding presents the opportunity not only to improve care for immediate needs, but also to predict upcoming needs and underlying capacity by leveraging both longitudinal and real-time data, delivering higher-quality, more personalized experiences.

Perhaps no industries better understand how to create and fulfill consumers-centric experiences than retail and technology. It’s no surprise that both established players like Amazon and greenfield startups are driving a paradigmatic shift at the intersection of innovation and health, leveraging their core competencies to offer more accessible and affordable care, largely enabled through technology. While the transformative power of technology has undoubtedly benefited consumers, it has caused disruption for incumbent health care and life sciences enterprises.

In order to respond to these disruptors, remain nimble, and drive transformation in their business models, traditional health care and life sciences enterprises are moving to reinvigorate their “innovation ecosystems.” Best exemplified in Silicon Valley in the 1990s, an innovation ecosystem is a community where a critical mass of available capital, startups, differentiated talent, enabling institutions, and favorable government policies converge and fuel vigorous cooperation and competition.

These ecosystems are where the magic happens: Ideas develop rapidly, startups readily source talent and funding, hypotheses are swiftly prototyped in real-world settings, and enterprises continuously bring new innovations to market—all measurably faster together within the ecosystem than outside of the ecosystem or on their own. Not only do these vibrant ecosystems increase local productivity and growth, but they also drive disruptive innovation globally.

In this paper, we will explore the core components of and force multipliers within innovation ecosystems and highlight examples of thriving ecosystems in four distinct global communities—Boston, Tel Aviv, Shanghai, and Berlin. Finally, we will provide case studies to illustrate benefits of innovation ecosystems, along with actionable insights and tools to help you along your innovation journey—whether you are looking to expand or just getting started.
Introduction

Ecosystems as catalysts for innovation

Deloitte’s vision for this future of health, rapidly accelerated by the COVID-19 pandemic, suggests that by the year 2040, consumers will be the nucleus of the health environment where technologies such as AI, robotics, and 3D printing will enable precision medicine and micro interventions to drastically improve consumers engagement and the quality and value of care delivered. In addition, new business archetypes will emerge based on who uses ecosystems, technology, and data the best, which will dramatically alter the landscape of the health care and life sciences industries.

Much of the innovation shaping the future of health is being created by disruptors outside the industry. For example, leading retail and technology enterprises, originating in consumers-centric businesses, have made significant investments in launching products and services that provide more efficient, accessible and convenient models of care. Amazon, for example, acquired PillPack in June 2018 to build and operate an integrated pharmacy offering. Leveraging Amazon’s online e-commerce platform along with its vaunted global supply chain, and synergizing with PillPack’s simplified model, together they were able to provide consumers with a differentiated pharmacy offering.

This trend also applies globally with companies like Ping An in China, the largest insurance company in the world, which is rapidly entering new markets through large investments, partnerships, and targeted acquisitions. These strategic choices enabled the rapid launch and growth of disruptive health care offerings like “Ping An Good Doctor,” currently the largest telehealth platform in the world, with more than 315 million registered users and daily consultations averaging 729,000 in 2019.

Large, nontraditional entrants are not the only ones focused on the opportunity in health care; startups and other small companies are as well. They are moving quickly to build and launch disruptive offerings with limited to no legacy assets or assumptions to inhibit their ambitions. In 2019, 359 US-based digital health startups raised $7.4 billion in capital from 600+ investors. Innovation in the digital health startup space is booming and proliferating globally, with more than 20 countries housing digital health startups with more than $100M in funding.

As businesses continue to become more digital and industry lines continue to blur, health care and life science incumbents are reacting to disruption by investing in long-term plays—including digitally enabled, designed ecosystems that span traditional industry boundaries—to build new, adjacent, and transformative businesses. The transformation remains slow and incremental, as most enterprises do not currently possess the capabilities to create offerings which differ from those of their core business. For example, while pharmaceutical companies are beginning to look “beyond the pill” and explore nonconventional methods of treating diseases through food-based and traditional medicine, the capabilities needed to develop these new offerings are drastically different from those they harbor to manufacture their blockbuster drugs.

To remain competitive, enterprises need to leverage ecosystems and partnerships that enable them to broaden their focus while staying nimble, to proactively define future business models, and to provide viable alternatives to disruptive offerings such as those previously described from Amazon and Ping An. Access to differentiated talent, emerging technology, and robust data sets, all connected through a platform to catalyze and sustain innovation, are now more critical than ever—even more so as the COVID-19 pandemic has exacerbated deficiencies and is catalyzing systemic, industry-wide change. Health care and life sciences enterprises are responding by increasing virtual care (telemedicine), contactless transactions (autonomous pharmacies), and rapid clinical trials (vaccine testing), all of which require looking outward for insights and resources to accelerate, build, and launch holistic offerings.

And this is where innovation ecosystems come into play.
Building a winning innovation ecosystem strategy

This paper addresses the key elements necessary for enterprise leaders to develop and execute an innovation ecosystem strategy:

- Defines key characteristics and drivers of an innovation ecosystem
- Highlights examples of ecosystems around the world uniquely positioned to support health care and life sciences innovation
- Describes key benefits enterprises can realize through cultivating an innovation ecosystem
- Provides actionable ideas for stakeholder engagement, testing, and scale
- Shares leading practices and tactical steps for enterprises to expand their innovation ecosystem and maximize value creation
What is an innovation ecosystem?

A cluster of synergistic forces

The ecosystem concept is rooted in Michael Porter’s Cluster Theory. Porter demonstrated empirically that country or regional competitiveness is based on the productivity generated by the geographic concentration of assets, talent, and capabilities and focuses on the microeconomic foundations of competitive advantage that underpin productivity in nations, regions, and clusters (or ecosystems). One of the world’s best-known ecosystems is in Silicon Valley. In the 1990s, Internet pioneers, venture capital investors, coders, entrepreneurs, and researchers flocked there and leveraged the growing centripetal force of the Silicon Valley cluster to catalyze the birth of the Internet—along with the launch of new business and collaborations. To this day, Silicon Valley remains one of the world’s most important centers of innovation and technology disruption.

In the health care and life sciences industries, innovation ecosystems have emerged in concert with the proliferation of technologies across the care continuum. These are developing in a variety of settings across the globe—some of which were established based on existing health care clusters or infrastructure (such as hospital systems and their related and supporting industries), while others were founded upon a concentration of scarce, differentiated talent.

Key drivers of innovation ecosystems

- Available capital
- Other ecosystems
- High startup activity
- Enabling institutions
- Favorable government policies
What are drivers of leading innovation ecosystems?

While ecosystems specialize and differentiate in a variety of ways, four key drivers have remained constant across leading innovation ecosystems throughout our exploration of 50+ established and emerging ecosystems.

<table>
<thead>
<tr>
<th>Driver</th>
<th>Description</th>
<th>Why it is important</th>
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<tr>
<td>Available capital</td>
<td>Sources of investments from financial institutions, corporate and private venture capital, and other sources that are readily available to fund startup and economic activity</td>
<td>Mature financial markets and investment sources provide incentives for innovators to establish and expand their companies in the ecosystem</td>
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<td>The greater the available capital and investment activity, the higher the likelihood that this geographical ecosystem can launch and support innovations</td>
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<tr>
<td>High startup activity</td>
<td>Relevant and widespread startups across different stages of maturity and focus</td>
<td>Startups provide enterprises with specific targets to engage, aligned to strategic priorities while also providing innovation ideas</td>
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<td>Startups are one of the key engines that fuel innovation in the ecosystem, and as such, a diverse assortment of startups can address problems from different vantage points, codevelop solutions, and share talent and data</td>
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<td>Enabling institutions</td>
<td>Presence of universities, hospital systems, and other cross-industry players that provide expertise and infrastructure necessary to develop, test, and launch new innovations</td>
<td>Ecosystems with both a high supply of resources (for example, specialized talent, open platforms, and R&amp;D labs) and demand (such as local appetite for innovation) are well-positioned to evolve an idea from inception to launch and support continuous innovation through rapid testing, learning, and scaling</td>
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<td>A healthy mix of industry players outside of health care and life sciences can catalyze innovation through diverse perspectives, processes, talent, data, and intellectual property</td>
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<tr>
<td>Favorable government policies</td>
<td>Accommodating government policies, subsidies, incentives, and investments supporting innovation and global collaboration</td>
<td>Government plays a critical role in fostering innovation by providing support to guide innovation priorities, test innovation locally, and enable and incentivize enterprises to enter the ecosystem; additionally, regulators are increasingly acting as catalysts of change</td>
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<td>Due to the sensitivity of health data and variability of electronically tracking this information across countries, ecosystems that have policies in place to support availability, interoperability, and analysis of this information enable and accelerate innovations</td>
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What are examples of exemplary health care and life sciences innovation ecosystems?

There are many communities that possess some of the above drivers, but it’s challenging to find ones where all four converge to continuously fuel disruptive innovation. The following table highlights four examples.

Examples of health care and life sciences innovation ecosystems

<table>
<thead>
<tr>
<th>Driver</th>
<th>Boston, Massachusetts</th>
<th>Tel Aviv, Israel</th>
<th>Shanghai, China</th>
<th>Berlin, Germany</th>
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<tr>
<td>Available capital</td>
<td>Nearly $11 billion in venture capital was raised in Massachusetts in 2019 alone, the majority of which funnels through the biotechnology hub in Boston.¹¹</td>
<td>Israel tops the list of highest venture capital investments per capita, with more than $8.3 billion raised in 2019, the majority of which funnels through Tel Aviv-based ventures.¹²</td>
<td>Financing in China has quadrupled over the past 10 years, and Shanghai now accounts for 85 percent of all direct-financing deals in China (more than $1.4 trillion in 2018).¹³</td>
<td>The top 100 German startups account for an accumulated funding of $11.1B as of December 2019, up from $6.3B in 2018.¹⁴</td>
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<tr>
<td>High startup activity</td>
<td>An estimated 58 startups were founded in the Greater Boston Area in 2019 alone—raising $498.1M across 70 funding rounds.¹⁵</td>
<td>Israel has the highest number of startups per capita in the world, with an estimated 350 startups focused on HealthTech-related innovation (as of Q2 2020).¹⁶</td>
<td>There are more than 550 HealthTech startups in China, and China is emerging as the second-fastest-growing digital health market (as of Q2 2020).¹⁷</td>
<td>There are more than 150 HealthTech startups developing biotech, AI, wellness, and mHealth software and device products that are currently headquartered in Berlin (as of Q2 2020).¹⁸</td>
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<tr>
<td>Enabling institutions</td>
<td>Leading academic institutions like MIT, Harvard, and Boston University—and health systems like Brigham and Women’s, Massachusetts General Hospital, and Boston Children’s Hospital—have dedicated processes and collaborations for startups to conduct pilots and research studies.¹⁹</td>
<td>Israel’s relatively advanced and centralized public health system, with 98 percent of the population covered by full health insurance and using the same linked EMR system for decades, drives interoperability and robust, longitudinal data about patients, conditions, and treatments.²⁰</td>
<td>Shanghai’s health institutions are providing opportunities for multinational corporations to partner and test out new technologies (such as vaccines, robots, and health apps) in hospital settings.²¹</td>
<td>Berlin’s top three academic institutions: Freie Universität Berlin, Humboldt-Universität zu Berlin, and Technische Universität Berlin—and the Charité, Europe’s largest university clinic—together form the Berlin University Alliance, an integrated clinical research environment for more than 10,000 students.²²</td>
</tr>
<tr>
<td>Favorable government policies</td>
<td>The Massachusetts Life Sciences Center has strategically deployed more than $700 million in Massachusetts through a combination of tax incentives, infrastructure investments, grants, loans, and workforce programs to support innovation, R&amp;D, commercialization, and manufacturing activities in the fields of biopharma, medical device, diagnostics, and digital health.²³</td>
<td>The Israel Innovation Authority offers entrepreneurs, researchers, companies, and multinational corporations with a myriad of tools and funding platforms for promoting technological entrepreneurship and investment in industrial R&amp;D.²⁴</td>
<td>China has made health care a core policy goal by targeting key measurements of health to improve by 2030. The government is seeking to reduce costs and address new health crises (such as diabetes) that have emerged in recent years.²⁵</td>
<td>Berlin is in the process of finalizing its Digital Healthcare Act (DVG), which will enable digital therapeutic technologies to be reimbursable in 2020. This, in turn, will encourage new innovations that take advantage of the incentive.²⁷</td>
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¹¹ There are more than 550 HealthTech startups in China, and China is emerging as the second-fastest-growing digital health market (as of Q2 2020).¹⁷

¹² Favorable government policies include tax incentives, infrastructure investments, grants, loans, and workforce programs to support innovation, R&D, commercialization, and manufacturing activities in the fields of biopharma, medical device, diagnostics, and digital health.²³

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Benefits of innovation ecosystems

Pathways to transformative growth

Enterprises that invest in developing a presence within an innovation ecosystem are well-positioned to access resources unique to the ecosystem and conduct mutually beneficial activities, such as sharing industry expertise to guide solution development. What it means to develop a presence will vary based on the characteristics of the ecosystem and ambition of the enterprise, but it is commonly achieved through developing a physical innovation and/or R&D center, funding and incubating startups, sponsoring events like hackathons or conferences, and creating relationships with local ecosystem players like academic institutions and think tanks.

There is particular benefit in working with earlier-stage ecosystems where talent, real estate, and other scarce resources are more accessible and energized by the idea of partnering with more established outside players who can bring scale, capital, and access to new consumers to the ecosystem. Once an enterprise has established a presence in the ecosystem, it enables a wide spectrum of activities and the realization of key benefits. Lastly, while ecosystems typically benefit all stakeholders, we will focus here on key enterprise benefits:

**Scan and scout new trends:**
Discover new business and technology trends in their early stages

**Identify collaboration opportunities:**
Develop solutions and identify potential partner or acquisition targets that can provide new capabilities or fill gaps

**Cultivate relationships and trust:**
Build connections with incubators, accelerators, VCs, academic institutions, and others that can be engaged to advance strategic priorities

**Conduct research, development, and pilots:**
Activate the innovation development process by performing integrated activities in the ecosystem to accelerate time to launch and scale

**Access leading talent and insights:**
Tap into readily accessible and specialized talent pools and thought leadership
### New roads to the health innovation ecosystems of tomorrow

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<tr>
<th>Ecosystem activity</th>
<th>Resulting benefits</th>
<th>Example</th>
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| **Scan and scout new trends**  
Discover new business and technology trends in their early stages. | By being plugged into the innovation ecosystem, enterprises are able to see firsthand new technologies and business models.  
These insights can influence enterprises as they make decisions on investments, acquisitions, and how they seek to position themselves for the future of health and defend against disruptors. | Johnson & Johnson, a global consumers products and pharmaceutical company, has cultivated a multinational network of open innovation ecosystems, “JLABS,” that run innovation challenges, provide resources to incubate startups and R&D, and enable J&J to keep a pulse on emerging trends. |  

Identify collaboration opportunities  
Develop solutions and identify potential partner or acquisition targets that can provide new capabilities or fill gaps. | As enterprises engage with startups, universities, and other institutions, they will be able to track the evolution of their innovations and determine the right time to strike partnerships or make new investments.  
This local knowledge and relationship-building can cut down the time to conduct due diligence and finalize deals. | Anthem, Inc., a large US health benefits company, tapped into its digital health ecosystem to identify and partner with K Health, a startup founded in Israel. Today, K Health’s AI-driven triage and symptom checker tool is offered to Anthem’s more than 40 million members. |  

Cultivate relationships and trust  
Build connections with incubators, accelerators, VCs, academic institutions, and others that can be engaged to advance strategic priorities. | Maintaining a presence in the ecosystem over the long term can nurture contacts and relationships that can be quickly engaged to capitalize on an opportunity and facilitate the evolution of an innovative idea.  
Strong local relationships can position enterprises for early and exclusive opportunities while also rallying the local ecosystem around an enterprise’s priorities. | For more than 20 years, Johns Hopkins Medicine International has worked hand in hand with local ecosystems in more than 20 countries to raise the standard of excellence in medical education, research, and clinical care across the world. For example, Johns Hopkins (US) cancer researchers have worked closely with university cancer centers in Singapore and completed over 65 clinical trials, many of which have resulted in groundbreaking therapies marketed globally. |  

Conduct research, development, and pilots  
Activate the innovation development process by performing integrated activities in the ecosystem to accelerate time to launch and scale. | With all the key capabilities and participants in the ecosystem together, enterprises are rapidly able to drive concepts from ideas to prototype to scaled solutions.  
This development cycle can be accelerated through design challenges, hackathons, pilots, and other activities. | In response to the COVID-19 pandemic, a global alliance of more than a dozen enterprises and ecosystems, including Gilead (Foster City, California), Novartis (Basel, Switzerland), and Takeda (Tokyo, Japan), was formed to discover and test antiviral treatments by sharing data about early results and basic science, as well as collaborating on designs for clinical trial designs. |  

Access leading talent and insights  
Tap into readily accessible and specialized talent pools and thought leadership. | Since ecosystems provide diverse educational and employment opportunities, they produce individuals with niche research and technology skill sets driving world-class R&D.  
The localization of these resources and insights enables enterprises participating in the ecosystem to more easily hire and/or partner with in-demand experts to tackle new opportunities. | Google’s largest R&D center in Asia, located in Taiwan, was established in 2006 and now has 2,000 employees (and growing). Taiwan’s low operating expenses, including the cost for talent, and the high supply of technical talent have driven Google to recently invest an additional $850M to expand its footprint in the local ecosystem. This is one of Google’s multiple AI and data R&D centers across 20+ countries working on specific goals aligned to Google’s strategic priorities while maintaining a level of autonomy and authority locally. |  

It is a common misconception that having an office or physical building in the location is equivalent to having a presence in the ecosystem. In truth, the benefits that an enterprise will yield from an ecosystem directly correlate to the time and energy invested. To truly take advantage of an ecosystem and realize the above benefits, enterprises need to embed themselves in the community and become a resource to participants through a give-and-take relationship. The ROI from an ecosystem presence may take time to generate, but once it’s concrete and active, the benefits realized can positively affect the enterprise across its global operations. As an example, innovations can originate and be accelerated through one local innovation ecosystem, then launched or matured in another ecosystem (based on that community’s unique capabilities or markets), creating a virtuous cycle of innovation where resources, speed to market, and sharing are maximized and costs minimized. In this sense, ecosystems know no boundaries.
CASE STUDY

Digital knows no boundaries

“Our ambition is to catalyze the industry toward whole-person health. And we are doing this through a digital-first mindset, which includes investing in innovation both inside and outside our walls.”

—Rajeev Ronanki, Chief Digital Officer, Anthem, Inc.

Anthem, Inc. (Anthem) one of the largest health benefits companies in the United States, launched its Digital organization led by chief digital officer Rajeev Ronanki. Its goal: To transform the company into a digital and AI-first enterprise that harnesses the power of artificial intelligence, data, and other emerging technologies to simplify healthcare and provide more personalized, proactive, and preventive care.

Recognizing the opportunity to look outside of its own walls to accelerate digitization and the adoption of exponential technologies, Anthem sought to understand and engage select innovation ecosystems aligned to its strategic priorities in order to expand its Digital Health Ecosystem—comprising startups, universities, data providers, health systems, nonprofits, incubators, accelerators, and other ecosystem players.

While Anthem’s overall strategy to curate a global ecosystem of innovators continuously fueling cutting-edge health innovation into its platform remained constant, the company’s strategy for each ecosystem varied. Different focus areas were established for each ecosystem based on its unique innovation drivers, and different engagement tactics were deployed based on what would best resonate in the local ecosystem (for example, establishing a physical presence, sponsoring local events, or hosting virtual challenges). To foster innovation and collaboration across its ecosystem, Anthem invested in digital assets, including building a Digital Data Sandbox, one of the world’s largest certified de-identified commercial data sets, enabling startups, researchers, and other ecosystem partners to discover insights, build and train algorithms, validate solutions with Anthem experts, and deploy solutions in the real world.

When the COVID-19 pandemic hit, Anthem was able to quickly respond, rallying its innovation ecosystem around immediate consumers, employer, care provider, broker, associate, and community needs. In a matter of weeks, Anthem, together with its innovation ecosystem, rapidly mobilized to transform a relatively gradual rollout of Sydney Care into a free-to-download, direct-to-consumers app complete with a COVID-19 symptom assessment and virtual consultations with care providers. The updates to the app launched on March 23, 2020, and Sydney Care became the No. 1 medical app on the App Store the same day. This is one of Anthem’s multiple offerings within its COVID-19 Digital Response Suite of analytics and engagement tools.

Through its interconnected, global Digital Health Ecosystem, Anthem is able to access and connect leading talent pools, institutions, and insights—accelerating the build and launch of disruptive digital offerings and improving core operational processes. Simultaneously, Anthem has created win-win partnerships where it gains access to leading innovation while also creating opportunity for ecosystem players, such as startups, to scale their solutions. This approach fuels a virtuous cycle of continuous learning and innovation that benefits everyone.
How to maximize value from an innovation ecosystem

Start small and think big

Determining your innovation ecosystem strategy, acting on it, and demonstrating its success is much easier said than done. While there is no one-size-fits-all answer, we have captured insights from our experiences helping enterprises along their journey in new ecosystems. Leaders can leverage these steps to expand their innovation ecosystem and realize sustainable competitive advantages for their enterprises.

1. Set your future of health ambitions: Establish your winning aspiration and role in the future of health
2. Do your homework: Research ideal innovation ecosystems to determine where to play
3. Establish your mission & ecosystem strategy: Start small but think big
4. Create a platform for collaboration: Foster trust, connectivity, and agility
5. Show, don’t just tell: Set measurable and transparent goals. Rapidly test, learn, and scale successes
WINNING ASPIRATION

1. Set your future of health ambitions

Disruptive solutions from across the globe are accelerating the pace of change across industries. It is important for incumbent enterprises to identify and stake out their role in the future of health and set their core, adjacent, and transformational innovation ambitions. In doing so, enterprises can identify current-state technology, talent, and operational gaps that can be addressed by innovation ecosystems.

Key actions

- Determine how the future of health will affect your business and the key industry, technology, and consumers trends creating disruption
- Make strategic choices and determine the role(s) you will seek to play in the future of health
- Identify existing gaps and anticipate future needs that will need to be fulfilled
- Assess implications of innovation ecosystems for your business, customers, employees, shareholders, and other key stakeholders

WHERE TO PLAY

2. Do your homework on the ideal ecosystems

Every ecosystem is different. There are myriad strategic, economic, legal, cultural, and operational factors at play, which are crucial to understand in order to develop a winning strategy for a given ecosystem and gain buy-in across the enterprise. Investing the time up front to make informed choices (while still operating with urgency), setting clear and realistic goals, and beginning to build important relationships within the ecosystem can position enterprises for long-term success.

Key actions

- Analyze and narrow ecosystems based on their alignment to your future of health ambitions, current capabilities, and other factors relevant to your enterprise
- Solicit local support to accelerate your understanding of the ecosystems and make important connections early on
- Build a comprehensive business case highlighting the ecosystem’s value proposition, monetization levers, risks and mitigations, financial and operational needs, and plan to enter or expand presence
- Obtain sponsorship from executive champion(s) as soon as possible
HOW TO WIN

3. Establish your mission and ecosystem strategy

Enterprises only get one shot at making a positive first impression in the ecosystem. Further, obtaining highly demanded, limited resources including top talent, office space, and partners has become increasingly challenging. Enterprises can improve their odds of success by having a focused, transparent mission and engaging the right people, in the right way, at the right time. This will quickly demonstrate an enterprise’s commitment to the ecosystem and help position it for future success.

Key actions

- Define a clear mission for the ecosystem and ensure alignment with the broader enterprise mission
- Determine your role as an orchestrator and/or convener within the ecosystem
- Develop a strategy to enter/expand your presence in the ecosystem (for example, through grassroots approaches, M&A, or partnerships)
- Create an executable ecosystem engagement plan, including strategic messaging to build relationships with key ecosystem participants

HOW TO CONFIGURE

4. Create a platform for collaboration

As enterprises expand their ecosystem and collaboration across industries and geographies, careful consideration must be given to how to best organize and operate, while ensuring adherence to enterprise standards and requirements (which may be less stringent in innovation ecosystems). Further, developing a secure, scalable platform can catalyze innovation and enable rapid response to evolving competitive and consumers needs.

Key actions

- Select an operating model that enables flexibility for the ecosystem team on the ground, while maintaining the right level of connectivity to the parent (balancing autonomy and oversight). Consider establishing a semiautonomous and self-sustaining “edge” business operating external from the core enterprise
- Centralize governance of innovation activities across ecosystems into a single entity to foster transparency and accountability
- Build a platform with resources to educate, empower, and incentivize key stakeholders to commit to mutually beneficial priorities and serve as trusted advocates across the ecosystem and enterprise (for example, innovation collaboration platform, data sandbox, and industry and ecosystem trainings)
- Adopt an agile, total innovation management mindset across all projects and ecosystem activities, recognizing that some ecosystem bets will succeed and others will fail
Prominent ecosystem operating models for enterprises

**Innovation center**
Innovation outpost that represents an enterprise’s interests within the ecosystem by identifying, evaluating, and recommending startups and other ecosystem players for collaboration.

**Accelerator or incubator**
Structured programs leveraging an enterprise’s specialized expertise and resources to mentor and nurture early-stage startup growth and innovation.

**R&D center**
Comprising cross-functional, local team(s) with specialized talent to generate IP, foster innovation, and build new products and services through research and development activities.

**Corporate venture capital (CVC)**
Equity-based arrangements and ongoing management of early-to-mid-stage startups aligned to enterprise priorities with the goal of strategic and/or financial gain.

**Open ecosystem collaborations**
Joint-collaboration initiatives, such as hackathons and conferences, with academic institutions, startups, incubators, or venture capital firms to accelerate an enterprise’s ecosystem priorities (for example, startup identification, talent acquisition, or algorithm development).

New roads to the health innovation ecosystems of tomorrow
GETTING STARTED

5. Show, don’t just tell

It is easy to stray from the original mission and diffuse limited resources. Maintain focus by selecting and delivering two to three strategic priorities with measurable value, then expand into additional areas in an organized pipeline. Investing time in high-impact activities to achieve wins early and build a solid foundation can help maximize value creation, fueling future funding and growth.

Key actions

- Set measurable and transparent goals to review regularly with leadership. For example, Google’s objectives and key results (OKR) goal-setting methodology is used by many enterprises today.

- Conduct rapid assessments and prototypes to accelerate core priorities, showing commitment and value to the ecosystem and gathering key insights prior to formalizing partnerships.

- Develop action plans to scale solutions from initial prototypes into market-ready solutions that can graduate from the ecosystem and scale throughout the enterprise.

- Build a robust pipeline of opportunities and remain actively engaged with potential partners and ecosystems to capitalize on new opportunities—before competitors do.
Conclusion

Cementing your position in the future of health

These are turbulent and disruptive times for the health care and life sciences industries. Orthogonal competitors are bringing massive scale from outside to bear on this newly accessible and growing market, one from which they have been historically excluded. Advances in interoperability and consumers-centricity are breaking down the moats diligently built around most health care businesses, and government is increasingly playing the roles of stakeholder and change agent in protecting and supporting citizens, all while the COVID-19 pandemic has altered the priorities and trajectories of many enterprises.

Localized and global virtual ecosystems are increasingly being built to catalyze enterprise transformation and modernization, recognizing that working well beyond the walls of the enterprise is a strategic imperative. What is missing is a clear ecosystem strategy, platform, and architecture. Enterprises need to grow new muscles around collaboration, partnering, and speed to market. And this needs to happen now in order to secure a spot in the future of health.
Endnotes


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