Open Innovation: Collaborating Successfully with Small High-Tech Firms
Many large companies today are turning to partnerships with small high-tech firms to drive faster, more effective innovation\(^1\). However, these collaborations often fail to fully satisfy expectations on both sides because of unresolved “deficits”—strategic, operational and cultural gaps—between the partners. Research by Accenture reveals how companies can close these deficits and succeed at open innovation.

### The new open innovation collaborators

Over the last decade, open innovation has evolved as a key tool for large companies to more quickly develop and commercialize new offerings. By directly engaging with outsiders—consumers, suppliers, universities and even competitors—large companies have been able to develop highly efficient innovation processes and differentiated products.

Since 2010, startups and specialized technology firms have become prominent collaborators in open innovation. Prior to 2010, large firms may have seen such startups as potentially dangerous competitors capable of taking away the markets from large incumbents with unimaginable speed.

But now, rather than fighting small high-tech firms, established companies are seeking to drive disruptive innovation with them. In fact, our survey of 200 large companies from China, India and US shows that more than 85 percent of incumbent businesses said they believe that collaborating with their smaller rivals will give them access to game-changing technologies that can help them thrive in technology-driven markets (see Figure 1).

In China, such firms include Datatang, a data pre-processing company; Ulucu, a cloud-based video-monitoring startup; and Megvii, an Internet startup focused on face-recognition services. These firms are creating highly innovative offerings for infrastructure, retail and telecom giants at speed these large companies would never be able to match. Moreover, such new entrants have created new markets creating opportunities for several others to crowd in. For example, Brite Semiconductor, a Chinese semiconductor startup, has developed an online interactive platform, facilitating knowledge sharing across the Internet of Things (IoT)-value chain. Several other semiconductor startups are integrating technologies onto this platform to enable evolution of better applications. For example, technology niche firms such as Innopower and CEVA are licensing a portfolio of intellectual properties to this platform for a wider range of applications in consumer portable devices and voice and fingerprint recognition.

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\(^1\) For the purpose of this research, large companies are those with a sales turnover of USD 1 billion and above, and small high-tech firms include firms such as technology startups; niche firms with turnover less than USD 100 million specializing in particular technologies; technology ventures seeking funds from VCs and PE investors to build their market presence.
Three deficits that drain value from collaborations

As Figure 1 reveals, large companies seek a wide variety of benefits from open-innovation initiatives with startups. But they are often frustrated. More than 50 percent of the large businesses in our survey said that these partnerships are not delivering the hoped-for outcomes. What explains this disappointing finding?

Our literature research and discussions with large companies and small high-tech firms revealed some three dozen challenges. Following an analysis of our survey results, we created a shortlist of a dozen partnership challenges, and synthesized these into three “deficits,” or gaps between the two sides:

**Appreciation deficit:** This divergence is apparent during the first stage of the collaboration process, when companies seek a partner to help develop an innovation opportunity. But during this stage the parties may fail to fully appreciate the nature of the opportunities, owing especially to: first, an unwillingness on the large company’s part to recognize disruptive opportunities driven by technology innovation; and second, the inability on the small company’s part to convince large companies about the value and relevance of their technological offerings to the incumbent’s business.

**Assimilation deficit:** If companies can overcome the appreciation deficit, the partners then will focus on working together. They will experiment with innovative ideas, build prototypes, and create an offering for market. During these middle stages of the innovation process, collaborators may fail to assimilate each other’s strategic priorities, goals and needs if: the incumbent firm cannot overcome strategic and operational barriers to collaboration; the established firm cannot smoothly integrate new technologies into its organization; and the small high-tech firm cannot customize its technology offerings to suit its large partner’s needs.

**Application deficit:** Late in the collaborative innovation process, the partners concentrate on scaling up the results of their collective efforts. At this stage, they may fail to use the larger innovation ecosystem to successfully scale, if: both companies lack the capabilities required to invest in and nurture a supportive innovation ecosystem; they fail to leverage government regulations to develop “win-win” business models; the smaller firm lacks a strategy and capabilities to support scaling up.
Overcoming the deficits

How might large companies collaborating with small high-tech firms in open innovation initiatives overcome these deficits?

The three deficits indicate that open innovation is never made possible with a single party’s efforts. Large companies should also take into account the needs of their partners and tap into the larger innovation ecosystem.

Accenture’s three-step Aggressively Driving Returns of Open Innovation Technology initiatives (ADROIT) model illustrates actions that companies can execute to successfully address partnership deficits and succeed at open innovation (see Figure 2). By using this model, incumbents can transform themselves into active and successful open innovators.

Step 1 focuses on addressing the appreciation deficit. To overcome this deficit, large firms’ top leaders must be aware of and value the opportunities offered by open innovation in order to drive the necessary organizational changes. Further, that awareness must translate into a sense of ownership of these initiatives and their outcomes. Senior leaders can demonstrate this appreciation and ownership by establishing a Technology Innovation Council comprising top executives from the firm. They can also hold “connect sessions” with C-suite executives from other large companies, startups, venture capital and angel investors and members of academia to deepen their understanding of technological disruption’s impacts on business.

Step 2 solves the assimilation deficit. To address the same, a large firm needs to align its small partners’ technology offerings to its own business strategies, acquire or strengthen capabilities required for efficient innovation and foster a partnership culture that drives out conflict.

Some large companies are achieving these aims by helping their smaller partners understand how their open innovation strategy fits into their overall business strategy. Others are building robust analytical toolkits accessible to their partners across all stages of the collaborative innovation process, including digital platforms enabling real-time collaboration and exchange of data and analyses.

Figure 2. The Model ADROIT and an action plan for large companies to successfully drive open innovation with small high-tech firms

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**Model ADROIT—Aggressively Driving Returns from Open Innovation Technology initiatives**

**Step 1: To solve the appreciation deficit**

**Focus: Internal**

**Goal:** To create awareness and openness within the firm about opportunities and challenges presented by technology disruption

**Step 2: To solve the assimilation deficit**

**Focus: Partnership**

**Goal:** To achieve better understanding of partnership challenges at the strategic, operational and cultural level

**Step 3: To solve the application deficit**

**Focus: Ecosystem**

**Goal:** To optimally leverage the innovation and policy ecosystem towards achieving profitable scale
Mutual respect can further enable assimilation. Large established firms can communicate their respect for their smaller open innovation partners in numerous ways, including asking them to deliver a speech at the large firm’s innovation meet or recommending the partner to other incumbents.

**Step 3 focuses on addressing the application deficit.** To overcome the application deficit, a large firm needs to establish an operating model that ensures gains for itself as well as its smaller partners. It must also strengthen its connection to the larger innovation ecosystem and adapt its operating model to remain indispensable to that ecosystem.

Large companies can accomplish these aims by stepping up their collaboration with open innovation-friendly governments (for instance, by jointly establishing an incubator for entrepreneurs and start-ups in the area of digital technologies) and partnering with not famous but capable partners. They can also build flexible collaboration architectures (such as various benefit-sharing schemes available for small high-tech partners, including one-off payment for product development, profit-sharing plan after product launch, or priority of collaboration in the future) to craft mutually beneficial business models, among other steps.
Clearly, the journey to successful open innovation with small high-tech firms is not an easy one. But large businesses can overcome the challenges by understanding and addressing each of the appreciation, assimilation and application deficits causing open innovation-collaborations to backfire.
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