IBM Institute for Business Value

### **Insatiable Innovation**

From sporadic to systemic



#### IBM Institute for Business Value

IBM Global Business Services, through the IBM Institute for Business Value, develops fact-based strategic insights for senior executives around critical public and private sector issues. This executive report is based on an in-depth study by the Institute's research team. It is part of an ongoing commitment by IBM Global Business Services to provide analysis and viewpoints that help companies realize business value. You may contact the authors or send an e-mail to <code>iibv@us.ibm.com</code> for more information. Additional studies from the IBM Institute for Business Value can be found at <code>ibm.com/iibv</code>

Introduction

By Anthony Marshall, Mieke de Rooij and Mauro Biscotti

**Some commentators** have been asserting recently that innovation is, at best, underwhelming, or at worst, a thing of the past. However, in analyzing the experience of thousands of C-suite executives and other data, we conclude that the presumed death of innovation is not supported by the facts. Not only does innovation remain strongly correlated with value creation, it is a key factor in financial outperformance. Innovation is more than just a "big idea." It is an ongoing process of creating value from something new – new ideas, new technologies, new products, new processes. As economies and societies become more connected, all aspects of business are confronting major change. Innovation is no different. Having once been the purview of the few, successful innovation today has become more collaborative, open and continuous.

Is innovation dead? Numerous press reports seem to indicate so. A view is emerging that innovation is no longer the driver of growth it once was, as evidenced by a January 2013 cover article in *The Economist.*<sup>1</sup> Pundits point to declining growth in global productivity as further proof that "The Big Idea" is a thing of the past (e.g., global per capita GDP 10-year CAGR, which topped 4 percent in the 1950s, fell to nearly 0.5 percent by 2010²).

Our view, based on analysis of past IBM Global CEO studies, as well as practical, hands-on experience, is that innovation is far from dead.<sup>3</sup> It is, instead, thriving among those outperforming companies that apply product, operational and business model innovation to truly differentiate themselves from their competition. The ability to generate, control and exploit innovation can become a major source of strategic advantage and economic benefit, as demonstrated by the growth in value of those companies deemed "most innovative."

To demonstrate the point, we analyzed the market capitalization of those companies that were recognized as among the top 50 most innovative companies by *BusinessWeek* magazine in 2010.<sup>4</sup> The results show that these top companies comprise approximately 20 percent of total market capitalization of Standard & Poor's Global 1200 (see Figure 1). Further, the ten most innovative companies realized 7 percent year-on-year market capitalization growth from 2008-2012, compared with -1 percent for the S&P Global 1200 as a whole. And two-year revenue CAGR of the top ten most innovative companies was 60 percent more than the overall S&P Global 1200.<sup>5</sup> Clearly, "innovative" organizations are doing something different from others – something that is driving more growth and better financial results.

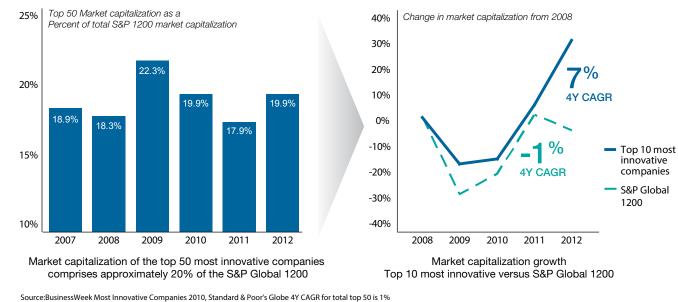


Figure 1: Evidence that innovation is not dead: innovative companies outperform in market capitalization growth.

In this report, we will focus on the evolving role of innovation and its impact in today's complex business environment. Specifically, we will identify what financially outperforming organizations are doing differently to foster innovation:

- How are they optimizing their innovation mix to balance among product, operations and business model innovation?
- · How are they embracing business model innovation?
- How are they expanding external partnerships to facilitate more value-creating innovation?

Finally, we will outline the steps necessary to develop a systematic innovation approach – to more effectively drive growth, efficiency and financial outperformance.

## Innovation is evolving in complexity and impact

Innovation has been constantly evolving in its complexity and impact. Beginning with the industrial revolution in the Nineteenth Century and continuing through one technological milestone after another, economic activity has become more global, opening up new markets, new businesses and new business models (see Figure 2). These models have evolved to the extent that, in today's age of "universal customization," customers are empowered to affect product attributes in real-time, with products and services becoming hypercustomized to meet the needs of individual customers.

Growing complexity has intensified competition, providing an ever-greater impetus for:

- Product innovation that has broadened the competitive playing field. Products today increasingly face non-traditional competitors.
- Operations innovation that has generated efficiencies and decreased cost for organizations and customers. Many organizations, for instance, now source production from specialists.
- Business model innovation that motivates creation of sophisticated ecosystems of products, services and experiences. Emerging technologies are fundamentally changing business and scale economics.

#### Product innovation

Product innovation drives significant customer value, with the potential to open up new markets and redefine the competitive landscape. In the past, the roadmap to product innovation was clear. It was driven by technological leadership and clear product silos. Companies with advanced capabilities in these areas were dominant. Think, for example, of Xerox and copiers, Sony and electronics, and Procter & Gamble and consumer products.

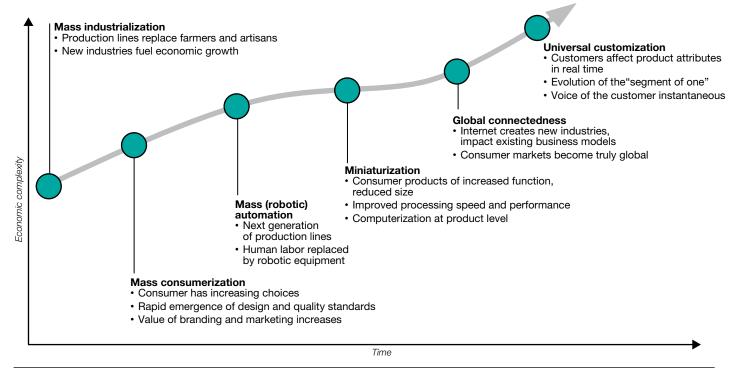


Figure 2: Innovation is constantly evolving in its complexity and impact.

But prevailing market dynamics are changing how product innovation is accomplished. Product innovation has become concurrently both more diverse and more convergent, with innovators facing increased competitive pressure from all directions. For example, a television manufacturer today must not just compete with other television manufacturers, it must also vie for customer attention with manufacturers of smartphones, tablets and other devices (see case study, "Innovation in the home entertainment industry," page 6). Additionally, today's empowered and enlightened customers are demanding increased customization. They expect retailers, manufacturers and service providers to cater to their unique, individual preferences.

To strengthen their offerings, top innovators today are combining value propositions and generating customer demand across multiple categories. For example, Tesla Motors, a leading designer of compact cars and a technology pioneer, is pursuing extensive product innovation in electric vehicles and energy storage – to serve both as intermediate component inputs as well as finished products.<sup>6</sup> Samsung's Galaxy Note, sized between a smartphone and a tablet, has effectively created the "phablet" (phone +tablet) category, which is redefining competition in the personal electronics device space.<sup>7</sup> Starbucks developed its own instant coffee brand, Via, and, in so doing, has managed not to cannibalize its in-store sales. Instead, it is marketing "additional usage occasions" for the Via brand, ultimately increasing its share of the consumer's wallet.<sup>8</sup>

#### **Operations innovation**

Operations innovation traditionally has delivered dramatic efficiencies – reducing costs and lowering prices. As with product innovation, operations innovation has generated vital customer value and efficiency, reducing production costs and, ultimately, improving quality and lowering prices for customers.

Operations innovation has historically created a strategic advantage for the "owners" of such innovation. Recently, however, specialist "best-in-class" organizations have emerged in manufacturing, supply chain and other processes. Operational innovations achieved by these specialists are now distributed to those who source from the original innovators. For example, chip designer ARM licenses design blueprints for a large number of chips used in smart phones and tablets; the scale economies ARM enjoys and its design innovations are passed on to customers through licensing and royalty agreements. Taiwanese electronics giant Foxconn produces many popular "name-brand" devices, including iPad, Kindle, PlayStation and Wii.10 Its innovative processes have garnered numerous patents on its supply chain – efficiencies that are ultimately passed on to its clients.11 Online grocer FreshDirect employs automation, direct relationships with local producers and a made-to-order philosophy to compress its supply chain and reduce inventory to levels substantially less than offline competitors. At the same time, FreshDirect enables broad market access to local "boutique" producers. With a freshness guarantee and powerful predictive analytics, FreshDirect has experienced rapid growth.12

#### **Business model innovation**

The third major kind of innovation, business model innovation, has influenced how organizations fundamentally think of value creation. Business models have evolved as a result of consumer preferences and emerging technologies and redefine what is possible. We see three types of business model innovation:

- Revenue model innovation Innovating how the company monetizes value, including pricing models
- Enterprise model innovation Innovating the way the organization operates (internal value chain) - partnering and collaboration, etc.
- Industry model innovation Redefining an existing industry, moving into a new industry or creating entirely new industries.

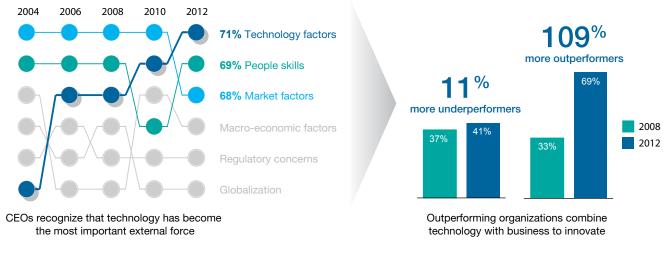
Organizations engaged in business model innovation synthesize new and emerging technologies with business imperatives to redefine value chains and create entirely new industries (see sidebar, "New technologies expand business model innovation – but also the threat of replication"). Google's Android, for example, has rapidly become a leading smartphone platform; its success stems from being flexible, open-source and modular.<sup>13</sup> Netflix introduced a subscription rental model, and then upped the ante even more by introducing streaming – in effect creating radically new business models by embracing new technologies and channels and, more recently, its own proprietary content.<sup>14</sup> ING Direct, an arm of ING, a major European bank, established a branchless global presence, serving purely through web, mobile, and phone channels; this efficiency enabled the bank to offer higher depository interest rates than many traditional banks.15

### New technologies expand business model innovation – but also increase the threat of replication

Business model innovation today is supported by new technologies that expand capabilities and remove scale constraints. Recent and evolving technologies, such as cloud, social business and predictive analytics, are leveling the playing field for smaller players, expanding what is possible, and challenging the established role and position of incumbents. However, not only do new technologies expand the potential for business model innovation, they also make it easier to replicate or copy new innovations. Replication, enabled by cloud or other sophisticated, inexpensive and scalable technologies, is becoming pervasive in some types of businesses – either in different markets or actually going head-to-head.

For example, eBay was established in 1995 and changed the way many people bought and sold goods. <sup>16</sup> In 1999, a German website, Alando, mimicked that business model and was later acquired by eBay. <sup>17</sup> Groupon, founded in 2008, introduced a daily-deal model that gave businesses a new way to reach potential customers. <sup>18</sup> Following the Groupon model, CityDeal successfully launched across 80 European cities in 2009; Groupon later acquired CityDeal. <sup>19</sup> Airbnb, founded in 2008, provides a marketplace for hosts to rent out unoccupied living space to guests, creating an alternative to hotels. <sup>20</sup> Wimdu, which offers a similar service, launched in Europe in 2011, and has projected revenue for 2013 of more than US\$132 million. <sup>21</sup>

Recent analysis of CEO sentiment confirms that private sector and government leaders are more aware of the importance of new and emerging technologies than ever before. The ability to combine new technologies with business processes to drive innovation in all of its forms has become strongly correlated with financial and operational outperformance (see Figure 3).



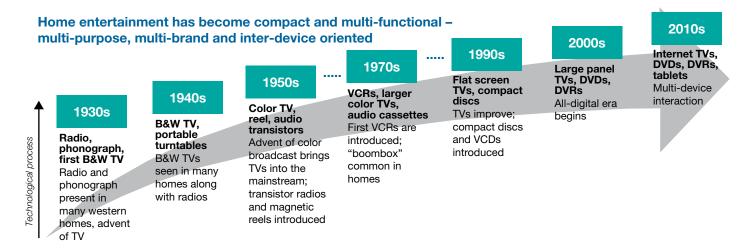
Source: Q1 "What are the most important external forces that will impact your organization over the next 3 to 5 years?" (n=1709); 2012 Global CEO study: Bench\_E: To what extent has your organization integrated business and technology to innovate? 2008 Global CEO study: Q5: To what extent has your organization integrated business and technology to innovate?

Figure 3: Organizations that combine new and emerging technologies with business imperatives to drive innovation often outperform their peers.

#### Case Study: Innovation in the home entertainment industry

The home entertainment industry is illustrative of the changing scope of the three innovation disciplines. A brief look at how the industry has evolved over the years reveals the ways in which it has responded to R&D and technological breakthroughs to provide greater value to its customers.

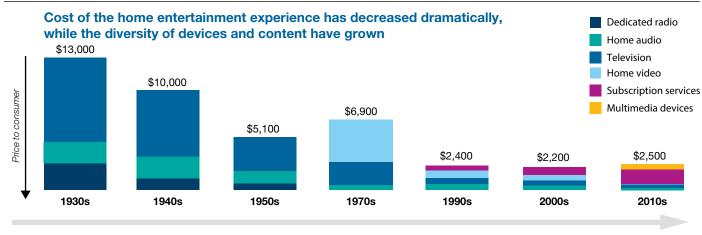
Product innovation: In the 1930s, home entertainment consisted primarily of the radio and phonograph, with a few black and white televisions in more affluent homes. By the 1990s, televisions were of high quality and multiple units were found in many homes, along with VCRs, compact disc players and other devices that could be mechanically linked. Today, homes are equipped with full digital systems, with Internet televisions, DVD and DVR players/recorders, tablets and gaming systems that are linked and can interact with each other. With each new innovation, the competition for delivery space and the consumer dollar becomes increasingly fierce (see Figure 4).



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Figure 4: Product innovation has driven significant customer value.

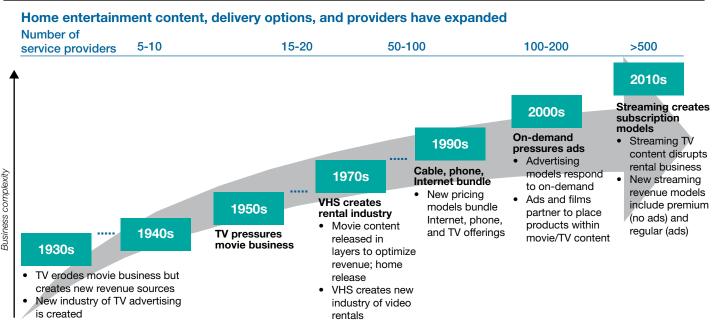
Operational innovation: As with product innovation, operations innovation has generated customer value and efficiency, reducing production costs and lowering prices for customers. While new technologies such as radio, television and home video were initially costly to produce, mass production, along with intense competition, tended to drive operational innovation to make production more efficient, reducing costs. Later technologies, such as home computers, flat-screen TVs, DVD/DVRs and tablets, experienced similar forces, although often with ever-shorter cost-reduction cycles. While the overall cost of home entertainment is little changed over the past 15 years, the functionality and content in a typical home today is profoundly different from that of the late 1990s. In 1998, most homes were limited to TV, cable, VCR, dial-up Internet and a CD player. Compare that with home entertainment options available to a typical home in 2013 – where flat screen TVs, DVRs, thousands of channels, high-speed fiber optic or cable Internet, on-demand programming accessible through smart phones, tablets, computers and multi-room television are ubiquitous (see Figure 5).



Each bar represents the cost to acquire one of each device or to subscribe to one year of a service, inflation adjusted (2012 dollars). "Subscription Services" include cable, Internet and Netflix with costs equivalent to one year of service; Pay cable originated in the 1970s, but reached mainstream in the 1980s. "Home Audio Devices" includes phonographs and CD players. Media costs estimated as the cost of 10 albums or 100 songs. Source: National Cable and Telecommunications Association (NCTA) via policyarchive.org, radioblyd.com, thepeoplehistory.com, philcoradio.com, twhistory.tv.

Figure 5: Operations innovation has delivered dramatic efficiencies, reducing costs and lowering prices.

Business model innovation: Evolving business models have driven value creation in home entertainment (see Figure 6). As television gained a foothold hold in the 1940s and 1950s, it eroded the movie business, creating new industries in its wake – most notably, television advertising. With the advent of VHS in the 1970s and 1980s, movie content started being released in phases to optimize revenue – with cinematic release being the primary phase and home (VHS) release secondary. VHS also created an entirely new industry of home video rentals. In the late 1990s and 2000s, Internet service providers began offering price bundling on Internet, television and phone services. The introduction of digital delivery further evolved revenue models. Influenced by on-demand broadcast, advertising is increasingly a central part of television and movie content, as opposed to simply comprising commercials. For example, certain movies or television shows will show only a specific automobile brand being used by the characters or a specific beverage being consumed.



Source: Service provider counts are an illustrative estimate based on a consumer's potential service options in any given market. (e.g. including but not limited to radio stations, TV stations, cassette tapes, DVDs, online music, video-on-demand, news websites)

Figure 6: Business models have evolved with changing tastes and ushered in a wave of competitive convergence.

Today, as streaming content caters to a device-agnostic audience, it has disrupted the rental business (once a disruptor itself). Service providers and content producers have developed complementary revenue models for content and/or broadcast.

In summary, the evolving nature of innovation continues to challenge established business models and create new opportunities for disruption. How is your organization adapting to these changes? Key questions to ask yourself include:

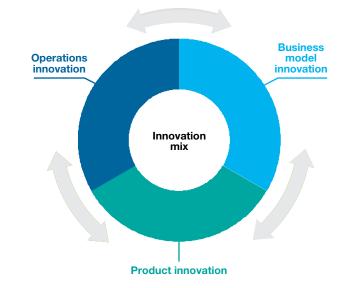
- · How are you responding to ever-growing complexity?
- In what ways is the trend toward convergent products apparent in your industry?
- Do you think operations innovation can be a key differentiator in an integrated, globalized economy?
- Where do you see the opportunities for business model innovation? Where are the threats?
- How effectively do your business units and IT departments work together on strategy and execution?

Leaders are increasingly asking themselves and their organizations these types of strategic questions. The ability or inability to have good answers can indicate a delineation point between being a disruptor and being the disrupted.

#### How outperforming organizations succeed

Organizations optimize their innovation mix to balance among product, operations and business model innovation (see Figure 7). A myopic focus on one type of innovation limits potential: outperformers create the right mix across all types of innovation. Compared to their underperforming peers, outperforming organizations succeed by:

- Optimizing their mix of innovation more frequently and dramatically
- Embracing more business model innovation, especially its more disruptive forms
- Becoming more open and pursuing more open forms of innovation
- Expanding external partnering to accelerate and extend innovation.



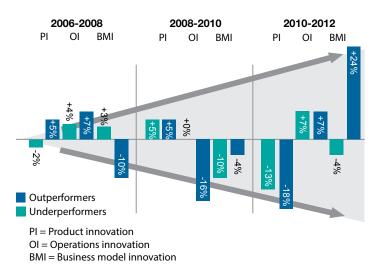
- Innovation mix describes the balance between the different types of innovation – product and service, operations and business models
- Organizations adjust their innovation mix to maximize potential value from innovation

Figure 7: Organizations optimize their innovation mix to balance between product, operations and business model innovation.

### Outperformers optimize the innovation mix more frequently and dramatically

Innovation mix is clearly an important consideration for all organizations, as the previous sections demonstrate. And while all organizations are optimizing their mix more dramatically, outperformers are doing so much more aggressively than underperformers (110 percent more between 2010 and 2012, see Figure 8).<sup>22</sup>

Outperforming organizations adjust their innovation mix substantially more than underperforming organizations



Source: 2006, 2008. 2010, 2012 CEO Studies: "Which of the following areas of innovation are most important to your organization?"

Figure 8: All organizations are optimizing their mix more dramatically – but outperformers adjust more aggressively than underperformers.

Three industries, electronics, metals and mining, and pharmaceuticals provide examples of how high-performing organizations are adjusting their innovation mix to adapt evolving market demands:

- In electronics, consumers are demanding more holistic experiences. Open standards increase product commoditization. Small, crowd-funded companies are becoming competitive threats. Outperformers have responded by building and orchestrating an ecosystem of products and services, sourcing production globally in the most costefficient way and defining user experiences across multiple products and services.<sup>23</sup>
- In pharmaceuticals, generics and product saturation are driving decreased prices. Patent infringements are escalating in emerging markets. In R&D, regulatory pressure is increasing and basic research is becoming more complex. As a result, outperformers are reinventing themselves as a trusted partner in pursuit of individualized health and wellness, moving aggressively into growth markets and expanding multi-channel marketing, alliances and partnerships to improve product development.<sup>24</sup>

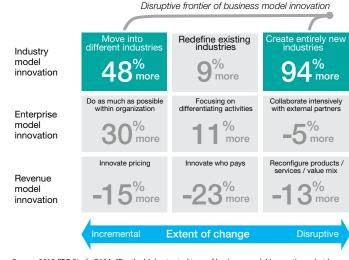
• In metals and mining, costs are inflating and commodity prices are softening. Customers are demanding services beyond product delivery. There is enhanced scrutiny of environmental performance. Top performers in the industry are meeting these challenges by expanding across the customer value chain into new businesses, such as logistics. They are creating smarter supply chains and IT processes that improve coordination across silos. And they are broadening the portfolio from traditional commodity products to services and solutions.<sup>25</sup>

# Embracing more business model innovation, especially its more disruptive forms

The need for business model innovation can be illustrated by examining data from the last three IBM Global CEO studies. From 2008 to 2012, the importance of business model innovation to outperformers increased by 19 percent. In contrast, underperformers reported a 13 percent decrease in business model innovation importance. <sup>26</sup>

Looking deeper into the types of business model innovation that organizations pursue, it's apparent that outperformers are not only engaging in more business model innovation, they are engaging in the more disruptive forms of business model innovation – moving into or creating entirely new industries (see Figure 9).

Outperformers focus on disruptive business model innovation



Source: 2012 CEO Study Q13A: "For the highest-rated type of business model innovation, what key initiatives will you implement over the part 3 to 5 years?"

Figure 9: Outperformers are more disruptive than their peers.

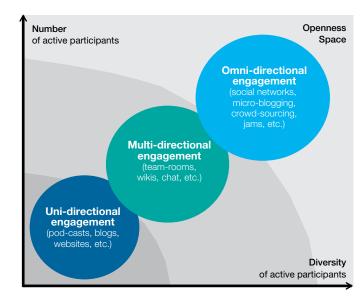
Moving into different industries: IKEA and Swatch are examples of companies that are pursuing highly disruptive types of business model innovation. IKEA is widely known as an innovator in home furnishings, but is now extending its offerings to home construction and hotels.<sup>27</sup> Swatch is a Swiss watch company, but is looking to enter the automotive space by building a hydrogen fuel-cell powered car.<sup>28</sup> Interestingly, this is not the first time Swatch has attempted to enter the auto industry; the company was the original developer of the smart car in the 1990s.<sup>29</sup>

Creating an entirely new industry: a further example of disruption is Medtronic, a medical technology company that is creating an entirely new industry value chain.<sup>30</sup> In India, heart disease is a major issue that impacts many, but diagnostics and treatments are difficult to access and too expensive for many citizens. Leveraging existing products and technologies, Medtronic made diagnostic services available through low-cost electrocardiograms and diagnostic camps in rural villages. Technology allows doctors to perform remote analysis. Also, the company introduced India's first financing plan for medical devices – to make pacemakers more affordable. The net outcome for Medtronic is a 21 percent increase in revenue from growth markets in 2012.<sup>31</sup>

### Becoming more open and pursuing more open forms of innovation

Future innovation will be conducted in less predictable, more open environments. CEOs interviewed for the 2012 IBM Global CEO study corroborate this point.<sup>32</sup> Forty-eight percent of CEOs of outperforming organizations said that organizational openness will be among the top influencers impacting their organizations, compared to 37 percent of underperformers. This openness will necessitate new skills and require enhanced transparency and collaboration. Communication that began with websites and podcasts, for example, has now evolved to the use of real-time chat, Twitter, Facebook and crowd-sourcing. With these tools, organizations not only reach more people, they communicate with more diverse groups of people.

Openness is becoming pervasive, but true openness involves not only opening to more people, but to a diversity of people, as illustrated in Figure 10.



Openness refers to freeing up constraints on collaboration, communication and creativity. It is associated with empowerment of individuals to engage and interact, both inside and outside organizations.

**Number of active participants** refers to the number of people actively engaged in interactions – whether they be internal or external.

**Diversity of active participants** refers to heterogeneity of people actively engaged in interactions – beyond internal employees to customers, partners, the community and others.

 $\it Figure~10: {\it Organizations are progressively opening themselves to both more and different types of people-from both inside and outside.}$ 

Examples of companies embracing openness abound. For example, Lego, the iconic maker of building blocks, responded to declining market share by introducing several operational improvements, rationalizing its product range and identifying new growth opportunities. The company introduced its "Cuusoo" website, where any person or group can submit ideas for future Lego products and receive 1 percent of net sales if the idea is commercialized. Additionally, Lego enabled online interaction between communities and virtual expert development teams, and expanded its focus on direct-to-consumer activities, board games and virtual experiences. The results have been impressive. The 2010 line of build-yourself board games rapidly captured 12.6 percent of the market. In 2011, sales increased by 17 percent, with double-digit growth in almost all markets.<sup>33</sup>

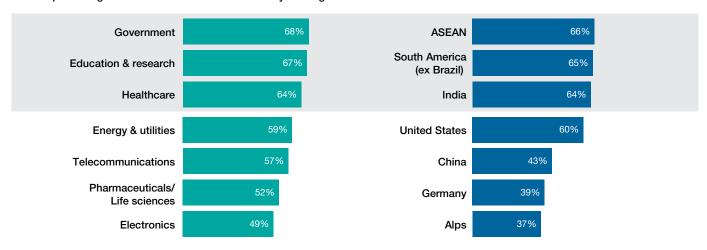
Fidor Bank, founded in 2003, operates in Germany on a branchless model with 25 employees. The company's mission is to provide innovative banking through compelling customer experiences and leading technologies. Fidor's business model emerged from a belief that standard branch banking creates a "them versus us" relationship with the customer. Branches, according to Fidor, do not convey qualifications of advisors

effectively, are limited in their capabilities and have restrictive hours of operation. The company developed a "banking with friends" service – centered on customer interactions through social media and a user-driven experience. Customers and employees can interact online and exchange information and opinions, thereby validating and improving financial decisions. Internet and mobile banking, peer-to-peer lending and virtual money services are available. As a result of these activities, Fidor has grown to more than 17,000 customers and €00m in assets.³⁴

# Outperformers are expanding external partnering to accelerate and extend innovation

CEOs from outperforming organizations are aggressively pursuing new partnering opportunities, especially those that help drive innovation. Since 2008, outperformers have increased partnering by 25 percent. Fifty-nine percent of outperformers are engaging in partnering for the purposes of innovation in 2012, compared to 46 percent of underperforming organizations.<sup>35</sup> Partnering for innovation is becoming particularly prolific in regulated industries and growth markets (see Figure 11).

#### External partnering for innovation varies across industry and region



 $Source: 2012\ CEO\ Study, Bench\ D: "To\ what\ extent\ does\ your\ organization\ collaborate\ and\ partner\ (externally)\ to\ innovate?$ 

Figure 11: Partnering for innovation is becoming particularly prolific in regulated industries and growth markets.

Examples of partnering include Metro Manila, a region of the Philippines, and Brazil, the fifth largest country in the world with a population of over 193 million people, including 60,000,000 children of school age.

In the mid-1990s, Metro Manila's water supply was in disarray, with few areas of the region able to receive water 24 hours a day; clean water was a luxury many could not afford. The Philippine government partnered with two private companies to take over operation of the government-owned Metropolitan Waterworks and Sewage System. A combination of subsidies and payment plans were offered to make water access affordable for low-income communities. The result is that 24-hour access to water is now available to 98 percent of the network. Water and sewage infrastructure has been rehabilitated and clean water is consistently delivered. The infrastructure has improved to the point where water and wastewater services are now being offered to less economically developed areas outside of Metro Manila.<sup>36</sup>

In Brazil, the government turned to large corporations to improve a public education system in which more than 30 percent of students repeated a grade level and 12 percent of 7-to-14 year olds did not attend school. Teacher training was poor, with 24 percent of all teachers reportedly not meeting legal requirements to teach at elementary level. Through the Acorda Brasil program, the Ministry of Education encouraged large corporations and institutions to help improve public schools. GIFE, an association of 80 large corporations, provided for additional training outside school hours. Two large corporations, Pitágoras and Positivo, provided integrated curriculum and textbooks and offered management support and training to the teachers. As a result, by 2010, the overall percentage of 7-to-14 year olds not attending school dropped to 3.1 percent. Youth (age 15-24) literacy in 2009 was 98.1 percent, up from 94.2 percent in 2000 and 83.9 percent in 1980.37

In summary, outperformers approach innovation differently – they are more open and collaborative, they adapt faster and are more disruptive.

- Does the threat of disruption keep you awake at night? Are there disruptive opportunities you want to pursue?
- Has your innovation focus changed over time? Do you consider it one of your strategic levers?
- Is openness impacting your organization? Do you see value in opening up your innovation processes more?
- How important is partnering to you? How do you decide whom to partner with and whom not to?

#### **Implications**

Innovation is not dying; outperformers continue to pursue innovation strategies that create value, differentiation and competitive advantage. Some clear implications emerge.

- 1. Past practices do not assure future success: We are in a dynamic environment in which technology, economics and society are rapidly evolving. Past practices may no longer deliver the acceptable outcomes or value. In a rapidly changing environment, it is crucial that organizations not be myopic do not assume successful innovation in the past provides a template for successful innovation in the future. Identify and pursue productive opportunities irrespective of whether they involve new products, improved efficiencies, enhanced experiences or alternative business models.
- 2. Agility is becoming the currency of leadership: New technologies are making imitation easier, globalization enables competition from anywhere in the world, and convergence means that organizations in previously unrelated industries are becoming competitors. In this environment, the ability to be nimble and responsive to rapid change from multiple sources becomes a critical driver of success. To stay ahead, innovation must be continual always searching, finding and capitalizing on new opportunities.

- 3. Today's unthinkable disruption is tomorrow's "business as usual:" Recent history is littered with examples of organizations that have identified innovative opportunities, but failed to pursue them for fear of cannibalizing existing businesses. These organizations trade off short-term placation against medium-term survival. Don't be afraid to make radical leaps. Look for disruptive opportunities and investigate them impartially. Always ask the question: "If I don't do this, will an existing or new competitor decide to?
- 4. Partners expand the possible: The nature of partnering is changing. Today's competitor is tomorrow's partner. Partners need not be other organizations or institutions; they can be communities of interest, individuals, customer associations or non-profits. Successful partnering extends the capabilities of participating organizations way beyond what would be possible alone opportunities, otherwise unattainable, can be pursued together. Identify common interests and invest in virtual and physical environments to facilitate interaction. A shared culture of cooperation and trust is essential to mutual success.
- 5. Innovation is for everyone: Innovation must become an integral part of everyone's job description. Employees and partners alike should be thinking about better ways of doing things, new opportunities for products and services, different pricing structures and radical shifts in markets and business models. Ideas should be fostered, captured, evaluated and pursued if they prove useful, no matter what the source. Value-generating behaviors should be encouraged and rewarded. In this way, a compelling culture of innovation will emerge, creating a self-sustaining engine of innovation and success.

#### **Next Steps**

### What can an organization do to embrace innovation more systematically?

Innovation should be conceived and embraced holistically and systematically. A comprehensive approach to innovation comprises exploration of the full range of possibilities and then identifies and pursues specific opportunities. Systematic innovation does not occur in the absence of structure and discipline, it requires development of innovation capabilities. Strong and sustainable innovation capabilities result from robust innovation model design:

- An "innovation framework" outlines the fundamental capabilities and assets that organizations must configure to generate and manage innovation.
- An "innovation cycle" represents innovation processes (producing new ideas) that the capabilities must support.
- "Innovation organizational design" comprises structures and functions that support and sustain effective innovation.

#### The innovation framework

The "innovation framework" identifies key innovation capabilities and organizes them into three distinct categories: strategic, managerial and enabling (see Figure 12).

The "innovation agenda" comprises the strategic dimensions of innovation for an organization. It links innovation strategy to the underlying business strategy to ensure that innovation serves overall organizational objectives. The agenda also highlights the innovation mix, necessitating explicit consideration of innovation priorities among product, operations and business model innovation.

Innovation "management and governance" deals with the nuts and bolts of innovation: those things that support the actual process of innovation within organizations. Project and portfolio management, analytics, knowledge management, incentives and rewards, and communications are all essential to managing innovation processes efficiently and delivering desired value from innovation investments.

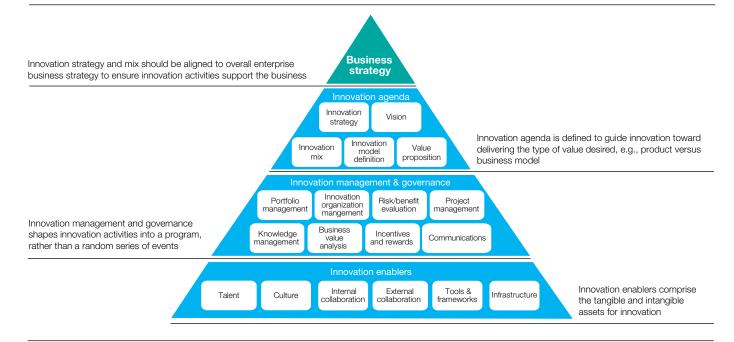


Figure 12: Innovation mix should be defined, aligned to strategy, with managerial and governance mechanisms established to enable and manage innovation processes.

"Innovation enablers" comprise the organizational elements that underpin the practice of innovation and its likely success or failure: the availability of robust talent, receptiveness of organizational culture, internal and external collaboration, tools and frameworks, and infrastructure all influence both the practice and probable outcomes of innovation for good or for ill.

While the actual components of the innovation framework are common across organizations, their specific qualities and application may differ dramatically between organizations. Successful innovation is not conducive to a "one-size-fits-all" philosophy. What succeeds in one organization may fail in another. Industry, region, history and environment all play a part. The innovation framework provides the science. Application of the innovation framework to specific organizations is partly art.

#### The innovation cycle

The "innovation cycle" outlines the sequence and logic of the actual process of innovation within an organization (see Figure 13).

- 1. "Assessment of experience" reflects the need to catalog innovation to date. It assesses the effectiveness of innovation in the past and realistically assesses innovation capabilities within the organization.
- 2. "Sensing and envisioning" involves collecting all the inputs necessary for effective ideation. Building an understanding of trends, developing possible future scenarios, gaining a sense of potential opportunities and identifying disruptive threats are all part of the sensing and envisioning process. All of these inputs combine to form a compelling vision of a possible future that will inform and motivate the ideation phase.

- 3. "Ideation" refers to the creative process that many people associate with innovating. It comprises conceiving and considering provocative ideas things that are new and that might create value for someone for customers, employees, shareholders, or for the world. Ideation also typically involves initial high-level prioritization of ideas so that fuller evaluation efforts can be focused an a subset of the most valuable opportunities.
- **4. "Evaluation"** refers to the analytic and design activities that enable transition from an idea to a concept. Feasibility and market or other forms of value are investigated and assessed into solid rationales or business cases, defining potential value, likely costs and possible risks of new initiatives.
- **5. "Development"** covers the various design activities associated with refinement and implementation of the concept into a fully engineered and deliverable value proposition, be it a product, operational change or business model.
- **6. "Realization"** relates to all the activities that support the communication, promotion and delivery of the innovation. It also refers to harvesting or capturing the innovation benefits whether they be in the form of additional revenues, lower costs or other types of value.

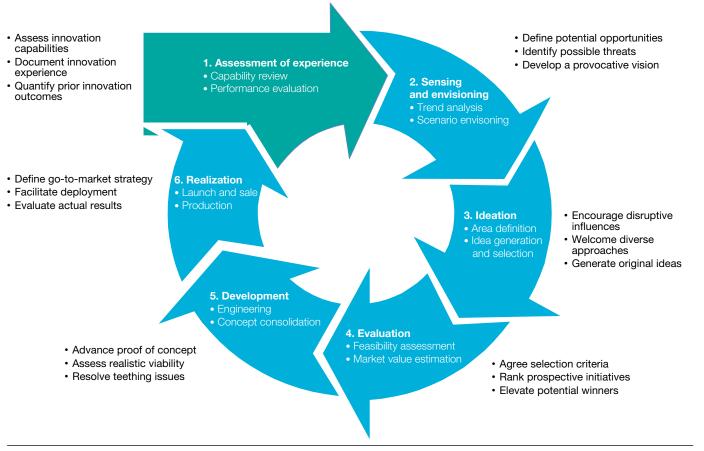


Figure 13: Innovation processes facilitate innovation activities from visioning to ideation to realization – building an engine for continuous innovation.

Finally, we end where we began. "Assessment of experience" highlights the iterative nature of the innovation cycle. In this instance, assessment comprises a systematic review of the value generated from the innovation advanced in the first cycle, lessons learned and capabilities developed. These will, in turn, support the next innovation cycle through a virtuous and continuous cycle.

#### Innovation organizational design

Innovation organizational design reflects how the four fundamental elements of design, (people, process, organization, tools/methodologies) should be aligned (see Figure 14). The principles and patterns that need to be considered are specific to innovation, but should fit seamlessly into the overall design of organizations. The intent is not to create a heavy, resource-intensive shadow model of the organization. Rather, it is to explicitly identify and define specific roles and responsibilities of individuals and functions as they pertain to the effective deployment of innovation across the organization.

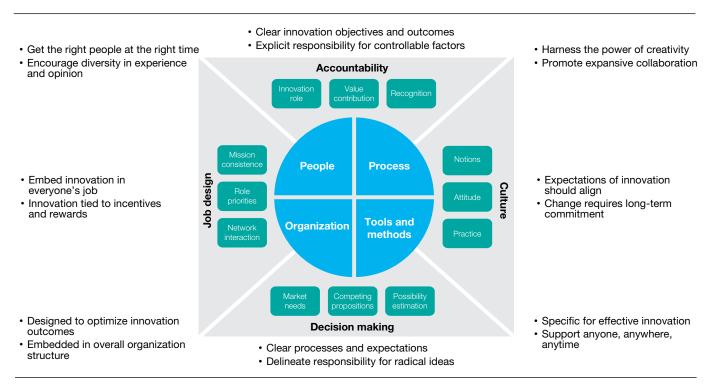


Figure 14: . Innovation should sit within the organization – dedicated innovation roles, functions and processes must be nimble.

Management and coordination mechanisms face significant challenges: they need to support creativity and divergence while at the same time ensuring control; they need to accept the conflict and the possibility of failure, while promoting productivity and value-enhancing outcomes. Accountability, job design, culture and decision making are the four perspectives under which these specificities can be explicitly formulated.

#### Conclusion

Innovation is alive and well in outperforming organizations. Combining product, operational and business model innovation these organizations are thriving in a challenging and complex environment. As today's customers and citizens become ever more empowered and vocal about being served with immediacy according to their individual needs, desires and aspirations, the future will belong to those organizations that use understanding, insight and technology to provide ever-expanding value. Innovation is not what it was in the 1950s. But few things are. Innovation is now more collaborative, open and continuous than ever before, and it continues to change and evolve. With that in mind, business leaders are left with a simple question: are you ready to ignore the doomsayers and extend innovation throughout your organization? If the answer is "yes," you, too, can take your place in the ranks of the new outperformers of the 2010s and beyond.

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