**For the Web:**

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**[head] Building a Winning Business Model Portfolio**

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**For print:**

**[rubric] Create Your Company's Future: Business Model Innovation**

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**THE LEADING QUESTION**

**How can companies achieve high performance from a portfolio of business models?**

**FINDINGS**

Business model diversification can help reduce risk, but implementation is rarely straightforward.

In adding new business models, managers should tap into existing resources to achieve economies of scope.

Executives should examine the interrelationships across their business model portfolio on a regular basis.

**Exhibits: 2**

1. **About the Research**
2. **Analyzing a Business Model Portfolio**

**[main text]** Across many industries, companies are using innovative business models as a basis for competitive advantage.[1] In recent years, for example, we have seen upstarts such as Uber Technologies Inc. and Airbnb Inc. use multisided business models to leverage ordinary resources against established competitors that rely on unique resources.[2] Increasingly, organizations are adopting two or more business models at once.[3] Multiple business models provide companies with a diversification vehicle that enables them to tap into resources and capabilities that aren't available through other means. By definition, a company diversifies into a business model portfolio when it engages in at least two ways of creating and/or monetizing value.[4]

To illustrate how business model diversification can work,[5] consider Netflix Inc. Netflix deployed two distinct business models (DVDs by mail and online streaming) to challenge Blockbuster and other movie rental incumbents.[6] Although its rapid market penetration and growth are indisputable, Netflix did not initially depend on traditional approaches to diversification. In fact, the company offered U.S. customers essentially the same movies through both its DVD by mail and online streaming services, but it offered different subscription prices, a choice of physical versus digital rentals, and value-added services online, including tailored recommendations. Netflix' business model diversification helped it to expand its U.S. market share, which provided a springboard for extensive international expansion as well as an expanded product portfolio that now includes original content.

Although Netflix's success shows how multiple business models can work to make organizations more competitive, such success stories are, more often than not, specific to a particular company's circumstances. However, there can also be industry-wide patterns. When we studied various business model configurations in the Formula One automobile racing industry, we found that certain configurations of business models were associated with higher performance than others. We concluded that the higher-performing business-model configurations generally led to better results because there were complementarities between the two business models chosen that helped companies both learn faster and further develop key business capabilities.[7]

As companies attempt to diversify into portfolios of business models that achieve higher performance than other configurations, they need to match their own resources[8] and capabilities[9] to the external opportunities they face. The goal is to establish a unique bundle of resources and capabilities that can deliver sustainable competitive advantage.

Despite the potential that business model diversification has for generating growth and profit, most companies lack the tools to assess the value of business models in their portfolio or their strategic contributions. In practice, different business models can be in direct conflict with one another, resulting in cannibalization and resource dilution. For example, they may provide offers that are mutually exclusive, or defocus resources from core activities that sustain competitive advantage.

For instance, beginning in the late 1980s, the direct-sales business model of Dell Computer Corp. (now Dell Technologies) fundamentally altered the structure of the personal computer industry. Once Dell's approach was seen as a success, competitors such as IBM, Hewlett-Packard, and Compaq tried to copy it. Unfortunately, the other companies found that pursuing two business models at once undermined their existing competitive advantages. Rather than offering synergies, the direct-sales business model required different assets and new capabilities (such as flexible fabrication lines and the ability to reorganize supply chains) and risked alienating distributors, who represented a core customer base.[10]

## [A-head] The Case for Business Model Diversification

Harvard Business School professor Michael E. Porter has noted that strategic diversification is about combining activities that efficiently relate to and mutually reinforce one another, forming a system of activities, as opposed to a collection of isolated activities.[11] In the process, the strategic fit may increase the value of the individual assets in addition to contributing to competitive advantage and superior profitability.[12] A business model is a system of interdependent organizational activities to create and capture value.[13] Executives need to assess whether there is fit not only *between* the activities underpinning each business model but also *across* multiple business models. In fact, although the fit within a business model's activities can reduce costs or enhance differentiation, the complementarities within a portfolio can further enhance individual activities and create unique and hard-to-imitate resources and capabilities. Indeed, diversified configurations of business models may offer unique opportunities for increased performance.

How can companies assess whether there are advantages to using multiple business models? And when might it make sense to focus on fewer business models rather than more? To develop our understanding of business models, we studied the Formula One auto racing industry, the various businesses operated by Amazon.com Inc., and nearly 50 other companies. (See "**About the Research**.") In this article, we offer a framework built on three core questions:

- What should you consider when thinking about business model diversification?
- In deciding to add a new business model to your portfolio, how can you assess and optimize its value ?
- How should you modify your business model portfolio over time ?

**[C-head] Question 1: What should you consider when thinking about business model diversification?**

When contemplating model diversification, managers should begin by assessing the extent which the business models in the company's portfolio can share resources. By sharing physical assets across business models, companies can enjoy economies of scope and eliminate redundancies. This approach is particularly valuable in capital-intensive and technology-focused industries.[14]

Successful business model diversification can help companies reduce risk. Biopharmaceutical companies provide a good example. Because they operate in highly uncertain environments where the time lag between an investment and the returns can be extremely long, many companies try to limit the risk by tapping into different revenue streams (such as R&D services, royalties, patents, and health care products). What's more, they try to share valuable assets such as financial and knowledge resources across business models, in order to create cross-business synergies.[15]

Another question to consider is whether the additional business model will provide access to valuable assets that can help an existing business. For example, Formula One teams that, in addition to racing, sell advanced components such as engines and gearboxes, to competitors, gain access to valuable data about how those components perform — an intangible resource that can provide insights that allow the teams that sell components to further develop their own technology, win more car races, and sell future engines at higher prices. In such cases, the two business models have positive complementarities.[16]

**[C-head] Question 2: In deciding to add a new business model to your portfolio, how can you assess and optimize its value?**

As attractive as "synergetic" business model diversification may seem, optimizing this approach entails challenges. How can a manager ensure that the company's portfolio of business models will have synergies? Historically, management scholars thought that competitive advantage was mostly based on a company's ability to control valuable, unique, and scarce resources.[17] As a result, many organizations focused their efforts and capital on acquiring and safeguarding what they considered to be "extraordinary assets."

When considering new business models, managers should start by looking for promising opportunities that would tap into existing company resources to achieve economies of scope and greater capacity utilization. The new business models should utilize resources and capabilities that are closely related to some employed by the existing business model or models.[18] However, managers should be careful not to let the costs of acquiring new resources restrict their freedom to develop new products and services.[19]

Indeed, there is a risk that a company's prior investments in valuable resources and capabilities can inhibit its ability to adopt new business models. Consider the case of Nokia Corp., the Finnish technology company. In the early 2000s, Nokia was a global leader in mobile handset manufacturing. Yet its mobile strategy was heavily geared toward controlling strategic and costly resources, as exemplified by its $8.1 billion purchase of Navteq Co., which supplied advanced navigation data. In contrast to Apple Inc., whose versatile iPhone platform took the mobile phone market by storm, Nokia failed to respond well to emerging consumer trends or leverage high-priced acquisitions such as Navteq. Within a relatively short period, it lost its competitive edge in the mobile phone business. In 2012, Microsoft Corp. acquired Nokia's phone and tablet business for less than the amount Nokia had paid to acquire Navteq five years earlier.

Business model diversification enables companies to maximize existing resources while developing capabilities that enhance their value across multiple activities. Therefore, managers should begin by asking: Does my proposed new business model help maximize the use of my current resource base while meeting an important need in the marketplace? If the answer to that question is yes, managers can expect their portfolio to generate cost efficiencies while also providing opportunities for risk reduction through cross-subsidization of the portfolio's interrelated activities.

In 1994, Amazon, for example, started with a single business model: selling books online. By 2016, the company had grown so that it was achieving close to $136 billion in revenue and operated a number of business models. Along the way, Amazon invested heavily in powerful servers and the development of an automated web infrastructure whose sole objective initially was to power its own website's massive traffic. Over the years, Amazon has acquired technological prowess and invaluable expertise in the development of web and data infrastructures; based on this expertise, it offers web services and infrastructure to thousands of companies (including Netflix, Siemens, and Vodafone) and has become one of the leading cloud-computing service providers.[20]

Not only is the ownership of such resources of immense value for Amazon's core e-business activities; it also has value as a stand-alone business model. Indeed, in 2016, Amazon Web Services brought in more than $12 billion in revenues and more than $3 billion in operating income.[21] Although e-commerce still accounts for the majority of Amazon's revenues, Amazon Web Services is a high-performing business unit.

By supporting a variety of business models and ensuring their survival, Amazon enjoys access to other critical resources. For example, with the Amazon Prime membership business model, the company gains access to important user data, promotes its brand, and fuels sales through the e-commerce platform. Resources and capabilities underpinning business models are often inextricably tied to one another, and thus not easily separable. For instance, Amazon Web Services used resource co-deployment to create a new revenue stream. The technological infrastructures and expertise involved are woven into Amazon's technology development capabilities.

When crafting new business models, managers also need to ensure that the models they create will be linked to the company's existing distinctive capabilities and what it does best.

For example, Apple leveraged its superior design and product development capabilities to serve product markets — going over and above PCs — but also capitalized on its exceptional management and marketing capabilities to develop a unique value proposition and customer engagement mechanism: in other words, a business model innovation. This enabled Apple to first disrupt the digital music industry (with iTunes and the iPod) and then reap the benefits of that disruption via the iPhone.

To translate capabilities beyond their current functional boundaries, managers must first delineate the structure of their individual business models' activities. (See "Analyzing a Business Model Portfolio.") This isn't always easy: Existing business models are often tightly intertwined and difficult to describe in isolation. Careful investigation can reveal potent and dynamic cross-business-model linkages, which might suggest new growth opportunities that transcend industry and product market boundaries.

As noted above, Amazon's complementary business models work together in generating mutually reinforcing advantages. Amazon Web Services, for example, helps subsidize the Amazon Prime business model. Prime memberships, in turn, provide Amazon with more customer purchase data, which enhances customer service and the online retail experience. This, in turn, feeds buyer demand, which attracts more sellers, which ensures low-cost products, and so on.

**[C-head] Question 3: How should you modify your business model portfolio over time?**

As appealing as the idea of cross-business-model synergies may seem, implementation is rarely straightforward. The same is true for intra-business-model portfolio complementarities.

Therefore, we think it's critical for managers to regularly examine portfolio synergies critically and granularly.

Consider the logic behind Amazon's technology products business (which has included devices such as the Kindle reader, Kindle Fire, Fire TV, Fire Phone, Dash Button, and Echo). These products are often bundled and sold with access to other Amazon products and services (such as its e-books and Prime subscriptions). However, among the company's business models, some of Amazon's technology products seem to have, in our analysis, the weakest synergies within the portfolio.

As its technological resources grew, Amazon thought it was gaining new capabilities it could apply to the development of technologies that complemented its online retail activities. In reality, though, Amazon's business model diversification into electronics manufacturing only partially leverages the company's distinctive capabilities in the areas of online platform and big data management. The latter areas are, in fact, quite different from hardware technological development in consumer electronics, since they also include hardware design, which needs to respond to changing consumer tastes and overcome established customer loyalties. Amazon products often compete directly with products offered by other suppliers, and some of Amazon's products have fallen short of expectations. For example, Amazon launched its Fire Phone in 2014. But due to poor response from consumers, the company reduced the price to just 99 cents with a two-year contract, and it discontinued the product in 2015.

However, Amazon has recently taken steps to increase the synergies between its consumer products and the rest of its business. In launching Amazon AI, a set of cloud-based artificial intelligence services, in fall 2016, the company has sought to leverage the artificial intelligence technology behind its Echo devices and Alexa personal assistant software.[22]

In general, executives need to examine the interrelationships across their business model portfolio rigorously and on a regular basis. Like other forms of corporate diversification, business model diversification does not always generate superior performance. In settings where a business model isn't generating the synergies that were envisioned, managers shouldn't be afraid to improve, streamline, or divest from business models in the portfolio, to focus on and bolster the activities that are strategically optimal.

The primary purpose of a business is to drive growth and performance while generating value for customers. Although it's common for managers to focus on financial performance, good managers seek to exploit new opportunities to create additional value, such as cross-selling, differentiation, reputation, user data, and capability development. Managed wisely, business model diversification can help executives improve performance and advance the purpose of the enterprise.

### Exhibit 1 : About the Research

This article draws extensively on our research with our colleague Santi Furnari on the Formula One racing industry, in which companies typically use multiple business models to maximize their racing success and financial performance. Our more general insights about business model portfolio diversification are based on research conducted in collaboration with Charles Baden-Fuller, Mary Morgan, Alessandro Giudici, and Alessandro Rossi; this involved a large classification project that analyzed more than 50 companies engaging with innovative business models across various industries (for more information, see businessmodelzoo.com.)

In addition, we looked at the business models that Amazon.com adopted between 1995 and 2016. We followed a multistep process to construct a database containing longitudinal information on Amazon's business models and financial performance. First, we collected data from a broad range of publicly available sources. Then, we analyzed Amazon's business model elements on four dimensions: customer sensing (the number of customer groups), customer engagement (the value proposition for each customer group), value chain and linkages (the network of actors through which the product/service is delivered to customers), and monetization mechanisms (pricing and complementary assets).[i] The analysis enabled us to identify seven distinct business models and to qualitatively examine the synergies. We substantiated this research by building on existing literature to identify iconic cases of business model diversification.

**Exhibit 2:**

**Analyzing a Business Model Portfolio**

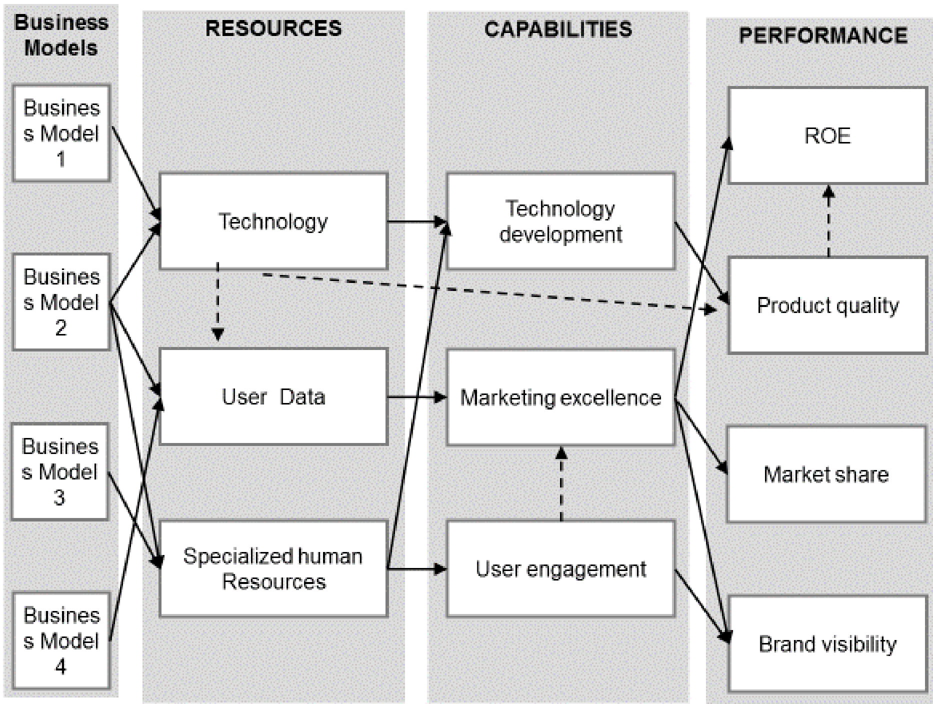
Business model portfolios encompass multiple activities that are sometimes difficult to disentangle and analyze. To maximize the complementarity across a business model portfolio, it is important to identify the relationships between the different business models' resources and capabilities, and their impact on performance. We developed this visualization tool to map such critical connections. We used it when analyzing the business model complementarities of several companies in our research. The diagram below shows a sample analysis for a hypothetical company with four business models.

To visualize the complementarities in your own business model portfolio, follow these steps.

1. List your company's business models in a column on the far left.
2. For each business model, identify the key resources it generates (for example, financial resources, user data, highly skilled human resources, or new technologies). Place them in the second column from the left. Label that column "Resources."
3. For each business model, identify the key capabilities that stem from it (for example, technological capabilities, sales capabilities, new product development capabilities, or communication capabilities) and place them in a "Capabilities" column, to the right of the "Resources" column.
4. Identify one or more performance measures important to your organization. These can be financial measures (such as return on equity or return on investment), market-driven measures (such as market share or number of users), or other types of measures (such as product quality). Place them in a "Performance" column on the far right.
5. Now use solid arrows to connect each business model to its associated resources and capabilities and, ultimately, to performance. Think about the mechanisms that

underpin such relationships. You can use thicker lines to identify the most strategic ones.

6. Resources are often bundled with other resources, as are capabilities. Use dotted arrows to identify resources that are related to other resources. For example, amassing user data create opportunities to monetize and thus increase financial resources. These in turn can be invested to improve a user interface.
7. Then analyze: Which business models produce fewer (or less valuable) resources and capabilities? Which business models (as well as their resources and capabilities) display fewer synergies with the others? How strong is their relationship to performance measures? You might want to consider how to strengthen the weakest ties, create new synergies, or—if that is not doable—possibly drop less-embedded business models to focus on the more complementary ones.
8. Business model portfolios are dynamic as the activities they underpin. Update your model portfolio chart periodically, to make sure your business model portfolio is always maximized. Use the tool to analyze the potential introduction of new business models to the portfolio.

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[12] Ibid. Porter argues that “fit locks out imitators by creating a chain that is as strong as its strongest link.”

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