



DIRECTING DIGITAL INNOVATION TO MAXIMIZE BUSINESS IMPACT AT PEPSICO

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Is digital innovation delivering real bottom-line business impact to your firm? Too often we see firms generate an abundance of innovation activity, experiments, prototypes, and spin-outs—only to struggle with having these ideas sponsored, integrated, and scaled. In this briefing, we share learnings on how to direct digital innovation to maximize business impact.

The stakes are high. We examined the financial results of over seventy large companies recognized as the world's most innovative.²

Top-performing firms direct innovation efforts to areas of greatest impact and priority, then lift and scale the resulting innovations across the firm.

Compared with their industries' averages, top performers had higher net margins (+11.8%), better ROI (+5.7%), and increased revenue growth (+17.1%). It's no small wonder CEOs are rating

innovation as one of their top priorities.³ The pressure is on throughout

all firms to be more innovative—and one the hottest areas of innovation is digital innovation.

A lot has been written on what it takes to get digital innovation right. Aspects for consideration include process, culture, teams, partnering, and

technology.⁴ In our research this year, which included case studies of fifteen digitally innovative firms, we identify one other characteristic. Rather than just collecting ideas across the firm and “letting a thousand flowers bloom,” these top-performing firms direct their innovation efforts to the areas of greatest impact and business priority. They then lift and scale the resulting innovations across the firm.

PepsiCo—A Digitally Innovative Company

Take PepsiCo, Inc., a global food and beverage leader with \$65B in revenues and more than 22 billion-dollar brands such as LAY'S, Tropicana, and Gatorade. PepsiCo is regularly recognized to be among the top innovative firms in the world and has a spectacular five-year growth rate—10.7% versus the industry average of 2.3%.⁵

We consider PepsiCo to be a digitally innovative firm because it applies digitization to every part of the business, including:

1. **Products and Services:** While PepsiCo is primarily a physical products company, it also wraps digital services around its products. For example, PepsiCo's Touch Tower™, a digital fountain, can dispense over one hundred different flavors of drinks from a benchtop unit with a touch screen. Digital services allow PepsiCo to advertise, run loyalty programs, collect and analyze real-time data, and conduct A/B testing of new products.

¹ We gratefully acknowledge BCG's collaboration throughout this research, and in particular Stuart Scantlebury, Senior Advisor, and Benjamin Rehberg, Principal.

² Source: Seventy-three recognized innovative global companies >\$2B annual revenues, consolidated from the [2012 InformationWeek 500](#) Report, accessed in May 2013; *Forbes* magazine's list of the “[World's Most Innovative Companies of 2012](#),” accessed in May 2013; the Thomson Reuters [2012 Top 100 Global Innovators](#) list; and the *Fast Company* “[World's 50 Most Innovative Companies](#)” in 2012. Six out of the seventy-nine did not have complete data. Industry averages were retrieved using the primary NAICS industry of the company in Hoovers. Analysis conducted by Deepak Mohan, MIT Fellow, MIT System Design and Management 2013.

³ 2012 conference board survey of 776 CEOs, <http://www.mbc.com.ph/engine/wp-content/uploads/2012/02/2012-03-13-Bart-Van-Ark-Risky-Business-Focus-on-Innovation-and-Talent-in-a-Volatile-World-Part-2.pdf>

⁴ G. Westerman and K. Gundersen, “[Build Innovative Capability Through an Innovation Team](#),” MIT Sloan CISR Research Briefing, Vol. IX, No. 6, June 2009; G. Westerman, “[Meeting the Challenge of Innovation](#),” MIT Sloan CISR Research Briefing, Vol. VIII, No. 2D, June 2008.

⁵ <http://www.reuters.com/finance/stocks/financialHighlights?symbol=PEP>

2. **Processes:** PepsiCo relies on efficient core processes, including merchandising and distribution, which are supported by traditional enabling processes such as finance and sales. One digital process innovation is an iPad app—*Facts on Demand*—that shows store sales performance of PepsiCo products at any time. The app is location based so that, during a visit, a salesperson can compare a store's sales with others' nearby and show the results to the store manager.
3. **Customer Experience:** PepsiCo is also changing the way it interacts with customers via its interactive social vending machine. Customers can buy products, collect loyalty points, and even send gifts via email or their social media profiles, while PepsiCo learns about its customers, their locations, and their connections.
4. **Strategy:** PepsiCo is continually exploring new business models and ecosystems, in particular in technology, media, and communications. For example, the company was an official launch partner for iTunes Radio.

PepsiCo has consistently leveraged music as a growth driver for our brands. We believe that today's music ecosystem allows our brands to play a more active role in supporting artists and engaging music fans. —Frank Cooper, Chief Marketing Officer, Global Consumer Engagement, PepsiCo

These examples show that for PepsiCo, digital innovation is not about a standalone digital product or a separate digital business. Digital innovation is practiced in every part of the business, and it is impacting the bottom line.

Directing IT Innovation at PepsiCo

To achieve this kind of innovation, PepsiCo has many R&D centers and

The biggest challenge is getting to the right problem to solve. We have found that is a significant effort in itself.

—David Bernard

centers of excellence around the world. A key one is the Digital Innovation Center, located within PepsiCo's IT function, that focuses on identifying

breakthrough and emerging opportunities that have the biggest impact on PepsiCo's growth.

Within the IT function, the Business and Information Solution (BIS) innovation team, led by David Bernard, PepsiCo's Global Innovation Strategy and Services Leader, is responsible for identifying breakthrough and emerging opportunities that could have a significant impact on PepsiCo's growth.

At the start of each annual business planning process, the team starts by partnering with business unit CIOs and line managers to identify strategic business capabilities—high-impact, long-term opportunities with potential to create competitive advantage for PepsiCo. These opportunities are referred to as “leverage points.” In 2013 these included product and lifecycle management, insights and advanced analytics solutions, and merchandising.

Next, the innovation team evaluates points of opportunity in each unit to identify two to three “sticky business challenges,” or challenges that it has not overcome on its own by traditional means. Then the team looks at emerging technology (such as social media, sensors, advanced analytics, security, cloud, and customer-centric design) to facilitate the selection of a small number of challenges it can help solve.

In short, the BIS innovation team applies significant effort to find high-priority problems, directing innovation to where it can deliver the greatest impact, now and in the long term.

To implement innovations, PepsiCo operates a portfolio of initiatives spanning three “Horizons.” Horizon 1 is for initiatives where the company understands both the problem and the solution, such as the augmented reality example above. The team runs the full process through into business case and implementation. Horizon 2 is for initiatives where the problem is understood, but the solution is not known. In these cases, the team creates experiments and prototypes, often involving partners to pitch ideas around the specific problem. Horizon 3 is for areas where PepsiCo doesn't yet understand either the problem or opportunity, and around which the team may do some preliminary research and evaluation of new technologies. Initiatives flow between horizons over time.

PepsiCo continues to evolve and mature its innovation capability as it looks to new opportunities and partnerships to help scale its efforts. Key objectives of the innovation center are stronger engagement, and collaboration and active sharing of knowledge, ideas, and processes across PepsiCo. By directing innovation to key areas of high priority and impact, it is increasingly being built into business strategy and plans across the organization.

Flipping the Switch on Innovation

Too often, in their rush to be innovative, firms end up generating hundreds of ideas across the business—by innovation platforms or competitions, for example. This then requires a mammoth ongoing process to select, prioritize, fund, stage gate, and evaluate the ideas. Even when an idea is selected, there are few guarantees that the

solution will significantly impact business strategy and that it will fit within agreed upon priorities.

But rather than starting with a bunch of ideas (“letting a thousand flowers bloom”), PepsiCo and other innovative firms we have studied employ a different approach: they flip the innovation process to first define high-priority problems where innovative solutions could deliver maximum impact. While they still use many of the same processes to innovate, these firms start at a different point (see figure 1).

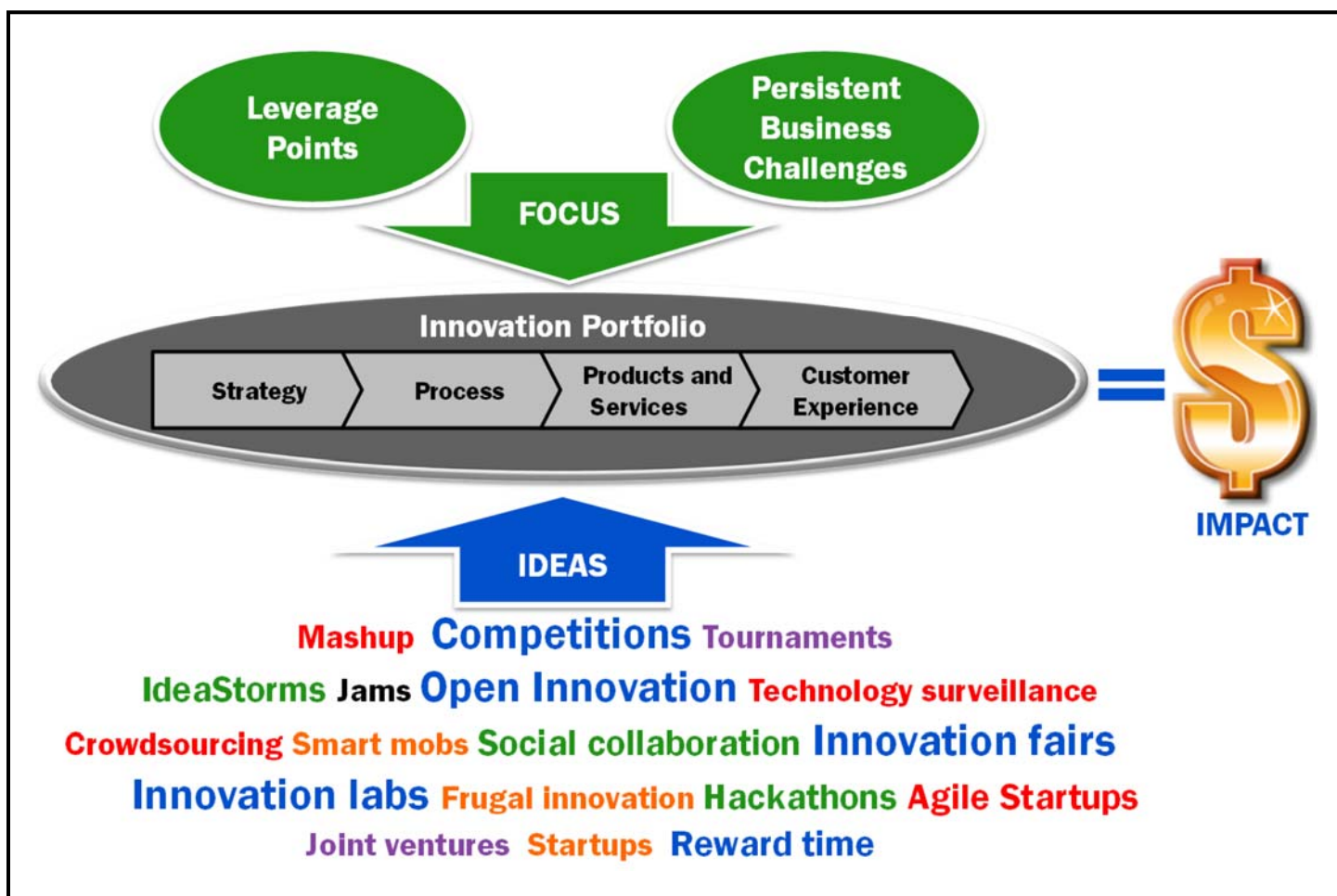
Maximize Your Impact from Digital Innovation

There is a lot of pressure to be more innovative, particularly by exploiting digital opportunities. Directing digital innovation to target your firm’s areas of highest priority and impact is one way of focusing your efforts and delivering real bottom-line impact.

Not all firms are at the stage of PepsiCo. To maximize the business impact from your digital innovation efforts, consider:

1. What are your firm’s highest-priority problems to which innovative solutions could deliver the greatest impact?
2. Where should you initially focus innovation efforts across the business—strategy, processes, products and services, or customer experience?
3. What is your process to lift and scale your successes across the firm?

Figure 1: Focusing Innovation on the Areas of Highest Priority and Maximum Impact



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