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FOUR STEPS TO MAXIMIZE YOUR INNOVATION POTENTIAL

To utilize the full innovation potential of the supply chain, companies need a strategic approach to deal with the obstacles to new product success. Here is a four-step approach to better utilize your innovation potential.

BY CONSTANTIN BRACHTENDORF, STEFAN KURPJUWEIT AND STEPHAN M. WAGNER

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Not every new product is a homerun like the iPhone. Some are underperformers like the 3-D television, or, worse yet, complete flops like the Samsung Galaxy Note 7.

Meanwhile, the number of new products is ever increasing as their life cycles decline. It was only a matter of months between Samsung's complete withdrawal of the 7 and the grand introduction of the 8, which was quickly billed by pundits as more than enough to make people forget about its predecessor.

On a broader scale, between 1997 and 2012, product life cycles of fast moving consumer goods fell by 46% while the number of products increased 62%. In the same time period, the chemical industry's new product introductions increased 313% while product life cycles fell 37%.

Furthermore, the complexity of developing products has increased. Just ask Samsung. Manufacturing firms

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require a wide range of competencies in fields such as mechanical engineering, electronics, and information technology to develop new products. However, not all companies are created equal in these and other regards, and sometimes it is tough to recognize these gaps.

Regardless, all companies must chase consumers' rapidly shifting needs and desires and deliver the right products. The question is how do some companies get new products right and others not so much or not at all?

Today's leading companies combine internal and external sources of knowledge to develop new products and proactively search for innovative ideas outside their organizational boundaries. They initiate R&D alliances within or across partners and industries, collect ideas for new products from their customers, and encourage suppliers to share their innovative technologies with them.

BMW, for instance, initiated an R&D collaboration to develop a new in-car control system for its 7-series. The necessary know-how was not available internally. The automaker contacted Immersion, a developer of touch feedback technologies, early in the R&D process, and

jointly developed a radically new integrated control system called iDrive.

While such collaboration is not uncommon, neither is it standard practice. Many firms have no established process in place to encourage suppliers to proactively share their innovative ideas. Furthermore, many companies don't realize that the power to build on such collaborations rests in the procurement department. As a result, the full innovation potential of many firms' supply chains remains hidden.

In fact, many firms are unaware of their suppliers' capabilities and technological know-how. Suppliers, in contrast, do not know what their customers actually need or who within the buying firm's organization to ask. In addition, the culture within the buying firm sometimes impedes acceptance of external innovation.

To utilize the full innovation potential of the supply chain, companies need a strategic approach to deal with these obstacles to new product success. Based on interviews with buying firms and suppliers from various industries, we developed a four-step approach to better utilize your innovation potential. They are:

- 1** build an innovation path;
- 2** communicate your needs;
- 3** become the partner of choice; and
- 4** establish innovation partnerships.

Using this four-step approach changes the game for procurement managers in new product innovation because it requires them take on a new role. They must assume strategic responsibilities with regard to innovation and product development instead of being solely operational buyers. Our research has shown that shift is essential to raising the bar in innovation and management of new product development.

Step 1 Build an innovation path

We started by asking: What is the greatest obstacle to sharing innovative ideas and products across companies? The answer turned out to be fairly simple: difficulty in identifying the appropriate contact person.

One expert explains: "[The supplier] either has

a contact person in the engineering department or a contact person in the purchasing department. If not, the supplier is in a situation in which he has to ask his way through the company ... to know which employee is working on which project...that's impossible for an external supplier."

This becomes even more problematic as the size and complexity of the buying firm increases. At large and diversified conglomerates it is difficult even for long-term suppliers to get access to the right person. Even their direct contacts in the procurement department often do not know the responsibilities and needs of their colleagues in other business units. Moreover, few employees have personal incentives to forward innovative ideas to other departments.

As a result, even if an innovative idea gets through the door, it often gets lost inside the organization. Clearly, buying firms must establish processes that facilitate the information flow into and within their organization to elevate the visibility of innovative ideas from suppliers.

To get this done, firms should establish an "innovation hub" within the purchasing department that serves as an intermediary between suppliers and all internal stakeholders (see Figure 1).

Suppliers (or other firms) that lack the appropriate contact person inside a buying firm can submit their innovative idea directly to the Innovation Hub. After an initial assessment, the hub's experts contact potentially interested departments and facilitate the collaboration between supplier and the R&D team.

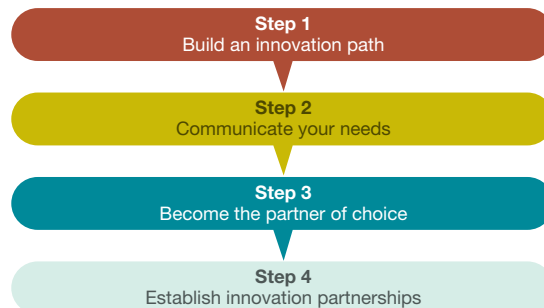
German automotive supplier Bosch, for instance, uses a Web-based interface that allows suppliers and other firms to pitch their innovative products. A dedicated innovation hub that establishes the contacts to relevant R&D departments screens these proposals. To function effectively, the hub's experts must be qualified to evaluate a broad range of technical innovations and know how to advance ideas through their organization.

The success of an innovation hub is not only contingent on its experts, however. It also requires an open culture toward external ideas within the entire organization and—in particular—the R&D department.

An open innovation culture is not built overnight.

FIGURE 1

The four-step approach



Source: Authors

It is a long process to convince a critical mass of people that external innovations are as valuable as internal innovations. Top management must communicate the new innovation strategy and incentive schemes. And the R&D staff should make no distinction between external and internal ideas to avoid a not-invented-here syndrome.

As another interviewee says: "[The contact person] has to convince internal decision makers that it was actually his idea and that he was the one initiating the cooperation with the supplier" in order to personally benefit from external ideas. Our findings emphasize the importance of committed contacts within the buyers' organization. If the contact person can personally benefit and make the supplier's innovation his own project, the odds for a successful R&D collaboration are high.

Step 2 Communicate your needs

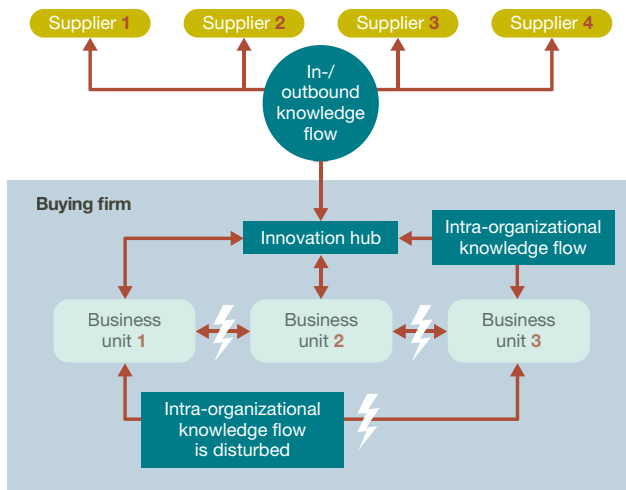
With the process in place, companies should develop a best-in-class supplier innovation model. An innovation hub cannot guarantee, by its mere existence, that proposed ideas are valuable to the firm. However, certain companies have an advantage at advancing ideas if they are already recognized as innovators or account for large purchase volumes. They can influence what innovations are proposed to them and even what kind of development activities are prioritized by their suppliers.

In addition, our findings suggest that many suppliers struggle to understand what their customers

actually need. To avoid developing products that do not meet market needs, companies need to know up front their (potential) customers' technological requirements and focus areas. As one interviewee puts it: "the worm has to be tasty for the fish, not for the fisherman."

FIGURE 2

Supply chain partnerships



Source: Authors

Today, suppliers rely on their personal network for this kind of information. "Everything happens through personal relationships," one interviewee remarks.

To counter this, some non-suppliers try to gain a foothold through aggressive pricing strategies. For instance, one expert says: "Some suppliers offer us products at very competitive prices. They don't do that to sell these particular products—they just want to establish a relationship with us. They want to use this relationship to get access to information and they expect to generate high profits through future products based on that information."

This statement exemplifies the value of strong, personal networks as resources for suppliers. It also says that buying firms lose an enormous innovation potential if they do not communicate their needs to all external stakeholders—suppliers and non-suppliers, alike.

Informing outsiders about what the company needs and focuses on goes beyond the traditional demand-pull mechanism of innovation where pre-

cisely specified development tasks are outsourced to suppliers. Firms should communicate relatively broad objectives to allow suppliers to come up with their own solutions.

One interviewee explains: "We don't pull, we orchestrate... we don't have the answer, we have the brief. The brief is: I want this product with 50% of the costs but I don't know how. I am not prescriptive... we are welcoming ideas." In addition, buying firms should inform suppliers about current R&D projects or give them access to technology roadmaps on a regular basis.

This is where innovation hubs become so valuable. Not only can they gather incoming innovation proposals, but they also communicate their firm's technological focus areas and innovation strategy. However, to inform (potential) suppliers about technological needs is most effective with a multi-channel approach. Some firms choose to communicate through their Websites to reach a broad audience, while others invite selected suppliers to supplier innovation days or special topic forums about the firms' current R&D focus.

Swiss-based Bühler Group, for instance, a manufacturer of food-processing machinery, invites selected suppliers to discuss technological opportunities during their annual "Supplier Excellence Days." French pharmaceutical firm Sanofi held a special topic forum, the "Excipients Innovation Days," in 2014 to stimulate supplier innovations with regard to solid dosage form.

Step 3 Become the partner of choice

It is important to realize that firms compete not only for customers but also for suppliers—more explicitly, for suppliers' best products, services and innovations.

High-quality suppliers do not necessarily offer the best products or services to all their customers. Similarly, they are selective in sharing their best ideas and innovations with customers. It is important to be perceived as the partner of choice by suppliers because "suppliers offer their innovations to their

friends. They go to their preferred customers,” says one interviewee.

In fact, a substantial research effort in the field of supply chain management is devoted to the ways that firms can position themselves as attractive customers. Naturally, suppliers are looking for profits, and the potential sales volume to a customer is the most obvious indicator for that. However, this is not the only motivation for a supplier to consider one buying firm a preferred customer.

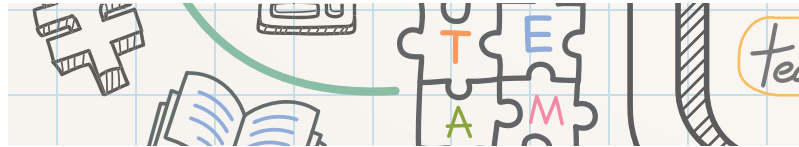
Our findings show that, in particular when sharing innovative ideas with customers, other factors are more important. Suppliers will select customers with whom they expect their efforts to pay off. These are the customers that support development and commercialization of an idea with their expertise and that treat their suppliers fairly.

One interviewee explains: “You are not going to someone who sells the most, but you go to someone who makes it happen. That is why size is not important.” For these customers, suppliers are willing to go the extra mile.

A great example of this observation is Toyota, which was significantly smaller in the United States than GM, Ford and Chrysler at the beginning of the century. Nevertheless, the U.S. branch of Toyota was a highly attractive customer for U.S. suppliers. Quite simply, Toyota used its lean management expertise to help suppliers improve their productivity without pushing down prices in upcoming negotiations—an unusual habit among car manufacturers. As a result, Toyota gained competitive advantages with regard to higher quality and improved delivery performance.

Our findings show that such a fair and collaborative approach also endorses the sharing of early stage innovations with customers. According to our findings, the most important reason why suppliers hesitate to share early stage innovations is their fear “that competitors will find out about their plans and strategic moves” and suppliers lose their intellectual property. Some interviewees even reported incidents where customers had stolen ideas and registered patents themselves.

Buying firms must refrain from such actions regardless of how attractive early stage innovations are to them. At this stage, the final outcome of an innovative idea can be easily tailored to the buying



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firm’s requirements, allowing the buying firm to gain a competitive advantage.

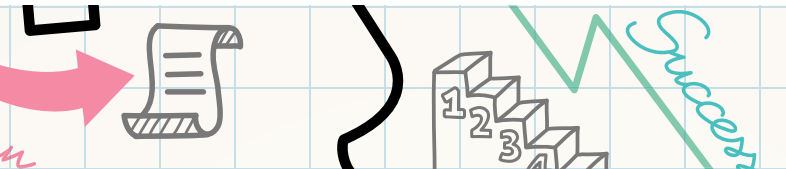
It is important to recognize that most suppliers are not willing to accept exclusivity agreements when they jointly develop products with customers. These contracts typically impede scale up of production, which would drive down production costs and prices in the future. However, an exclusivity contract might not be necessary if the innovation is already tailored to one customer.

Step 4 Establish innovation partnerships

The final step in the development of a best-in-class supplier innovation model is institutionalization of knowledge sharing and establishment of continuous collaboration techniques between equal supply chain partners. This enables collaboration partners to benefit from the innovations and benefit from the best tailored solutions to their problems. It is worth noting that this step goes beyond merely tapping the existing knowledge of suppliers. It also creates an innovative environment that facilitates the collaborative generation of innovations.

Bringing together a diverse set of experiences and know-how from different partners can substantially increase innovativeness. In fact, research design firms that develop new products for different industries, such as Silicon Valley-based IDEO (known for invention of the first Apple computer mouse), rely on their employees' diverse set of academic backgrounds and

Dedicated partnership programs facilitate the exchange of ideas and close collaboration. Through these programs, buying firms can position themselves as the preferred customer for their suppliers: "The goal of Partner to Win is to become the customer of choice," says the chief supply chain officer of Unilever.



industry experiences to combine and transform existing knowledge into new products.

A prime example of collaborative innovation is the multinational, fast-moving consumer goods manufacturer Unilever. In 2011, the company launched its Partner to Win (P2W) program to forge strong partnerships with selected suppliers. Among other concerns, an integral objective of this program was to team up with Unilever's most innovative suppliers and generate innovations collaboratively. Unilever realized that "we need to work closely with our suppliers in order to have best-in-class capabilities, sustainable practices and innovation," according to the company's CEO. Unilever now selects the most innovative companies within its supply chain. Even indirect suppliers or start-ups are selected for the program with great success. Today, Unilever reports that 69% of its innovations come from partnerships with suppliers.

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exchange of ideas and close collaboration. Through these programs, buying firms can position themselves as the preferred customer for their suppliers: "The goal of Partner to Win is to become the customer of choice," says the chief supply chain officer of Unilever.

Actually, the program goes much further. It comprises three distinct components to fully utilize the innovation potential of Unilever's supply chain:

1 Exclusive access to key decision makers in R&D, procurement and marketing departments.

Within P2W, suppliers receive preferential treatment and exclusive access to different departments such as R&D, procurement and marketing on a regular basis. This aligns expectations and objectives of the collaboration. Moreover, market requirements and the buying firm's needs are openly shared with the suppliers.

At this point, the marketing team plays an important role for consumer goods manufacturers such as Unilever because they have to convey the brand message of its products. For instance, it is the sound of the chocolate crack that defines the customer experience for Unilever's Magnum ice cream bars.

It is important for chocolate manufacturers to be aware of this when working on their formulation. In addition, Unilever holds regular events to present their vision of the "perfect product," encouraging suppliers to shift their development efforts in these directions.

Access to R&D teams is equally important to understand technological needs and specify the interfaces of the customer's product. Overall, "based on their proximity ... [these suppliers] are in the best position to propose solutions to the business," says Unilever.

2 Co-location and preferred access to internal resources.

Many suppliers, particularly smaller ones, substantially benefit from preferential access to the buying firm's internal resources. Our research shows that suppliers most importantly require means to test their prototypes under real-life conditions, a problem buying firms can easily support. Unilever goes as far

as letting suppliers use their offices and labs, facilitating the exchange of expertise and deepens the collaboration. In addition, Unilever is more likely to contribute to joint R&D projects with financial resources when suppliers are in the P2W program.

3 Establish a true network of supply chain partners. To combine diverse expertise in a new product collaboration, it is important to build a network of supply chain partners rather than several dyadic buyer-supplier relationships. Only when suppliers know each other and share their expertise can they collaboratively generate innovations.

In most cases, Unilever initiates such collaborations by bringing suppliers together. For instance, Unilever facilitated the collaboration of the MIT spinoff MuCell Extrusion and ALPLA, a supplier for extrusion molded plastic bottles, through P2W.

MuCell invented a technology that injected atmospheric gas into extrusion molded plastics. Together with ALPLA, they developed plastic bottles for Unilever's cosmetics products that needed 15% less material, improving the firms' ecological footprint and reducing material costs.

When several suppliers contribute to one product—which is generally the case—it is important for them to coordinate with each other as early as possible, ideally at the so-called fuzzy front end of the innovation process.

One interviewee responsible for the P2W program at Unilever explains: “When you are developing a new product formula, compatibility tests with packaging need to be done upstream at the very early stages to avoid non compatibility issues later in the process and a delayed product launch.”

Initially, the Unilever's P2W program was set up as a hub-and-spoke network. Unilever was the hub connecting different suppliers with each other. To facilitate the knowledge sharing between suppliers even further and increase the development speed, this approach was replaced by a true network perspective that lets suppliers know each other and speak with each other directly.

The interviewee explains: “Now the idea is to have



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the two people, the pack person and the formula person work together very upstream ... so you don't have this problem anymore.” To make this work, there must be aligned objectives and clear guidelines of what information can be shared. If done properly, such an approach has the potential to substantially improve development speed and innovation output.

Pulling it all together

As our interviews showed, buying companies can greatly benefit from the technological know-how and innovations of their suppliers. Making this happen, however, is not a casual process or event.

It requires development of an innovation path including creation of an innovation hub. Improved communications are also essential to positive outcomes. Essential here is improved information sharing with suppliers to identify new opportunities and communicate these to all involved. A best-in-class supplier innovation model should additionally focus on developing partners of choice, connecting different suppliers and emphasizing collaborative innovation partnerships.

Aside from the process, there is also the matter of the key drivers of such programs. Procurement departments are ideally positioned to coordinate and manage of innovation across companies and industries. By taking on this more strategic role, procurement also positions the company for greater success as new product introductions steadily increase and their life cycles shrink. ∞∞