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Organizing R&D for the Future

A brief discussion of how many R&D organizations have failed to master the vital art of collaboration, and what can be done about it, by Marla M. Capozzi, Peet Van Biljon and Jim Williams

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Organizing R&D for the Future

Though it's vital to their futures, the art of collaboration is one that many research and development organizations have yet to master.

BY MARLA M. CAPOZZI, PEET VAN BILJON AND JIM WILLIAMS

Executives from around the world agree that research and development is a global effort requiring collaboration. Yet many say their organizations must improve in this area — evolving from the predominantly centralized approach that's prevalent today — to meet strategic goals. In other words, for today's R&D organizations, there is a significant gap between knowing what to do and actually doing it.

In a 2012 McKinsey survey on R&D, we surveyed 1,283 executives representing a range of regions, industries, functional specialties, tenures and company sizes. (Note: To adjust for differences in response rates in different countries, the data were weighted by the contribution of each respondent's nation to global GDP.) A vast majority of the executives surveyed — 80% — believed that the best way organizations can position themselves to meet goals is by establishing satellite units that operate — and collaborate — as a network. But only 63% of respondents said that their R&D organizations already include satellites.

Executives' responses on the current state of R&D depict an increasingly global reality that is at odds with today's organizational structures. Specifically, a plurality of respondents — 37% — said their current R&D organizations consist of a central function in a single location. To meet their collaborative goals in the next three to five years, more than half of respondents acknowledged that their organizations *should* employ a more decentralized model.

This overall preference for moving away from centralization reflects the reality on the ground: 38% of executives said their companies plan to increase offshoring of their global R&D activities. While there has been much recent discussion of companies bringing manufacturing activities and processes closer to home (to increase operating flexibility, for example), our results suggest that for many R&D organizations, the offshoring trend continues. In fact, just 18% of respondents said their companies' "onshoring" of global R&D functions and processes will increase in the next three to five years, and only 24% said the same about "nearshoring" (bringing functions and processes closer to the company's home base).

The Value — and Challenge — of Collaboration

Nevertheless, for the time being, collaboration is an art that many R&D organizations have yet to master. Of the executives responding to this question, less than half said their central functions and satellites collaborate very or extremely effectively. And less than one-quarter said the same about satellite-to-satellite collaboration — a requirement of the very model many want to move toward. If there's a silver lining to these answers, it's this: Respondents at larger organizations with at least six different R&D sites are the likeliest to say their satellites collaborate effectively. In our view, this suggests that structural moves away from the center may be the push for organizations to improve internal cooperation.

We asked survey respondents which capabilities were most important for fostering successful collaboration. Respondents most often identified collaborative mind-sets and greater transparency on R&D strategy as important capabilities for collaboration. Improved talent management also ranked highly among those respondents who said their satellites work well together. However, talent is an allocation issue as well. When executives identified the most significant challenge their R&D organizations face, the largest share — 40% — said that their key people are overextended and unavailable.

What "High Performers" Do Differently

As in surveys past, we identified a group of "high-performing innovators" — companies where respondents report higher organic growth than competitors and attribute a large portion of that growth to new in-house products. Not surprisingly, these high performers are far ahead of their peers in three key dimensions: collaboration, allocation of talent and capital, and the use of product platforms to drive speed to market.

For example, 31% of respondents at high-performing companies said their organizations already make product-related decisions collaboratively, compared with 20% of all other respon-

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SATELLITES STRUGGLETO COLLABORATE

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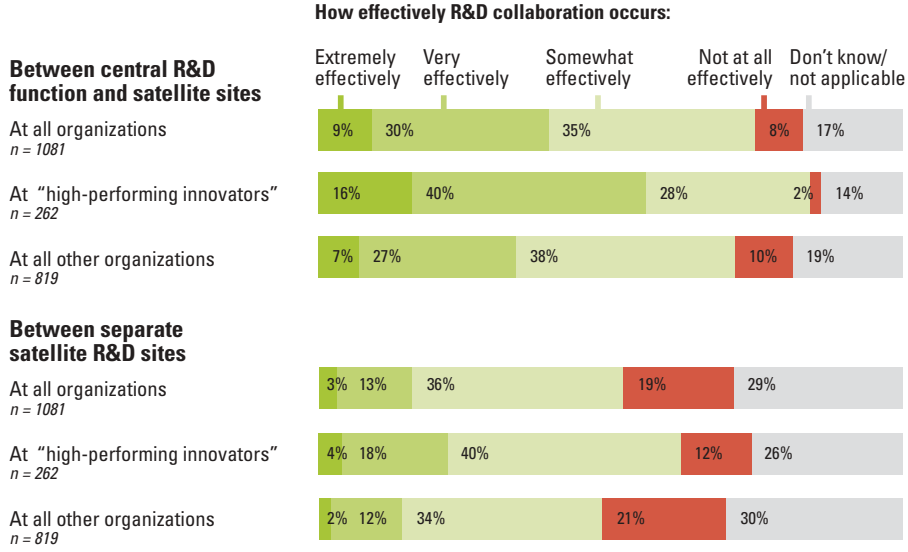

dents. And while the results indicate that satellite-to-satellite communication — a critical dimension of achieving a globally networked model of separate R&D sites — is a challenge for most organizations, executives at high-performing companies reported more effective collaboration than everyone else. (See "Satellites Struggle to Collaborate.")

In addition, the high performers' resource moves are likelier to be proactive and directed toward defined growth opportunities, while their peers are likelier to increase budgets as a reaction to competitors' moves. Executives at high-performing innovators also said their companies allocate additional resources to hiring.

Another area where the high performers stand out is speed to market. In the survey as a whole, more executives said their R&D organizations' product strategies focus on creating shared product platforms rather than on developing local or standardized global products. At high-performing organizations, respondents more often reported that they use these platformed products now and plan to focus on them more in the coming years. The high performers are also ahead in their use of technologies and are more likely to either be using or planning to use social media to collaborate internally, engage external partners and crowdsource ideas.

Lessons for Leaders

As R&D organizations continue to globalize and pursue less-centralized decision making, the talent-allocation and collaboration challenges that many executives reported will become even more important. One thing's for certain: Respondents are dissatisfied with how their companies are handling the issues now. Those companies that have seen improvements reported collaboration progress in several areas, including driving knowledge flows, applying online tools for collaboration and designing the work to be collaborative throughout the R&D process. Continuous and targeted knowledge sharing is an essential element for collaboration and a prerequisite for innovation success. R&D leaders should ensure that sharing new insights, lessons and best practices is an expected part of daily work activities. These leaders should also clearly define which knowledge is most important to share.

Additionally, leveraging online collaboration tools in support of knowledge sharing and virtual teaming is essential across a global R&D footprint. These technologies can be designed to integrate with work processes and improve both productivity and innovation. Lastly, we observe that the problem at times is work process. Adding new technologies on top of a poorly performing process only frustrates talented employees and unnecessarily impacts time to market. The work should be designed to be genuinely collaborative, in real time — not a linear series of functionally focused activities, punctuated by handoffs. Leaders at other companies would do well to follow the high performers' lead: Pay as much attention to the management and communication elements of your R&D footprints as you do to your budgets and portfolios.

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