McKinsey Global Survey results

R&D strategies in emerging economies

Dissatisfaction with managers and a lack of knowledge sharing are universal challenges.

Economies such as China, India, and Brazil are emerging from the global recession with high expectations for growth, presenting global companies with new markets, ongoing access to lower costs, and unprecedented opportunities to broaden their research and development efforts in the coming years. Yet in our third annual McKinsey survey on R&D,[1] fully one-third of executives around the world say their companies are not doing any R&D work in emerging economies.[2]

Of the two-thirds of respondents whose companies pursue such efforts, the largest shares say their R&D is focused on either global product platforms or local innovation in emerging economies, as opposed to R&D for developed markets only, which respondents say is not a major focus of emerging-market R&D operations. Moreover, companies appear to be aligning their goals, whether it's seeking lower development costs or gaining better access to customer insights, with their specific R&D focus in emerging economies.

That focus seems to matter more than whether or not companies are "high-performing innovators."[3] Indeed, there are few notable differences between the goals and practices reported by high performers and others, save one: every respondent among the high performers says his or her company conducts R&D in emerging economies.

Regardless of why companies conduct R&D in emerging economies, respondents broadly agree that the performance of managers for R&D in emerging economies tends to lag behind their counterparts in the developed world, that most decisions about R&D are made centrally, and that their companies struggle to share knowledge effectively.

[1] The online survey was in the field from March 1 to March 11, 2011, and received responses from 1,173 executives, representing the full range of regions, industries, functional specialties, tenures, and company sizes.

[2] We define "emerging economies" as countries and regions experiencing rapid growth and industrialization. This includes countries such as China and India, subregions within those countries (such as Shanghai Municipality), and countries in Latin America, Eastern Europe, and Southeast Asia, among other regions.

[3] Companies that, according to respondents, have had higher rates of organic growth than competitors and realized more than 30 percent of that growth through new products developed in-house.

Spending and goals

Four in ten respondents say their companies' R&D budgets will be higher than last year's—the same proportion that said so in our 2010 survey.[4] And two-thirds of executives say their companies are spending part of their 2011 R&D budgets in emerging economies, with most focusing on the support of either product platforms sold in global markets, or innovation for products made and sold in local, emerging-economy markets. Fewer than one in ten say the main focus of their company's emerging-economy R&D work is for developed economies.

Executives at companies based in either the Asia-Pacific region[5] or North America are the likeliest to say their companies don't pursue R&D in any emerging economy (Exhibit 1). Strikingly, among companies we define as "high-performing innovators," 100 percent conduct some R&D in emerging economies.

[4] For more, see "R&D after the crisis: McKinsey Global Survey results," mckinseyquarterly.com, April 2010.

[5] Australia, Hong Kong, Japan, New Zealand, the Philippines, Singapore, South Korea, and Taiwan.

Exhibit 1

Disparities in emerging-economy spending

% of respondents, by location of company headquarters

Main focus in companies' 2011 budgets for R&D conducted in emerging economies

	Total, n = 1,020	**Asia-Pacific,** n = 92	**Europe,** n = 326	**North America,** n = 321	**India,** n = 73	**Developing markets,**[1] n = 114
Global product platforms	30	31	31	32	48	21
Local innovation in emerging economies	25	22	22	20	34	47
Developed countries	8	3	11	8	11	6
Other, nonlocal emerging economies	3	5	3	2	0	4
My company does not do R&D work in emerging economies	34	39	34	37	7	22

[1] Includes China and Latin America.

Exhibit 2

More in-house R&D investment

[1] Figures do not sum to 100%, because respondents could select more than one category of spending.

Among respondents whose companies pursue emerging-economy R&D, the largest share of overall development spending remains in-house, followed by spending on collaborative R&D with suppliers (Exhibit 2). Broadly speaking, companies' spending appears aligned with their goals. Companies that focus on local innovation in emerging economies, for example, spend significantly more of their in-house R&D budgets in those economies, and companies focusing on global product platforms spend more of their in-house budget in developed economies.

One size does not fit all

The reasons given for pursuing emerging-economy R&D depend on the companies' goals. Among respondents who say their companies focus on R&D for global platforms, 44 percent say the reason for conducting R&D in emerging economies is lower costs; among those pursuing innovation for emerging markets, 39 percent cite access to customer insights (Exhibit 3).

Exhibit 3

Lower costs and better insights

% of respondents[1]

	Companies' objectives for R&D in emerging economies, by focus	
	Global product platforms, n = 211	**Local innovation in emerging economies,** n = 184
Lower development costs	44	26
Better access to local consumer insights	36	39
Access to larger talent pool	23	22
Proximity to local manufacturing and production	20	24
Access to proprietary relationships and intellectual property	14	15
Government incentives	12	14
Access to local technology or materials	11	19
Other	6	9

[1] Respondents who answered "don't know" are not shown.

Exhibit 4

R&D focus shapes the work approach

% of respondents[1]

Companies' approaches to selling products or services in emerging economies in 2011	Total, n = 454	By focus for R&D in emerging economies: Global product platforms, n = 211	By focus for R&D in emerging economies: Local innovation in emerging economies, n = 184
Adjust product features to better meet the needs or desires of local consumers	40	34	46
Sell the same products as the company sells in developed-economy markets	34	43	23
Adjust features on developed-economy products to comply with local regulatory requirements	30	34	22
Develop entirely new products for consumers in local markets	16	14	24
Adjust product features on developed-economy products to account for local supply chain characteristics	15	15	16
Reduce costs on developed-economy products without changing any product features	9	9	5
Reduce or remove product features to meet a lower local price point	7	7	6

[1] Respondents who answered "don't know" are not shown.

Forty percent of respondents say their companies adjust product features to meet the needs of emerging-market consumers, while just 16 percent say their companies develop entirely new products for these customers (Exhibit 4). Companies focusing on R&D for innovation in emerging economies are somewhat more likely to develop new products (24 percent), while respondents at companies headquartered in some of the largest emerging economies—notably India—are likelier still to say they're developing new products for emerging-market consumers. Perhaps this is because the companies originated in these locales with offerings aimed at local markets, and today enjoy privileged access to them.

Exhibit 5

Investing all over the world

% of respondents, n = 454

The emerging economies where companies are, and will be, allocating R&D resources

[1]The most frequently cited cities, countries, and regions that respondents wrote in for "other" include: Chennai, Hyderabad, Mumbai, and Kolkata (all in India); Indonesia; Mexico; Russia; South Africa; the Middle East; and countries in Eastern Europe such as the Czech Republic, Romania, and Slovakia.

China and India are the most common regional choices for R&D destinations, respondents indicate, and Shanghai and Beijing are the cities that respondents are most likely to cite as current destinations for R&D investment (Exhibit 5). Still, this survey uncovered no single geographic hot spot for R&D in emerging economies; indeed, one-quarter of executives say their companies put R&D resources in geographies outside the ten leading destinations our survey asked about.[6]

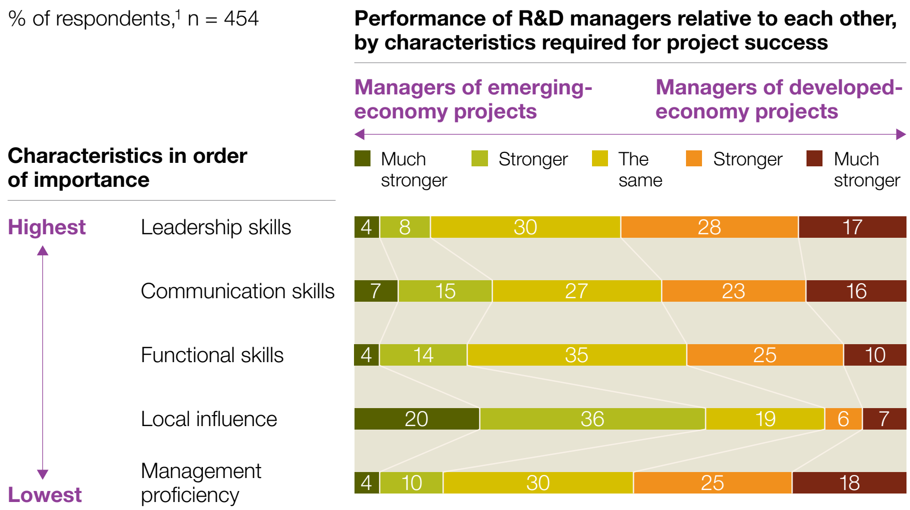
[6]The destinations we selected for the survey are those places ranked among the top ten in both average R&D investment levels over the period 2006–10 and among the top ten in higher-than-average *recent growth* in R&D investment (determined by comparing 2009–10 growth with 2003–10 average growth).

Managing R&D in emerging economies

Retention is the dominant approach to talent management in emerging-economy R&D (cited by 37 percent of respondents), followed by aggressive hiring from top sources such as competitors, universities, or other industries (26 percent).

Exhibit 6

Variable management skills



[1] Respondents who answered "don't know" are not shown.

Nonetheless, executives are, on the whole, not very pleased with the skills of their R&D managers in emerging economies, regardless of those managers' nationalities (Exhibit 6). To be sure, respondents rate their R&D managers in emerging economies higher than managers in developed economies on local knowledge and understanding of their business environment. Yet on all the other management skills the survey asked about—including the two that respondents say matter most, leadership and communication skills—managers in emerging economies are seen to lag, regardless of the company's focus or the nationality of its R&D managers in emerging economies.

Executives at companies focusing on local innovation are more positive about the skills of R&D managers than other respondents—though not by much—and executives at companies headquartered in emerging markets are also more positive than other respondents.

Perhaps because of their local knowledge, companies focusing on local innovation tap more nationals to lead their R&D projects in emerging markets: nearly half of the executives at those companies say nationals manage the majority of company R&D projects, compared with about one-quarter of executives at companies focusing on R&D for global product platforms. Overall, though, just 34 percent of respondents say that nationals manage the majority of their companies' R&D projects in emerging economies. Moreover, respondents don't expect much of an increase over the next few years.

Respondents at companies with annual revenues of less than $1 billion are more likely than respondents at larger companies to say they rely on local R&D managers—perhaps by necessity, given that they have fewer resources and lack the scale necessary to establish extensive global R&D footprints.

Given the broad dissatisfaction with managers in emerging economies, it's unsurprising that most companies take a centralized approach to R&D decision making: 23 percent say their companies' local offices select criteria to evaluate project portfolios, compared with 72 percent who say their central offices decide. Still, companies defer to local knowledge in some circumstances: 49 percent of respondents say decisions about choosing local partnerships are made locally, versus 45 percent who say these choices are determined centrally.

Another area that respondents agree about is the difficulty of knowledge sharing: 64 percent say their companies are no better than "somewhat effective" at it. The most commonly used collaboration tools are relatively old-fashioned, such as frequent telephone and video conferences (65 percent) and travel for face-to-face meetings (62 percent). Respondents at companies that are high-performing innovators are somewhat more likely to use central knowledge databases and global communities of practice to share information, in addition to telephones, video, and travel.

Looking ahead

- For companies contemplating a more global R&D footprint, the perceived differences in skills between R&D managers in emerging economies and developed ones should underscore the importance of not overlooking talent and organizational development at the expense of operational best practices during expansion. In our experience, the best innovators in emerging economies excel at both.

- All the companies defined as high-performing innovators in this survey conduct R&D in emerging economies. In addition, a higher proportion of respondents say their companies are seeking growth in emerging markets than actually conduct R&D there. Companies would likely benefit from doing more R&D work in emerging economies.

- The high performers otherwise differ little from others, suggesting that companies will benefit most from pursuing the tactics best suited to their goals for emerging-market R&D.

- The tendency toward centralized decision making observed in this survey makes sense given the reported differences between R&D managers in emerging and developed economies. However, centralized training to improve those managers' skills would benefit many companies—particularly against the talent-management backdrop of retention and aggressive hiring highlighted in the survey.

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