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Innovation Benchmarking for Middle Market Companies

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Innovation is at once a business necessity and a societal good. Executives and management experts cite it as crucial to growth; numerous studies correlate profitability with investment in R&D and the resulting introduction of new products and services. On a more exalted plane, innovation signifies an organization's cultural vitality, optimization of human capital, and vision and capability to contribute to progress. In a way, to call a firm "innovative" is the highest compliment one can pay.

Management writers helping companies maximize innovation tend to focus on getting the most from individuals and from teams. They advise business leaders, for example, to create fear-free cultures and to replace stage-gate development models with more-fluid, experimental environments. These insights are valuable but don't address the larger picture: the innovation infrastructure. Yes, companies want employees and teams to be prolific creators. But where in the organization do these creators reside? Who funds their activities? Who chooses among projects? What are companies' overarching innovation goals?

To the extent these subjects receive attention, the focus has been on large and small companies. The business press, the public, and academia have framed the narrative as a battle between resource-rich corporations and scrappy, nimble entrepreneurs duking it out for the mantle of "Most Innovative." Middle market companies are largely neglected. That's despite the fact that many of the country's most innovative businesses fall squarely in the $10 million to $1 billion annual revenue range that defines the mid-sized segment. Middle market companies have found ways to field new-to-market and even new-to-world products and services without the massive R&D infrastructure of large companies or the green-field advantages of startups. And unlike startups, middle market players have generally enjoyed enough time and success to thoughtfully design optimal processes and policies in support of innovation.

To learn about those processes and policies, we recently surveyed hundreds of middle market companies--close to three-quarters of them service firms and the remainder manufacturers.* We asked these companies a series of questions on a broad swath of topics, ranging from how innovation is funded and staffed to what types of innovations are pursued to how value is protected and extracted. The responses suggest, among other things, that middle market companies are deploying deep wells of expertise to develop new-to-firm offerings for specific customers and user groups. And while they rely on such usual-suspects sources as senior managers and R&D directors for idea generation, they are also reaching deeper into their organizations with innovation tournaments, and even occasionally venturing outside their own walls.

For all the chatter about the roles of experimentation and serendipity in innovation, companies first require an optimal structure. Leaders of middle market firms should take into account these findings**
as they consider how best to organize and to create.

STAFFING FOR INNOVATION

Companies like to say that customer service is everybody's responsibility. Apparently that credo does not extend to innovation, where middle market companies are more selective about whom to involve in the idea generation and selection process, perhaps to keep the volume of ideas manageable. **Just 19% of the service firms and 13% of manufacturers in our sample involve more than half of their employees in innovation efforts.** More than a third of service firms and over 50% of manufacturing firms engage fewer than 10%. For the most part, idea generation is the purview of those whose responsibilities include innovation or overall company strategy. Just over two-thirds of manufacturers look to their R&D or innovation officers to prime the product pipeline. Among service firms that number is 59%. And a little over half of all companies draw on the creative powers of senior management. Manufacturers are more likely to seek contributions from their marketing officers, while service firms draw more heavily on internal innovation committees.

Companies are even more selective about their gatekeepers. More than two-thirds of all respondents confine the critical job of choosing which innovations to pursue to a few individuals; while just 4% of service firms and 7% of manufacturers pull more than half the company into such discussions. Not surprisingly, senior managers are the most frequent adjudicators, as roughly 70% of all companies involve them in the selection process. Just under half consult R&D and innovation officers.

But idea generation and selection doesn't just take place around conference tables. A significant part of our sample reported opening up those processes in an effort to interact more broadly with people inside and outside their companies. **Internal innovation contests help 43% of service firms to generate ideas and 27% to select them; for manufacturers, those numbers are 35% and 28%, respectively.** The use of external crowds, contests, tournaments and similar mechanisms to foster and choose among innovations is lower for both kinds of companies. Middle market leaders appear open to nontraditional innovation-sourcing, but apparently prefer to canvass their own creative resources first.

In terms of more formal duties, **service companies in particular, assign a significant percentage of employees—26%— to innovation activities**, defined as the introduction of new ideas, products, or services intended to generate economic value. That is more than twice the number assigned to managerial and administrative duties. In addition, 79% reported using non-dedicated innovation employees to foster innovation. And almost a third of service-firm employees are formally assigned to an innovation-related line manager. In manufacturing companies the percentage of employees devoted to innovation is noticeably lower, at 18%, as are the ratios of innovation-related jobs to managerial and administrative jobs. In addition, just 70% of manufacturers deploy non-dedicated employees to innovation efforts; and 29% work under an innovation-related manager.

While companies may draw on employees from a range of functions to generate ideas, domain experts do most of the heavy lifting. **Almost all companies of both types rely on domain experts for innovation.** But service companies are significantly more dependent on those with area-specific knowledge: 88% said they use their domain experts for much of their innovation, compared with 69% for manufacturers. The greater use of domain experts in service companies is apparently linked to the types of knowledge underlying innovations in the two types of firms. And while a large majority of both service firms and manufacturers also use non-experts, just 9% of service firms and 8% of manufacturers depend on non-experts to generate a great deal of innovation.

Almost two-thirds of service companies and manufacturers told us they rely on highly concentrated fields of knowledge for their innovations. By contrast, just 10% of service firms and 11% of manufacturers draw on widely dispersed knowledge. The fields of knowledge that contribute to their given innovations are also somewhat segregated: 60% of service and manufacturing firms described typical innovations as "highly autonomous" or "modular", meaning they do not combine multiple fields of knowledge, like chemistry and manufacturing. While future work may reveal more about the performance consequences of multi-disciplinary efforts, the challenge of integrating distinct knowledge bases appears to lead most middle market firms to generate innovation through more modest efforts.

Wherever employees hail from, they are rewarded for their contributions. **Roughly two-thirds of both kinds of companies report using incentive compensation for those involved in innovation activities.** Not every idea is feasible or desirable, so employees must know that no matter what the outcome, their efforts are recognized.

BUDGETING FOR INNOVATION

Innovation is always a gamble, albeit a necessary one. That attitude is reflected in how companies position it financially. **The majority of manufacturers and service firms said they view innovation as a cost center.**

Companies look to multiple sources and recipients for project funding. Given the importance of discrete fields of knowledge to innovation efforts, **it's not surprising that business functions play a major role in the process.** That is particularly true in manufacturing firms, where 50% report funding innovation projects through functional area budgets, and 48% allocate innovation project funds to functional areas. In service firms, the corresponding numbers are 40% for both funding and allocation. **About half of all firms report funding through corporate budgets,** but just 38% of manufacturers and 34% of service firms allocate money there. **Dedicated R&D or innovation budgets fund projects in slightly more than a third of both types of firms and are the recipients of 38% of funds.** Although business writers have recently urged companies to offer greater autonomy to user- or product groups and to geographic regions, our middle market respondents allocate notably lower levels of funds to these areas. It appears that the majority of decentralized innovation activity is funded through the traditional business functions.

Middle market firms are also deliberative in how they spend money. Of the manufacturing companies, 73% had a formal process to provision funds for innovation projects and roughly the same number had such a process for the actual funding. The numbers are slightly lower for service firms: 67% for both provision and funding. The greater cautiousness of manufacturers is also apparent in their embrace of ROI hurdles for project approval: 65% require them, compared with just 47% of service firms. Notably, though, roughly three-quarters of mid-sized service and manufacturing firms that use ROI hurdles adjust them for technical and market risks.

SETTING GOALS FOR INNOVATION

Deciding how much to invest in innovation is a secondary consideration. The paramount issue is where to focus. For startups this is not a difficult question: almost everything they do is new by definition. Large corporations have vast portfolios of legacy products and brands they can extend indefinitely and ample resources to support multiple blue-sky experiments. Middle market companies, by contrast, must be ambitious but not stretch too far lest they topple the sturdy—but not invulnerable—edifices they've built carefully year by year.

To understand companies' goals and strategies, it is useful to study how they expend their resources. Middle market companies are particularly eager to innovate with and for specific customers or groups of customers, both existing and potential. Such projects tend to be less risky than others because demand is easier to quantify. In addition, many mid-sized companies owe their scale to successful, often long-term customer relationships that make excellent platforms for joint or targeted innovation efforts. **In our survey, 32% of service companies report devoting more than 60% of their innovation efforts (as measured by FTE person-hours) to customer-centric projects, and 34% deploy more than 60% of their innovation budgets there. As for their manufacturing counterparts, 20% devote more than 60% of person-hours and 32% of their innovation budgets to projects, products, and services for customers in the hand or in the bush.**

Basic research, which can produce a company's most sustained advantage but may have less immediate returns, receives comparably less attention. Service firms and manufacturers are united here: **fewer than 10% devote a majority of their person-hours or budgets to the advancement of scientific understanding.** The numbers are only slightly higher for innovation efforts aimed at improving understanding of future consumer needs.

Budget allocations also provide a glimpse of where mid-sized companies detect the most-promising market opportunities. **Service companies devote more of their innovation budgets to serve existing markets with existing technologies.** Manufacturers are also concentrating on the markets and technologies they already know, in terms of budgets. However, **manufacturers report spending more than service firms on adjacent markets and next-generation technologies**. By contrast with the service firms, the simultaneous pursuit of new markets and next-generation technologies appear to pose little interest.

PROFITING FROM INNOVATION

Of course, companies from all industries and of all sizes pursue innovation with two goals: to improve the lives of their customers and their own bottom lines. **Virtually all our respondents reported quantifiable benefits from their innovation efforts, although roughly three-quarters of both manufacturers and two-thirds of service firms said that, in a given year, less than 20% of their sales, profits, or efficiency gains are produced by new offerings.**

Both service firms and manufactures were most successful launching products and services they had never before offered but that exist somewhere in the market. Nearly 40% of service firms and slightly more than a third of manufacturers said they derive more than 20% of both sales and profits from such new-to-firm offerings in their last fiscal year. With new-to-world products—the true breakthroughs—they have been slightly less successful. Such products reportedly contribute 20% of sales at roughly a third of service firms and roughly one-quarter of manufacturers. In part, those outcomes reflect the much higher investment allocated to current markets and technologies.

Process innovations, predictably, have somewhat less impact on bottom lines, but they are still felt. Mid-sized service firms attributed between 14% and 17% of their profits to the implementation of new-to-firm or new-to-world process innovations. Mid-sized manufacturing firms reported slightly lower numbers—ascribing between 12% and 14% of their profits to new process innovations. At the same time, between 18% and 29% of all firms reported cost reductions and efficiency gains greater than 20% from innovations, with service companies racking up the best numbers from new-to-firm innovations.

Clearly, middle market companies are experiencing significant success by focusing on the customers and the areas they know best to improve existing products and services. There are intimations of change as such businesses widen their sources for ideas and grow more ambitious with new markets and technologies. As we learn more about how these companies innovate, we will understand the mechanics inside what is, in this country, our most powerful engine for growth.

*Middle market status was self-reported by survey participants, based on their understanding of firm size.

**The statistical results reported in this paper are based on a preliminary analysis of survey data.
Reported statistics for the service industry are +/-5.7% and for manufacturers are +/-8.9%