People: A Key to Innovation Capability

By Scott J. Edgett

Top performing companies recognize that successful innovation is inherently complex. Below, Scott J. Edgett argues that no matter how much money a company invests, or how efficient it makes its internal processes, the companies that are the most successful at innovation are those that invest significant time, effort and money in people.

Top performing companies the world over recognize that successful innovation is inherently complex. They work hard to master this critical capability by entrenching the four proven drivers of success that comprise the Innovation Performance Framework®: Robust innovation strategy, effective portfolio management, solid idea-to-launch processes and established innovation culture. All four drivers are harmonized and working together to support innovation capabilities.[1]

In the end, however, no matter how much money a company invests, or how efficient it makes its internal processes, success at product innovation comes down to people: People from differing functions, varying skill sets, levels of seniority, diverse locations and years of experience – all working together and contributing to their company's innovation culture.

> The theme among top performing companies is that good project management is considered a critical success criterion and it is supported with professional and experienced team leaders.

A recent benchmarking study of 211 companies assessed the way companies organize and lead their innovation project teams in order to gauge how these two aspects of culture impact innovation performance.[2] Organizations can have well defined strategies, effective portfolio practices and internal new product development processes but how significantly do the teams themselves affect performance results?

How Project Teams Are Organized

The ways in which project teams are structured and leveraged are fundamental to product innovation success.[3,4] This study confirmed this by showing that 90 percent of the top performers make sure that the functions required to make the new product a success are represented on the development team. Only 48 percent of the poor performers followed this practice (See Figure 1). Management of innovation teams in these top performing companies ensure that their team leaders and project teams are thoughtfully selected, deployed and managed.

The study found that top performing product innovation teams have a number of common traits:

- Each significant product innovation project has a clearly assigned team.
- Team members are selected based on resource availability and skills.
- Team members represent the cross-functional needs of the project; i.e. R&D, Marketing, Operations, Finance and Supply Chain. The days of silo new product development are gone.
- Key team members remain with the project from start to finish.
- Teams are accountable for the success of their projects.
- Teams are able to handle outside-the-team inputs and decisions effectively.
- Cross-functional cooperation and communication is good.
- Each team has an executive sponsor to help when necessary.
- Technology is leveraged so the team members can communicate effectively. This is more important when teams are not co-located, such as with regional or global project teams.

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By leading the logistics of the project and staying out of the more technical elements, the project manager can guide the development team objectively and make decisions that are best for the project and for the company's broader business objectives.

How Project Teams are Managed

The subject of team management is much debated, and this study was no exception in finding that companies used a variety of approaches for project leadership. Seventy percent of the most successful companies, however, claimed to carefully select team leaders based on the skills required to successfully manage the innovation project. This compares to only 23 percent of the poorer performing companies. In-depth case studies were also used to gain further insight into what makes project team management successful. The common success traits that emerged were:

- Product innovation team leader is a respected professional career track with career development and training provided within 55 percent of best performers. This is the case in only four percent for the poor performers.
- Team leaders are carefully selected for their project management skills.
- Team leaders are trained and skilled at objective decision-making regardless of their personal, emotional, or technical attachment to the project.
- There is a clearly identified team leader who is in charge and responsible for driving the project from start to finish.
- Team leaders remain with a project throughout the life of the project versus changing leaders as the project progresses through the idea-to-launch process.

The following company examples illustrate varying approaches to project management. Although they represent diverse industries, the common theme among top performing companies is that good project management is considered a critical success criterion and it is supported accordingly with professional and experienced team leaders.

Electro Scientific Industries, Inc. (ESI) is a leading supplier of innovative laser-based manufacturing solutions for the micro technology industry. At ESI a full-time, experienced program manager leads each new product development project. By driving all the involved functions to meet the project's objectives, the program manager is responsible for the integrity of the process at the team level. This job requires a unique set of skills: toughness, fearlessness, and a good level of comfort delivering both good news and bad to management.

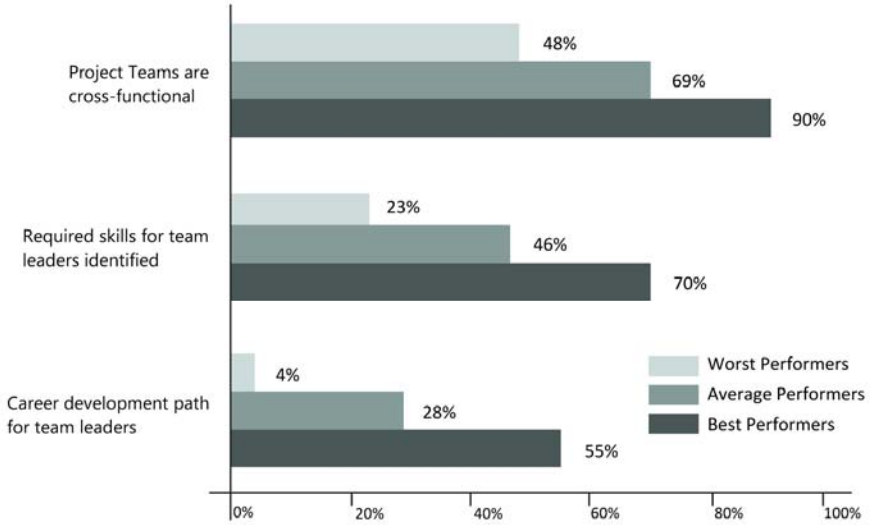

Figure 1: Impact of Product Innovation Team Organization

One important distinction at ESI is that the program manager is not the technical decision maker. By removing any technical stake in the project for the manager the company allows the individual to focus on the broader cross-functional deliverables needed to bring a product successfully to market. At any given time ESI's program managers are usually working on two to three projects.

EXFO is a provider of next-generation test and service assurance solutions for wireless and wireline network operators, and equipment manufacturers in the telecom industry. At EXFO, the project manager who leads the product innovation team is considered to have an important strategic position in the company. EXFO employees in R&D follow one of two tracks: technical or managerial. The project manager position ranks high on the latter track. Project managers usually have a technical background but do not specialize in a particular technology in this role. They must provide objective guidance and maintain a disciplined distance from technical details during each stage of the project so that they can keep it moving efficiently. The project manager, responsible for approximately five projects at any given time, helps determine which deliverables are appropriate and how to apply process rules. By leading the logistics of the project and staying out of the more technical elements, the project manager can guide the development team objectively and make decisions that are best for the project and for the company's broader business objectives.

Becton, Dickinson and Company (BD) is a global medical technology company that manufactures and sells a broad range of medical supplies, devices, laboratory equipment and diagnostic products. The core team

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leader at BD is seen as the general manager and chief architect of the project and is ultimately responsible for its success. Although most core team leaders come from technical backgrounds, the organization increasingly emphasizes filling this role with strong project managers. These managers are given extensive training and must:

- have project management skills
- be business-savvy and adept at interpersonal interactions
- handle resourcing and other team issues, and
- create and manage schedules and budgets.

Core team leaders also reinforce the business perspective throughout the product innovation process. They continuously coordinate with leadership to report project status, schedule appropriate project reviews, and provide input into the other team members' performance evaluations. Core team leaders report to the program management office and are considered the equivalent to functional managers in terms of grouping and compensation. Depending on a project's complexity, core team leaders might focus on one project full-time or work on several projects simultaneously.

> Senior management understands that if innovation is critical to achieving the company's growth strategies, the best people need to be involved and supported.

Ashland, Inc. is a global specialty chemicals company. Unique among the best-practice partners in this study, Ashland allows two types of project management depending on the business unit: management by a technical lead and management by a dedicated project manager. The typical new product development project team at Ashland's Performance Materials Division is headed by a lead chemist. Ideally, a lead chemist is only in charge of one project at a time to allow for full dedication and ownership of the project. The lead chemist on a particular project is responsible for managing all the team members and delegating tasks. The lead chemist is mentored by a Six Sigma Master Black Belt or Black Belt and is sponsored by the technology group leader. Ashland's Performance Materials Division emphasizes having project leaders from science or engineering backgrounds responsible for the technical execution of projects.

One of Ashland's other business units, Valvoline, has project team leaders who are not technical experts; they are project management experts. These general project managers support a content leader specialist and take on more administrative tasks. These project managers typically work on 10 to 20 projects at one time. They are typically being groomed for leadership positions and must delegate tasks, facilitate groups, communicate with sales and marketing, and be customer-oriented.

A common theme emerges from these best practice companies. They all ensure that the human side of their innovation projects is well managed. Innovation project leaders have respected roles inside the organization. Senior management understands that if innovation is critical to achieving the company's growth strategies, the best people need to be involved and supported. In other words, companies that are the most successful at innovation are those that invest significant time, effort and money in their most valuable assets – their people.

About the Author

Scott J. Edgett, Ph.D., is Chief Executive Officer at Stage-Gate International and is internationally recognized as one of the world's top experts in product innovation. A co-author of eight books and numerous articles, Dr. Edgett is a former professor at the DeGroote School of Business at McMaster University and is a Faculty Scholar at the Institute for the Study of Business Markets (ISBM) at Penn State University.

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References

1. Edgett, S.J. (2014) "Innovation: A Critical Capability", The European Business Review, January-February, pp. 28-30.
2. Edgett, S.J. (2011) New Product Development: Process Benchmarks and Performance Metrics, Hamilton: The Product Development Institute and Houston: American Productivity and Quality Center. More in-depth and detailed case studies of the companies included in this study are provided.
3. Cooper, R.G. and Edgett, S.J. (2008) "Maximizing Productivity in Product Innovation", Research Technology Management, Vol. 51:2, pp. 47-58.
4. Cooper, R., Edgett, S. and Kleinschmidt, E. (2004) "Benchmarking Best NPD Practices – I: Culture, Climate, Teams and Senior Management Roles", Research Technology Management, Vol. 47:1, pp, 31-43.

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