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With patent applications and trademarks up in the past several years, and given the recent explosion of new products, the question for manufacturers is not if they should innovate, but rather how they manage their innovation efforts. Georgia Tech’s newly organized Enterprise Innovation Institute believes manufacturers should borrow from their own playbook and apply their well-honed skill of process management to the innovation effort (see graphic below).

In short, firms should break down the innovation system into its core processes. The processes then need to be aligned with each other and with other relevant processes such as the organization’s strategy and culture, then be allowed to operate without bureaucracy. Enterprise Innovation Institute staff suggest firms begin by analyzing three core processes of opportunity sensing, idea incubation, and opportunity development. They also believe manufacturers should expand the traditional view of innovation beyond product development to include new types of services such as systems integrators and new processes (for example, involving customers in product design). The first core process is discussed below; a subsequent issue will examine the remaining two.

Three perspectives are appropriate and complementary doorways to opportunity sensing. The first doorway is existing customers. It is what customers don’t say that is most interesting. To get that type of information, firms send technical and quality staff to visit customers where their products are being used. Before the visit, staff are trained to ask open-ended questions, listen to what is really being said, and observe how their products are used. Progressive companies are moving farther upstream and collaborating on visits to their customers’ customers. The bottom line is determining what you could do to get your customer to buy more of what you are already selling him, to buy what you currently make but are not selling him, and what you could make that he would buy if you produced it.

The second doorway leading to opportunities comprises broader markets, current markets, and markets where your core competencies (such as engineering design or just-in-time delivery) are valued. Industry statistics and trade association overviews are a good start, but the real action is through rigorous analysis of leading competitors’ capabilities and reputations. Once again, the real sources of competitive information are the customers of the products and services.

The third doorway for opportunity sensing is technology. Keeping abreast of new-to-market and emerging technologies enables progressive manufacturers to catalyze their continuous improvement processes with external information. Progressive manufacturers already do a great job of identifying incremental product and process improvement opportunities. By proactively exploring targeted technologies, companies greatly expand their possibilities pipelines and challenge themselves with the question, “Why not us?”

The interesting thing about these three opportunity-sensing doors is that they lead to different ideas. By following only one doorway, companies tend to be too narrowly focused and miss trends. In addition, the process of sensing, rather than evaluating, allows the company to create a significant inventory of opportunities that are unhindered by detailed return-on-investment analysis, personal bias, or budget constraints. Finally, the targeting of the opportunity systems can significantly increase the potential value of the ideas. Companies with a clearly articulated strategy tend to generate ideas that get to the next stage of development. In short, when
employees understand where the firm is going, they tend to investigate and observe things that will move them toward the end game.

At this stage of the innovation management process, the output is simply an inventory of ideas and thoughts with potential value. Inventory of value, even potential value, must be properly tagged, stored, and exposed so anyone can readily get it. After all, the real failure is when an organization successfully identifies an opportunity, but drops it on the floor where someone else picks it up and runs with it.

(Note: Idea incubation and opportunity development will be covered in a future issue.)