

## Goldense Group, Inc. Survey

## Reveals Rapidly-Growing Trend Toward Greater Discipline In Earlier Stage Research Part 2 of 5 – November 21, 2008

The GGI research was conducted between August 2007 and January 2008. Questionnaires were mailed to product development professionals in a wide range of fields, from North America, Europe and Asia. Responses were received from 209 companies from such industries as aerospace & defense, electronics, chemicals, software and medical products. The questionnaire contained 30 questions covering the following areas: demographic profile, innovation environment, innovation processes, innovation identity, innovation tools, and top corporate-level R&D metrics.

In the innovation processes portion of the survey, GGI examined the types of R&D activities in which respondents were engaged and whether or not respondents had documented processes or guidelines to control them. First, respondents were asked to indicate whether their company engaged in Basic Research, Applied Research, Advanced Development and/or Product Development. Placing Product Development processes to one side, the next question asked respondents to indicate whether or not his or her company had a documented process or documented guidelines for the following R&D activities: a) Basic Research, b) Applied Research, c) Advanced Development, d) Combination Researched & Advanced, and/or e) Multiple (i.e. more than one documented process for) Research and Advanced Development. The final question in the innovation processes section asked respondents to indicate the number of documented product development processes or process variants in use in his or her organization (No Process, Single Process, Two Processes, Three Processes, Four or More Processes).

A key distinction in these questions is between earlier-stage R&D activities on one hand and standard product development activities on the other. The research intent behind these questions was to ascertain whether or not the increased focus on innovation in recent years has caused a corresponding increase in activity in the earlier stages of R&D. If the study found that a large percentage of respondents are





engaging in early-stage research, then does it follow that these organizations have also exercised control over these investments by creating documented processes or guidelines for these earlier stage activities?

The survey found that about three-quarters of respondents are now engaging in earlier-stage research activities of some type. Goldense Group Inc. President, Brad Goldense, estimates that as recently as five years ago only about 15 to 20 percent of firms engaged in these earlier-stage R&D activities with any consistency. The finding that the percentage of firms engaging in earlier stage R&D now constitutes a commanding majority of companies "indicates a clear trend," according to Goldense.

If a large number of firms are now engaging in these earlier stages of R&D, then are they also executing more control over them in parallel with the risk they have assumed? The GGI research found that about 70 percent of respondents report that their firms are developing additional process-ware for these earlier R&D activities.

Says Goldense: "If we found that there is more applied and advanced [research], but then we found that there is no growth in processes, that would mean that they were either leaving the process open...or they were attempting to do some [of these activities] in the...development processes they already have – [processes] that are made for execution and not innovation." Rather than folding R&D activities into the product development process, firms are now articulating a range of processes to meet the special requirements of innovation.

The research also found that 96% of all respondents had one or more documented process for product development. Roughly forty percent reported that they have a single process for product development, while 55 percent reported having two or more processes.

Concludes Goldense, "R&D as a whole appears to be changing its mix of 'R' versus 'D' based on addressing the increased need for innovation... We can conclude that as the earlier stage is increasing" so is management attention and control. "While we didn't research the budget numbers...it is logical to conclude that if the earlier stage activity is increasing then so is the budget for it... Now that [management is] increasing the budget for these earlier stages...they are also adding controls."

