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 tools portion of the survey, GGI investigated the market penetration and degree of use of generally available tools for enhancing innovation. From a larger list of 250 innovation tools identified by GGI, the questionnaire presented respondents with a list of 67 tools deemed “generally available” in the marketplace. Survey respondents were asked to indicate whether each tool was “available for use” in his or her organization. If the tool was available, respondents were then asked whether that tool was “used occasionally” or “fully embedded” in the respondent’s organization. The survey found that only five tools are “used occasionally” by more than eight percent of respondents, while another five are “fully embedded” in more than two percent of companies surveyed.

The researchers determined that a tool had penetrated a corporation if it was “internally available and/or owned by” the company in question. Excluding the Microsoft Office suite, which duplicates many of the outlining and text manipulation features also included in stand-alone innovation tools, GGI found that only five tools have penetrated more than 15 percent of survey respondents. These five tools include the U.S. Patent and Trademark Office Website, Wikis, TRIZ, Blue Ocean Strategy, and MindManager.
Goldense Group Inc. President, Brad Goldense, observes that the tools listed in the questionnaire range in price from free of charge to as much as a low six-figure investment. Not surprisingly, the GGI research found that the tools that are available free of charge are used frequently. With one exception, however, Goldense reports that the most frequently used tools are those that companies have purchased and to which they have made a commitment.

The researchers also divided innovation tools into five groups. The first group included outliners, sketchpads and text manipulators. Another group was comprised of tools that facilitated the thought processes of individuals or groups; these were identified as self-help or group-help tools. The next three groups of tools were progressively more powerful and complex tool-sets that either shared information, or that both shared and structured information. The fifth group of tools included those that had the potential to increase domain knowledge. While Goldense claims that, “the tools that increase domain knowledge are probably the future,” he also observes that, “execution tools are still the predominant tool set in product development.”

The study also found that, “Approximately one-third of all tools that [GGI] identified in the early 2000s no longer exist [while] twenty new tools have been invented within the last few years,” reports Goldense. The GGI research also revealed that the inventory of available tools had shifted by 20 percent since the early 2000s. Based on these findings, Goldense concludes that, “innovation tools exhibit all of the classical features of an emerging market.”

Goldense advises product development managers to understand what they are purchasing when they acquire an innovation tool, paying particular attention to the software and training component attached to the more complex tools since the training required to fully leverage the tool may be more expensive than the tool itself. Concludes Goldense: “Like in any emerging market – caveat emptor.”