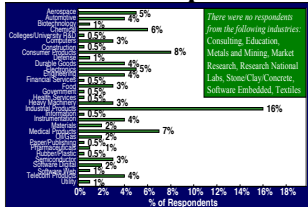




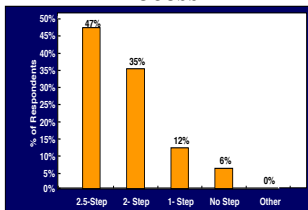
2004 Product Development Metrics Survey

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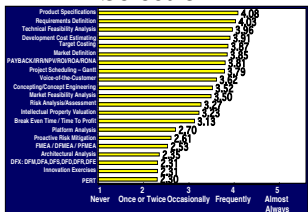
Sample Results Respondent Profile: Industries Represented



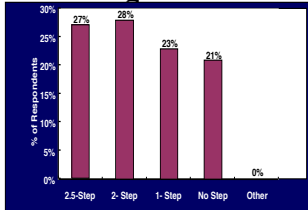
Product Selection Process



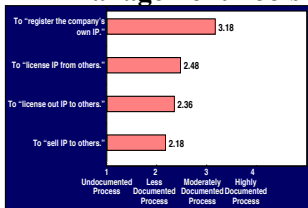
Tools For Product Selection



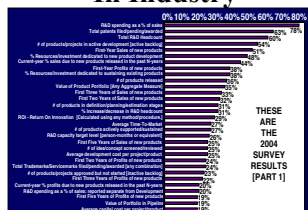
IP Management Process



IP Management Tools



R&D Metrics Used In Industry



Product Selection, Intellectual Property, and Top Corporate Metrics

GGI's 2004 Product Development Metrics Survey is **primary research** that provides important information on the management and decision-making processes, the methods, and the tools that top companies use to select products for development, and their ability to help generate innovation and intellectual property as well. This is ground-breaking work on Intellectual Property (IP), an area now recognized as growing in importance for the valuation of companies. The report also lists the current rankings of the metrics used to measure RD&E, and compares these 2004 results to those from the three prior GGI surveys of 2002, 2000 and 1998.

This study was conducted by distributing a combination of e-mail and mailer questionnaires, with a small number of handouts. Net total pieces distributed was 4050. There were 202 valid surveys received for a response rate of 5.0%, giving statistically robust results. Margin of error calculations are shown on graphs, where applicable. The Highlights Report has in-depth text of Observations and Analysis along with Key Findings; the Summary Report adds extensive Graphics; the Results Report further adds Special Breakdowns into various segmentations of the companies.

To download the complete 12 page Survey Questionnaire, go to this link: <http://www.goldensegroupinc.com/biannual.shtml> and click on 'Questionnaire: Download PDF.'

2004 GGI PRODUCT DEVELOPMENT METRICS SURVEY

These reports deliver Great Value to you and your company.....

- See current industry practices for the **decision-making processes** used to select new products for development. Adding rigor to your selection process will lead to more successful products and higher success rates.
- Understand the usage of 21 different tools to **improve product selection**, and their ability to also help generate innovation and registerable IP.
- Discover this **Groundbreaking research** in the processes, tools and systems companies use to **manage their intellectual property**. The importance of IP in the next two decades will go from 10% to as much as 90% of a company's stock valuation by Wall Street.
- Review the **top ranked metrics** used by the 202 companies that responded to this survey to **measure the overall performance of their R&D process**. Compare 2004 results with those from past surveys in 2002, 2000 and 1998.

Benchmark your company against top North American companies.

Learn and adopt the leading practices to measure and help improve your product development performance, and.....

Focus on your opportunities to generate greater innovation and IP.

Goldense Group, Inc.
1346 South Street
Needham, MA 02492

Phone 781-444-5400
Fax 781-444-5475



2004 Product Development Metrics Survey

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Every two years since 1998, Goldense Group, Inc. [GGI] surveys industry on **product development practices and metrics topics of current interest**. Questionnaires are sent to a wide distribution of product development professionals in industries ranging from industrial and medical products to aerospace, defense, electronics, and chemicals, in North America, Europe and Asia.

GGI's 2004 Product Development Metrics Survey is **primary research that focuses on five areas** where there is significant industry activity. Respondents completed a 12-page questionnaire covering their demographic information and the following five areas: the product selection process and tools used by industry to approve products for development and commercialization, ground breaking work on company's intellectual property (IP) management processes and tools, and the current rankings of top corporate metrics used in RD&E with comparisons to the metrics usage from our past surveys in 2002, 2000 and 1998.

This research was conducted by distributing the questionnaires by a combination of e-mails and mailers, with a small number of handouts. Net total pieces distributed were 4050. There were **202 valid surveys received for a response rate of 5%**, giving statistically robust results. **Margin of error calculations are shown on graphs where applicable**. The 2004 survey was completed by respondents from April through early August, 2004 and **published in October 2004**. Responses are held in strict confidence to encourage honest and full reporting of sensitive information.

Results of this ground breaking primary research are offered in **three reports having increasingly detailed views of survey** observations, analysis and key findings, with insights into new developments and trends. These reports are a text only executive-level **Highlights Report (MR31)**, a text plus extensive graphics middle management **Summary Report (MR32)**, and the **Results Report (MR34)**, the most detailed version with added multiple "cuts" of the report into a variety of segmentations of the 202 respondent companies.

GGI's 2004 Metrics Survey contains six sections, each comprised of a number of questions, as follows:

Section A: Respondent Profile: The basic questions asked are title and functions performed of the person completing the survey, the type/scope of the reporting organization within the company, the company's industry or service, and places in the world the company does sales, R&D and manufacturing. Also asked are questions that categorize each company within the population of companies that responded to this survey. This provides the ability to do "cuts" of the entire survey population data into segments, such as public vs. private, smaller vs. larger sales, more vs. fewer employees, high tech vs. low tech, and process vs. repetitive/discrete vs. job shop companies.

Section B: Product Selection Process: This section investigated various aspects of the process which companies use to select projects or products to be sent on to full development. Companies list the number of review/decision steps they use to formally approve or reject a proposed product or project for development, and the number of decision-makers and the degree of formality of meetings at each decision step. They report the organizational format they use for the product selection/decision process, and if R&D uses these same methods for advanced development projects. If no, they note if the R&AD process is more formal or less formal.



2004 Product Development Metrics Survey

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Section C: Product Selection Tools: This section investigated the tools used during the product selection process. Respondents report which tools and/or techniques are used to analyze and/or document a proposed product or project before the point of approval for development leading to commercialization. And, which tools and/or techniques also help to generate innovative thinking and/or visible innovation. They also check which tools help generate copyrightable, trademarkable, or patentable Intellectual Property [IP]. They note the frequency with which this happens.

Section D: Intellectual Property [IP] Management Process: This section investigated the process companies use to make decisions about the management of their IP. Companies identify how many times (decision steps) a potential copyrightable, trademarkable, or patentable IP proposal is reviewed before making a business decision to formally approve or reject the proposal, and also the number of decision-makers and the degree of formality of meetings at each decision step.

The next series of questions in this section are asked in the context of “registering the company’s IP,” “licensing IP from others,” “license IP out to others,” and “sell your IP to others,” and how frequently this happens. The questions explore the degree to which each company actively applies processes for managing IP at any point during the product lifecycle, and repeats the question for prior to and up to the point of approval of a product for development and commercialization. Companies are asked to what extent the product selection and IP management decision-making processes are mutually dependent, and to what extent the people making the product selection decisions also participate in making the decisions for intellectual property.

Respondents select the organizational format their IP management process takes during the entire product lifecycle, the structure of the organization that supports the IP management process, and if their company believes that IP management will be more important in the next five years than it was in the past five years

Section E: Intellectual Property [IP] Management Tools: This section investigated the tools and systems which companies use in the IP management process. Companies are asked to what degree they have formal documented processes for managing IP (from registering your own IP to sell to others, as above), and, to the degree that the company automates its IP process, what type of system is used to manage the inventory of IP, what types of IP are in use and to what degree (six categories of IP to choose from across five levels of frequency of use).

Section F: R&D Metrics Used In Industry: This section investigated the metrics companies use to measure their R&D process. The same single question is asked as in GGI’s 2002, 2000, and 1998 surveys. Identify the R&D metrics that are “in use” at your company, with 75 choices available. The four qualifications for “in use” are that they are measured at least annually, be visible to all members of top management as active/ongoing tools, numerous people in the organization have easy access to the results, and that there is consistency in the method used to calculate these metrics from year to year.

2004 Metrics Survey of Industry

Product Development Metrics *for R&D practitioners!*

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2004 RESEARCH REPORTS AVAILABLE

*Hard Copy *Corporate License

Report Title	Format	Pages	Hard Copy Price	Corporate License Price
MR31: 2004 Metrics Survey Highlights	[Text]	75 pages	\$ 300.00	\$ 300.00
MR32: 2004 Metrics Survey Summary	[Text & Graphics]	149 pages	\$ 596.00	\$ 596.00
MR34: 2004 Metrics Survey Results	[Text & Graphics]	313 pages	\$ 1252.00	\$ 1252.00

MR34 includes five cross-sections of the survey population: Public vs. Private, Hi Tech vs. Lo Tech, Many vs. Few Employees, Large vs. Small Revenues, and Job Shop vs. Discrete vs. Repetitive vs. Process Operations.

* **Hardcopy & Electronic Versions are available at GGI's website in The Wisdom iStore at www.goldensegroupinc.com.**



THE WISDOM iSTORE



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Richard J. James is Director of Research at GGI. Mr. James has over 30 years experience with the design, development, manufacture, and quality of complex electro-mechanical and chemical products. In several Quality and Technical management positions at Polaroid, his emphasis has been on rapid product inception, product and process design and manufacturing improvements, cost reductions, vendor relations, and customer Satisfaction. Richard led corporate-wide improvement projects across design, manufacturing, and marketing in areas of the product development process. He is VP Finance for the Boston Chapter of SCPD, and is a certified ISO 9000 auditor.

NPD INSIGHT

The Product Development Metrics Survey reports for 2004 describe the decision making processes and tools companies use to select products and to help generate innovation and intellectual property, and ranks the metrics used to measure R&D in 2004 compared to prior survey results in 2002, 2000 and 1998.

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