



Innovation Incentives: How Companies Foster Innovation

By Susan Malanowski

September 2007

This paper summarizes the findings of a recent study of programs to recognize innovation by scientific and technical professionals. The survey was conducted through the New England Compensation Consortium in September 2007 and includes responses from twelve (12) companies. Fifty percent or half of NECC responses did not have a program and two had identified a need to support innovation. The following provides a summary of NECC responses and from research conducted by the Research and Technology Council of the Corporate Executive Board and described in the report “Compendium of R&D Reward and Recognition Programs” December 2006 (www.rtec.executiveboard.com).

There are five categories of programs that provide recognition and rewards to technical professionals for innovation:

1. **Recognizing Long-Standing Excellence**
Having internal honor societies and awarding research grants to innovators for greater ability to impact the organization. *
2. **Distinguishing Individual and Team Contributions** (16% of NECC responses)
Rewarding and recognizing individuals and/or teams for exceptional performance during the year or specific project with annual and spot awards in the form of bonuses, trophies or plaques, technical stipends, vacations and other financial rewards. *
3. **Rewarding Patent Inventions** (76% of US companies, 25% of NECC responses)
Motivating inventors to pursue inventions by offering patent rewards – due to the complicated nature of the patent application process and because they solely benefit the company. The program provides cash or other non-financial awards for original ideas and patent filing. *
4. **Royalty Compensation Plans** (7% of US companies)
Sharing a percentage of the profits with key contributors, such as sharing in a pool of funds between 10% and 25% of license and royalty fees or 2% of gross revenues. In addition, additional funds from license and royalty fees can go to purchase additional laboratory equipment.
5. **Separate Companies or Innovation Banks**
Obtaining additional freedom and funding normally not available through a separate company.

There are two types of companies where these rewards exist, commercial and research and development (R&D). R&D environments are unique. Projects continually evolve and change. The

focus is internally driven. The R&D staff makes major contributions to either enhance knowledge and information or develop processes and outcomes.

R&D is a major function of a company but it is not the only. Therefore, some rewards and recognition programs exist for all employees at a company-wide level while others support the unique R&D environment. In contrast, commercial organizations are under significant competitive pressure to invent, design and bring products to market in a shorter time frame. Often technical staffs are eligible for an annual incentive based on their grade level. Their performance management and incentive goals reflect their invention and development of the product. In either environment, a company culture focused on being leading edge and innovative may see the need for separate and unique awards for technical staff.

What is Leading Edge

Leading edge rewards exist within a hierarchy of rewards, needs and feedback. However, before a company can be leading edge, efforts must first focus on ensuring that basic needs are met, such as competitive base salary compensation and providing regular feedback to employees on their performance and progress. This will ensure the attraction and retention of talent needed and that core employee needs have been met through programs and offerings.

Offerings that can attract superior talent and meet an employee's higher level needs are defined as leading edge. Leading edge also means being more than just competitive with the market – it means being ahead of the others. The practices that are considered leading edge in one company may not necessarily be leading edge in other companies due to company objectives, culture and values.

Beyond leading edge is what companies have to do to sustain leading edge programs that have been started, because sooner or later everyone will have some similar form of a patent award. As you look to do something different than the rest, it requires risk in adapting programs that seem absurd at the moment but could have significant impact.

Recognizing Long Standing Excellence

Procter & Gamble inducts elite scientific contributors into the Victor Mills Society to acknowledge tenured scientists with strong records of technology advancement and innovation. It is considered the highest innovation award within the organization. The Society consists of only a few dozen prominent P&G scientists. Executive leadership inducts individuals who have made sustaining and important business-building contributions throughout their careers. The company acknowledges honorees throughout P&G's entire technical and scientific community. In addition, Victor Mills inductees mentor younger, high-potential scientists and formally advise the Chief Technology Officer on prospective innovations.*

Other similar programs include:

- 3M's Carlton Society honors outstanding technical and scientific career achievements*
- Goodyear Tire & Rubber nominates R&D Fellows to recognize lifetime technical excellence*
- PPG elects long-standing innovators into the PPG Collegium and recognizes other key contributors as Corporate Fellows*

- Hitachi creates a Fellow position to honor the organization's strongest long-standing technical leaders *
- Bell Labs Fellows represent Lucent's most influential technical and scientific contributors *
- IBM honors leading innovators through Fellows program *

Distinguishing Individual Contributions

Merck creates the 'Reasons to Celebrate' Program to reward individual project contributions and dedication. After rethinking ways to recognize and reward scientific excellence in individual plants, Merck developed a peer-recognized plan titled 'Reasons to Celebrate.' Merck encourages employees to recognize teammates for extraordinary effort and accomplishment –especially contributions that might go unnoticed by management. The list of criteria for nomination includes effort beyond expected performance, improvements in the quality of teamwork, and suggestions that result in product quality, worker safety, or process improvements. Award winners choose from a list of awards such as courtesy time off, a free set of tires, a year of membership fees to a local health club, etc. In addition, honorees receive a letter of appreciation written by nominators and copied to management, as well as a public broadcast to their entire facility on a centralized bulletin board. *

An NECC participant has an Innovator of the Year as an annual award program that recognizes an employee or team who substantially contributes to product innovation at the company and achieves this promise through tangible results. This program promotes constant innovation in all aspects of the business and the courage to lead with superior products, services, solutions and support. Past award recipients have challenged the status quo to develop new methods and approaches for solving problems.

The Innovator of the Year will be awarded \$10,000.00 (or local equivalent) and a personalized crystal memento. If a team is chosen, award remuneration will be decided based on the number of team members. Recognition for the winning innovation will be communicated across the company. The winner is expected to serve as a role model for future company innovations and actively engage with senior management on technology, product and innovation planning.

Examples of Innovation include:

- Creatively solves a business or technical problem
- Creates a groundbreaking strategy through the use of existing technology or the creation of new technology
- Creates a higher level of performance than previously available
- Introduces a new technology/new market for existing technology, a revenue and/or profit enhancer. There must be benefit to customers, and a history of bottom line performance
- A product/innovation that is practical and therefore supports the brand proposition

Nominations for the annual Innovator of the Year award are submitted from November 1 to December 22nd using an online nomination form, and may include innovation that came to fruition in the Calendar Year. The company's President and CEO will select and honor an employee or team as Innovator of the Year - usually in the beginning of the New Year for previous calendar year.

Other related programs that recognize investors and other innovators include:

- Sun Microsystems Distinguished Engineer nominations *

- IBM has three different categories of rewards presented at a special annual recognition event *
- Rockwell Collins has an engineer of the year award *
- Lockheed Martin has NOVA awards *
- 3M has Circle of Technical Excellence and Innovation Awards *
- Allergan hosts an Authors and Inventors Reception *
- Siemens AG has an Inventor of the Year Award. *

Distinguishing Team Contributions

GlaxoSmithKline's Green Chemistry/Green Technology Award recognizes innovations that benefit the global environment and it promotes improvements in GlaxoSmithKline's use of human, environmental, and economic resources. GSK presents Green Chemistry/Green Technology awards to teams who complete projects that benefit environment, health, and safety through new and efficient chemistry or technology. The GSK Board of Directors recommends annual award winners from a list of finalist projects submitted throughout the year. Each winner receives a specialized trophy and the opportunity to make a company-sponsored donation to a charitable organization of his or her choice. *

Other related programs include:

- Cognis' annual Team Innovation Awards Program Honors *
- 3M honors cross-functional team success with the Golden Step Award *
- IBM recognizes innovative teams through annual Corporate and Patent Portfolio Awards. *

An NECC participant has two programs that recognize employees for technical excellence annually with the best receiving awards of \$5K and others that get honorable mention \$1K. One recognizes technical papers that advance the company as a technical leader and the other recognizes project teams that do the best job of integrating service, technical and business excellence. Awards go to authors of the paper and the project team on projects. Both are judged by the Chief Technical Officer with a team of reviewers. These awards are typically for technical design projects.

Rewarding Patent Inventions - Process

To educate and train inventors, Hewlett-Packard holds 'InventShops' and 'Innovation Workshops'. At InventShops, in-house lawyers present the case for patents and teach employees how to write disclosures. At Innovation Workshops, engineers conceive new ideas and generate invention disclosures. *

Other related programs include:

- Dell Computer training employees on a range of patentable ideas rather than basic patent law *
- Motorola employees submit ideas through an electronic 'innovation disclosure form' to the technical committee *
- Rockwell Collins implements an inventor friendly, electronic invention disclosure process that immediately captures and rewards key ideas *
- Employees in Adobe India propose new ideas to an Idea Studio who evaluates the commercial value of every idea and allocates appropriate resources for its development. *

Rewarding Patent Inventions - Financial

There are three different recognition criteria for financial patent awards – submission of ideas, filing the patent and issuance of a patent. The most common criteria used are for filing a patent.

- Motorola issues cash awards according to the expected dollar value of the eventual patent. Bonuses are between \$10,000 and \$40,000 for revenue generating patents. *
- Lucent awards \$1,000 for filed patents and another \$2,000 for issued patents. *
- Hewlett-Packard provides \$175 per submission and an additional \$1,750 for ideas that reach the patent application stages. *
- American Power and Electric issues up to \$1,000 for successfully filing a patent and provides an additional \$4,000 if the patent receives an award from the US Patent and Trademark Office. *
- Honeywell honors individual inventors with \$1,500 per patent and up to \$5,000 for a single patent filed by three or more inventors. *
- Adobe India offers cash awards between \$5,000 and \$7,000 for ideas that are successfully developed and approved by management for patent applications. *
- InstallShield Software awards \$1,000 for filed patents and other \$2,500 for issued patents. *

Royalty Compensation Plans

Baxter feels that patent awards focus too much on the quality rather than the commercial value of awards. They developed a system of rating the commercial value of the inventions - the higher the rating, the larger portion of gross sales paid to the inventor as described below. Inventors can also receive stock options based on revenue generated in place of cash. *

<u>Tier</u>	<u>Description</u>	<u>Grant (#s disguised)</u>
1	Using innovation in product, vital to product success	.33% of licenses or gross sales, max \$50,000
2	Using innovation in product, assists product marketability and provides long term advantage	.15% of licenses or gross sales, max \$25,000
3	Using innovation in products produces short term marketing advantage	One time payment \$2,000
4.	Unlikely to use the innovation in product or license	One time payment \$1,000 *

Other related programs include:

- Synergen sharing a percentage of profits with key contributors *
- Key researchers at Battelle Pacific Northwest Laboratory sharing in a pool of 10% of gross royalties SRI International researchers sharing in a pool of funds worth 25% *
- Texas Instruments offering up to \$175,000 for a single patent *
- Monsanto Corporate Research giving employees \$50,000 for significant lifetime achievements *
- Micrografx setting aside 2% of gross revenues for royalty payments. *

Summary

Scientists and engineers in both R&D and commercial companies are recognized and rewarded in a variety of ways. These programs are an important part of an organization's value proposition to technical staff. With an increasing shortage of technical talent and an increasing need for these skills, these programs can be a source of competitive advantage for the organization.

There are five major categories and in many organizations they have programs covering more than one category. Since each reward program can have inherent weaknesses in design or meaningfulness to individual employees, having two or more programs will ensure balance and maximum impact. It is very important in larger technology and biotechnology organizations that innovation flows between business units and technical groups. As a result, it is important to avoid the negative consequences that can happen with high payouts/individual attention by balancing with team based programs.

The intention of the question asked of NECC members about scientific reward programs was to uncover programs in the category of royalty compensation. Since none of the 128 NECC members had such a program, they are one of the rarest categories of rewards. This may be due to the perceived negative consequences of singling out one inventor, knowing that many people and functions play a part in making a commercial product successful. Overall it is encouraging to see the variety and growth in rewards that encourage innovation. Therefore, the reward system has a significant influence on behavior and results.

Endnotes

* Research & Technology Executive Council. “*Compendium of R & D Reward and Recognition Programs.*” Corporate Executive Board, December 2006, www.rtec.executiveboard.com

Works Cited

Research & Technology Executive Council. “*Compendium of R & D Reward and Recognition Programs.*” Corporate Executive Board, December 2006, www.rtec.executiveboard.com

Caudron, Shari. “*Motivating Creative Employees Calls for New Strategies.*” Workforce Management, Personnel Journal, May 1994, Vol.73, No. 5, pp. 103-106, obtained from www.workforce.com

Leavitt, Paige. “*Rewarding Innovation.*” January 2002, <http://jobfunctions.bnet.com/email.aspx?page=/whitepaper.aspx&&q=rewarding+innovation&docid=73771>