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A LIFE CYCLE APPROACH THAT UNLEASHES BUSINESS OPPORTUNITIES: JOHNSON & JOHNSON'S EARTHWARDS® PROCESS

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ABSTRACT

Johnson & Johnson's Earthwards® process supports its corporate objectives of using life cycle thinking towards reducing the environmental footprint of its products and delivering greater value to customers. The use of life cycle thinking helps uncover innovative ideas and develop differentiated products. The process also helps support the company's objectives of being a successful and responsible corporate citizen.

With its emphasis on applied life cycle thinking and continuous improvement, the Earthwards® process provides support for product developers to include sustainability into their standard development processes. As a result, product developers increase their skills, knowledge and confidence on life cycle thinking and the company produces more marketable products, helping drive business success, reduce impact and address the needs of its customers.

INTRODUCTION

Johnson & Johnson is one of the world's leading consumer goods and healthcare companies. The company consists of 250 subsidiaries, employs over 114,000 employees worldwide, and sells some of the world's most recognizable brands. Products fall into three broad categories – consumer products, medical devices & diagnostics and pharmaceuticals. Further, since the company's foundation in 1886, managing for the long term – including environmental stewardship – has been a core value at Johnson & Johnson (R.W. Johnson, 1947).

Today, this commitment is articulated through Johnson & Johnson's Healthy Future 2015 Goals. One of these goals is to increase the sustainable design of Johnson & Johnson's products, including having all new products and packaging evaluated for sustainability improvements.

Achieving this corporate, global aim required the development of a process to consistently identify ways of reducing a product's environmental footprint and present opportunities to make credible environmental claims.

This paper describes the Earthwards® process – Johnson & Johnson's life cycle thinking based process that enables product designers to better understand the areas of greatest impact and guide how they should focus their efforts.

METHODS

In 2009, Johnson & Johnson worked with PE INTERNATIONAL’s Five Winds Strategic Consulting, to develop the Earthwards® process. The elements of the Earthwards® process included a product evaluation scorecard and process, the design and development of a governance system, and third party assurance.

Product Evaluation Scorecard and Process

The Earthwards® process consists of four steps. The first two, or their equivalent, are required for all products and the final two available for products with significant sustainability improvements which are pursuing Earthwards® recognition.

First, in the prerequisite stage, product teams ask themselves a series of questions aimed at ensuring a minimum standard of performance and raising their awareness of key sustainability issues and opportunities.

Second, the product undergoes a life cycle screening that examines its environmental and social impacts across key areas of concern. This steers the product team to focus on minimizing the impacts that occur during the most important life cycle stages.

Using life cycle thinking as a basis, PE INTERNATIONAL worked with Johnson & Johnson to identify seven key areas of concern which were relevant across the full spectrum of products. These seven categories are shown in Figure 1.



Figure 1. Seven areas of concern of Johnson & Johnson’s EARTHWARDS® environmental scorecard process.

Third, the product teams identify potential improvements. A product which shows more than a 10 percent improvement in three or more categories can qualify as an Earthwards® recognized product.

Finally, for those pursuing recognition, a product team submits the evaluation results and supporting documentation to a review board composed of experts from inside and outside Johnson & Johnson. This review process ensures the accuracy of the improvements identified in the previous steps.

Governance System

The governance system comprises a review board consisting of Johnson & Johnson product developers and brand marketers, as well as external subject matter experts from organizations such as Practice Greenhealth and World Wildlife Fund. The Board conducts a review of each application for Earthwards® recognition, thereby ensuring strict quality standards and brand reputation.



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Third Party Assurance

UL Environment provides ongoing annual assurance review of the Earthwards® process and verifies that process guidelines and minimum requirements are met.

RESULTS

The Earthwards® process has been applied to the full scope of products from Johnson & Johnson's Consumer Products, Pharmaceuticals, and Medical Devices and Diagnostics sectors.

As of March 2013, all new products and packaging have gone through the initial three critical stages of the Earthwards® process. Amongst these, 36 exceptional products have received Earthwards® recognition, proving that the company is well on its way towards achieving its Healthy Future goal of 60 Earthwards® products by 2015.

As importantly, the Earthwards® process is teaching the company how to better focus its efforts and infuse innovative thinking into its product development process. As lessons are learned, they are communicated broadly internally to inform Johnson & Johnson's full suite of products.

DISCUSSION

While key outcomes of the Earthwards® process, increased life cycle thinking and awareness across the organization are difficult to capture and quantify. The more tangible measure of its influence and impact is in the increased communications about environmental benefits. A sample of these, from Johnson & Johnson's Earthwards® website, includes:

- SUNDOWN® Sunblock Lotion which through a streamlined transportation process cut fuel use by 95%
- NATUSAN® First Touch Diaper Ointment which increased its use of environmentally preferred ingredients by 40% over the previous formula
- NUCYNTA® Tapentadol which improved its manufacturing process to achieve a 78% reduction in water use compared to the previous production methods
- SURGICEL® Brand Absorbable Hermostats which reduced their packaging material by 50% [through design improvements] and increased sustainable packaging materials by 100% versus the previous version.
- NEUTROGENA® Naturals Purifying Facial Cleanser which achieved a 70% reduction of greenhouse gas emissions by optimizing its distribution network.

For Johnson & Johnson, the objective of the Earthwards® process was to have a systematic approach for reducing the environmental footprint of its products and delivering greater value to customers. These two objectives go hand in hand. Without the communication of the value to customers, the innovation and the environmental improvements alone do not create business value.

Johnson & Johnson has found that product teams that complete the Earthwards® process develop the capacity to translate technical data gathered to communicate compelling environmental benefits to its stakeholders. Johnson & Johnson uses an outcome-based metric that measures the percentage of Earthwards® generated claims that are actually being used to



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communicate with customers. The higher this percentage, the more the company knows the Earthwards[®] process helps to drive meaningful communication about sustainability, thus demonstrating its business value. An example of this is Earthwards[®] influence in the company being ranked number two in Interbrand's Best Global Green Brands 2012.

As for any business, the market is the ultimate judge. Many of the Earthwards[®] recognized products sit at the top of their product categories, proving that Johnson & Johnson's approach is helping drive business success.

CONCLUSIONS

The Earthwards[®] process provides the needed structure and support for product developers to invest time into building their capacity on life cycle thinking. As a result, product developers increase their skills, knowledge and confidence, and the company produces more marketable 'greener' products, helping drive business success, reduce their impact and address the needs of its customers.

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