

## A case study on open innovation on Procter & Gamble. Part II: Co-creation and digital involvement

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**Abstract.** The first part of the present study case has pointed to the efforts directed by Procter & Gamble over time to keep close to its customers and the manner in which management has supported innovation within the company. Following the principles of disruptive innovation, the CEO of the company has set the goal for the company as to produce at least 50% of the innovations from external ideas. So, the aim of this paper is to continue to analyse the tools and the approach that P&G has taken in order to launch new products by partnering with other companies. Innovating by collaborating with external entities holding a highly specialized level of technology and engineering knowhow has been appreciated to contribute to the value creation process. In order to understand how open innovation strategy has worked for Procter & Gamble and which was the designated tool used to enrich the company with valuable input in order to develop products, we have taken a look at P&G's open innovation platform Connect + Develop.

### 1. Concept introduction

Although not considered to be a new approach, open innovation has captured more attention in the last years especially from companies such as P&G, PepsiCo, Lego, Barilla or Heineken. The manner in which these companies have chosen to work together with their customers, suppliers, distributors or other partners is different and supported by different tools. The principles behind open innovation are dating since the 60s, for example: the idea that there are people outside the organization who have the expertise to contribute is supported by the “gatekeeper” role a person could have within the company [1]. The term of co-creation has been coined by C. K. Prahalad and Venkat Ramaswamy with the occasion of an article in Harvard Business Review in 2000 supporting the idea that co-creation was high related to the desire of the customer to define the product he or she will eventually buy and not wait for companies to decide for them the characteristics of the goods [2]. In order to support the idea that co-creating has high chances to revealing information that it's not obvious or that comes up by taking a classical approach – like market research, information that needs to be gathered from all stakeholders, V. Ramaswamy and F. Gouillart have come up with the following separation between a classical strategy and strategy by co-creating [3] – table 1.

By analyzing the platform and communication approach of Procter& Gamble we will see that the stakeholders of the company are not only the customers and that the company is looking to joint its resources with those of other businesses, help them grow but also come up with new products under P&G brand.



**Table 1.** Traditional strategy vs. Co-creation strategy [3].

| Traditional strategy                                                                                                                                                                                            | Co-creation strategy                                                                                                                                                                                                          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Value: Creates value by delivering defined customer experience to targeted customer set.                                                                                                                        | Value: Creates value by constantly enhancing experiences for all stakeholders.                                                                                                                                                |
| Goal: Establishes strategic goals at the outset and doesn't significantly change them.                                                                                                                          | Goal: Uses the initial strategic goal as a starting point and lets the full strategy emerge over time.                                                                                                                        |
| Traditional strategy                                                                                                                                                                                            | Co-creation strategy                                                                                                                                                                                                          |
| Key Focus: Focuses on the interests of the firm: that is, how the firm can maximize its share of the created value relative to the shares of its industry competitors and the other members of its value chain. | Key Focus: Focuses on the interests of all stakeholders and how the ecosystem can maximize the size of the pie; maximizing the share of value captured by the firm is secondary.                                              |
| Advantage: Achieves advantage through realizing economies of scale before competitors do and making big, bold moves (such as acquisitions and investments in proprietary assets).                               | Advantage: Achieves advantage through the increased engagement of stakeholders and by continually building new interactions and experiences, which lead to higher productivity, higher creativity, and lower costs and risks. |

## 2. Procter & Gamble: strategy background

With a powerful research and development team of scientists and researchers located all over the world and a strong brand, Procter & Gamble has encountered a slowdown in sales through the late 1990s. The business model created along the years by the company has been considered a closed one, meaning that there were no exchanges with outside partners regarding development of new products and even improvements. Technology owned was considered „corporate secret” and was used less than 10 percent. For example, licensing was done seldom and the policy that was followed was quite rigid. Precisely due to the large team of professionals that P&G hold and the increasing costs of new technology, determined the company strategists to shift to a different model where proactivity was practiced [4].

## 3. Procter & Gamble platform: overview

Connect and Develop platform, launched in 2001, is considered one of the official tools that help the company collect and manage ideas to supports its open innovation approach. In order to make everything clear for the visitor, the first section of this platform deals with the benefits and motivations of the company when using this approach. The main reasons behind it are: creating an opportunity for people outside the organization to improve P&G products; avoid stale and repetitive ideas from the employees. The benefit is that, this way the company manages to avoid investing in research and development much more than necessary. The name of the platform is intended to suggest exactly the approach that will rule over the company in the years to come: research and development is becoming connect and develop in order to connect the technologies much better so that the development process will become shorter and efficiency will increase [4]. The platform can be accessed at the following URL <http://www.pgconnectdevelop.com/> and also using a new window link on several pages on the official website of the company [www.pgconnectdevelop.com](http://www.pgconnectdevelop.com/). The present version of the website was launched by the company in 2013 allowing for several new types of activities: user submissions are directly feed into the business category leaders which allowed responsible inside P&G to speed up the evaluation process. The designated team can also search by topic, share with other colleagues and track progress of all submitted information.

## 4. Data collection and analysis by dedicated Connect & Develop team

By gathering a large set of ideas from companies and individuals, P&G can easily get insight from a diversity of professionals. The only request that is mentioned on Connect & Develop, just as

introducing the concept, is intellectual property; P&G requires all ideas to follow information on the granted patent or the published patent application [5].

Similar to other companies, P&G knows its areas where improvements are required and communicates the list of present needs. Grouped into categories under the section called Our needs, these are connected to the product categories manufactured by the company: personal and family care innovations; beauty and grooming innovations, household care innovations; packing innovations; industrial and manufacturing innovations; digital, business and retail innovations; other innovations [6]. One example of specific request that the company has is within the category of laundry disinfection in professional business products. The interest is to find technologies cost effectively in disinfecting or sanitizing laundry. The information sheet that can only be accessed after creating an account, explaining technical aspects for the solution is divided into few sections as it follows [7]:

*Need description.* P&G explains what is looking for.

*Background.* Specific details regarding products in the sanitizing/disinfecting laundry are given in order to underline the standards that the solution has to comply with.

*We are looking for.* Details regarding the criteria that technology has to comply with.

*We are not looking for.* The company states very clear the type of solutions that it's not interested in.

The reasoning behind using an online platform such as Connect & Develop to manage new ideas and proposals is the volume of open innovation submissions. So that all these submissions to be reviewed, the online platform help the company to manage the process efficiently, collect all the information they need and also respond. The submissions are reviewed by a specific team member of Connect and Develop who will pass the innovation to the relevant business in the company [8].

Using the same online space – Connect & Develop, P&G states its interest in collaborating with companies - small or large, entrepreneurs, academia and research groups. Despite the size of the company, P&G wants to reassure those who are interested in submitting ideas that, internally they work as a „small company”. The cores in charge of Connect & Develop have the capacity of analysing the information submitted, review and evaluate and finally share it with an Expert Panel. The role of the Experts Panel is to be connected to all P&G businesses and share their knowledge on the company's strategy, needs and plans [9].

When talking about its success stories on Connect & Develop, P&G classifies its open innovations initiatives into main categories: academia partnerships, joint ventures, trademark licensing, in & out licensing. Improvements to already existing and popular products are listed in Other case studies section mentioning the collaboration between P&G and other companies. Below are some examples of collaboration that the company has developed using Connect + Develop – table 2.

**Table 2.** Open collaboration managed on Connect & Develop [10].

| Company objective                                                                                                                                                                                                                                                        | Type of collaboration                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| Sponsoring high-potential start-ups who can demonstrate innovative technology and/or business model ideas to dramatically accelerate quality and speed of critical business opportunities for P&G brands across the globe.                                               | Partnership & support: start up sponsoring |
| Identify strategic research themes across a wide range of academic disciplines including engineering, maths and physics, design, computing, chemistry, psychology, business and the arts. Link the work done at Leeds to the value of the company's commercial products. | Academia partnerships                      |
| Enter a new growth area in the health-care business                                                                                                                                                                                                                      | Joint Venture                              |
| Expand brand equity into new areas                                                                                                                                                                                                                                       | Trademark Licensing                        |
| Introduce a new product category in portfolio                                                                                                                                                                                                                            | In & out licensing                         |

### 5. Procter & Gamble successful products resulting from open innovation

Tide Pods, Olay, Always Infinity or Crest are just some of the brands that have benefit from open innovation partnerships. Crest Whitestrips Advanced Seal teeth whitening product is the result of the collaboration with Corium International, Inc. a privately-owned, clinical stage company engaged in the research, development and manufacture of advanced transdermal drug delivery technologies and products. Through the combination of its proprietary delivery technologies and its development and manufacturing expertise, Corium is developing a range of novel active and passive transdermal products as well as consumer products. Corium's innovative "form fit, no slip, clean removal" Corplex technology has been of great interest for P&G's technicians that decided to integrate it into the product. A commercially proven versatile polymer technology that can be delivered in liquid, semi-liquid and solid formats for many drug delivery, medical and consumer product applications, Corplex consists of composite blends of polymers with unique adhesive, physical/chemical, and water-absorbing properties and offers a range of hydrophilic to hydrophobic properties, enabling excellent adhesion to both dry and wet surfaces and a variety of wear times. Corium has been awarded due to this collaboration that produced outstanding business results. Crest Whitestrips Advanced Seal teeth-whitening product was launched in early 2009 and has received great reviews from consumers who were offered a new solution to whitening their teeth [11]. The partnership is a good example of how the company has succeeded to create value for all involved stakeholders in the process, proving the benefits of an open innovation approach. This partnership helped P&G to avoid investing time and research resources at the same time as Corium, the result was that both companies have contributed and built on each other's capabilities.

To emphasize the flexibility and determination that P&G has to develop great products, while managing more than one partner in their efforts to develop a new product category, below are the different companies that P&G worked with that led to a successful product range under the same brand name – Febreze (table 3).

**Table 3.** External partners who helped build Febreze products [10].

| Febreze Trademark Licensing Program       |                           |                                                                                                                        |
|-------------------------------------------|---------------------------|------------------------------------------------------------------------------------------------------------------------|
| Product                                   | Licensing Partner         | Outcome for P&G                                                                                                        |
| Febreze air filters                       | Imagine One Resources     | Trademark for use with residential air filters                                                                         |
| Febreze vacuum filters and carpet powders | Bissell                   | A new line of vacuum bags and filters; cleaning carpet powders, including specialty products such as pet odour remover |
| Febreze spot and stain removers           | Home Care Industries, Inc | A new line of carpet, rug and upholstery spot and stain removers                                                       |
| Honeywell Febreze fan                     | Kaz                       | Two speed fan freshener                                                                                                |

### 6. Connect and Develop results

With more than 10 years of success from 2000 global partnerships and more than 4000 ideas a year C +D, focus is to deliver discontinuous innovations. The open innovation programme reached its initial goal in 2005 – to have more than 50% of product innovations as a partnership with external entities. In 2010 the company has set two new goals: to triple the contribution through the open innovation platform by delivering 30 billion dollars in annual sales and become a Partner of Choice when it comes to innovation collaboration [12]. Judging by the impact or part of the product that will include the innovation elements, the company is performing the following types of innovation – table 4.

**Table 4.** Types of innovation resulting from C+D\* collaborations [7] [13].

| P&G's posted need on the platform / What are they looking for?                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Type of innovation according to the OECD** classification |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| Need: Refillable Dispensing Package for Wet-Wipes<br>What is P&G looking for: innovative packaging design to improve ease of use and overall consumer experience of wet-wipe product; an IP protected existing solution; novel packaging design solution.                                                                                                                                                                                                                                                                   | Marketing/product innovation                              |
| Need: Digestive Wellness/products, technologies and packaging that improve benefit areas of treat, manage and/or enhance in Digestive Wellness<br>What is P&G looking for: technologies capable of providing new or augmenting established health claims, increasing consumer satisfaction, enhancing consumer compliance, or enabling greater convenience. Opportunities may consist of new product forms, packaging innovations, delivery technologies, or new actives/ingredients or actives'/ingredients' combinations. | Product/Process innovation                                |
| Need: pseudoephedrine technologies<br>What is P&G looking for: formulations that will reduce/inhibit the in vitro extraction/use of PSE, yet maintain clinical bioavailability, effectiveness and safety.                                                                                                                                                                                                                                                                                                                   | Product/Process innovation                                |

\* *Connect + Develop*\*\* *Organisation for Economic Co-operation and Development*

## 7. Conclusion

At a closer look, the success coming from the various products the company has launched is not strictly related to just the platform Connect + Develop, it is the mixture of all tools and types of collaborations, mentioned in the first part of this case study, that creates opportunities for specialists to develop new solutions. In the last financial report issued by the company innovation is still mentioned as “company lifeblood” [14].

The official purpose of the platform is clearly aligned with the mission of the company „delighting the consumer with innovations that can make every day better” [15]. In comparison with the manner in which other consumer product companies have organized their open innovation process, P&G keeps a high control over all partners' input. There are rules stated in order to communicate precisely the areas where new ideas are welcome. The fuzzy front end of a product development process is considerate to be the „messy getting started” period of new products and although it doesn't require capital investment it can take 50% of development time [16]. Most of the featured needs presented on Connect & Develop are related to products already existing, the purpose of the input would be to help the company change the performance of the product.

A future research idea would be to analyse in depth, taking into consideration other innovation theories besides OECD classification, the type of innovation that results from using an online solution such as the platform Connect + Develop. In the examples mentioned above it is not clear whether they should qualify for process innovation also since the technologies are not owned by P&G – the company just integrates it. The limitations of the present study are connected to the fact that much of the information regarding this platform has been desk researched and most of the scientific research available is mainly related to the open innovation strategy inside the company. The goal of the present case study was to show the results of the change from a closed strategy to a new, open innovation strategy leading to numerous partnerships and success products.

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## References

- [1] Trott P and Hartman D Why “open innovation” is old wine in new bottles *Int. J. Innovation Management* **13(4)** pp 715-736
- [2] Prahalad C K and Ramaswamy V 2004 Co-Creation Experiences: The next practice in value creation *J. of Interactive Marketing* **18** (Wiley InterScience)
- [3] Information on product development by co-creation: <https://hbr.org/2010/10/building-the-co-creative-enterprise>, accessed 10 March 2015
- [4] Sakkab N Y 2009 *Connect & Develop Complements research & Develop at P&G* (Industrial Research Institute)
- [5] What is open innovation, [http://www.pgconnectdevelop.com/home/open\\_innovation.html](http://www.pgconnectdevelop.com/home/open_innovation.html), accessed 10 February 2015
- [6] Information on P&G’s needs, <http://www.pgconnectdevelop.com/home/needs.html>, accessed 10 February 2015
- [7] Information on household care innovations, <https://pgconnectdevelop.inovasuite.com/pg/>, accessed 10 February 2015
- [8] About submitting to P&G, [http://www.pgconnectdevelop.com/home/frequently\\_asked\\_questions/about-submitting-to-pg.html](http://www.pgconnectdevelop.com/home/frequently_asked_questions/about-submitting-to-pg.html), accessed 10 February 2015
- [9] About partnering with P&G, [http://www.pgconnectdevelop.com/home/frequently\\_asked\\_questions/about-partnering-with-pg.html](http://www.pgconnectdevelop.com/home/frequently_asked_questions/about-partnering-with-pg.html), accessed 10 February 2015
- [10] Open innovation stories, <http://www.pgconnectdevelop.com/home/stories.html>, accessed 20 March 2015
- [11] Corium International, Inc. Honored as P&G’s External Business Partner of the Year [http://www.coriumgroup.com/PreseRelease\\_HonoredPandGsExternalBusinessPartner.html](http://www.coriumgroup.com/PreseRelease_HonoredPandGsExternalBusinessPartner.html), accessed 13 March 2015
- [12] Connect + Develop Fact Sheet, [http://www.pg.com/en\\_US/downloads/innovation/C\\_D\\_factsheet.pdf](http://www.pg.com/en_US/downloads/innovation/C_D_factsheet.pdf), accessed 10 March 2015
- [13] OECD/Eurostat 2005 *Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data, 3rd Edition* The Measurement of Scientific and Technological Activities (Paris: OECD Publishing)
- [14] Annual Report 2014, [http://www.pginvestor.com/interactive/lookandfeel/4004124/PG\\_Annual\\_Report\\_2014.pdf](http://www.pginvestor.com/interactive/lookandfeel/4004124/PG_Annual_Report_2014.pdf), accessed 20 March 2015
- [15] Why innovation matters and how to make it work – Speech Transcript, [https://www.pg.com/en\\_US/downloads/company/purpose\\_people/touching\\_lives\\_improving\\_life.pdf](https://www.pg.com/en_US/downloads/company/purpose_people/touching_lives_improving_life.pdf), accessed 15 March 2015
- [16] Nambisan S “Designing virtual customer environments for new product development: Toward a theory” *The academy of Management Review* **27(3)** pp 392-413