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Innovation management based on proactive engagement of customers: A case study on LEGO Group. Part II: Challenge of engaging the digital customer

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Abstract. To foster the development of innovative products and new technologies, nowadays companies use an open innovation system, encouraging stakeholders to contribute, using the companies' online platforms for open innovation or social media, bringing and sharing creative solutions and ideas in order to respond to challenging needs the company directly expresses. Accordingly, the current research continues the analysis of the LEGO Group innovation efforts, aiming to provide a case study approach based on describing the most important projects and online instruments company uses to interact with customers and other external stakeholders. Thus, by analysing the experience of the company in developing projects of involving stakeholders in the innovation processes, the article emphasizes the objective of these past projects developed by LEGO Group, outlining their objectives regarding the focus on the product or process innovation, the team management and stakeholders involved in the innovation actions and the results they obtained. Moreover, the case study highlights the features of the most important online instruments LEGO Group uses at the moment for engaging LEGO fans, children, parents, and other external stakeholders in developing new LEGO sets. Thus, LEGO online instruments provide the opportunity for customers to be creative and to respond to LEGO management team challenges. Accordingly, LEGO involve customers in bringing innovative ideas for LEGO sets through LEGO Ideas instrument, which aims to engage customers in submitting projects, voting and supporting ideas and also sharing them on social media. Also, the research emphasizes the role of supporting the open dialogue and interaction with customers and other external stakeholders through LEGO.com Create & Share Galleries instrument, using their creativity to upload innovative models in the public galleries. The continuous challenges LEGO launches for their fans create a long-term connection between company and its customers, supporting the value co-creation process, as the submitted ideas can materialize in new LEGO products which can be found on the market. As a consequence, customers' engagement in the co-creation process facilitated by the multiple online instruments provided by LEGO, resulted in positive outcomes for the company regarding new product development for the sets launched on the market to satisfy changing needs of their customers. The results provided by this case study approach can be useful for the business environment and academia as well in order to understand the role of engaging customers in the open innovation process, creating a competitive advantage on the market for companies.

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1. Introduction

The current case study approach continues the first part of the paper highlighting the LEGO Group company and the innovation management, where there were analysed the history of the company and management team, company's organizational products and services, the philosophy of the company, its mission and vision, the most important policies and strategies, the organizational structure, company's concerns for the innovation factors.

In the current paper we aim to analyse the co-creation in innovation process focusing on the experience of the LEGO Group and providing examples from company's history regarding the online platforms which facilitate the permanent dialogue with their customers and their creative ideas for new product development.

Thus, the second part of this case study regarding the innovation management on LEGO Group is focused on the following issues: the experience of the company in involving customers in the innovation processes by developing programs and projects, and the digitization innovation process, by using online instruments to interact with their customers. The case study presents the main instruments used by LEGO Group, identifying the target segment of customers and company's management of the relation with their customers.

2. Co-creation in innovation: Involving stakeholders in developing New LEGO products

2.1. The experience of LEGO in involving customers in the innovation processes LEGO Group has a wide experience in creating new products as the number of projects developed in order to customize, develop and create new products is continuously increased.

Thus, the first project developed in 2005 was Ambassador, which provided a direct way for the company to connect with LEGO fans. The Ambassador program represented for the company discovering new ideas, new technologies, new business partnerships, and for adult fans, the collaboration with LEGO specialists enable them to influence the business decisions of LEGO and to encourage the company to develop new products [1]. The objective of the program was to recruit about 50 users committed to brand communities from the entire world in order to work for short periods of time within innovation facilities provided by LEGO [2]. The role of the ambassadors was to present requests and questions from the community to LEGO managers, and then managers asked ambassadors to look for ideas and feedback from users groups [3]. Also, managers participated into corporatist programs regarding product innovation and knowledge sharing activities with LEGO employees, this activity contributing to co-creating new products [2].

LEGO Kids Inner Circle is another LEGO program, created for children to comment about photographs with designers' concepts for the future toys and to criticize the sets prepared for launching on the market [3]. Accessing the program, the user can buy LEGO sets, mentioning at first his age, the most accessed plays in that day on LEGO site, how often he visits the LEGO site, the evaluation of the site, recommendation of the site to other users, the intention to come back on site and to buy LEGO products, demographic data regarding the user [4]. It may observed that this LEGO platform aims at this moment to obtain feedback regarding the site of the company, by marking answers on a questionnaire, and less to obtain ideas regarding the products which should be launched on the market by LEGO.

Another program focused on customization of the product, LEGO Factory (Design by Me) represented a real success for the company, by enabling users of the platform to create what they imagined on their personal computer, and then to order the customized product. Although this program, closed in January 2012, represented a great success for LEGO, Design by Me experience challenged the capacity of the company to accomplish the quality standards regarding LEGO service for the customized products [5]. However, the models can be found on co-creation platform called LEGO Digital Designer (LDD), which enable users to upload models in the public gallery, the success of the platform consisting in engaging millions of people in 6 years of building activities of

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customized models [5], when main actors from the company interacted with innovators from over the world.

Also, LEGO CUUSOO was another experiment for obtaining innovative ideas through the online environment. Launching this program in 2011 at the global level, LEGO Group managed to involve external stakeholders in a process focused on new product development, as the actors involved (designers for LEGO sets, marketing and business representatives) had the role of evaluating the new ideas for LEGO products and the projects obtaining over 10 000 supporting votes had the chance to become the new LEGO sets [6]. Though, at this moment LEGO CUUSOO team informs the users who access the platform that all projects, comments, profiles and the other data from LEGO CUUSOO were redirected to the new program of the LEGO Group, called LEGO Ideas [6].

3. Digitizing innovation by using the online environments

3.1. LEGO Ideas: the main instrument for interacting with LEGO customers

LEGO Among the numerous online instruments used by LEGO to interact with customers and to involve them in the co-creation in innovation process, LEGO Ideas is one of the most important at this moment. The homepage of LEGO Ideas is very suggestive, the visual identity being provided by LEGO logo, being present in the left side of the menu. The image representing the process followed by the company through interacting with customers expresses directly the question for users ("Have an idea for a LEGO set?"), but also the stages of the process including sharing ideas, obtaining support, evaluating the idea by LEGO specialists and obtaining and launching a new LEGO product, as in the figure below [7].



Figure 1. The process of collecting creative ideas on LEGO Ideas [7].

Regarding the link with official website of the company, it may be observed that there is no link from the official website of the company to LEGO Ideas (https://ideas.lego.com/), which may represent a drawback if users are not familiar with LEGO CUUSOO official blog, website closed, but which provides the possibility to be redirected to the official website of LEGO Ideas program.

Though, it may be mentioned the externalization of this instrument, as the goal of the company is to receive as much ideas, being addressed to all users, excepting children below 13 years old. Moreover, LEGO encourages collaborations between members who build the model and those who promote the model, for the submitted projects [8].

LEGO Ideas presents to innovators on the homepage the possibility to create an account and to import data from LEGO CUUSOO. The button "Discover" enable LEGO fans to visualize the ongoing projects, to vote and to support ideas, mentioning the number of supporters, but also the number of days remained for voting during a year. Agreeing to support a project means that the user should respond to a questionnaire regarding the cost of the future product, the number of people buying it, the category of users for whom it is suitable, but also the difficulty of building the model [9].

The button "Submit" provides information to innovator regarding the project which will be sent, the way competition is conducted, the prizes and the rewards, the criteria for projects to be accepted, the quality standards of the project and rules for using the instrument and starting competition [10].

The interface of the instrument for submitting the project provides the stages for submitting the idea to LEGO specialists. The first step consists in giving the name of the project, followed by

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uploading an image of high quality reflecting the model [11]. In the section "Details", the innovator should offer a description of the project, mentioning its aim, having also the possibility to visualize the project uploaded on LEGO Ideas site. The last button ("Submit") offers the possibility for user to submit the project with the last changes, after marking that he agrees with terms and conditions and mentions if the idea of the project is original or it is based on the intellectual property of someone else.

Also, accessing "Community" the users of the platform can visualize the activities of the all users of the instrument and the votes of support. Pressing the button "How it works", the user receive information regarding all four stages which should be followed in order to submit an idea for developing a new product [12]. The next section, "My page", represents the profile of the user, who can access the realized activity, the submitted projects, the support offered to projects and to editing the profile. The last section of the menu, "Blog" comprise announcements regarding the results of the evaluation process, new ideas regarding the LEGO sets, the projects which are qualified for different evaluation rounds, etc. [13].

LEGO Ideas instrument provided by LEGO to interact with its customers addresses to a large segment of customers, LEGO adult fans, and children who are 13 years old or older, who can bring a new product idea for LEGO sets. Thus, the need defined by the company, which involves customers in developing new products using their creativity, is presented as a contest. This is indicated by the time period mentioned by the company (365 days) in which the innovator which submitted the project for the new LEGO set can gather votes, as support, passing into an evaluation process in those three periods from the year. Moreover, the creation process, innovation and competition are supported by providing rewards if the project submitted will become the new LEGO set launched on the market. Thus, innovators have the chance to receive 1% from the total net sales of the product, 5 complimentary copies of the LEGO Ideas set created by them, credit and bio in set materials as the LEGO Ideas set creators [14].

Regarding the intellectual property rights over the submitted ideas, the LEGO Group mentions the distinction made between "generic" ideas, which may be similar to other ideas existing in the world, but which may be different by the concept presentation, and "unique" ideas, original, such as a fictive vehicle, which benefits from the intellectual property right, as the company will not allow that the submitted idea to be used or modified by someone else [14].

LEGO Ideas platform encourages the social media presence, innovators being invited to share their ideas, projects, and to announce their friends that they participate to the contest and they need their support. The projects submitted for evaluation can be shared on Facebook, Twitter, Skype, blogs and other online communities to obtain support. Also, there other platforms which LEGO provide for sharing creations, ideas, contents, new models, such as LEGO.com Create & Share Galleries and ReBrick. The last one, ReBrick, is a social platform for bookmarking, where adult users can share, organize and discuss LEGO contents created by users of the LEGO digital platforms, teenagers and adults who use their creativity to build their own models, called MOCs (My Own Creation) [15].

3.2. LEGO.com Create & Share Galleries: the creativity trigger for LEGO customers

This online instrument aims the establishment of direct interaction with customers, by sharing ideas regarding new creations of LEGO fans. This platform contributes to a large extent to consolidation of the LEGO brand, as supports the interaction with customers of any age wanting to use their creativity to build new LEGO models. The visual identity of the brand is provided by the logo of LEGO brand illustrated to the page of interacting with customers and by an image which expresses a light bulb followed by green arrow directed toward the words "Create & Share". The LEGO.com Create & Share Galleries instrument has the advantage to be directly connected to the official website of the company, the connection being made by the main menu of the official page of the company. This direct connection from the official website menu highlights the importance that the company offers to activities of interaction with customers and to open innovation through the digital environment.

Thus, by accessing the official website of the LEGO Group (www.lego.com) and choosing the button Create & Share (http://www.lego.com/en-us/createandshare), the user opens the page which

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enables him to upload new models created in public galleries. The galleries provide different challenges for customers depending on occasion, as for example the celebration of Halloween opened the challenge "Spookify your LEGO sets" [16].

This LEGO instrument aims the open innovation and the externalization of the instrument, by involving all users, LEGO sets fans, who want to share their creative models with the others fans. By participating to LEGO challenges, the innovators use the LEGO bricks for building a model, take a photo of it and upload it on LEGO galleries, sharing their creations with the other users of the website. Also, if customers do not have enough LEGO bricks to build the models, the LEGO team provided the LEGO Digital Designer software which can be downloaded from the website and which enable them to create the models and to upload the creations from their personal computers on the LEGO website [17], supporting creativity and innovation of new LEGO models. After building the model using this application, the "Send" button enables the user to send and upload the new model on LEGO Digital Designer Gallery, to give a name to his creation, offering a description and selecting a category where to register the model [18].

By opening the LEGO Galleries, the LEGO.com Create & Share Galleries instrument offers information to LEGO customers regarding the current challenges, but also the challenges from the past, and the winners of the first 3 places of the LEGO contest. Each challenge which is launched has a certain theme, and in each gallery for each set, to which LEGO fans can upload creative models, there is a separate page which offers a menu with buttons for adding the creations ("Add creation"), for visualizing the personal creations ("My creations"), for adding the comments ("My comments"), or for searching the submitted models ("Search Creations"). The authors of the creative models have the opportunity to upload more than one image, video files, or files offered by the virtual application LEGO Digital Designer, with the model they build [19].

The segment of customers targeted by this instrument is very large, being addressed to both children and LEGO adult fans, who share their ideas for new LEGO products. The reward obtained for winning the contest is an intrinsic one, referring to the notoriety innovators gain by being known in the whole world for their creations awarded by the LEGO team. Regarding the intellectual property rights, the users who upload creations on LEGO website assign to LEGO Group the irreversible right to use, modify, to publish or to display the submitted material with different promotional or marketing aims [20].

3.3. Collecting, processing and analyzing customers' ideas

The process of collecting, processing and analysing customers' ideas involves the evaluation by the LEGO specialists of the submitted projects supported by more than 10 000 of supporters. If the project is selected for the production phase, the designers of the LEGO sets improve the original application in order to become a new LEGO product ready for launching on the market. The LEGO team decides which will be the main features of the product in the end, in 6 months being realized the final set for selling [21].

3.4. Assessing the results of involving customers in the innovation process

The involvement of customers in the co-creation process initiated by LEGO using the online platforms created positive results for the company, such as the profit for the year amounted to DKK 6.1 billion in 2013 and operating profit to DKK 8.3 billion [22]. Also, the company stated that new products generate 60% of the total sales for the company every year, LEGO mentioning that "an innovative and consumer-oriented development process is a fundamental parameter to the continued success" [22].

3.5. Future projects

The future projects of the company aims the globalization of company's presence on the market and continuous innovation of the LEGO play systems. Supporting the open innovation process, LEGO aims to launch new product lines, extending its presence to the global level and reaching to children from every country of the world [23]. Also, regarding the innovation efforts, the future projects of the

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company refer to creating the leverages for digitizing innovation on a wide range of subjects, such as integration of physical and digital play, marketing, e-commerce and business system [23].

4. Conclusions

LEGO Group developed a continuous dialogue with their customers, involving them in the open innovation process. The numerous open innovation platforms provided by the company in order to engage their customers in sharing their creative ideas about new LEGO sets enable customers to develop their ideas with LEGO specialists. The foreseen result of the co-creation process is the long-term success of the company as the customers' specific needs are satisfied by creating a permanent interaction with them in the online environment.

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