Abstract—as it was highlighted in the first part of this research, the emergence of platforms emphasize consumers as triggers for product development. The organizational challenges for use of open innovation became oriented to the creation of virtual instruments as an essential part of innovation strategy. Thus, this paper aims to present social communities as co-designers and their engagement into value co-creation process through collaboration. Based on case study approach on Electrolux AG, there will be highlighted the company’s main concerns for innovation implementation and its approach for consumers’ engagement into ideation process. From this point of view there will be analyzed the past experience of Electrolux in terms of successful digitalized innovation, the platform structure and company’s approach for data collection and analysis in order to promote creativity and ideation importance. The foreseen result is to understand the Design Lab as an innovative tool for socializing and ideas generation within product design context.

Keywords— collaboration, co-designers, digitalized innovation, ideation, platform structure

I. INTRODUCTION

The value co-creation, as well as the process of co-innovation exceeds the common conceptualization of product development. The future of product design and development is narrowly shaped by consumers or/and customers, in terms of their needs, expectations, innovative ideas.

The organizational context allows and develops new ways to engage the social community as an important integrative approach to co-innovation. The modern technologies facilitate businesses to create their own ways and tools for communication with consumers and customers. Going further, open innovation became a must for product design and development processes.

The active role of social community into these processes, creates the prerequisite for their transformation into co-designers, co-innovators, lead users [1]. According to Romero and Molina co-creation is a process of consumers or customers involvement into organizational creative activities [1]. From this point of view core competencies, knowledge, past experience from both sides contribute to ideation, conceptualization and production of new products or services [1].

However, a customer-driven approach is promoting the consumers or customers as key drivers of innovation activities [1], or technology development [2].

II. CONSUMERS AS CO-DESIGNERS

The adoption of value co-creation means the involvement of social communities into the product development process at the early stages – co-design. Basically it is about the consumers’ power to influence the innovation and provide creativity aspects [2] and establishing the contact through continuous dialogue [2]. The main requirement for a successful communication with consumers, is reflected by specially designed tools, such as virtual platforms [2].

Consumer’s engagement into product development stages (ideation, conceptualization, design and testing) represents the mechanism of value generation and the creation of innovative solutions [3]. Thus, Romero and Molina identified the main features of social community by presenting the consumers from four point of views:

1) Consumer as co-designer
2) Consumer as innovator
3) Consumer as brander
4) Consumer as responsible actor [1]

As a part of consumer-based approach, the social communities are seen as an important source of technological innovation in terms of product design and ideas exchange with the companies [2]. However, their engagement is essential in:

1) Co-ideation – idea generation stage which implies active participation in product concept development [2]
2) Co-design – stage characterized by filling the gap...
between developed concept and the best practical solutions [2].

III. PLATFORM DEVELOPMENT: THE CASE OF ELECTROLUX

The platform development process depends upon previous experience of organizations within consumers’ engagement activities. Innovation represents the driver for co – creation in the case of Electrolux Company. From this point of view there was launched the competition “Electrolux Design Lab” [4], a discussion forum for students around the world [5].

The main concern was to gather and analyze innovative ideas for development of appliances for the future [6] and to create new concepts along with consumers in order to create a new “face” of the products – co – design activity [6]. As it was mentioned bellow the experience of the company has a major impact on the product development.

B. Previous experience of Electrolux Design Lab

The main concern of Electrolux Design Lab is to ensure the continuous development and generation of new concepts or ideas. From this point of view the competition is based on the evaluation of consumers’ needs, requirements and expectation, so that it comprises various themes (table I).

<table>
<thead>
<tr>
<th>Period</th>
<th>Competition Theme</th>
<th>Key Aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004 -</td>
<td>The design of the future</td>
<td>Innovative ideas for 2020</td>
</tr>
<tr>
<td>2005</td>
<td>Design and healthy alimentation</td>
<td>Promoting innovative solutions and healthy habits</td>
</tr>
<tr>
<td>2006</td>
<td>Design and Sustainability</td>
<td>New ecological concepts</td>
</tr>
<tr>
<td>2007</td>
<td>Design for Generation of Internet</td>
<td>Energy and water efficiency</td>
</tr>
<tr>
<td>2008</td>
<td>The Next 90 Years</td>
<td>Short term implementation</td>
</tr>
<tr>
<td>2009</td>
<td>New Spatial Era</td>
<td>Internet-based concepts</td>
</tr>
<tr>
<td>2010</td>
<td>Intelligent Mobility</td>
<td>Concepts for cooking, washing activities in small spaces</td>
</tr>
<tr>
<td>2011</td>
<td>Design of Future</td>
<td>Past and future design experience</td>
</tr>
<tr>
<td>2012</td>
<td>Urban Life</td>
<td>Innovative and creative concepts for daily life</td>
</tr>
<tr>
<td>2013</td>
<td>Healthy Houses</td>
<td>Creative and innovative ideas and concepts for</td>
</tr>
</tbody>
</table>

The Electrolux Design Lab is targeting mostly students from Industrial Design or Engineering Curricula, who are engaged into interactions with company’s team of experts. The involvement of potential consumers occurs at the end of each competition stage, through the possibility to vote the most interesting design concept [15]

For the evaluation of innovative ideas and concepts, Electrolux team of experts comprise personalities from Departments of Design, Research & Development, Consumers, Innovation Marketing at global level [16]. The engagement of the experts is important for competition evolution and success as the team provide the assessment of submitted concepts and ensures the feedback to the participants [16].

The approach for Healthy Houses was concretized through three main concerns:
1) *Cooking delight*  
Comprises the concepts and ideas which provide the motivation for adoption of healthy lifestyle [17]
2) *Air purification*  
Development of flexible and innovative solutions for air quality management [17].
3) *Textile Care*  
The creation of innovative, sustainable and creative solutions for the design of houses according to consumers’ needs and their own lifestyles [17]. The key aspect is to ensure the balance between the environment, quality and efficient solutions [17].

C. Digitizing innovation

The key aspect is not only to promote the innovative and creative concepts and ideas, but also to create and provide innovative ways for their submission. From this point of view, Electrolux Design Lab represents a virtual forum for discussions, which comprises participants’ blogs. Each blog should contain the participant’s information, such as: photo of the participant, academic curricula, contact, social media accounts, the main concerns or hobbies [18]. This platform is developed around the main theme of the competition and provides the information about the mission of the competition, the rules and intellectual property aspects [18], [19].

The platform is structured as a collection of blogs, where participant can upload their concepts. The access to Electrolux Design Lab is realized through accounts, each participant should be registered in the platform in order to access their information and to visualize the feedback from the experts.

Each participant should demonstrate their capabilities to be co – designers, as well as maintain the contact with potential consumers. From this point of view, on each blog participant will post description of their activities, opinions about social and innovative issues [19].

In the front page of the platform it can be seen the evolution of the competition, the final count-down, also a shortcut to the most interesting projects. However other contributors can search the projects based on criteria: projects, people, the most popular concepts and the most discussed projects [18]. The platform contains also participants’ statistics: the countries of origins, the number of votes, the number of shared concepts on social media and the countries of origins of the persons that participate at the vote [18].

The vote can be expressed through the registration with: e-mail address, the Facebook or Twitter accounts on Design Lab platform. In the first case, the voters will receive a link for confirmation from Electrolux Design Lab which the voters should access in order to confirm
the electronic address and the information provided at the registration. Those who express their vote, gain the possibility to participate at the competition for consumers by expressing their opinion for what a healthy house means. The platform contains also the visual trademark of Electrolux Group: the framed letter E with Electrolux keyword and it can be found on each section of the platform. The visibility of the platform is ensured through the presence of Electrolux on social media, such as:

1) **YouTube**
   Includes the presentation of the past competitions or current one through short videos
2) **Facebook and Twitter**
   Can be found the information about the present competition, the results and innovative products [20]
3) **Pinterest, Flickr and Instagram**
   Comprises a collection of pictures, images of the developed concepts [20].

### D. The collection, processing and analysis of the concepts

Electrolux Design Lab represents a competition evolving in four distinct stages (fig. 1).

Starting from the announcement of the competition, the participant have to submit their ideas and the sketch of the concept. The first 100 best ideas will be competing in the Design Lab, after a rigorous evaluation from the team of experts. However, based on voting process from the potential customers, in the first stage will participate only the best 70 proposed and submitted of concepts [22]. Each stage is followed by experts’ feedback and guidelines for next level [22].

At stage 3 the participants should motivate their choice of concept and describe how their concept will change people’ live [23] and to provide an image which reflects the human nature of developed concepts. Additional, they should send the materials which demonstrate the functionality and utility of their concepts [23].

In the process of evaluation, the team of experts assess the conformity of the concept and idea with following criteria:

1) **Concept or project conformity with the main theme and objective of the competition**
2) **Inclusive intuitive design**
3) **The degree of innovation**
4) **The conformity of the concept with consumers or clients’ needs and requirements**
5) **Aesthetic features**
6) **The concept is reflecting the Scandinavian design values: sensibility and environment friendly**

---

**Fig. 1. The collection, processing and analysis process at Electrolux AG [21]**

### III. THE COMPANY’S RESULTS AND FUTURE PROJECTS

The Electrolux Design Lab launching represented the first step to gaining significant financial results. The results of the competition were concretized through new product development, for participants it was new opportunity to promote their own portfolios of designs [24].

Also Electrolux creates opportunities for young specialist to develop from the early stages their concepts through internship at one of the Centers of Design and Innovation Electrolux at global level [24].

The utility of platform was shown through new implemented designs. As opportunity, Electrolux Company believes that consumers should be co-designers and co-innovators of their products. From this point of view each year Electrolux Design Lab addresses new design challenges, mostly oriented for innovation, consolidated brand and efficiency, as well as
attracted talented participants at global level [14].

In the first quarter of the year 2014, Electrolux consolidated their position on premium markets and achieved a growing rate of net sales of 28.284 million (+5.5%) [25].

In the future Electrolux will perceive to achieve the significant results in the terms of innovation and consumers’ engagement into product development process, ecology enhancement. New range of ecological products brought Electrolux a growing rate of 12% compared to the year 2013 [14].

IV. CONCLUSIONS

This research aims to present the main features of value co – creation or co – innovation based on case study of Electrolux Company. In the first part, there was presented the organizational context for adoption of consumers as driving force of innovation. The experience of the company in the field of collaboration with consumers or customers have a major impact on financial or other results.

The digitalized innovation ensures the visibility of organizational efforts to gain consumers loyalty, as well as promotes open innovation tools, such as competition platform Electrolux Design Lab. Organized as contest, this competition gathers together each year students around the world and challenge them for new creative and innovative ideas. The main concern is concentrated on the mix of creative designs, functionality of future product and capabilities and abilities needed to develop the concept further.

ACKNOWLEDGMENT

This research was undertaken within the framework of the National Research Program PN II, financed by MEN – UEFISCDI, project PN-II-PT-PCCA-2013-4-1811

REFERENCES


[3] Nambisan


