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Value Creation through Consumers' Participation Using Digital and Social Media

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1. Introduction

The purpose of this study is to find out how a company can enter an unspecified large number of consumers into its online platform and search for new values related to products common to the world.

With the development of information and communication technology such as social media, and due to the penetration of 3D printers and other digital equipment, everyone can use lots of information and those tools equally and for anytime anywhere. A situation appears expressing his or her own feelings in an easy-to-understand manner by means of photos and movies through instagrams and the like, and exchanging opinions with fellows. Consumers have changed from passive recipients of information to active creators of meaning and then, select and pick up information from their own viewpoints. They could create new values through unique creative ingenuity using these devices. Democratization of participation opportunities and so-called user innovation progress (von Hippel, 2005: Schau & Muniz, 2004: von Hippel, Ogawa & Jong, 2011 etc). With the spread of information and communication technology, the increase of users is also being advanced in emerging countries, which offers to many companies an opportunity and possibility to efficiently sell unified products around the world.

However, it is not easy for those companies to capture values perceived by consumers in the context of actually consuming and using products. Even if they could collect big data spreading to the market, it is to be behavior data and not attitude data related to overall evaluation such as whether it is favorable to products or brands. When they forecast its future of the market, it is a probabilistic prediction at that time based on information accumulated in the past, and it merely shows a solution to be statistically correct. Furthermore, if they can grasp feelings and meanings about products raised in deep layers of each consumer, it is not easy to understand them without any bias. At the same time, they can not restrict consumers from receiving and sending online information related to products, and get to know that they only have to accept the information exchange by a variety of consumers. As a result, the fact that the few products stimulate and appeal consumers' sensitivity is the present situation.

2. Precedent Studies and their Limits

Considering how to efficiently market uniform products in a wide range of areas, this study refers to the standardization and adaptation strategy in global marketing as a precedent research field. The discussion is said to have been started in international advertisement in the 1960s, to aim at the image penetration and local culture translation (Buzzell, 1968; Keegan, 1969; Schilke, Reimann & Thomas, 2009, etc.). Along with the globalization, targeted factors and scope for standardization and adaptation have been expanded and there are many research accumulations until now.

Among them, Porter (1986) is supposed to have shown one of the significant frameworks. Based on differences between environmental factors in and outside companies, task in two dimensions was proposed, "configuration" on which market, when and where to enter, and "coordination" of standardization and adaptation for marketing factors (4P: product, price, promotion, place) and knowledge transfer. In order to simultaneously achieve advantages of standardization and adaptation, Porter pointed out three importance; (1) configuration related to marketing activities based on concentration and dispersion, (2) coordination for standardization and adaptation, and (3) research and development linking with other management activities.

In this study, focusing on collaboration between companies and an unspecified large number of consumers beyond borders on a global scale, issues to be concerned with an entry object and its subdivision of the market are not considered. And other issues related to selection of entry forms such as export, grant licenses, joint ventures, and direct investment are not considered, either. Therefore, the discussion here should be limited to "coordination" rather than "configuration".

In case examples and empirical research on coordination, there are many that identified impact factors of standardization and adaptation. And most of them investigated the degree of compromise between standardization and adaptation, and analyzed as to how it may reflect the management results (Akaah, 1991; Samiee & Roth, 1992; Boddewyn & Grosse, 1995; O'Donnell & Jeong, 2000:

Theodosiou & Leonidou , 2003, etc.). On the other hand, as the object, method and timing etc in those investigations are different, it is not easy to compare and examine them. There looks no consistency in the research results among them, where it is difficult to find implications about coordination. Or, these are inferences in a certain country or region, or at a certain point in time. Since the findings are transient only, it seems impossible to seek recommendations for standardization and adaptation based on changes in the market environment and user consciousness among different times.

It has been repeatedly said that the characteristics and preferences of consumer goods closely related to daily life and culture differ across countries. Its complexity of the market is higher than industrial products, then the efficiency of standardization concerned with consumer goods is rather low and the degree of localization becomes high (Boddewyn & Grosse, 1995;Schilke, Reimann & Thomas, 2009). This study, however, focuses on standardization and adaptation of values inherent in products, unlike the conventional researches. If companies search for local needs, promote research and development of products to be, and then sell only standardized and uniform products, that is, it does not consider local adaptation at all in the conventional thinking.

Moreover, this study aims to find a mechanism to efficiently sell unified consumer goods in various places. Such a mechanism is that simultaneously provides standardized values and local adaptive values through proposals and evaluations by consumers. Therefore, it is incompatible with the conventional viewpoint of "degree of compromise between standardization and adaptation" related to products.

3. Presentation of Analysis Viewpoint

Grönroos & Voima (2013) noted that products consist of three values: value created by companies themselves, value fostered by interaction between companies and consumers, and value that each consumer independently develops in use. Companies have been tried to continuously grasp by their own those value information of products that most consumers may be interested in and sympathize with, but such company-led traditional methods will not work when the market expands with the globalization and the number of potential customers increases all over the world. Page (2007) argued that the diversity of information to be gathered will lead to an improvement in prediction accuracy for problem solving. To ensure that diversity, project participants are required to properly understand an objective of the project and avoid communication failure or diffusion by creating ideas freely. Then, various interpretations are not established among participants and it is useful for the aggregation of opinions.

This study focuses on "crowdsourcing" which is a method of evaluating value propositions among participants. Crowd-sourcing is a coined word of an unspecified large number of crowds and outsourcing (Howe, 2006) and "an online distributed problem solving model" (Brabham, 2008). To

that end, it is necessary to encourage voluntary participation of diverse consumers with different lifestyle, ages, and cultural habits in a wide range of areas. And it needs also to make consumers' values watch out in a timely manner. Kohler (2015) insisted that following three are necessary to proceed crowd-sourcing effectively; (1) opening a business model, (2) motivating customers to participate in the crowd-sourcing platform, and (3) implementing facilitation to realize value co-creation on that platform. And he argued that it resolves a sort of asymmetry of information among participants, and leads to the active exchange of opinions through crowd-sourcing as well as the growth of companies to use. In those online platforms, consumers participate on a global scale, who want to share and spread accumulated ideas and emotions through consumption and use of products with their colleagues. Collective intelligence will be gradually formed by exchanges of customer information (Surowiecki, 2004), and the fruitful result of progressive sharing and accumulation process by the aggregate comes out.

In this research, I will interpret the business model of above (1) as a mechanism to create profit, and consider its effectiveness of the case to be introduced later on the basis of (1) (2) (3). The research method adopts case study as well as many of the researches on standardization and adaptation so far, in order to explore a mechanism of "how" the standardization and adaptation of values related to products will be coordinated (Yin, 1994).

4. Case Study

This study addresses a case of retail manufacturing Lego. Lego sells blocks common throughout the world that can be played and learned in combination.

In order to gather ideas for continuously creating values and suggesting to customers especially for the Play Theme, the company has installed an online platform LEGO Ideas. LEGO Ideas invites proposals for a specific theme from consumers on a global scale, lets consumers evaluate such likeness, and attempt to discover new values. The proposals by consumers diverging there will lead to sustainable standardization and adaptation of the values related to unified products. Making full use of that information, the company could pursue cost reductions by enjoying economies of scale through procurement of raw materials. At the same time, it is an opportunity for effective "coordination" by adapting and learning to the local market through customer contacts.

Information concerning the case was collected from listening to some stakeholders as well as from the secondary data of homepages, newspapers and magazines.

4.1. LEGO Ideas

LEGO Ideas recruits photographs of works that consumers assembled with LEGO block on the Internet (http://ideas.lego.com/dashboard). The platform to exchange among consumers will incorporate voice of fans who are said to be over 500 million people worldwide, and collaborate towards "ideal LEGO".

4.1.1. Outline of Lego company and Lego brand

Lego was founded in Denmark as a wooden toy manufacturer in 1932, and in 1949 released a plastic assembly toy that leads to the current Lego block. In these 10 years, the turnover has increased fivefold and for the eleventh consecutive term until the December 2016 period. The company is thinner than Mattel, which is known as "Barbie" and "Uno" and is the industry leader but has continued declining revenue until 2016. And Lego is likely to become the world's largest toy maker in 2017.

There are two product groups in Lego block, "Free Building" is with no design drawing or instruction, which creates things that consumers want to make with free ideas, and "Play Theme" which assembles while watching instructions. In the past, the Free Building had been a selling point, but now the Play Theme occupies 60% of the total sales.

Lego is said to have 220 brand communities worldwide, mainly in North America, including an international consumer network Lugnet.com. In 2005, the company launched the Ambassador Program as a place to interact directly with a community, AFOLs (abbreviation of Adult Fans of Lego). It looks enthusiastic and is filled with advanced ideas to smoothly facilitate the product developments (Antorini, Muniz, & Askildsen, 2012).

4.1.2. Case Outline and Background of Introduction

LEGO Ideas developed LEGO Cuusoo in May 2014, which had been launched in November 2008 for Japan only as a site to recruit ideas "I wish there would be such a LEGO". There exist two elements in the background; Lego 's characteristic to easily shape ideas by anyone, and rise of consumers who are not satisfied with value proposals from the company.

Consumers submit photographs of their own works by Lego block and English instructions on the creation, while other participants find favorites from their fellow proposals, vote for support, and give feedback exchange. In this posting site, lots of frank conversations among friends flutter; "cool, expressing a world Lego", "would be better to modify the shape here a little more, this is boring", "not so much fun". As the consumers participate in the place to post, view, evaluate, and actively exchange together, the points gather. And the badges offered in 4 stages respectively will also rise.

Works that have gathered support with 10,000 from their colleagues and manifested consumers' standardized values at that time, are going to be commoditized after negotiating issues such as intellectual property rights over the average 4 months with LEGO. To decide on commercialization, it is necessary to collect at least 1,000 support within the first year of its posting, 5,000 by the next 182 days, and 10,000 within 2 years as exhibited in FIGURE 1. When the work is commercialized and its sales begins, the proposer can acquire 1% of the sales including related games etc. as monetary reward. Even works that do not reach 10,000 support may become aware of new ideas and contribute to adaptation of customers' value.

By the way, the third version of commercialized LEGO Ideas, "Minecraft" which is a Swedish sandbox type manufacturing game and started its sales in December 2011, is a memorable proposal that gathered 10,000 support within 48 hours of posting. At the time, Lego and Minecraft won over 30,000 "Like" on each site on Facebook and it was tweeted over 4,000 times ⁽¹⁾.

It is necessary to efficiently proceed with the product developments for the company's growth, say, how to combine Lego block said to circulate 500 billion pieces worldwide and 3,500 common parts. And it is also cost saving not to produce new blocks and parts and not to manufacture molds for them. More than 300 new products of the Play Themes are being developed and commercialized each year, and there are about 30 kinds that are currently popular out of them. Such continuous introduction of the new products with series is getting to be an indispensable condition for its sales of the Play Theme and the whole Lego.

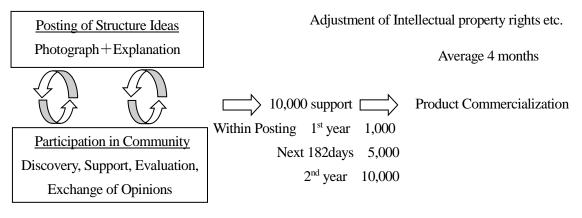


FIGURE 1 Mechanism of Posting Site by Lego Block

On the other hand, the 200 in-house designers have been planning to take into consideration tastes

and preferences of consumers around the world for several years to come. But there are human and

temporal limitations to achieving the task. From that view-point, the company needs to recruit unlimited variety of ideas from the outside, seeking to discover and create new values.

According to Lego, Lego has three characteristics; "possibilities of playing are infinite", "learning while playing", and "fostering cooperativeness and sociality through play". There are 24 combinations of 2 blocks in the same color, 130 million combinations possible with 6 blocks, and then, more than 900 million shapes to be assembled. If there are several colors used, it becomes a distant figure. Lego Group CEO said about LEGO Ideas that "it's about discovering what's obviously Lego, but has never been seen before" ⁽²⁾ and narrative works there appear one after another. He has been appreciating consumers' contribution through LEGO Ideas to the Play Theme which accounts for 60% of the sales.

5. Insights

Lego practices a framework that is considered to be effective for crowdsourcing. There are two opportunities for the company to discover values that it could not find by itself, and to respond to continuous changes in the market.

5.1. Opening a Business Model

Lego opens up to the outside the process of value added creation of the products that form its core of the business model, and leaves it to the inter-consumer evaluation. It helps to publicly invite proposals on the online platform for prototypes of the Play Theme, and many consumers share and accumulate ideas and emotions. Such diversity of information, and crowdsourcing method based on crowd wisdom will generate optimized values in the market at the time.

The reason behind the introduction of this method is that there is a limit for the company to timely and accurately feedback market trends. Meanwhile, due to the spread of information communication technology, idea exchanges are released from geographical and temporal constraints, and the environment comes up where many diverse consumers from all over the world can participate and form a peer network. There are situations in which consumers exchange value information and generate new values to standardize and adapt. And the company will be able to acquire consumers' value propositions based on use and experience of products and background stories.

5.2. Motivation for Customers' Participation in Crowd-Sourcing Platform

Psychological motivation to encourage consumers' participation in the platform has intrinsic and extrinsic incentives (Holbrook, 1999). In the recruitment, there is self-oriented intrinsic psychological motivation that wishes to exercise their ingenuity related to their own ideas, and embody their understanding of its core of the brand. At the same time, it stimulates other-oriented intrinsic motivation that wishes to reinterpret a way of thinking or method of manufacturing through insight by consumer associates. As the theme of creating constructions should be a concern of Lego customers around the world, it can also stimulate extrinsic psychological motivation and expect a smooth induction to the platform. Moreover, there is social motivation that wants to connect with friends who share brand information through social media and pursue pleasant experiences within the platform.

The presence or absence of monetary remuneration, which is related to extrinsic psychological motivation, may come from a theme. There will be with monetary remuneration, as LEGO's is proposing a structure with a visible result of commercialization. Franke & Shah (2003), however, asserted that stimulating instinctive habits such as designing somewhat than giving monetary rewards, will motivate more active participation of consumers

With these motivations, consumers will participate in the platform on a global scale and disclose their thoughts. Then there overflow diverse ideas, forming a positive feedback loop that leads to discovery and creation of values.

5.3. Implementation of Facilitation to Realize Value Co-Creation on Platform

The company narrows down its theme of the recruitment and limits the means of suggesting under an online community where various users can easily participate. It promotes discovery of values inherent in the proposals and creates new values without unnecessary dissemination of ideas and opinions within the platform. That helps value co-creation among consumers.

Lego brings unique ideas from around the world to the platform by encouraging consumers' free customization. In Lego's recruitment procedures, there is a mechanism that enables participants in

the platform to easily understand and imagine that type and assembly method of Lego block by contributors.

There are abundant variations in the proposals which are generated by accumulation of experience as users, while the company can not consider and realize by itself. At the same time, the proposals are linked with ideas to adapt to local consumers' preferences and become a source of value creation for the fellows. Such diverse ideas are born from time to time and converged on the platform, then new ideas will emerge again.

6. Conclusion and Implication

This study examined the standardization and adaptation strategy in different perspective from conventional, and I revealed a mechanism by which value standardization and adaptation is coordinated through consumers' propositions on an online platform. As presented by Cannon & Yaprak (2011), consumer interests transform from the needs inherent in local culture and customs to the needs of the context of each individual's use and experience, when those information is connected on a global scale.

Lego, a modular type of toy, proceeds a strategy that standardizes the parts and conforms to potential needs of local consumers. It can be said that it is the same "component standardization / combination localization strategy" as the US PC Dell. Since lots of users who share the brand knowledge and experience, participate in the project, propose and evaluate various ideas among them, the transfer of knowledge related to value proposals progresses smoothly and "coordination" goes well on the online platform. Therefore, this case will be a new component standardization / combinational localization strategy through cooperation with consumers, which does not simply entrust selection to users like Dell. Moreover, it can also be said as an effort to continually seek "simultaneous achievement" of deepening existing products and searching for values hidden in those products, which is based on Contingency Perspective of Cavusgil, Zou & Naidu (1993)⁽³⁾, and is required to be fully take into consideration company-specific internal and external environmental factors.

This case differs from most of so-called user innovation cases that suggest physical modifications of products with their appearance or specifications. It is an effort to add values by new interpretation related to products and without any physical modifications. And not only the company but also user associates will make use of the values.

On the other hand, a platform on social media has some characteristics that may hinder the discovery and creation of new values. When consumers, who share common tastes and preferences related to brands and similar feelings, get to gather frequently, it may be difficult to distinguish information with their own values by advancing homogenization. There exists a possibility that dynamics by diversity can not be expected. It may be wrong to judge the evaluation from its

credibility of the signal on how to grasp consumers' support in the process of aggregation and convergence of information by the group. Or it could be wrong from the cascade effect.by reputation pressure that "others want to see this" from others in the group. There also may be a preferential choice that candidates chosen by many participants are more likely to be chosen finally. Given these concerns, it is necessary for a company to carefully explore themes collaborating with consumers. And it will need to continue searching correct answers by trial and error, considering their backgrounds.

In addition, once such collaboration with consumers to create new values is started, consumers' expectations and demands for a company will expand at an accelerating pace, and then the withdrawal or reversal can hurt the company trust. In order to avoid the disappointments of consumers, it is necessary to maintain its transparency of the process of value creation and present to the results to stakeholders each time, which will induce diverse consumers with various ideas.

Keywords: crowdsourcing, consumers' participation, value, standardization, localization

Notes:

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