

Prediction of Electric Load Neural Network Prediction Model for Big Data

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Abstract. Based on the background of the new media era, this paper takes the research on the online advertising marketing characteristics of LEGO “Rebuild the World” series as an example to explore how brands should play the advantages of online marketing under the new internet background, update the creative thinking of online marketing communication, and achieve the purpose of clarifying the target consumer group positioning and optimizing the brand image. By combining the Method of combining observation and content analysis, the author found 3 characteristics of Lego “Rebuild the World” series online advertising, which are: using LEGO bricks to connect the seemingly unconnected toy world with the real world, showing the richness, diversity and plasticity of LEGO bricks; cleverly designed with lots of elements to maximize the imagination of adults and children; closely connected the digital world with the real world, making the online advertising of LEGO “Rebuild the World” timely, progressive and universal. In addition, in view of the updating of online marketing modes of major brands in the era of new media, the author also puts forward corresponding thinking: how to improve the fit between the host broadcast with goods and the brand image, and how to rationally apply the Internet platform to realize the updating of online marketing modes.

Keywords: LEGO, Marketing, Online Advertising.

1. Introduction

LEGO, a world famous toy manufacturer which enjoys the reputation of “Toys of The Century” in the industry for the sales volume of this brand has always been listed among the top ten toys in the world, was founded by Ole Kirk Christiansen, in Denmark in 1932. Mr. Christiansen was not much of a businessman but was a masterful carpenter, making the “Yoyo” toys designed by himself in the youth popular. The name “Lego” comes from the Danish “Leg Godt”, meaning “play well”, and this name first quickly became synonymous with the quality toys made by LEGO at LEGO’s toy factory in the Billund region.

The company originally produced wooden toys and gave birth to the brand’s first set of toys that were different from contemporaries: wooden duck toys with abundant moving parts that made a sound when opened and closed. In 1947, LEGO bought a plastic injection-molding machine for 12 times its own brand’s profits the previous year, and faced criticism from toy industry magazine that “Plastic will never replace sturdy wooden toys.” In 1949, LEGO began to produce plastic bricks called “self-assembling bricks”. However, due to the poor stability of the new improved technology, the spliced blocks are prone to collapse, affecting the consumer experience, and LEGO once experienced a large number of plastic toy returns. But LEGO was convinced that plastic would eventually replace wood. 2 years later, the plastic brick was launched, and in 1958, after a decade of research and development, LEGO filed a patent in Copenhagen. This is the flexible and compact structure of today’s LEGO bricks. Not only that, but over the years, the LEGO logo has taken on a variety of shapes. The latest one, created in 1998, was a slight modification of the 1973 version to make it easier to spread and identify in the media.

In December 2018, LEGO was listed in the 2018 Top 500 Global Brands List. In October 2019, Interbrand ranked the world’s Top 100 Brands, LEGO was at number 75. In December of the same year, the company was rated the first in the “TOP10 new consumer brands of children’s toys 2019” released by iiMedia Ranking. In January 2020, the 2020 list of the World’s 500 Most Valuable Brands

was released, and LEGO ranked the 313th. In July, LEGO was ranked 92nd on Forbes's 2020 list of the World's 100 most valuable Brands. In 2021, this brand was the first exhibitor of the 4th CIIE (China International Import Expo).

LEGO's wooden toys were just educational toys for babies in the first decade of existence, but LEGO tried to shed this weak and one-dimensional brand image in the era of rapid internationalization after World War II. After completing the transition from wooden toys to plastic building blocks, LEGO began to experiment with themed building blocks. "Children are the role models when it comes to imagination and creativity." says LEGO. In 1955, LEGO first proposed the slogan "Play and Learn", advocating the idea that study and play can promote each other. LEGO also built Billund Airport in the 1960s, which not only met the huge demands of the international market and doubled the company sales, but also captured the imagination of children with its products' strong modeling capabilities and the possibility of solving unknown challenges -- in line with LEGO's brand philosophy: "Creating a toy that teaches children about life, arouses their imagination, develops their creative impulses, and allows children to experience the joy of creation. Those are the driving forces for everyone." Until now, LEGO has released a number of innovative themed collections every quarter. For example, LEGO has partnered with Harry Potter, DC Comics, Marvel and other companies for IP licensing.

The big campaign, called "Rebuild the World", by French company BETC, is LEGO's first major branding campaign since the 1980s. The project includes a live-action action-adventure film and a series of creative LEGO designs to convey how creativity can make a difference in the world.

The marketing communication theme of LEGO's "Rebuild the World" commercials is rebuilding the world -- breaking the rules can make things better. At the same time, LEGO also conveys the diversity of the world and the unique value of each person. Through this release, LEGO group shows its tolerance and identification of diverse groups and emphasizes its long-standing tolerance and identification of diverse groups and minority groups. Meanwhile, LEGO's "Rebuild the World" campaign, takes another unconventional approach to its goal of making things better: "How to capture the simple things kids can imagine and solve problems creatively on top of them." In the 2020 Christmas special campaign of LEGO's "Rebuild the World", LEGO released an online commercial based on the Louis Armstrong's classic work "What a Wonderful World", Once again, it is LEGO's unique way to lead adults and children to escape from the real world and start a new adventure in the world built by LEGO. In a chorus of upbeat songs, a family playing with LEGO in their house builds their imaginary world out of bricks: trees, blue ponies, Iron Man, astronaut weddings, city dinosaurs and street commandos, dragon-slaying princesses and Star Wars AT-ats take a nap on their journey... As can be seen, LEGO also encourages people of all ages to unleash their creativity and work together to recreate the world around them during the holidays.

2. Literature Review

With the development of network media, the form of advertising is changing gradually. Now online advertising has become a general trend, and many scholars have done analysis and research on the marketing communication mode of online advertising. In terms of the relationship between online marketing and brand image, according to Zhang Mingjun's research, the scholar emphasizes that brand image is closely related to most relevant online marketing activities, and among all the publicity methods that can achieve brand promotion, the impact of online activities is the most direct [1]. In the era of new media, the public has more initiative than ever before, and the network advertisement also presents new characteristics. Xiaozhu Zhang believes that in the era of new media, more people-oriented online advertisements pay more attention to the emotional interaction between brands and consumers, emotional design of advertising content and word-of-mouth communication [2]. At the same time, with the advantage of information technology, online advertising in the new media era is also increasingly creating better earnings. Dawei Li found that a big advantage of new media to promote advertising communication lies in the compatibility and inclusiveness of new media. Each

brand promotes through advertising design and advertising creativity and uses new media to better convey the function and value of products, which can stimulate the public's greater desire to buy and provide opportunities for positive product selection [3]. In the process of brand marketing communication, symbols also play a very important role. Zhuangzhuang Xu pointed out the necessity of semiotics in product design: product itself is an organic and independent systematic engineering, covering the whole life cycle of product from development to extinction [4].

Apart from that, under the new Internet situation, brand advertising marketing planning under the background of new media has also developed a new path. Yu Gao suggested that the Internet is fast and convenient. Under these advantages, new media platforms are gradually emerging, among which online marketing represented by short video live streaming with goods has gradually become the mainstream marketing and shopping mode. This mode conforms to the new needs of economic development and consumers and has gradually become a new driving force to promote the development of national economy [5]. Chengyun Zhang pointed out in this respect that enterprises should skillfully use big data to accurately count the visits to their websites, and accurately deliver advertisements to enterprise users according to the crowd portraits of visitors. Not only that, with the support of new media technology, enterprises can more accurately evaluate the effect of advertising, reasonably develop new media advertising marketing planning scheme, and further control advertising costs [6].

Back to the marketing communication characteristics of LEGO brand itself, many scholars have conducted a series of studies on the marketing communication and planning methods of the brand. Like Apple, the Lego Group is a company that can generate cult loyalty around the world and is one of the most creative marketing companies in the world, according to Zeyu Hao [7]. Based on its core products, Lego uses a gradual innovation strategy to occupy the market. In the process of company innovation, Lego puts forward the seven principles of innovation strategy and constantly challenges and improves its own development strategy [7]. Apart from that, Lina Qian and Dan Shi believe that in the changing industry and macroeconomic cycle, LEGO Group has always stuck to its core business -- building blocks for more than 90 years. Take IP co-branding as an example: "The LEGO Group works with the world's most powerful brands based on three characteristics: creativity, values and cultural relevance," explained by Emily Jacobs, Global head of product licensing for the LEGO Group [8]. Faced with brand choice in the digital age, they also mentioned that the growth of technology has led to long-term changes in the toy industry as children consume more digital toys. The trouble for most toy companies is not a lack of demand, but an inefficient business model that is out of place in the digital age [8].

The research and theories above can help the author to better understand the model of brand marketing communication, the characteristics and development path of online advertising communication in the new media era, and the characteristics of the marketing communication model of LEGO brand itself. All these are of great help to the research on the marketing and communication characteristics of LEGO "Rebuild the World" series online advertising. However, in the process of literature review, the author found that scholars have a lot of research on the marketing model of LEGO brand, but lack of analysis and research on the marketing communication case of LEGO's large-scale marketing campaign of "Rebuild the World". Similarly, scholars have a lot of research on online marketing communication in the era of new media, but lack of research on the characteristics of online marketing communication in the form of theme film and short film. The purpose of the author of this paper is to deeply explore the characteristics of the short theme film released by LEGO in the large-scale activity of "Rebuild the World" and to think about how to improve the marketing mode of today's brands so as to better adapt to the current well-developed internet situation. By analyzing the marketing strategy of LEGO "Rebuild the World" online advertising, the author hopes to learn from LEGO's strategy: "Break the traditional publicity routine of introducing the product itself and establish a series of marketing ideas of a new animation adventure world." In this way, the author can think about how to take LEGO as an example to better play the role of online advertising to achieve the optimization of brand image construction and the renewal of marketing communication

creative thinking, and finally better define the positioning of the brand itself for consumers and the analysis of buyers.

3. Methodology

The research on the marketing communication characteristics of LEGO "Rebuild the World" series online advertising belongs to qualitative research. For this research, the author uses the method of combining observation and content analysis. As part of LEGO's first major branding campaign since the 1980s, the author carefully watched the adventure action movie which LEGO released as part of the "Rebuild the World" project. In addition, in view of the LEGO's "Beyond Building Bricks" special concept and the release of online commercials of creative thinking, the author searched a series of LEGO's "Rebuild the World" online commercials on various internet social platform, including mainland China websites: Weibo, WeChat, Post Bar, The Little Red Book, Bilibili, etc.; And international internet sites: YouTube, Twitter, Instagram, etc., in order to explore how the LEGO Group is forging links between the physical and digital worlds. Last but not least, it is worth mentioning that the author of this paper followed the principle of firstly adopting the data in the past two years when searching the references in the literature review.

4. Results

Through a series of research, the author believes that LEGO's online advertising marketing has 3 remarkable features. Firstly, "Rebuild the World" animated short film uses LEGO bricks to connect the seemingly unconnected toy world with the real world, showing the richness, diversity and plasticity of LEGO bricks. For example, the short animation film "Rebuild the World" presents a series of scenes that can only be seen in the animation to the audience, and makes the picture presented with the unique toy texture of LEGO. Such design can make LEGO better integrate into people's life. Secondly, LEGO's "Rebuild the World" animated short film is cleverly designed with lots of elements and uses unconventional design to maximize the imagination of adults and children. Just as each character and plot in the short film may seem counterintuitive, they all have a unique story behind them. LEGO's designers make good use of children's rich imagination and creativity, using the elements that children love to build a wider and more exciting world. Last but not least, the designers of LEGO make good use of the publicity ability of the Internet platform in the new media era, and closely connected the digital world with the real world, making the online advertising of LEGO "Rebuild the World" timely, progressive and universal. For example, on the premise of clear consumer positioning, LEGO Group maximizes the use of YouTube, Twitter and other channels of social media for online advertising short film publicity, and builds "LEGO House" in the real world, combines online and offline publicity, updates its publicity methods with the times by using new media as well. These methods all help LEGO expand the influence of their own brand in a new era and a new shopping group. In this era when live streaming is very popular, the development of e-commerce is also driving the development of a new online marketing model. On this basis, the major brands should think about how to improve the fit between the host broadcast and the brand image, and how to optimize the way of live broadcast to achieve better publicity effect.

5. Discussion

LEGO's "Rebuild the World" online commercials are based on the live-action action-adventure movie, following the marketing theme "Breaking the rules can make things better." This online marketing and communication model also fits the LEGO Group's goal to convey to all the consumers: "Use creativity to bring wonderful changes to the world."

The most intuitive advantage of LEGO's online advertising marketing is this commercial naturally and subtly shows that LEGO bricks can be randomly stitched together into anything you want without any logic. Through the LEGO Group's live action-adventure animated short film audiences can

clearly see a plenty of elements and stories related to the reconstruction of the world. In this short film, LEGO leads people to escape the real world and embark on a new adventure in the creative world of Lego imagined by LEGO players: Bows and arrows, wigs, flames, dinosaurs, bricks, tall buildings, fire engines, cameras, barbers, go-karts, motorcycles, palm trees, carrots, scissors and so on all appear in the form of LEGO bricks in the urban and natural world of human's real life. Among them, towns and prairies are closely connected; models walking in the street are frequently changing the hairstyle; after opening a door is a wall; in order to avoid the dinosaur in the city's attack, the hunter stands close to the wall and turns into a butterfly painting; the big dinosaur wears a pair of fashion shoes; the fire from the dinosaur's mouth becomes the flame print on passengers' coats; rabbits can drive human-driven four-wheel-drives; go-karts and submarines can be taken to the sky; palm trees can be uprooted; the police car can slide down the rotary slide; hunters and rabbits can exchange food, weapons and bodies, etc.. It is not hard for audiences to see that all of these elements and each of the characters featured in the online advertisement are exotic sights that can only be seen in LEGO's creative world. However, the designers of LEGO skillfully integrated these elements in the fantasy world into people's real-life world, connected imagination and reality with LEGO bricks, broke people's imagination, and gave full play to the power of LEGO to reconstruct the world. It is worth mentioning that every character and thing in the advertisement can be found in the prototype of LEGO bricks, and the screen in the advertisement is also presented in the form of the combination of LEGO bricks and real shooting scenes. This makes the whole animated short film present in the form of the unique texture of LEGO toys and reality. the LEGO Group presents the richness, diversity and plasticity of LEGO bricks in this short animated film.

What's more, the story of the LEGO "Rebuild the World" animated short film is very fluid, and the design is very fresh. The hunter and the rabbit drive the plot development of the whole story and the change of the animation scene. The story begins in a vast prairie, where a hunter with a bow and arrow made of LEGO bricks finds a baby rabbit with a carrot and goes on a magical chase. The rabbit scurries away, the hunter follows, and the scene quickly shifts from the prairie to the town. Here, the LEGO designers use the chase scene to combine nature with the city. As the hunter is chasing the rabbit, there are models as well as bricks and toilets made of LEGO bricks appear on the streets. Suddenly, a large dinosaur invades the city. The rabbit takes advantage of the firemen to put out the fire to escape in a four-wheel drive, which lead them to a new part of chase. The scene then shifts to a more diverse road, where two speeding vehicles attract police cars sliding down form a spiral staircase, then the hunter and the rabbit switch scenes again to start a chase through the air. Finally, the scene returns to the ground, where the hunter confronts the rabbit at the beginning of the chase. The plot design of the whole animation is very rich and changeable, the plot is also very complete. Interestingly, at the end of the short film, the hunter finally catches the rabbit, but when he raises his bow and arrow, he finds that the bow and arrow has turned into a huge carrot, and the baby carrot in the rabbit's hand has turned into a miniature bow and arrow. In addition, the hunter's own lower body becomes the legs of a rabbit, and the rabbit's lower body has two human legs. With wild imagination, LEGO's designers create a creative world that children rebuild in their minds when playing with LEGO bricks. Thus audiences can see that LEGO designers make the online advertising break the traditional marketing way of simply introduce the product itself, and choose to use the basis of LEGO bricks to create unique films and stories. In the form of animated short film, LEGO can stimulate the adults and the children's imagination and creativity. By publishing animation short film, LEGO also let people pay attention to children's innocent, lovely and the spiritual world which is full of creative value.

Finally, LEGO "Rebuild the world" online advertising is very diverse. After making a very creative animated short film, LEGO cleverly makes full use of the rich Internet platform in today's new media era to launch and promote online advertisements in various forms. The first is the familiar video site YouTube. There is a YouTube channel called "Beyond the Brick" with more than 280,000 users and more than 120 million views. LEGO's choice of online advertising on this brand channel which has 5 million followers, is undoubtedly a very smart choice: putting the brand's short film on

the most popular brand channel on the most popular video site helps LEGO to guarantee the base views and click-through rate of the online advertisements. LEGO's online campaign, meanwhile, follows Twitter's "outlook, Reveal, Reinforce" philosophy [9]. The LEGO group has taken up advertising space in Twitter's Spotlight area, which is a collection of trending topics and hashtags in 24 hours on Twitter, placing online advertising in this area ensures LEGO's "Rebuild the World" online campaign stays at the forefront of the conversation, making it immediately visible to users [9]. For Twitter's "outlook, Reveal, Reinforce" dissemination law, the advertising methods of LEGO "Rebuild the World" are provided as follows: Perspective: The official account of LEGO posted a brief trailer 2 days before the announcement of the animation, which attracted users' curiosity and interest and increased expectations. Reveal: LEGO used Spotlight in the UK to officially release the full length of the animated short video, which dominated the conversation for 24 hours, covering people in the 10 EU (Europe Union) countries, and greatly stimulated users' interest; Reinforce: LEGO partnered with Twitter sponsors to run their advertisements during the professional football game, reinforce the campaign's presence in the USA as well as reinforce the LEGO brand spirit with the football spirit, further inspire users [9]. On social media platforms in the Chinese mainland, LEGO has integrated into young Internet platforms with great development potential, high user aggregation, strong content inclusiveness and open network environment, such as TikTok and The Little Red Book. In addition, for the offline part of the promotion, LEGO Group's "Rebuild the World" theme park opened "LEGO House" in Denmark in September 2020 along with other 8 LEGO theme parks. It is a playground of 25 million blocks, made up of multi-colored areas. "LEGO House" aims to teach children "core skills" including social development, problem solving, emotional development and creativity [10]. However, in this era when live streaming is very popular, streamers like Li Jiaqi and Dong Yuhui of New Oriental come into being in mainland China, quietly transforming the commercial marketing models of major brands. More and more soft advertising has been put into various short video platforms, and the development of e-commerce is also driving the development of a new online marketing model. It is not difficult for users to find that more and more brands choose to carry out cross-platform sales in the e-commerce industry, which requires the brand side to think about the fit between the host broadcast of goods and the brand image, and how to optimize the way of live broadcast and goods to achieve better publicity effect. In this regard, LEGO group encourages users of The Little Red Book to share the content related to LEGO bricks, which not only reduces the distance with consumers, but also reduces the advertising cost and expands the publicity scope and influence of the brand.

6. Conclusion

Overall, through a series of analyses of the characteristics of the online advertising and marketing of LEGO "Rebuild the World" campaigns, the author aims to think about how to take LEGO as a typical example to let online commercials play a better role under the new media era, as well as to help brands refresh the brand images in the particular consumer groups and update the marketing communication creative thinking under the new era. According to Results and Discussion, LEGO "Rebuild the World" online advertising marketing has 3 typical characteristics, which are as follows: First, "Rebuild the World" campaign is a clever combination of the almost unrelated toy world and the real world with LEGO bricks which shows the richness, diversity and plasticity of LEGO bricks. With the help of animation, the short film visually and audibly presents the fantasy scenes that can only be seen in animation to the audience, and highlights the unique texture of LEGO toy pictures, helping LEGO to better integrate into the real life. Second, LEGO "Rebuild the World" animation short film has plots designed in the form of ups and downs, as well as has wonderful, colorful animation elements which are full of freshness. "Rebuild the World" is an animated short film that uses unconventional design to create a unique story for each irrational character and plot in the short film that maximizes people's imagination. In addition, the short film uses the elements that children love to create a creative world that both adults and children can share, emphasizing the importance

of giving play to children's creativity. At last, the online advertising of LEGO "Rebuild the World" gives full play to the publicity ability of Internet platforms in the new media era. Multimedia platforms such as Youtube and Twitter are used for publicity to closely connect the digital world with the real world, making the online advertising of LEGO "Rebuild the world" timely, progressive and universal. At the same time, Lego's "Rebuild the World" series also includes building "Lego House" in the real world, combining online and offline publicity, so that LEGO can expand its brand influence in the new era and new shopping groups.

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