

Analysis on the Open Mode of Barrier Free Packaging Design

Lin Liu^{1, a}

¹Zhengzhou University of Industrial Technology, Zhengzhou, Henan, 451100

^a email

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Abstract. In this paper, the control of the current package designed to open the way missing by studying various groups proposed humane accessibility packaging open the way new ideas. Based on the proposed final views on the future development trend of barrier-free packaging design also made prospects.

Introduction

Accessible design concept development so far, people in many ways to study it, there are always more limitations, which also caused a barrier-free design currently applied mostly reflected in the infrastructure. Packaging applications in the field is less. On the other hand, the current social traditions accessible packaging design is only limited to the analysis of the structure of the packaging, materials, etc., there is little research Roll package open mode. Therefore, the maximum theoretical significance of this issue lies in the accessibility of various groups such as the analysis of packaging open the way: the mass consumer groups, the disabled, the elderly, children, the physical needs of foreigners, form a complete set to meet its physiological needs design theory to guide the manufacturers of the product packaging design, and ultimately achieve the purpose of promoting consumption.

Packaging products reach the first turn is a part of the hands of consumers, so the packaging is an important link between the opening and consumer products businesses and consumers. Most of the market is concerned that packaging design landscaping products to promote product sales, while ignoring the packaging open the way to design, in many cases we have to open the packaging must unaided, thus can not avoid finger cut, cuts and other phenomena, thus affecting the product image. Currently open packaging problems are the following:

- (1) Certain product packaging design without any open design, it must be by means of aid.
- (2) Although there are some product packaging design open but no signs or instructions are not clear.

Some product packaging design does not consider the consumer to open the operating practices, and often brutally freely open resulting in waste and environmental pollution.

Accessible packaging open the way in the face of all vulnerable groups consider their physical and psychological characteristics of the product open design. Ease open the package directly reflects practicality. Due to the physical condition of the different stages of different groups, hand grip strength and flexibility is not a seemingly easy-open packaging, for young and old may not be able to complete successfully. Accessible packaging design through the study of different consumer groups, psychological and physical design can be subjected to a small force to open the packaging, so in turn can increase the size of the design part of the open, in order to force the consumer objects. Also considered as far as possible to adopt a single open hand is designed to provide convenience for the disabled and the elderly.

Opening the Way for Mass Consumption

Currently, the market benefited from uneven packaging more significant, open difficult issues still plaguing users. How to open the package, you have to make the packaging speak for themselves, become their own "silent salesman." Consumers must have the visual habits also need to adopt the principles of ergonomics, comfort and meet all kinds of people open, so that consumers and easy to

operate. Such as by color or simple pattern in the use of packaging surface design guide path, or to provide a shear line prompt.

It comes from two sessions to promote conservation, beginning around the catch advocated "CD action." How to avoid when promoting the virtues of non-human waste is a challenge for packaging designers. Increase the product structure or change the angle of the product are likely to achieve this target. As shown in a yogurt box. General yogurt box packaging is different, this yogurt corner box was 145 ° of tilt design. When consumers use a straw to drink yogurt daily, since the relatively thick yogurt, yogurt and a top corner of the box sticking to drink milk often, resulting in waste. However, this yogurt box packaging, taking into account the practical problems of consumer consumption of such products, without increasing the cost of production and use of the premise, yogurt boxes made minor changes: the use of a slope and tilt 145 ° Xiecha mouth, the insertion of either full-suction clean straw box of yogurt, but also to ensure food hygiene. The yogurt is a very good box packaging design of barrier-free packaging design practice.



Figure 1. Yogurt box packaging

Our common disposable drink endless drinks cans are discarded phenomenon. Currently living in canned drinks main material is tin. Tin as a material health and safety has long been widely used in food packaging, should count the most common means of Sprite and Coke cans, but because of the long-term production and transport process exposed, opening pollution, causing health problems. While products once the pull ring off, it can not be closed. Health can design and reuse design imminent. As shown two tin cans New-Tin Cans, he will be capping bottles of mineral water is incorporated in traditional tin cans not only convenient for people to carry and use while improving product safety and health, more convenient secondary use, to avoid unnecessary waste, realistic needs of the public.

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Figure 2 Tin cans New-Tin Cans

Open the Way for Special Groups

Child. According to the child's own characteristics: mental immaturity, curiosity, lack of life experience, a number of factors that make children vulnerable to harm everyday life of certain goods. According to the characteristics of children, children's products during the packaging open barriers need to increase, rather than eliminate. Designer merchandise on open security cover design, or open the desired increase efforts to increase the steps required to open, such as certain commodity turn needs to press, a number of steps of rotation, tearing, etc., increasing the difficulty when open. Produce other warning whistle sound, etc. or merchandise open, so that when the child is about to open the packaging to remind parents. Some products avoid wrongly caused family tragedies. To solve the problem of the amount of medicines for children, designers brains design. This chart three drops packaging packaging for children. Designers give full consideration to the difficulties or problems that consumers use ordinary eye drops encountered. For example, after opening a product contamination caused by repeated use, do not know how many drops of appropriate eye drops, eye drops, or in the process of excessive force will cause a lot of waste and so on. In this packaging design, designers will design drops into tablets, each container can hold a single-use doses, when in use, just put out a container from a drug-board, then you can use . After use, the container containing syrup can also be recycled.



Figure 3 Package drops

Based on children's psychological characteristics, the following are some children open packaging design:

(1) Children packaging design pressure cap. Pharmaceutical packaging such as children. Open the premise must be forced under pressure under the cap rotation.

(2) Children packaging drawing style cover design. It is a new drawing cover. You must have two conditions can be opened: the lower part of the cover flange aligned bottleneck gap, then firmly pull the cover of the inner plug it to exit the bottle. This open approach commonly used in children's oral design.

(3) Children password packaging cover design, which is made up of cap and bottle cap seat components. Only two parts of the landmark perfectly aligned, the lid can be opened. The packaging cover mostly used in child-care articles.

(4) Children packaging musical intelligence cover, open the package in the clever use of voice technology, when open the package will automatically send the wonderful music, this design is generally used in holiday gift wrap inside.

2. The elderly

China is one of the most aging countries in the world, and the number is growing year by year, the elderly supplies market and demand has gradually larger. Many on the market of packaging, open the elderly common package tight packaging is the use of aids. Based on psychological characteristics of the elderly in the packaging design should try not to turn on outside help. Plaster such as tin tube packaging, since the mouth is completely sealed, must use foreign objects cut sealing, security value is low, there is no such aids can not open the product is turned on. To solve this problem designers to add a conical spines on the outside of the lid, just before the product is aligned sealing prick easily open tin tube.

Elderly insufficient physical characteristics in the design of the product packaging shall be appropriate to reduce the force required to open trade, to ensure product sealed tight premise, as far as possible to enable the elderly to use minimal force to open the package. Specific increase ashamed tear-shaped hole number and size.

Increase in the older product packaging design guide. Because of the degradation of memory, two and three dimensional design appropriate combination of tamper indicating packaging design, in favor of the elderly successfully open the package. D including printing, embossing, seniors can see a description of the product to complete the package open. Refers to form three-dimensional display, the elderly can be guided by tactile perception open packaging. Because the elderly weakened hand flexibility in packaging design should open the packaging to show the product is turned on the plane prompted directions and hand gestures needs.

Elderly due to decreased vision, flexible limbs inconvenience, there are often dose deviation in product use. Resulting in waste. The right amount of medication to solve the problem is older designers have been exploring the issue. Figure IV antiperspirants Lu design. This product to meet consumer psychology to grasp a good amount of product structure and improve the product

packaging design was added to control the ball at the top of the container embedded in a plastic ball just right to act as a liquid product applicator role. The plastic ball is vital organs, tight you can not rotate, the liquid can not be applied to the skin, too loose a lot of the liquid will flow out. Plastic cover on the ball sealing cap is also very important. When closed, it must be able to press the plastic balls, embedded neck of the bottle so that a special seal ring, the case of leakage of liquid would otherwise occur. Open design user-friendly way to the elderly warm love.



Figure 4 antiperspirants gel design

Persons with disabilities. Security open the way people with disabilities is the first element of packaging design must have. Packaging should have turned their consumer psychology. We design any negligence are likely buried security risk, giving them physical and psychological harm. Such as: the blind, although God retrieve their vision, but gives them a keen sense of touch and hearing. In packaging design, we should pay attention to the open position in product design contact tips and primers shown in Braille. Beep sounds when you turn.

People with disabilities, especially the quadriplegic or physical handicap people. Often can not properly use body open packaging. We can modify the details in the original packaging in solving this problem, to meet their consumer psychological needs, giving them convenient. Such as: the common life of the container, through clever design and given new life: a common bottle of shampoo, add a few bumps in the open position or corrugated pattern, suggesting that even if people do not see the operation can be completed commodity opening action . This design eliminates the barriers to make use of the blind open more convenient and user-friendly.

Foreigners. Cultural differences and bring different cultural transmission continuation will have different living habits and preferences, this habit will affect the way human activity. For newcomers to our country's foreign point of view, there could open the packaging open principle cognitive differences problem, there is also a way to open oriented misunderstood problem. Therefore, packaging design tips on writing in English as much as possible. And international guidance and other marks or three-dimensional display.

Future Development Trend of China Roll Packaging Open the Method

Standardized forms. Through practice and accumulation, Roll packing open the way not only to meet basic consumer use, but also scientifically specification. Therefore, only a standardized form of packaging design, in order on the basis of the traditional packaging breakthrough, and better promotion and innovation.

Packaging function segmentation. With the growing number of product categories, consumer groups are becoming increasingly diverse, making accessibility packaging design based on people's spending habits need to be broken down consumer groups function on the open way.

The laws, regulations and standards to improve. For now, China has not set up a complete set of laws and regulations on the packaging Open with standard specifications. We want to establish and improve accessibility packaging laws, regulations and standards to open the way, from the

following aspects need to be efforts: first, standardized packaging method in technical terms, define packaging design, packaging design clearly open the way to accessibility of services objects and applications; second, for different consumer groups, different products, different product packaging requiring functional refine and improve the accessibility of content from the packaging standards; third, open the way to encourage innovative design of packaging and packaging innovations to create good atmosphere, and there is great practical value packaging innovation promotion. Further, in the perfect packaging regulations, packaging and open the way for a people-oriented, the packaging industry to promote the harmonious and sustainable development for the consumer to create a safe and comfortable atmosphere consumption.

Enhance design education. Between the state, society, trade balance, including normative policy guidance, public advocacy, standards, accessibility packaging design affected. These also need to open the way to accessibility packaging skills training and research support. Train future designers is to design industry responsibility, accessibility design packaging open the way thanks to the education sector in order to effectively get implemented. Range of design education industry is relatively broad design training colleges professional packaging design, various training institutions. In these institutions, Roll packing open research methods, deepen, one of the responsibilities is to enhance the function of universities.

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