The role of advertising designer in designing sustainable packages Associ. Prof. Dr. Amal Mohamed Hasanen Serag

Head of Advertising Department - Faculty of Applied Arts – 6^{th} October University - Cairo

Amalserag@ymail.com

Dr. Reda Salah Moheb El-Din

Lecturer at Printing, Publishing and Packaging department -Faculty of Applied Arts - Damietta University - Giza

redahob2001@gmail.com

Assist. Lect. Hussein Abdel Hakeim Fadda

Assistant Lecturer at Advertising Department - Faculty of Applied Arts - Damietta
University - Damietta

husseinfadda@gmail.com

Abstract:

The world is proceeding with fast steps towards the future, in which many natural resources and energy sources come in order to satisfy its needs and meet its future aspirations without taking into account the rights of future generations, and as a result of the many environmental problems resulting from the expansion of the competitive market in the field of designing and producing packages, leaving tons of waste and depleting natural resources and energy sources. the packaging industry has become a huge burden on the environment and society, and the emergence of the term sustainability has been a constant voice calling for the need to preserve the environment and the right of future generations to maintain resources and energy sources. The topic of the research came to address the role of sustainable packages as one of the important elements for preserving the environment and natural resources, so the researcher had to find a set of sustainable alternatives capable of carrying out the same job role and provide a measure of beauty capable of distinguishing and showing the packaging on the shelves of shops, by finding natural alternatives from other materials, taking into account the need to save energy sources as much as possible. To overcome the difficulties and challenges facing designers in designing sustainable packages is to achieve the aesthetic and functional aspect together in a proportionate manner in a sustainable packaging with environmentally friendly materials, where the research was based on clarifying the role of the advertising designer in finding the complement part of functionality and beauty equation for a sustainable packaging that satisfies consumers aesthetically and functionally.

The importance of the research is to shed light on the design of the various sustainable packages as an environmentally friendly alternative that plays its role to the fullest extent as it preserves the environment and ensures the reduction of harmful residues resulting from the traditional packages. The research also aims to provide a set of alternatives from raw materials, natural or recycled, or packages that can be reused to facilitate the process of reaching a sustainable packaging design. The research aims to correct the path of society in making sustainable packaging design a way of life and a primary goal for preserving the environment and reducing pollutants resulting from the accumulation of tons of waste resulting from the packages.

Key words:

Sustainable Design - Sustainable Packaging - Environment - Packaging.

DOI: 10.21608/mjaf.2020.35782.1724

Introduction:

Packaging represents the main drive for consumer feelings, as it is the first thing that attracts attention and raises interest and drives instincts and motives towards the products, it is the distinctive appearance of the brand, as soon as the consumer picks up the package from among the competitors from one of the shelves, the process of feeling and enjoying all its details begins. The silent seller who urges the consumer to generate positive responses and reactions to the initiative to acquire the product.

Packaging is an area that has no limits in which materials are numerous with design elements and different methods of formation, allowing the designer to have many options to reach the design of the packaging to different and innovative solutions that are compatible with the nature of the product and the appearance of the brand.

Sustainable design comes on top of these design trends, and sustainable packaging design is intended to design packages that provide environmental, social and economic benefits while protecting public health and the environment throughout its life cycle, from raw material extraction to final disposal, as the designer has the ability to find effective solutions to reduce the environmental impact for packages as he/she is responsible for design decisions and these decisions are the ones that set solutions for choosing materials and how much energy is used to produce them, and is it easy to recycle or dispose of it without harming the environment, so the goal of an environmentally aware designer is to use the least resources to get the maximum possible value for the package while reducing energy and reduce pollution produced during manufacturing and during the life of the consumer package.

Packaging between concept and design:

The design of the packages includes a set of printed messages that perform different and important tasks, and they also play vital roles towards the product, such as protecting its contents from damage, temperature change, and others, as the packages have become one of the most important aspects of brands, as they gain the protection crisis and put it within the perimeter of sales and competitiveness and make it the silent marketing tool and primary consumer attraction.

When designing packages of different shapes and types, you find that each product imposes on the designer a set of basic elements in the design, such as writings, pictures, drawings, etc. The individual product, but it takes into account the joint visual display between a group of diverse products on the shelves to make the packaging competitive and secure the required sales percentage in front of competitors.

The functional role of the packages

When the packaging achieves the desired function of it, the packaging becomes an integral part of the product, and this package may add emotional advantages or unexpected benefits that push the consumer to acquire it, then the line between the product and the package begins to disappear, and the packaging plays the role of the hero as an effective selling tool and enables the consumer to make a purchase decision. For the packaging from other competitive packages without making comparisons on the basis of the product's quality and the extent of its ability to

satisfy the needs of the consumer, and the basic functions that the designer must provide when designing the package to perform its functional role can be summarized in the next:

- 1. Represents the identity of the product.
- 2. Labels contain a lot of data and information.
- 3. Facilitating the purchasing comparison process.
- 4. Effective advertising and sales tool and unique branding.
- 5. Relevance to the nature of the target group.

The role of ergonomics in enhancing the functional aspect of the packages

The science of ergonomics arose as a result of many design and production problems that appeared in the systems of design and production of packages where specialists in ergonomics in the modern era played an effective role in improving and developing packages and other products that consumers use in various fields of work and life.

The goals of ergonomics in packaging design:

- 1. Improving effectiveness and efficiency to increase both suitability for use and productivity.
- 2. Providing safety and increasing the comfort and satisfaction of the user of the packaging to achieve a better life.
- 3. Anthropometric compatibility between the dimensions of the human body and the package.
- 4. Achieve comfort and safety when using the product by applying physiological and biomechanical standards as well as perceptual ergonomics standards.
- 5. Achieve the use efficiency in terms of the suitability of the task or the package for the purpose for which it was designed.
- 6. Giving the designer the ability to design a standard package or system that meets the ergonomic standards as well as the market requirements.
- 7. Achieving a common and rapid understanding of the user when using different types of packaging.

Packaging design

The designer must analyze, interpret and formulate the final shape of the package while being fully aware of the scientific and technological developments related to the field of packaging and other fields. We find the designer is interfering and innovating, and revealing new systems and relationships, as he integrates with his material until he reaches his formal formulation in the form of a set of ideas, signs, symbols, pictures and writings.

Where the designer deals with ideas, concepts, texts and images and presents them in a homogeneous visual form through printing, electronic means, or any other means the designer deems appropriate, and the design works to impose a system and structure for the content in order to facilitate and simplify the stages of communication. The designer achieves his goal by consciously manipulating the elements used in packaging design.

Package design stages

- 1. Brave stage or design brief.
- 2. The stage of gathering information about the package.
- 3. The information analysis stage.

- 4. Synthesis stage and prototypes of the package.
- 5. Large prototypes of the package.
- 6. The stage of evaluation of the final solution.

Sustainable packaging

It is clear that the impact of packaging design is causing a lot of damage to the environment as the third largest consumer of fossil fuels in the world is the pulp and paper industry. It is also one of the largest contributors to the production of air and water pollutants, and the second largest consumer of black carbon - the substance that is derived from incomplete combustion of oil – the printing ink and toner powder, and it is not the only materials used in the manufacture of packaging that have a negative impact on the environment, but there is a lot of damage on the environment caused by other raw materials.

Sustainability

It is derived from the word sustainability, i.e. support, or persistence. It is worth noting that permanence or continuity refers to extension and links between generations, meaning that it means that the current generation must leave for future generations an adequate stock of natural resources and an environment that is not destructive and non-polluting in order for these generations to have a chance for continuation.

Sustainability dimensions

- The economic dimension.
- The technological dimension.
- The social dimension.
- The environmental dimension.

Sustainable packaging

Sustainable packaging can be defined in the following points:

- It is safe and healthy mobilization for both individuals and communities throughout its entire life cycle.
- Meets market standards in performance and cost.
- It is a productive activity that uses renewable energy, starting from its source, manufacturing and transportation, until it arrives for recycling.
- Improved use of raw materials, whether their source is renewable or recycled, provided that they are recyclable.
- Manufactured using clean production technologies.

Sustainable packaging design

Packaging design is often seen as just a collection of graphics that adorn the printed surface. Its physical impacts are neglected even though it could be responsible for forest decimation to produce enclosures. The alternative is to design packaging that uses environmentally friendly materials and production techniques aimed at minimizing its environmental impact. It is

imperative to think about the design process and the life cycle of the packaging, by getting to know its life cycle from its production to disposal, and its purpose is to know the fate of the packaging after its consumption.

Where we can explain what the designer can do in terms of processes and practices to reach the design of a sustainable package:

- Reducing the amount of materials needed to produce packages.
- Using recycled paper and materials made from post-consumer waste or using environmentally friendly materials.
- Printing with inks with low volatile organic compounds, such as using soy inks, to reduce the use of petroleum-based inks.
- Using production methods that reduce transportation operations.
- The possibility of replacing some parts of the package with a digital design, instead of printed.
- Ensure that the final product is degradable or recyclable.
- Minimize printing additives, such as UV rays as coating, that may interfere with paper recycling.

Some considerations to take when designing sustainable packaging

- 1. Use the resources more wisely, so we use both sides of the paper whenever possible.
- 2. Limiting the use of inks and their coverage of the printed surface.
- 3. Choose materials carefully with the function in mind.
- 4. Combine separate functions in one piece.
- 5. Expanding the function by finding more than one use for the packaging and its parts.
- 6. Extending the consumption life of resources by designing a piece for reuse (such as refillable milk containers) or employing an innovative idea in a new job.
- 7. Avoid excessive decoration that does not perform a function or addition. Also excessive use of printing applications (foil stamping, varnishes, embossing, laminating, die cut), it has to be limited to promoting a good idea or increasing design effectiveness.
- 8. The designer should avoid any exaggeration that could consume energy and additional resources or create problems in recycling operations.

A strategy to follow when designing a sustainable packaging

	<u> </u>
Rethink	Analyze user behaviors and expectations (how do they think? What do they
	need and want?) To receive choices about the product and package lifecycle
	and use this research as a pathway or approach for designers.
Re-engineer	By looking at packaging manufacturing, logistics, retailing, and user
	constraints, we find that they include both engineering and marketing areas
	before design.
Remove	Improving packaging levels by reducing raw materials and searching for
	disposal and reuse methods to achieve: manufacturing, logistics, retail and
	user expectations without losing their main functions (which often have
	multiple uses).

Reduce	Work to reduce the raw materials of packaging materials without affecting the performance of the product during the stages: production, transportation, distribution and use.
Recycle	Taking into account the life cycle of the packaging to improve how the materials used are reintroduced at the end of the cycle and can be recycled.

References:

- Muhmad, Usama Yusif Muhamad "Aeitibarat altasmim alsinaeii lihimayat albiyat min altalawuth watatbiqiha fi ahda almuntajat almunzliati" risalat majstir kuliyat alfunun altatbiqiat jamieat hulwan -2002
- Alfuratiu , Muhamad Eatiata. "Altaghlif wa'atharah ealaa almujtamae walbiyati" dar alfikr alearabii alqahrt 1999.
- Eatris , Fatin Faruq Ahmad. "Aldur altafaeli lilmutlaqii fi tasmim 'iistratijiat aleallamat altijariata" bahath manshur alkuliyat aldawliat alththaniat lilfunun altatbiqiat jamieat dimiat 2010.
- Alfuar dr. Muhamad Jamal. "Msarid almustalahat al'iielamiat" dar 'usamat lilnashr waltawzie 2014.
- Shawqi, dr. Aismaeyl. "Fan Wa tasmima" muwalif alnaashr- altibeat alrrabieat 2007.
- Eisaa dr. Iihab. Waeamir dr. Tariq "Altanmiat albashariat walmustadamati" almuasasat alearabiat lileulum walthaqafat 2017.
- Atrush, Bilad Faris. "Athar alaietibarat albiyiyat ealaa siasat altaebiat waltaghlif (draasat halat mueaqdata)" risalat majstir jamieat earab bin mahdi 'um albawaqi 2009.
- •Abu Almjd , Abd Alnabi. "Alarjunumakis Alhadith 'iirshadat lileawamil albashariat fi altasmima" alqahrt , altibeat al'uwlaa 42011.
- Ahmad Eisam Eawdatu. Wahinfiun , Iihab Mahmud. "Tsamim altafaeul bayn almuntaj walmustakhdam fi 'iitar thaqafat alaistiemaliati" , majalat aleulum walfunun , almujlid alththalith waleishrun , aleadad alrrabie 2011.
- Hasan , Hasan Ridwan Muhmid. "Bayanat al'arjunumkis almieyariat fi majal altasmim alsinaeii "risalat majstyr , kuliyat alfunun altatbiqiat , jamieat hilwan , 2001.

Ambruz, Jafin. Haris, Bawl. "Asasiat altasmim aljarafiki" jabal eamman - 2015. •

- Husayn. dr.Samir Muhmid, "Al'iielan" ealam alkutub altabeat alththalithat algahrt 1984
- Kindirsliun, Durlynj. "Altaswiq Alnajh" maktabat lubnan nashirun 2004.
- \bullet Barnamaj Al'umam Almutahidat lilbiyat , Tawaqueat Albiyat lilmintaqat alearabia "albiyat min ajl altanmiat warafahiat al'iinsan" , 2010
- Mahmud , Shayama Mahmud Muhmd. "Altasmim albiyiyi likhamat altaghlif alblastikiat almutahalilat wifqaan lilhindasat albiyiyati" risalat dukturah kuliyat alfunun altatbiqiat jamieat hulwan 2012.
- Ghriba, a.dr.Mahmd. w Hilmi, dr.Wjdi."Al'iielam Waltanmiat almustadamuh" aldaar almisriat allubnaniat 2018.
- Eisaa dr.Iihab. Wa Amir dr. Tarq. "Altanmiat albashariat waltanmiat almustadamata" almusasaat alearabiat lileulum walthaqafat 2017
- Dib , Zbyda. "Altakhtit min ajl liltanmiat almstdam" , majalat jamieat dimashq lileulum alhandasiat almujalad 25 , aleadad al'awal , 2009.

- Alkhawajatu. Eala Muhmid, "Alieawlimat waltanmiat almustadamati, almawsueat alearabiat lilmuerifat min ajl altanmiat almustadamata" bayrut almajalid al'awal 2006.
- Aibdaleziz, dr.Samaa. , Alealam , dr.Sfutu. "Mqadimat fa al'iielan" markaz jamieat alqahirat liltaelim almftwh- 2004.
- Abu Taeimat, Husam Fahuma. "Alaelan wasuluk almustahlikin alnazariat walttbyq" dar alfaruq lilnashr, eamman, almamlakat al'urduniyat alhashimiat, 2007.
- Salam , 'a. da/ jalal ealaa muhmad, Eabd almuhsina, 'a. d/ naha eabd allh, Ebdaleal, ma. ma/ munaa eabd alhay eizb dawr tiknulujiaa altaebiat waltaghlif fi alhadi min alfaqd khilal dawrat hayat almuntaj alghadhayiyi majalat aleamarat walfunun waleulum
- Cliff ,Stafford. "50 Trade Secrets of great design Packaging" Rockport Publishers, Inc, ".1999.
- Dupuis, Steven. and Silva, John. "Package Design workbook "Rockport Publisher, Inc 2004.
- \bullet Ambrose , Gavin. and Harris, Paul. " The Fundamentals of Graphic Design" AVA Publishing SA $-\,2009.$
- Alervall ,Viktoria. and Saied, Juan Sdiq. "Perspectives on the Elements of Packaging Design "Bachelor thesis in Business Administration at the Section for Management Blekinge Institute of Technology-spring 2013.
- Adducci, Brian. "Packaging Capsule 01" Rockport Publishers 2008.
- Ambrose, Gavin. and Harris, Paul. "Packaging the brand "AVA publishing SA-2011.
- Calver ,Giles. "What is Packaging design "Roto Vision SA 2004.
- Mckinnon, Ronald I. "Money and Capital in Economic Development" The Brookings Institution Washington , D.C- 2003.
- Meyers, Robert A. Encyclopedia of Sustainability Science and Technology "Springer Science & Business Media, LLC 2012.
- 1. https://thedieline.com/blog/2019/12/9/german-designer-takes-plastic-out-of-shampoo-bottle-and-replaces-it-with-soap Accessed 5/12/2020
- 2. https://www.boredpanda.com/creative-packaging-pasta-hairstylesnikita/?utm_source=google&utm_medium=organic&utm_campaign=organicAccessed-15/6/2019
- 3. https://www.pinterest.com/pin/420312577718780749/ Accessed 10/2/2019
- 4. http://thereactionchamber.com/portfolio-item/packaging-sketches/ Accessed 23/12/2019