

Sensory packaging design using new technological means to enhance competitive advantage

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Abstract

The future of packaging design revolves around providing products that have sensual distinctive packaging, and create a sense of brand, and identify recent trends in Packaging design. Besides the functions of packaging such as product protection and safety, being environmentally friendly, and bringing convenience to the consumer. Packaging design and “pack opening” are of great importance to confirm the product in the competitive market. The research presents a summary on how to achieve integration between technology means through the use of more than one effective technology to achieve the communication objectives of the packaging, where the visual aspects of packaging design are key components for the success or failure of many products on supermarket shelves. Despite the importance of the meaning and influence of the color of the packaging and its external shape, the tactile, auditory, and olfactory features of the packaging design have now attracted the attention of many researchers with the advent of the modern technology used. The impact of the use of modern technological means on the design of sensory packaging and its evaluations and perceptions of products and brands towards consumers was also clarified. Focusing on the contributions of the different senses to the overall consumer experience of a sensory product, with declining production and development costs coupled with a growing awareness of the importance of sensory packaging technology, interest in sensory features of product packaging is likely to increase in the coming years.

Finally, it is clear that modern technology is a means of replacing traditional packaging models with others with techniques that are more appropriate to the nature of the product and more attractive to consumers. As packaging is the first interaction consumers have with a product, it is tangible, tells a story, sets the tone, and provides a tangible experience for consumers as it affirms the brand and its unique identity. And by incorporating this technology into the design process of sensory packaging, it raises the interest of consumers and motivates them to buy, thus increasing the competitive advantage of products.

Keywords

Packaging Design- Sensory Packaging- New Technologies- Competitive Advantage

Research problem

The research problem is determined in answering the following question:

- How to enhance the competitive advantage of products by employing modern technology means in packaging design?
- To what extent can the integration of technology means be achieved through the use of more than one effective technology to get the communication goals of the sensory packaging?

The importance of the research problem

- The importance of using technology and making use of it in the process of building direct interaction with the consumer through the Packaging design.

Research Aims

- Describe and analyze different, innovative and interactive means of integrating the consumer into the brand's marketing process to enrich the competitive advantage.
- Highlighting the Sensor Packaging after its success and achieving high effectiveness for the consumer.

Research hypotheses

Research assumes that

- Incorporating the consumer into this communicative process of packaging design affects positively the success of the brand and gaining consumer loyalty to the product over other competing products.
- Achieving integration between technology and packaging design by directing each technology to the right consumer which increases the effectiveness of the packaging's impact in achieving competitive advantage.

Research Delimitation

- Time limits: from 2015 AD to 2021 AD.
- Spatial boundaries: global Packaging designs models in the analytical approach.

Research Methodology

- Descriptive approach: to study the phenomenon in question.
- Analytical approach: to analyze a set of global and local models.

Introduction

Packaging is a key point of contact between the consumer and the company through its ability to attract attention and emphasize the brand image; Hence consumption wrappers create product engagement and influence consumption. The fields of sensory encapsulation have evolved in an effort to better understand how it influences consumers' perceptions, emotions, memories, preferences, choices, and consumption by sensory and unconscious processes, with the aim of engaging them more effectively. The goal of creating and enriching consumers' experience is now more achievable through the effectiveness of sensory tactics.



The impact of sensory effects on packaging design as a successful influence on the consumer



Purchase Packaging

Research Results

- The design of interactive sensory packaging for a product needs to understand and analyze the needs of different users in the early design stage, and use this as an entry point to improve packaging design.
- Sensory communication should be designed for product packaging in a clear and rational way, so that people can easily understand how to use the product when using it, and product packaging does not need to pay much attention to formalities, it should be designed in a simple way.
- Determine what consumers need, want, and value in their packaging by identifying their needs, values, and buying motives.

Recommendations

- Keeping abreast of all new means and technological developments, and trying to exploit them to develop the design of product packaging.
- Enhancing interest in the dimensions of sensory packaging and stimulating consumers' senses towards the presented packages, and seeking to diagnose and excite their concerns and sensory perceptions.

References

Arabic references

- سمير, أسامة: دراسة تحليلية لعناصر العبوة ودورها فى إتخاذ القرار الشرائى للمستهلك بالتطبيق على السلع - 117 – 128. المجلة العلمية للأقتصاد والتجارة - كلية التجارة، جامعة عين شمس - ٢٠١٨ - ص
- Samir, Osama: drasa t7lilia l3naser al 3bowa w dorha fe et5az al krar al shra2i ll mosthlik bltatbe2 3la el sela3 al esthlakia- al mgla al 3lmia ll 2ktsad w el tgara- koliet al tgara, game3at 3en shams-2018-s 117-128.
- السيد مهران, مروة: تحليل العلاقة بين بطاقة الأداء المتوازن والميزة التنافسية المستدامة - كلية التجارة - جامعة بورسعيد - ٢٠١٩ - ص ١٨٣.
- Al said mhran, Marwa: T7lili al 3laka bin btaket al ada2 al motwazen w al miza al tnafosia al mostadama- koliet al tgara- game3at borsa3ied- 2019- s 183.

English references

- Bruno M. Ferreira, (2019).Packaging texture influences product taste and consumer satisfaction. J Sens Stud. 2019;34: e12532. <https://doi.org/10.1111/joss.12532>
- Krishna, Aradhna & Cian, Luca & Aydinoglu, Nilüfer. (2017). Sensory Aspects of Package Design. Journal of Retailing. 93. 43-54. 10.1016/j.jretai.2016.12.002.
- Kouveli, A., Tzetzis, D. & Kyratsis, P. Packaging Design in Today's Industries: The Case of Olive Oil Packaging Design. (2017). J Package Technol Res 1, 13–23
- Spence, Charles. (2016). Multisensory Packaging Design. 10.1016/B978-0-08-100356-5.00001-2.
- Ying Li 2021 *J. Phys.: Conf. Ser.* 1852 022074
- Velasco, C., Spence, C. (Springer, 2018). Multisensory Packaging: Designing New Product Experiences, 3319949772, 9783319949772, 3-

Web sites

- <https://www.johnsbyrne.com/blog/maximizing-5-senses-product-packaging/> 9/8/2021
- https://www.interpack.com/en/TIGHTLY_PACKED/SECTORS/COSMETICS_PACKAGING/News/Packaging_with_an_Alluring_Scent 28/7/2021
- <https://www.follmann.com/en/about-us> 28/7/2021
- <https://www.packaginginnovation.com/packaging-design/innovative-packaging-2/smells-like-sale-scented-packaging-trending/> 28/7/2021
- <https://www.packagingdigest.com/packaging-design/9-sensory-packaging-wins-and-fails> 25/7/2021
- <https://greatergood-brands.com/multisensory-packaging-20-of-our-favourites/> 28/7/2021
- <https://pactivate.com/2020/09/03/how-can-multi-sensory-packaging-elevate-your-product/> 14/8/2021
- packagingoftheworld.com/2021/07/shape.html 19/7/2021
- <https://www.packaging-gateway.com/features/featurethe-smell-of-success-scented-packaging-4882996/> 9/8/2021
- <https://doi.org/10.1016/j.jretai.2019.11.001> 16/8/2021
- <https://www.liendesign.com/blog/2020/1/24/honing-in-on-the-sensory-packaging-trend> 14/8/2021
- <http://www.holohasanah.com/arabic/hologram.html> 16/8/2021

- <https://www.mainlineprinting.com/holographic> 16/8/2021
- <https://support.jukeboxprint.com/hc/en-us/articles/203349087-What-is-the-difference-between-Blind-and-Registered-Embossing-> 16/8/2021
- <http://arabprintmedia.com/wp-content/uploads/2019/09/Arab-print-media-Issue-4.pdf>
16/8/2021
- <https://www.pannam.com/blog/what-is-printed-electronics/> 13/8/2021
- <https://scntt.com/about-our-technologies/#!/encapScnt-coatings> 13/8/2021
- <https://reedpacificmedia.com/scented-packaging-technology/> 13/8/2021
- https://projekt.beuthhochschule.de/fileadmin/projekt/sprachen/sprachenpreis/erfolgreiche_beitrag_e_2007/1_Preis_07_-_Scent_Encapsulated_in_Printed_Products_-_Heike_Rose.pdf
13/8/2021
- https://www.allbusiness.com/barrons_dictionary/dictionary-package-design-4956697-1.html ٢٠:٠٨ ٢٠١٨/١٠/٢٣ 16/8/2021
- <https://www.winston.com/en/legal-glossary/emerging-technology.html> 16/8/2021
- <https://www.encyclopedia.com/social-sciences-and-law/sociology-and-social-reform/sociology-general-terms-and-concepts/new-0> 16/8/2021
- <https://searchcio.techtarget.com/definition/competitive-advantage> 16/8/2021
- https://www.marefa.org/%D9%85%D9%8A%D8%B2%D8%A9_%D8%AA%D9%86%D8%A7%D9%81%D8%B3%D9%8A%D8%A9 16/8/2021
- <https://www.packagingoftheworld.com/2014/07/dove-men-care-face.html> 18/8/2021
- <https://brandspurng.com/2017/12/14/coca-cola-to-roll-out-new-spiral-fanta-pet-bottle-design/> 18/8/2021
- <https://www.beveragedaily.com/Article/2015/07/29/Four-former-CTI-employees-found-guilty-of-fraud> 1/10/2021