

76.01:621.798.1:004.9
ID ORCID 0000-0001-6403-1592

ДИЗАЙН УПАКОВКИ МАЙБУТНЬОГО: ПРОГНОСТИЧНІ ТЕНДЕНЦІЇ РОЗВИТКУ

Ганоцька О. В. *Дизайн упаковки майбутнього: прогностичні тенденції розвитку.* У статті розглядаються основні тенденції розвитку дизайну упаковки, які в майбутньому закріплять свої позиції та нададуть можливості разом із подальшим розвитком новітніх технологій та матеріалів з'явитися принципово новим зразкам упаковки. Споживча упаковка — це складова частина продукту, її властивості безпосередньо впливають на конкурентоспроможність товару, а якість упаковки сьогодні багато в чому визначає прихильність споживача. При насиченості ринку великою кількістю близьких за якістю товарів упаковка стає певним чинником конкурентної боротьби. Тому сьогодні, працюючи над упаковкою, дизайнеру необхідно постійно відстежувати зміни в естетичних, функціональних і технологічних вимогах, які висуваються суспільством, ринком і виробництвом, а також проаналізувати прогностичні тенденції розвитку дизайну упаковки.

Ключові слова: графічний дизайн, дизайн упаковки, прогностичні тенденції, універсальність, екологія, інноваційність.

Ганоцкая О. В. *Дизайн упаковки будущего: прогностические тенденции развития.* В статье рассматриваются основные тенденции развития дизайна упаковки, которые в будущем закрепят свои позиции и дадут возможность вместе с последующим развитием новейших технологий и материалов появиться принципиально новым образцам упаковки. Потребительская упаковка — это составная часть продукта, ее свойства непосредственно влияют на конкурентоспособность товара, а качество упаковки сегодня во многом определяет предпочтения потребителя. При насыщенности рынка большим количеством близких по качеству товаров упаковка становится определенным фактором конкурентной борьбы. Поэтому сегодня, работая над упаковкой, дизайнеру необходимо постоянно отслеживать изменения в эстетических, функциональных и технологических требованиях, предъявляемых обществом, рынком и производством, а также проанализировать прогностические тенденции развития дизайна упаковки.

Ключевые слова: графический дизайн, дизайн упаковки, прогностические тенденции, универсальность, экология, инновационность.

Hanotska O. *Future Packaging Design: Prognostic Development Trends.*

Background. Manufacturers are turning to designers with suggestions for creating something extraordinary, supernatural and innovative with the ever-increasing number of packaging for goods. Some manufacturers can boast of original packaging of their products, but most of non-standard ideas are still concept projects. Eco-packaging, smart packaging, flavoring, multifunctional and versatile packages that speak or glow are predicted to be actively used in the future.

The purpose of the article is to identify prognostic trends in the development of packaging design in the future and to characterize them.

Results. The twentieth century has brought some achievements in the field of packaging production, but the environmental situation is aggravated, the only way out is the transition to the use of environmentally friendly and organic materials. Thus, one of the main trends in the world related to the design of packaging is the improvement of environmental situation. Today the direction of eco-packaging develops in several directions: first of all, it is the usage of environmental materials, secondly, it is the introduction of new eco-materials for creation of food packaging, and thirdly, it is renewal of the packaging, it means the introduction of new functions or creation of a multifunctional packaging that does not become litter. The idea of making polymeric materials subject to biodegradation has been at the center of attention of scientists around the world for over forty years. According to the International Organization for Standardization, biodegradable plastics are polymers whose decay occurs under the influence of bacteria, fungi and algae. Despite the fact that the cost of such packaging is higher than usual, many large retail chains, supermarkets began to use the packaging made of biodegradable materials. Therefore, manufacturers increase the production of such packaging and materials for its production.

Another point is the program devoted to so-called “active” packaging systems. “Active packaging systems” are designed for food products with an extended shelf life. Thus, protection of goods is carried out not only passively but also actively. So-called “smart” materials, on the contrary, are designed to reflect the state of a food product. These can be integration into packaging materials that come in contact with food, components that change color if the food product is spoiled, or those that prove that the product has been kept at constant temperature throughout the shelf life of retail chain. Environmental aspect and safety of usage are among technological advantages of “smart packaging”.

Innovative development in the field of environmental packaging is directed to edible packaging. This packaging does not leak and doesn't let oxygen go out. It is made from a protective electrostatic gel, formed by the interaction between natural edible particles, nutrients and polysaccharides. This package is well combined with any kinds of gastronomy.

Today, innovative packaging developments of the future relate to specific replacement of plastic packaging. This package is a drop-shaped container for water. It is ed-

ible, durable, hygienic, biodegradable, easy and cheap to produce. It is made from seaweed extract.

A very interesting development of introduction of the latest technology into design is the idea of packaging with a built-in voice device. The VTT Research Center believes that it is a growing market, and in the future, when this technology becomes cheaper, such original packaging will become a common occurrence.

The latest development is packaging with a diagnostic function, that is, packaging with a built-in chip-scanner, which will determine the impact of the product on the human body. Perhaps in the near future package-informers will encourage humanity to more serious approach as for food choice. It is necessary to turn to the theme of universal packaging design too. So, universal packaging is able to adapt to the consumer, and not to adjust the consumer and his life to it. It can change shape, color, provide accessible and understandable information to any consumer and it can be easily recycled.

Regarding present basic trends in the design of packaging, it is necessary to distinguish the handmade technique, because handmade packaging has always been appreciated by consumers. With the help of the original wrapper the manufacturer emphasizes that his product is designed individually, taking into account all its advantages and tastes. In addition, flavored packaging materials that were used in packaging production were presented at the latest packaging design exhibitions. Nowadays the introduction of flavoring in packaging design is another innovative idea that has a great potential for development.

Conclusions. It is likely that the packaging of the future will be a convenient and maximally protected container, which will give not only visual and tactile information, but will also affect other receptors. The prognostic trends in packaging design can be outlined in the following areas: eco-packaging, which will be made from environmentally friendly materials that are subject to rapid biodegradation, from edible materials, and also will be multifunctional packaging; smart packaging with digital labels that describe product quality; "Active" packaging, which provides certain properties of the product in a long-term storage; package with built-in voice device; packaging using flavored materials; handmade packaging, which reflects originality and authenticity; universal packaging that can fit under certain conditions and interactive packaging.

Keywords: graphic design, package design, prognostic development trends, universality, ecology, innovation.

Постановка проблеми.

Зв'язок роботи з важливими науковими або практичними завданнями.

Аналіз останніх досліджень і публікацій.

(Gordon L. Robertson) «Food Packaging: Principles and Practice».

(MTech and PhD in food technology, professor in the School of Agriculture and Food Science at the University of Queensland in Brisbane, Australia),

[11].

[5].

“Sustainable Era” (“...”),

» [1, . 67].

» [1, . 71].

Мета статті —

Виклад основного матеріалу дослідження.

— Mater-Bi,
1995

Novamont.

33 %

2050

» [4, . 17].

» [2].

90-

« »

» [9].

(François Azambourg)
(Don Ingber).

SIAL 2012

WikiFoods Inc.

Jelloware

«The way we see the world».

«SmartPack»

startup Skipping

Rocks Lab

«Ooho»

(www.skippingrockslab.com/ooho!.html)

Ooho,

WikiPearl —

(David Edwards).

Ooho

, startup

TetraPak [6].

WikiFoods

WikiFoods

Evaware
 : —
 ; NFC (NFC)
 VTT
 » [7]. NFC.
 (Andrea Ponti) Life. [3], NFC,
 Life « » NFC,
 : « — Mind Design
 ()
 Lacoste.
 (Tom Dixon)
 » [8]. [3] Lacoste.
 Techno
 (. 1).
 open & play.
 » [3, . 52].



Рис. 1. Mind Design & Tom Dixon, упаковка для двух сорочок поло фирмы Lacoste. Лондон, Велика Британія, 2014 [URL : <http://www.minddesign.co.uk/show.php?id=189&pos=6&cat=6>]

Graphics» ()

«Quantum

(. 2): «

» [10].

hand

made,



Рис. 2. Quantum Graphics. Идея универсальной упаковки. Москва, Российская Федерация, 2016 [URL : <http://www.qgraphics.ru/e-to-u/>]

Висновки.

1.

2.« »
(smart pack-
age)

3.« »

4.

open & play,

(smart pack-
age)

5. [] / . // . — 2017. — 5. — . 66–72.
6. , , hand made — . , , .
7. , , .
8. , (,) , .

Література:

1. [] / . // . — 2017. — 5. — . 66–72.
2. [] / . // . — 2005. — 10. — : http://www.kursiv.ru/kursivnew/paket_magazine/archive/34/12.php (: 25.01.2018). —
3. [] / . // . — 2017. — 3. — . 43–52.
4. : [] / . // . — 2017. — 2. — . 13–17.
5. [] / . — : , 2017. — 288 . : .
6. . Ooho — [] / // Hi-news.ru : [-]. — 18.04.2017. — : <https://hi-news.ru/technology/ooho-deshyovaya-i-sedobnaya-alternativa-plastikovej-upakovke.html> (: 23.01.2018). —
7. [] [] / shance [] // : []. — 23.01.2018. — : https://rodovid.me/soznatelnoe_potreblenie/unikalnaya-sedobnaya-upakovka-iz-morskih-vodorosley.html (: 25.01.2018). —
8. : [] // Novate.ru : . — [2007–2018]. — : <http://www.novate.ru/blogs/190511/17662/> (: 03.01.2018). —
9. [] // : [] . — : <https://uznayvse.ru/interesting-facts/siedobnaia-upakovka-dlia-produktov-uzhe-ne-mif.html> (: 24.01.2018). —
10. Quantum Graphics [] // Unipack : [] . —

- 2 . — 2016. — : <https://news.unipack.ru/62949/> (: 25.01.2018). —
11. Robertson G. Food Packaging: Principles and Practice [] / Gordon L. Robertson. — 3rd ed. — London : CRC Press, 2012. — 733 .

References:

1. Boichuk, O. V. (2017). Dyzaïn postindustrialnoi epokhy: novi vymiry, novi vymohy [Design of post industrial epoch: new perspectives, new requirements]. *Visnyk Kharkivskoi derzhavnoi akademii dyzainu i mystetstv — Bulletin of Kharkov State Academy of Design and Arts*, 5, 66–72. (In Ukrainian).
2. Budnikova, O. A. & Budnikov, B. O. (2005). Utilizatsiya polimernykh materialov. Nemetskii opyt i rossiiskaya real'nost' [Utilization of polymer materials. German experience and Russian reality]. *Paket — Package*, 10. Retrieved from http://www.kursiv.ru/kursivnew/paket_magazine/archive/34/12.php. (In Russian).
3. Hanotska, O. V. (2017). Interaktyvna upakovka: novi mozhlyvosti u dyzaini [Interactive packaging: new opportunities in design]. *Visnyk Kharkivskoi derzhavnoi akademii dyzainu i mystetstv — Bulletin of Kharkov State Academy of Design and Arts*, 3, 43–52. (In Ukrainian).
4. Holoborodko, V. M. & Soboliev, O. V. (2017). Ekolohichniy dyzaïn: do problemy formuvannya zasad profesiinoi osvity [Environmental design: the problem of formation of professional education foundations]. *Visnyk Kharkivskoi derzhavnoi akademii dyzainu i mystetstv — Bulletin of Kharkov State Academy of Design and Arts*, 2, 13–17. (In Ukrainian).
5. Krivoshei, V. N. (2017). *Upakovka v ukrainskikh realiyakh* [Packing in Ukrainian realities]. Lvov : Ukrainskaya akademiya pechati. (In Russian).
6. Larionov, V. (2017, April 18). Ooho — deshevaya i s'edobnaya al'ternativa plastikovoi upakovke [Ooho — a cheap and edible alternative to plastic packaging]. *Hi-news.ru*. Retrieved from <https://hi-news.ru/technology/ooho-deshyovaya-i-sedobnaya-alternativa-plastikovej-upakovke.html>. (In Russian).
7. Nikitina, K. [shance]. (2018, January 23). Unikal'naya s'edobnaya upakovka iz morskih vodoroslei [Unique edible packaging from seaweed]. *Rodovid*. Retrieve from https://rodovid.me/soznatelnoe_potreblenie/unikalnaya-sedobnaya-upakovka-iz-morskih-vodorosley.html. (In Russian).
8. Pakety iz bumagi s vodoi: ekologichnaya upakovka budushchego [Paper bags with water: ecological packaging of the future]. (2007–2018). *Novate.ru*. Retrieved from <http://www.novate.ru/blogs/190511/17662/>. (In Russian).
9. S'edobnaya upakovka dlya produktov uzhe ne mif [Edible packaging for food is no longer a myth]. (N. d.). *Uznai vse — Learn all*. Retrieved from <https://uznayvse.ru/interesting-facts/siedobnaia-upakovka-dlia-produktov-uzhe-ne-mif.html>. (In Russian).
10. Upakovka budushchego ot Quantum Graphics [Packing of the future from Quantum Graphics]. (2016, Desember 2). *Unipack*. Retrieved from <https://news.unipack.ru/62949/>. (In Russian).
11. Robertson, G. L. (2012). *Food Packaging: Principles and Practice*. (3rd ed.). London : CRC Press. (In English).