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PACKAGING: RELEVANCE AND DEVELOPMENT TENDENCIES

At this stage of society's development, packaging is perceived as one of the main means of forming the consumer space, an object of communication between the manufacturer, seller and consumer. The history of printed packaging dates back to the third century. Packaging as an object of graphic design, included in the sphere of modern marketing – only the second hundred years. The United States, Germany, Japan, and Russia are leading the way in this process. Despite its long history, domestic packaging has not been sufficiently studied. Its artistic component, which was updated during the period of design training, remained out of the attention of researchers.

The topic of this article is devoted to current development trends in the field of packaging and packaging materials. The authors consider and theoretically justify the possibility of improving the packaging process in Kazakhstan using modern technologies, including 3D printing methods. The authors conduct a comparative analysis of foreign and Kazakh packaging based on specific data, they note that the packaging of domestic products does not meet international standards, and there are significant shortcomings in the protective, aesthetic, consumer, and environmental properties of packaging.

The purpose of the article is to study the practice and development trends of modern packaging, as well as problems related to the peculiarities of packaging functioning in marketing conditions. The article analyzes the relevance and characteristics of the packaging process. The practical significance of the research is that the authors, by analyzing trends in the development of the packaging process abroad, identify ways to introduce new practical approaches to packaging in Kazakhstan.

The article reviews materials on this topic, studies articles and scientific works of famous foreign and domestic scientists: I.S. Stefanov, N.N. Poliyansky, K.E. Petrov, V.Sitnikov, Zh.Bazilov, Sh.Eleukenov, B.Omarova.

This research is relevant for University teachers, printing specialists, students and young scientists who are engaged in packaging as an effective tool for product promotion.

Key words: packaging, publishing, publishing products, decoration.

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Орап-қаптау: өзектілігі мен даму тенденциясы

Қоғамның осы даму кезеңінде, орап-қаптау үдерісін тұтыну кеңістігін қалыптастыру, өндіруші, сатушы және тұтынушы арасындағы коммуникация нысаны ретінде қабылданады. Полиграфиялық орап-қаптау үдерісінің тарихы үшінші ғасырдан бастау алады. Орап-қаптау қазіргі заманғы маркетинг саласына енген графикалық дизайн нысаны ретінде тек екінші жүз жылдықты құрайды. Бұл үдерісте АҚШ, Германия, Жапония, Ресей көш бастап тұр. Ұзақ жылғы тарихқа қарамастан отандық орап-қаптау үдерісі жеткілікті зерттелмеген. Оның көркемдік компоненті дизайнерлік дайындық кезеңінде зерттеушілердің назарынан тыс қалды.

Бұл мақаланың тақырыбы орап-қаптау үдерісі және оның материалдары саласындағы заманауи даму тенденциясына арналған. Авторлар 3D басу әдісі сынды заманауи технологияларды қолдану арқылы, Қазақстандағы орап-қаптау үдерісін жақсартуға болатындығын жан-жақты қарастырып, теория жүзінде дәлелдейді. Сонымен қатар, шетелдік және отандық орап-қаптау үдерісіне салыстырмалы талдау жүргізеді, отандық бұйымдарды орап-қаптау халықаралық стандарттарға сәйкес келмейтіні мен орап-қаптаудың қорғаныштық, эстетикалық, тұтынушылық, экологиялық қасиеттерінде елеулі кемшіліктер бар екенін деректерге сүйене отырып көрсетеді.

Мақаланың мақсаты – заманауи орап-қаптау үдерісінің тәжірибесі мен даму тенденцияларын, сондай-ақ оның маркетингтік жағдайында қызмет ету ерекшеліктерімен байланысты мәселелерді

зерттеу. Мақалада орап-қаптау үдерісінің өзектілігі мен сипаттамалары талданады. Зерттеудің практикалық маңыздылығы – авторлар шетелдегі орап-қаптау үдерісінің даму тенденциясын талдау арқылы, Қазақстандағы орап-қаптау үдерісіне жаңа практикалық тәсілдерді енгізу жолдарын анықтауында болып табылады.

Мақалада осы тақырып бойынша материалдарға шолу жасалды, И.С. Стефанов, Н.Н. Полянский, К.Е. Петров, В.П. Ситников, Ж. Базилов, Ш. Елеукенов, Б. Омарова сынды белгілі шетелдік және отандық ғалымдардың мақалалары мен ғылыми еңбектері зерттелді.

Бұл зерттеу – жоғары оқу орындарының оқытушылары мен полиграфия мамандары үшін және өнімдерді жылжытудың тиімді құралы ретінде, студенттер мен жас ғалымдар үшін өте өзекті болып табылады.

Түйін сөздер: орап-қаптау, баспа ісі, баспа өнімдері, безендіру, 3D басу әдісі.

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Упаковка: актуальность и тенденции развития

На данном этапе развития общества упаковка воспринимается как одно из основных средств формирования пространства потребления, объект коммуникации между производителем, продавцом и потребителем. История полиграфической печатной упаковки насчитывает третий век. Упаковка, как объект графического дизайна, включенная в сферу современного маркетинга – всего вторую сотню лет. Лидируют в этом процессе США, Германия, Япония, Россия. Несмотря на длительную историю, отечественная упаковка недостаточно изучена. Ее художественный компонент, актуализирующийся в период дизайнерской подготовки, оставался вне внимания исследователей.

Тема данной статьи посвящена современным тенденциям развития в области упаковки и упаковочных материалов. Авторы рассматривают и теоретически обосновывают возможность совершенствования процесса упаковки в Казахстане с использованием современных технологий, в том числе и методами 3D-печати. Авторы проводят сравнительный анализ зарубежной и казахстанской упаковки, на основании конкретных данных отмечают, что упаковка изделий отечественного производства не соответствует международным стандартам, имеются значительные недостатки в защитных, эстетических, потребительских, экологических свойствах упаковки.

Цель статьи – исследовать практику и тенденции развития современной упаковки, а также проблемы, связанные с особенностями функционирования упаковки в условиях маркетинга. В статье анализируются актуальность и характеристики процесса упаковки. Практическая значимость исследования заключается в том, что авторы посредством анализа тенденций развития процесса упаковки за рубежом обозначают пути внедрения новых практических подходов к упаковке в Казахстане.

В статье сделан обзор материалов по данной теме, изучены статьи и научные труды известных зарубежных и отечественных ученых: И.С. Стефанова, Н.Н. Полянского, К.Е. Петрова, В.П. Ситникова, Ж. Базилова, Ш. Елеукенова, Б. Омаровой.

Это исследование актуально для преподавателей вузов, специалистов полиграфии, студентов и молодых ученых, занимающихся упаковкой как эффективным инструментом продвижения товара.

Ключевые слова: упаковка, издательское дело, издательские продукты, дизайн упаковки, декорации.

Introduction

The packaging industry is global in the economy to one of the important places. In developed countries packaging business production volume of its population busy coverage on the other hand is one of them. Packaging is a method surrounded by environmental pollution, as well as damage to goods and disappearance security. Additional packaging function - a variety of goods color decoration. This

in the case of consumers and marketers self-interest causes.

Before we start the packaging (Basin O., 1996), it is significant why we use it. Packaging is the main protective agent for food and non-food products. To make it safe for the product and the person, certain requirements are imposed on it, according to which various manufacturers develop packaging containers and select materials for them, and also use one or another packaging technology. Thanks

to packaging, the product takes on unusual shapes, becomes bright and easy to use. Manufacturers are interested in choosing modern and highly efficient packaging materials, as well as packaging equipment with the product packed and sealed. To facilitate the production process and accelerate it, global manufacturers are improving their skills in the manufacture of filling and packaging equipment. Thanks to the use of high technology, the equipment becomes reliable and convenient, accurate in operation and is gaining popularity among manufacturers of food and non-food industries (Kurmanbayeva A.A., Danayeva N.T., 2016). Each manufacturer makes a unique product that differs from the others in composition, original packaging or name. However, the manufacturer follows certain quality standards so that his product meets the safety requirements - does not cause harm to human health and life and useful in everyday life or in cooking (Zorin V.I., 2002).

Material and methods

During the research, authors used historical-functional analysis, historical-comparative explain, problematic systematization, collection and online questionnaire method for doing all tasks and goals of given work. Moreover, there were used literature and scientific articles of researchers who made a research before. Almost thirty works were analyzed totally and operated here for good comparative analysis of packaging deal in Kazakhstan and foreign countries.

Literature review

Comparing with the researchers' work applied in given article, it was used more than twenty scientific materials and other literature explaining the role of packaging in publishing and not only this sphere. Especially articles and books of Stefanov, Polyanskyi, Petrov, Sitnikov, Volkova and Zorin were the best example to analyze the packaging in our country and others. From local Kazakhstani authors, there were selected researchers as B.Omarova, K.Mergenbayeva, Zh.Bazilov, Sh.Yeleukenov, Zh.Nuskabayuly, R.Abdiyeva.

The most close material for this research work was the article of B.Omarova "Technological trends in polygraphy". It is brightly seen that she wrote about trends in polygraphy and its technological species. But nevertheless, there are lots of information about packaging trend development way in domestic publishing houses. The theme written in this research work was so clear and excellent shown which provided to use it as a key for this article (Omarova B.A., 2009).

Result and discussions

Basic packaging techniques and methods of production in printing offices conducted because of the techniques in the printing houses works master sitting printed product preparation ways out is carried out. Among them book cover external the bag is "supercover" or different household equipment and food industry outer wrapping shape and ergonomics different artistic attractive compliance with the requirement need. Therefore and prepare them in the making necessity causing main equipment computer Graphic Corel Draw program especially service performs. Here is the interior composition basics samples, its beauty increase designer literacy, aesthetic. The taste forms the educational attitude of the cover (Marogulova N.N., Stefanov S.I., 2002). Wrap involve done of the programs to be implemented-Corel Draw computer program. Today it is big demanding graphicone of the programs becomes calculated. Left type of packaging for, different in shapes products volume prepared and mathematical accuracy and computer by means of programs measured is prepared. Right now in time Corel Draw programs are different graphic images convert a lot of firms or original for other newspapers and magazines logo preparing composes. Apart from that, Corel Draw any invitation papers and promotional tickets and book covers and a lot of products external one of the bag sin a corporate style makes. Features of the program, any image in format volume without reducing prepares qualitatively. Corel Draw consists of many pages. It's different with lines, with pictures filling or delete his place and name to change. "Scroll- via "deposit" effects: turns, mirrors, color change, shrink and enlargeas well as straight with lines curvelines assemblingbuild up for additional tools panel service performs (Sitnikov V.P., 2002). Today Select Corel Draw programin our homeland designers widely among used. For example, known one meal industry due to come from ordered preparation in all, artist. The designer first called it a program artistic prepare the sideshould receive. Then postmain technology performed poligraphicas a product prepared from him packaging is carried out. Packaging is the materials from which it is made various types of papers, cardboard, including corrugated, various films, metals, glass, etc., and its printing technologies, which differ in a number of specific requirements: psychological, hygienic, strength aspects, protection against falsification. The need for their simultaneous accounting in the printing process immediately suggests the use of system solutions. By the beginning of the third mil-

lennium, packaging printing is developing in line with the global development of the printing industry. The demand for high-quality printed products is constantly growing with the increasing pressure of market prices, circulations are decreasing with a shorter production time, changes are taking place in the markets, large firms are merging and the structure of orders is changing (Bazilov Zh., 2005).

In industrialized countries and, above all, in the USA and Western Europe, packaging materials its packaging forms have undergone significant changes. Packaging has become more expensive, and its design is complicated. The color has increased, the print quality has improved.

There is a tendency to use polymeric materials for soft packaging (annual growth of 3-5%). This is facilitated by new packaging materials and packaging for fresh fruits, vegetables, salads, surgical and medical products, various food and industrial products (Omarova B.A., Sayakbayeva G.A., 2014). Paper and cardboard are gradually being replaced with films because films have better packaging properties and are often cheaper than paper and cardboard. At the same time, the demand for cardboard packaging for milk, juice, tea, wine and mineral water is growing (Volkova V.G., 2003).

As for the total global turnover of packaging products, if the total value of all printed packaging products amounted to \$ 350 billion in 1985, then, according to the most pessimistic estimates, by 2005 it will increase to almost \$ 500 billion. At the same time, the turnover of offset, intaglio and other printing methods will amount to 300 billion US dollars or 59% of the total market, and the volume of turnover of flexographic packaging printing - 200 billion US dollars (41% of the market).

At the same time, the production of packaging materials is projected to increase by about 30% in the countries of eastern Central Europe for the next 5 years, while in the Russian Federation and other Eastern European countries it is expected to grow by 10% or slightly less (compuart.ru).

The alignment of the American and Western European levels of development of packaging production.

New types of printing inks are emerging. The role of digital methods in prepress processes and the computerized manufacture of printing forms are increasing. There is a competition between packaging printing methods, their role and importance are changing, post-printing processing is being developed and automated.

The role of system integration in packaging production is growing, in which all of its stages must

be connected together. Here the role of firms that play the role of system integrators, combining the disparate stages of production into a single system, is increasing (Polyanskyi N.N., 1991).

The packaging industry is one of the important business in the world economy. In developed countries, the packaging business is both the volume of production and one of the largest in terms of employment. Packaging must ensure the safety of the product and the safety of the environment, as well as damage and loss of goods. An additional function of packaging is the color design of products. In this case, it is of interest to consumers and marketers (Petrov K.E., 1998).

Before switching to packaging, first of all, for what purposes it is used should be applied. When packaging high-value large-format publications, special attention must be paid to each copy and they must be Packed separately. In order for it to be focused on large customers, but even if it was taken to the warehouse, this is very important. A distinctive feature of the separate packaging is that it provides an unobstructed, new and affordable edition on the way to the customer. Immediately, many packages have their advantages, for example, it is easy and fast. Because they are grouped and sent immediately from the manufacturer's warehouse to the customer's warehouse. And for the sale of products abroad, their packaging requirements are very complex and strict, and then can difficulties arise. Every specialist who knows the theory and practice of design of printed products and its packaging requires the development of theoretical knowledge related to the formation and development of the basics of composition in the design of printed products, learning about the types of design from the twentieth century to the present, examples of its formation (Konovalova M.V., 2004). The development of packaging of printed products in Kazakhstan is caused by the lack of various books, papers or magazines, the production of various food products, and special advanced technology performed by ancient traditional methods. Lack of time and limited number of employees cause many difficulties. As for them, over the past years, all the work was done manually. The lack of printers of various quality and unavailability of color schemes led to mechanical production of printed products. And as a result of many modern technical continuous stages of development, many possible views are formed. One of the programs that runs related to packaging is the computer program Cor Draw. Today, it is one of the graphics programs that require a lot of demand. For this purpose, the type of packaging is manufactured and manufac-

tured in various forms of products, measured with mathematical accuracy and computer programs. Currently, the Corel Draw program modifies various graphic images and creates its own symbol (logo) for many companies or other Newspapers and magazines. In addition, Sorel Draw makes any invitations and promotional tickets, book covers and outer bags of many products in one corporate style. The peculiarity of the program is that in any format it is produced efficiently without reducing the image volume. Corel Draw-consists of many pages. In addition to different lines, you can fill or delete them with images and change its place and name. To create effects via the Scroll – tab: turns, rotations, color changes, zoom-in and zoom-out, as well as curves, use the additional dashboard as straight lines (Stefanov S.I., 2002).

By the way, the Corel Draw program is widely used among designers of our country. For example, when preparing an order received in connection with a certain food industry, the design designer must prepare this program, first of all, its artistic side. Then packaging and manufacturing of the main technology of printing products is carried out (Abdiyeva R.S., 2013). After the complete execution of special printers, samples of boxes are put into operation as finished products. Therefore, since this program, which performs its artistic function, is a Corel Draw program, before each printed product turns to the services of this program. But, in accordance with the requirements of the time, there are many available programs, thanks to which there is a lot of access to designers. In addition, it should be noted that the main regularities of the most important functions take into account the artistic formation of the composition, the formation of its full form. Data containing the state of development at the present stage, consider it necessary to determine the specific features of packaging. For example, based on compositional features, for example, an example of manufacturing many packaging products, including chocolate bags. These programs are used for their art projects, and the rest of the tasks are uploaded by the services responsible for their form. That in case it is responsible for their papers and materials (Stefanov S.I., 2001).

The biggest achievement of packaging in Kazakhstan and even in the world has become one of the achievements of science, which has become the latest model of highly developed technology “3D printer” (Abdrayev M.K., 2015). Scientists say that this technology can make major discoveries in the world economy, change the established mode of manufacture and balance in world trade. The 3D printer took files

with a three-dimensional drawing on the computer, collected layers of plastic, resin, ceramics, metal and other materials, and made a product out of it. Engineers and designers have been using this technology for decades to create original automation. Many combined parts made with a 3D printer and the production of printed products related to the packaging on which we are based, the most thoughtful achievements of science are used with this 3D printer (Omarova B.A., Sayakbayeva G.A., 2015).

To apply colors to the wrapper, the design uses dyes allowed by the Ministry of Health of Russia. The safest is glass and fabric containers, and the danger is metal and polymer containers. The reliability of the package is the property of conservation of mechanical properties or integrity over a certain period of time. Depending on these properties, packaging ensures the safety of goods.

The analysis of the world experience in creating a packaging organization can be considered on the example of several countries that have a successfully developing packaging market. These are India, Germany, Poland, Turkey, as well as a number of CIS countries. Also, Russia, Belarus and Ukraine, have similar initial conditions in the development of the packaging market. The wrapping industry in India has great prospects for controversy. According to the results of WPO research, India is one of the 15 most successful countries where the packaging market is developing progressively. India has a very dynamic packaging industry in 1993-2014 (Omarova B.A., 2009). It received at the end of its formative period. Over the past 5 years, it has started to develop rapidly and by the end of 2013, this country has already entered the top 15 countries in the global packaging market. In addition, the industrial packaging industry in India is developing dynamically – India is second only to Turkey in terms of growth trends in the market under study, and is slightly moving from Poland. In terms of packaging production, these two countries are significantly ahead. The adoption of various packaging legislation in India is aimed at protecting consumer rights. The regulatory system of the packaging industry in India is divided into mandatory norms and voluntary standards. Government regulatory agencies in the Indian packaging industry include the Ministry of Nutrition and civil welfare, the Ministry of food industry, the Ministry of Agriculture, the Ministry of Health and family welfare, the Ministry of Commerce, and the Ministry of Consumer Affairs. Individual items that meet Indian packaging standards must be weighed and sold only in a specific form. Products such as baby

food, cookies, butter, margarine, cereals, beans are only Packed in certain quantities. In addition, various legal acts impose additional requirements on the quality of information placed on the packaging or label of goods entering retail trade. Thus, each product must specify the manufacturer and packer, the type and quantity of goods, as well as the place and time of production and collection. In India, much attention is paid to the field of packaging. There are sufficient organizations in the country whose activities are aimed at supporting the relevant industry. The main unions in the packing India include the following associations: Association of manufacturers of cardboard packaging India, Federal Association of manufacturers of corrugated boxes, manufacturers Association Obednannya flat strips, of the state manufacturers Association Gujar plastics Federation Obednannya glass manufacturers, the Council for the development of the leaf package, Western India corrugated boxes Association of manufacturers, as well as the Institute of packaging in India. The process of packaging individual batches can be Packed in specialized packaging. Their types: hand bags, cardboard bags, shrink films, special postcards fastened on both sides with ribbons, corresponding publications in different ways, depending on the volume.

Heat-shrinkable films warm up the book from the scandal, when cooling, fix it in accordance with the shape of the book. This type of packaging is one of the best materials that protect the book from damage caused by external influences. However, these films are weak to protect the spine of hardcover publications (Mukhamadiyeva L.I., 2013).

Shrink wrap is designed for books on the shelves of bookstores. It protects from dirt, pollen from the consumer's fingers. Manual and machine packages serve their intended purpose. However, when packaging for many batches, this type of packaging requires uniformity. Due to manual manufacturing, it is not possible to make the same packaging for all books, so manual packaging must only be done in separate, special books. To prevent fire or drowning in the way of delivery of outgoing products to the customer, flavored cardboard packaging is used. The content of impurities in them helps the product to survive. Therefore, special attention should be paid to packaging, so that the merit of publishers does not remain indifferent to anyone. To send a tomato book, the customer should make a separate package for each copy. After that, it must be placed in large boxes and tightly fastened on all sides. Large containers are used for orders sent abroad (Mergenbayeva K.K., 2012).

Conclusion

Study of world experience in showed that the packaging field could surely stay "on its fee". Its development should be regulated and controlled by the state. The packaging industry is a distinctive feature of all types at the development stage. In countries with a developed packaging market, there is no government intervention. All questions relate to special non-governmental authorized organizations-chambers of Commerce and industry and packaging associations. Main problems of Kazakhstan's packaging industry: inefficient and insufficient use of local raw materials; technologies and their use by packaging manufacturers and consumers; lack of highly qualified specialists and government support in the industry (Bazilov Zh., 2012).

The priority tasks that need to be addressed for the development of the industry are:

1. Harmonization of Kazakhstan's legislation with the world, development and improvement of the regulatory framework of Kazakhstan, development and amendment of existing GOSTs and standards. Work in this direction will be carried out by Kazakhstan's institutes of standardization and certification. However, the interest of the state allows not only to speed up this process, but also to regulate its behavior in accordance with the priorities stated by future users of these norms and standards.

2. Joining the International packaging organization and Association. This will facilitate an intensive exchange of experience, improve the skills of our specialists, and improve the quality of packaging. Participation in international societies and associations can stimulate the development of Kazakhstan's packaging business by establishing close partnerships between the Republic and other participants, connecting producers and consumers in different countries, and creating new business opportunities. Responsibility for international integration, as well as for the organization created by packaging.

3. Special support for domestic manufacturers developing programs and benefits, promoting the development of its own raw material base, as well as showing leniency in the introduction of imported raw materials to increase the price competitiveness of products of local producers working with it (Nuskabayuly Zh., 2015). Many manufacturers and consumers of consumer packaging say that the state does not provide them with proper assistance. Thus, 75% of respondents expressed that the state does not support domestic producers. After a few years, new packaging methods are used, which means, you can imagine that any consumer, being in their permanent

place, can make any products without visiting the printing house. First of all, you can scan the form you see fit and send it from the information to the machine that outputs the product you see fit from the printer (Omarova B.A., 2011) .

This way you can create the template you want. A special device will copy at the moment and the same color that you want. This is how you can make all the necessary household items and other items.

New packaging technologies in the global publishing market as a result of intensive development, all types of services will be implemented efficiently (Omarova B.A., Abdiyeva R.S., 2013). We hope that new forms of packaging will develop after receiving domestic application in Kazakhstan, and new approaches to printed products would develop dynamically. (Omarova B.A., Abdiyeva R.S., 2013)

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