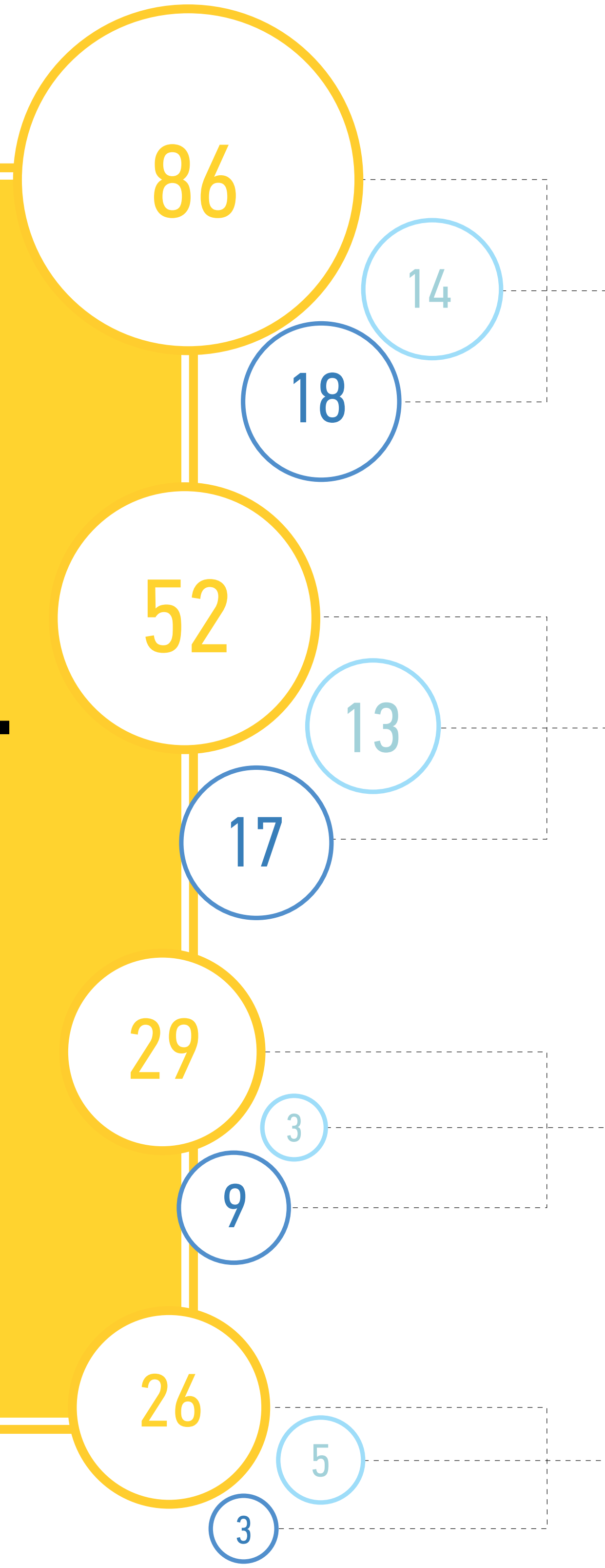
STATE OF DESIGN DEVELOPMENT IN UKRAINE

As exemplified by graphic and industrial design



Report on the results of the study

The study was conducted as part of the project «Monitoring the Design Development in Ukraine» within the program «UCM: Ukrainian Cultural Monitor» supported by the Ukrainian Cultural Foundation.

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Lviv, 2019

The study was conducted by the PPV Knowledge Networks economic development agency as part of the project «Monitoring the Design Development in Ukraine» within the program «UCM: Ukrainian Cultural Monitor» supported by the Ukrainian Cultural Foundation.

The project aims to create an effective monitoring tool for design development in Ukraine applied by policy makers, media and market players which can be replicated for research in other sectors of creative industries.

Project objectives:

1. Development of methodology for monitoring the design market of Ukraine (as exemplified by clothing design, graphic and industrial design);
2. Conducting surveillance study (collection and processing of data for graphic and industrial design, reporting for industrial design);
3. Issuance of recommendations for strategic approaches for the development of design at the national and regional level.

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PPV Knowledge Networks economic development agency helps grow businesses and builds systems of business support in the territories. The agency develops strategies and business models, generates project ideas and implements projects, prepares analytics and supports investments.

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Ukrainian Cultural Foundation is a state institution established in 2017 based on the relevant Law of Ukraine with the aim of promoting the development of national culture and art in the country, providing favorable conditions for the development of intellectual and spiritual potential of the individual and society, wide access for citizens to the national cultural heritage, support for cultural diversity and integration of Ukrainian culture into the world cultural space. According to the current legislation, the Foundation's activities are directed and coordinated by the Ministry of Culture of Ukraine. Project support is provided by the Ukrainian Cultural Foundation on a competitive basis. Project support is provided by the Ukrainian Cultural Foundation on a competitive basis.

CONTENT

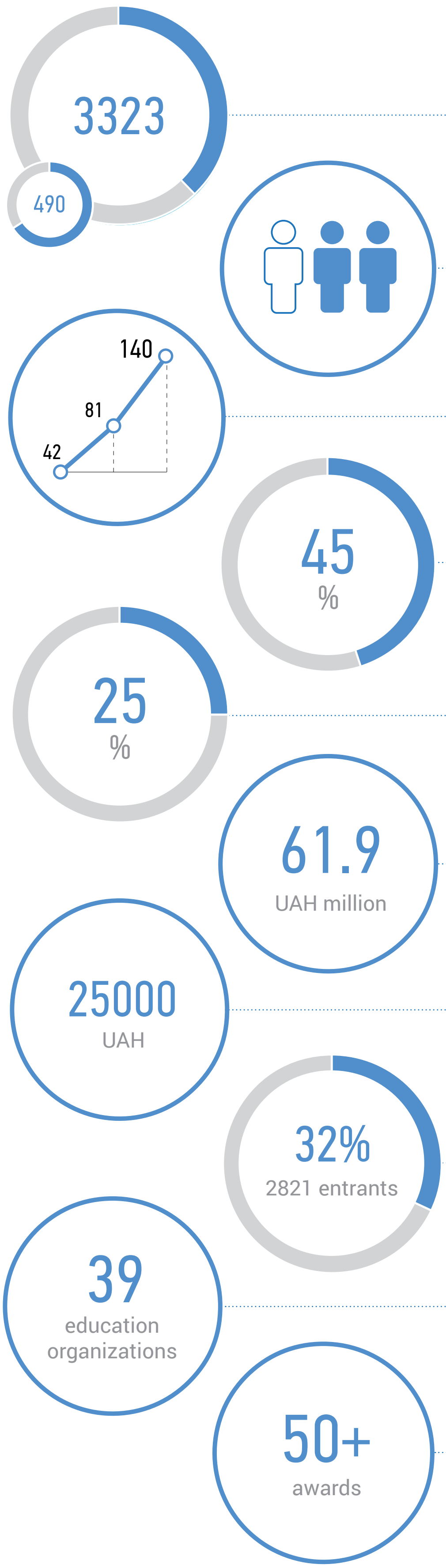
ABBREVIATIONS AND TERMS

SP: Sole Proprietor
UCF: Ukrainian Cultural Foundation
Freelancer: a freelance professional who is not employed as a full-time employee executing individual projects
LLC: Limited Liability Company
PE: Private Enterprise
SFS: State Fiscal Service
USEDE: Unified State Electronic Database on Education
SADD: State Agency for Design Development
SFRD: State Fund for Regional Development

ABSTRACT

In order to get a holistic picture of development of the design market in Ukraine, the survey covered different categories of respondents in the questionnaire, focus groups and in-depth individual interviews. We have studied market players through the lens of the work of designers, managers and founders of design agencies and other companies that integrate design into their services/products. It is also important that the interviewed respondents have different experience in design and work in different regions of Ukraine. This allows for the most objective consideration of the specific needs and problems of a wide range of market members.

KEY FACTS



490 companies (LLCs and PEs) and 3 323 SPs for which design is the main activity are functioning in the metropolises of Ukraine (Dnipro, Kyiv, Lviv, Odesa, Kharkiv). 66% of companies and 38% of SPs are incorporated in Kyiv.

One SP corresponds to two off-the-books designers. Survey results show that 70% of self-employed designers and more than one third of designers in agencies are not incorporated.

Taxes paid by designers increased by one and a half to two times each year during 2016-2018. In 2016, taxes paid amounted to almost UAH 42 million, in 2017 – nearly UAH 81 million, and in 2018 – nearly UAH 140 million.

The market is growing: 45% of designers have grown significantly over the last 3 years, with only 7% of businesses declining. The highest growth rate is in design agencies.

A quarter of agency owners who took part in the survey were clueless about their business models.

Over the last 3 years, the total value of public procurement in the centers of the survey (Dnipro, Kyiv, Lviv, Odesa, Kharkiv) amounted to UAH 61.9 million, of which 82% of purchases were carried out in Kyiv. Self-employed freelancers (SPs) were service providers for 70% of purchases.

The cost of most projects in the design market was up to UAH 25 thousand. However, design agencies focus on projects priced over UAH 100 thousand. The cost of industrial design projects is comparatively higher than the average cost of design projects in other areas.

Aggregate licensed admission conducted by educational institutions in design speciality in 2018 was 6,665 for bachelor's degree and 2,133 for master's degree. For comparison, in 2018, 2,293 entrants undertook the bachelor's degree, and 528 – the master's degree.

In five Ukrainian metropolitan areas (Dnipro, Kyiv, Lviv, Odesa, Kharkiv) there are 39 non-formal education organizations providing specialized educational services for graphic and industrial designers.

Since 2009, Ukrainian agencies have received more than 50 Red Dot Design Awards, more than half of them in the Brand&Communication design category.

METHODOLOGY

To conduct the monitoring, the authors developed a methodology which meets modern standards of theoretical and applied research, allows to as much as practical reach the available sources of information and methods of its obtaining taking into account the duration of the monitoring. The methodology is based on an integrated approach.

Object of monitoring:
the state of development of graphic and industrial design in Ukraine. Graphic design is already actively developing in Ukraine, and industrial design has great added value, but is still in its initial growth phase.

Geography (locations) of monitoring:
Kyiv, Lviv, Odesa, Dnipro, Kharkiv.

Monitoring period:
June-September 2019.

Duration of field survey data collection and analysis:
July-September 2019.

Collection and analysis of desk study data for the period:
2016-August 2019.

The outline of the study included the following stages:

1. The preparation phase of the monitoring, which included the formulation of hypotheses, definition of tasks, picking the type of monitoring, its participants, users, time and geographical limits, tools, and forecasting. At this point, the authors have directly developed and described the methodology, and suggested it for expert consideration. Expert and professional community verified and approved the metodology at round table meetings (on 02.07.2019 in Kyiv, on 03.07.2019 in Kharkiv, on 04.07.2019 in Lviv), and completed it with a list of questions.

2. The desk study included the following types of analysis: causation analysis (expert determination on the basis of freely available information of the aspects which shape the current state of the design market, what events/activities, trends have affected those market members that are now part of it); content analysis (determination of the level of informational value, content-richness of publications and materials in order to articulate questions about the design market in Ukraine that have not yet been answered, and to understand what needs to be studied).

   The desk study included collection and analysis of information in monitoring locations on:

   - number of business entities according to Classifier of economic activities 74.10 «Specialized design activity» and dynamics of the amount of taxes paid by them;
   - subject, value and parties of public procurement by CVP 021:2015: 79930000-2 «Professional design services»;
   - higher education institutions, students and licensed volumes in the specialty 022 «Design»;
   - non-formal design education platforms;
   - public and educational events in the field of design;
   - European experience in facilitating design development;
   - general trends of development and achievements in Ukrainian design from domestic and foreign core publications, platforms and competitions.

3. The field study included collection of primary information on graphic and industrial design in the monitoring locations through:
   - online questionnaire survey of designers aimed to understand the structure of the design market, its key players, their needs and problems, the features of standardization in the design field, competitive situation; during August-September 2019, the responses of 292 respondents working in the focus area of industrial and graphic design were collected and processed;
   - questionnaire survey of manufacturers using design was conducted to find out what role design plays in their business, at what stages of work it is applied and how their interaction with external designers is realized; 10 Ukrainian furniture manufacturers with focus on obtaining the information on the industrial design were selected for the survey;
   - focus groups with participants in the design ecosystem aimed at understanding the place of Ukrainian design among other creative industries and determining the status of key areas for supporting it; there were 5 focus groups in total, the duration of each – 2.5-3 hours, 8-10 participants, 4 issues to be discussed;
   - in-depth individual interviews allowed to complement the understanding of the features and perspectives of doing business in the field of design, as well as the importance of design for business; the focus of the interview was directed towards the industrial design, 5 interviews were conducted in total, with the respondents being the founders of design agencies, freelancers, and manufacturers applying design products.

4. Processing and systematization of the data obtained during the survey, information analysis and monitoring report generation.

5. Development of strategic recommendations based on monitoring results which are intended to promote the development of design at the national and regional levels.

6. The results of the study can be used by market participants, public authorities, organizations of formal and non-formal education and other interested parties.

The observations and perspectives, problems and directions of their solution presented in the research are formed on the basis of the analysis of the questionnaire survey, focus groups and in-depth interviews results, as well as expert opinions during round table meetings.

RESTRICTIONS ON RESEARCH

The following restrictions were encountered during the study:

1. Time (duration): the study was conducted during July-September 2019 as it was defined by the time limits of the project which significantly reduced the capabilities for the authors to collect data over a longer period, involve more respondents and interested parties.

2. Geography: locations like Lviv, Kharkiv, Odesa, Kyiv and Dnipro have been selected for the study. They meet the criteria described in the methodology: traditionally they are centers of workforce attraction and creative business development, have a greater variety of forms of employment (in particular freelancing), as well as in recent years their local authorities initiate the generation of strategies or programs for the development of creative industries; these cities are located in different regions of the country, this allowing to disclose possible regional specific features in the market (one city per region); the cities in which formal and non-formal design education is developing (by the number of higher education institutions, schools, courses, etc.); the cities in which there are most of the organized events for the design community (number of events). Although the data obtained in the selected cities are representative, neglect of other towns and regions partially limits the objectivity and completeness of the conclusions about the national level of development of Ukrainian design.

3. Number and answers of the respondents to the main questionnaire: the initial hypothesis regarding the number of graphic and industrial designers in the cities of the survey was not confirmed. Accordingly, receiving the estimated number of responses from respondents in the framework of the project (350 responses) was not reached. As of September 30, 2019, 292 questionnaires were received from respondents. This is explained by the following:
   - forecasted quantitative indicators of the representative sample were not confirmed by the data of territorial bodies of the SFS in the cities-locations of the study about the number of business entities performing activities according to Classifier of economic activities 74.10 “Specialized design activity”;
   - the number of responses received confirmed the low level of development of industrial design in Ukraine;
   - poor development of a network of industrial designers in Ukraine limited the effectiveness of the questionnaire distribution.

   Nevertheless, the answers to the questionnaires were received and included respondents who are key players in the industrial and graphic design market in Ukraine, who received international and Ukrainian awards in design, and data from the territorial authorities of the SFS of Ukraine allow for adjusting the input criteria in the methodology in paragraph 1, Determining the Size and Structure of a Representative Sample. Also, on average, 5% of respondents did not answer all the questionnaire questions (this can be considered a standard permissible error).

4. Questionnaire distribution method: because the survey only provided online questionnaire distribution in social networks, it narrowed the audience of respondents to users of these networks and subscribers of those pages through which the questionnaire was presented. Also, lack of targeted communication with the respondents caused inactivity in the survey.

5. Statistical information:
   - lack of the full amount of data that was requested in territorial bodies of the State Fiscal Service (SFS) of Ukraine, as well as the unstructured information provided by separate bodies (SFS of Ukraine in the Kyiv region); separate requested data were not provided in dynamics according to the needs of the study (the number of registered companies according to Classifier of economic activities 74.10 by the STS of Ukraine in Odesa and Dnipro regions);
   - non-provision of the requested information by the Ministry of education and science of Ukraine with the recommendation to enquire with the resources of the Unified State Electronic Database on Education, where a large part of the required data was missing or inconsistent;
   - lack of response to information requests submitted in the higher education institutions (HEI), which provide training for students in the specialty 022 “Design”, regarding the total number of scientific and pedagogical staff and those who have a scientific degree in this specialty, the number of international programs for students of the specialty; of the 33 HEIs, only 5 responded, which did not allow the authors to fully evaluate design development opportunities in the section “Education and human capital assets”.

INTRODUCTION

Over the last 10 years, Ukrainian design has evolved rapidly. Since 2009, Ukrainian designers have been awarded the prestigious Red Dot Design Award every year. The positive dynamic of economic development observed in recent years also stimulates the demand of businesses for professional design services. In major cities, steady design communities are emerging, field-specific events are taking place, and niche publications are being launched.

In 2017, the PPV Knowledge Networks economic development agency conducted a market study of the industrial design in Ukraine in response to an order from the European Bank for Reconstruction and Development. The authors of the survey interviewed small and medium-sized business representatives in the relevant segment: design agencies, independent designers and manufacturing companies from various industries. The survey was attended by 60 design agencies and independent designers and 56 manufacturing companies and brands from different areas and regions of Ukraine[1].

The authors of the research concluded that the field of industrial design in Ukraine is in its infancy, but shows signs of actuation, awareness and interest growth among manufacturers and designers, as well as among a wider range of consumers.

The conducted research confirms the tendency of growth and development of the industrial design market in Ukraine, but reveals problems that arise under these conditions. In Ukraine, design is still underestimated as a factor that can bring added value to tangible and intangible products, among other things because of the absence of a methodology for objective evaluation of its quality.

There is also a problem of lack of up-to-date and complete information on the Ukrainian design market, its main and potential contributions to other areas of economy.

The UK Design Council singles out the term **'design economy'** as a value generated by the use of design in various industries. This term includes the work of designers particularly in the design industries (e.g. graphic design), representatives of other professions in the design industry (e.g., managers), and designers in other areas of the economy (e.g. mechanic engineering).

The classification of economic activities of the European Union distinguishes a separate class 74.10, which includes:

- design of clothing, which includes textiles, styles, shoes, jewelry, accessories and other interior items, other types of clothing as well as personal or household items;
- industrial design, for example, creation, design and technical specifications development that optimize the use, value and appearance of products, in particular the purpose of materials, mechanisms, forms, colours and treatment of surfaces of products, thus considering human characteristics and needs, safety, market attractiveness, use and support;
- graphic design;
- interior design.

This class does not include:

- webdesign;
- architectural design;
- engineering design (that is, the application of the laws of physics and engineering principles to design mechanisms, materials, tools, structures, processes, and systems).

The Ukrainian correspondent of the classifier is very similar, but the level of development of the same types of design is significantly different in Ukraine and the countries of the European Union.

The purpose of this monitoring is to determine the current state and prospects of development of the design market in Ukraine. This analytical material is focused on industrial design as the one unifying many features and is crucial in the market for consumers. However, it is still one of the most underrated types of design in Ukraine.

Who gets benefits from this monitoring?

1. The representatives of the professional design community who are interested in developing professional environment, expanding demand for design and gaining new opportunities for growth.

2. The representatives of formal and non-formal design education institutions who are interested in increasing the demand for their services and meeting of the designers' requests.

3. The consumers of design products of various types, in particular, a business that is interested in receiving quality services.

4. The public sector that is focused on activating the development of creative industries and promotion of product value added through design.

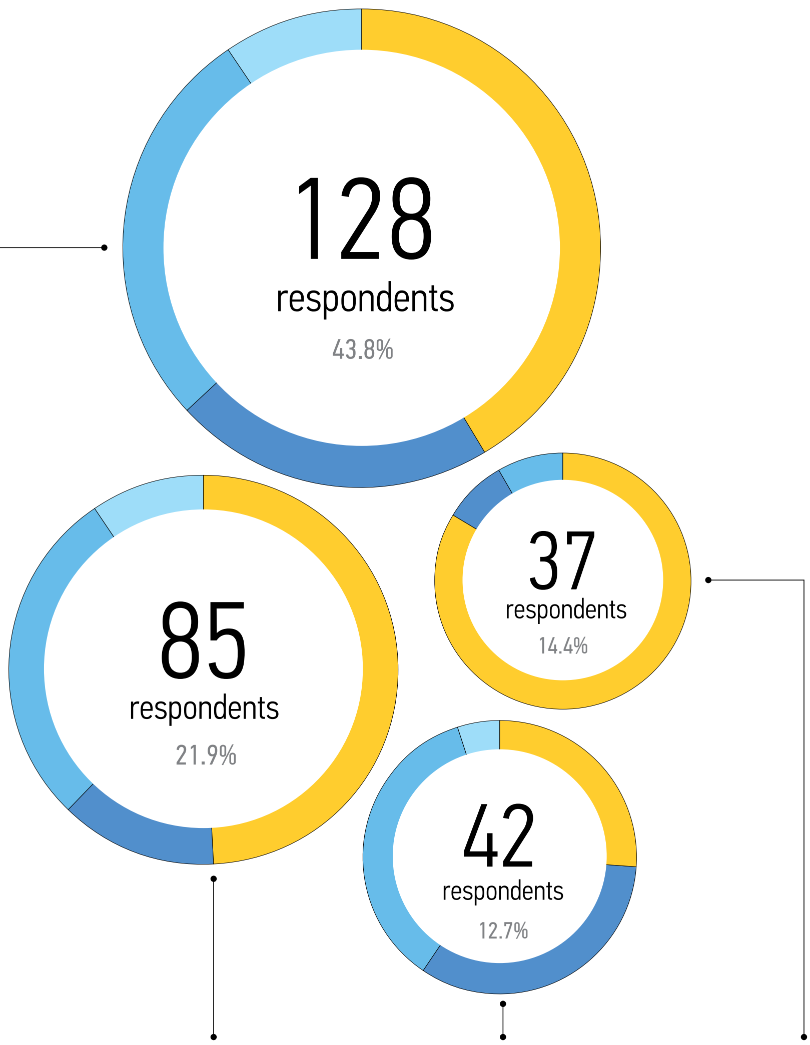
5. Regional and central government authorities concerned in elaboration of programs for the development of the creative industry sector, but do not have current information on the state and the needs of the design market and the markets associated with it.

We hope the results of the monitoring provoke a public discussion about the existing problems of the design market and its players by the results of which there will appear offers to resolve these problems. Besides, the results of the monitoring can be justified as necessity for development of both overall design strategy and the individual policies in this area.

1. Source: http://www.ppv.net.ua/uploads/work_attachments/Ukrainian_Industrial_Design_Market_Study_PPV_2017.pdf

DESIGN MARKET AND ITS MEMBERS

Structure of respondents and their experience in design



	Self-employed/freelance designer	Designer in a company *	Designer working for a design agency	Owner/manager of a design agency
Over 5 years	41.4	49.4	26.2	83.8
3-5 years	21.9	12.9	33.3	8.1
1-3 years	27.3	28.3	35.7	8.1
Under 1 year	9.4	9.4	4.8	
	%	%	%	%

Under 1 year · 1-3 years · 3-5 years · Over 5 years

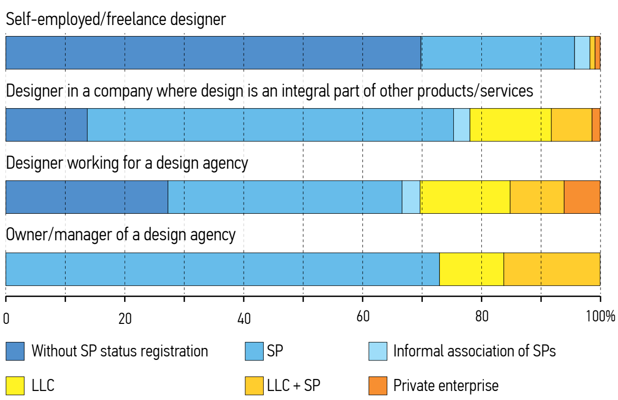
** Designer in a company where design is an integral part of other products/services*
Source: questionnaire survey results, total number of respondents – 292 persons.

Market members and their projects

> Portrait of a typical designer: freelancer or employee of a company employed as an SP who often performs individual (sample) works for domestic customers.

In order to get a holistic picture of development trends of the design market in Ukraine, the survey covered different categories of respondents in the questionnaire, focus groups and in-depth individual interviews. We have studied market players through the lens of the work of designers, managers and founders of design agencies and other companies that integrate design into their services/products. It is also important that the respondents have different experience in design and work in different regions of Ukraine. This allows for the most objective consideration of the specific needs and problems of a wide range of market members.

Work status of designers in Ukraine



Source: questionnaire survey results, total number of responses – 259.

Observations:

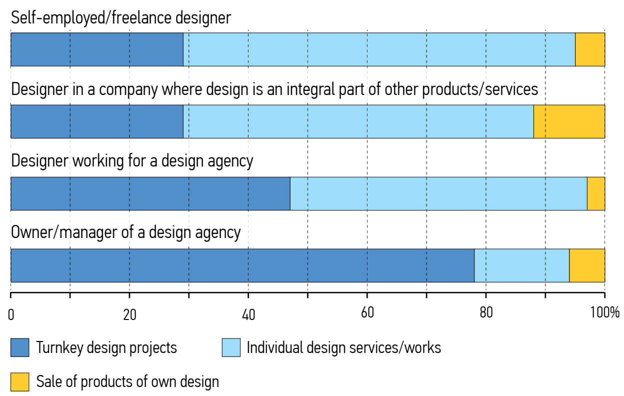
- one SP corresponds to two off-the-books designers;
- freelancers work routinely in the market and are reluctant to start work for a company;
- SP is the most common and profitable work status both for design company founders and their employees.

Prospects:

- stimulation of market players to integrate into other forms of business ownership (LLC and PE);
- enhancing growth and financial sustainability of the design sector at national level;
- facilitating organizing for cooperation with foreign customers, partners, and providing better legal protection at the international level.

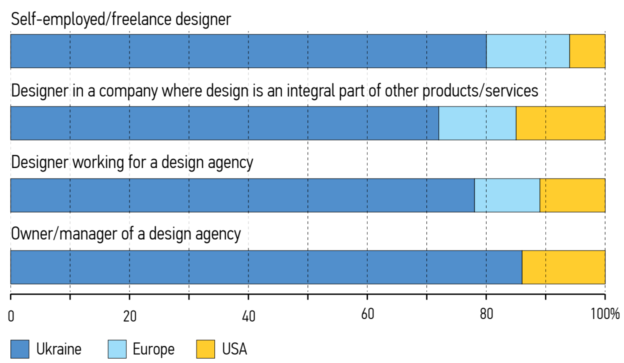
Conceptual projects and products are economically unprofitable; they are mainly implemented by design agencies as an additional area for enhancing prestige and participation in competitions.

What designers make most money off in Ukraine



Source: questionnaire survey results; percentage of the number of responses in each category of respondents; total number of responses – 272.

Markets that designers work for in Ukraine



Source: questionnaire survey results; percentage of the number of responses in each category of respondents; total number of responses – 263.

Observations:

- the focus of freelance designers and small agencies on projects of the same kind with fast commercial result and minimal effort;
- copying common (mainly European) trends and low percentage of original products by Ukrainian designers;
- diffidence of designers in their own competencies and ideas for entering foreign markets;
- a large gap between the cost and quality of design projects on the market (there is no happy middle ground);
- the international design community knows the leading Ukrainian “star companies” who receive most awards and set trends for the development of interior market.

Prospects:

- stimulating the development of a design agencies segment with quality portfolio and prices for services available to small and medium-sized clients.

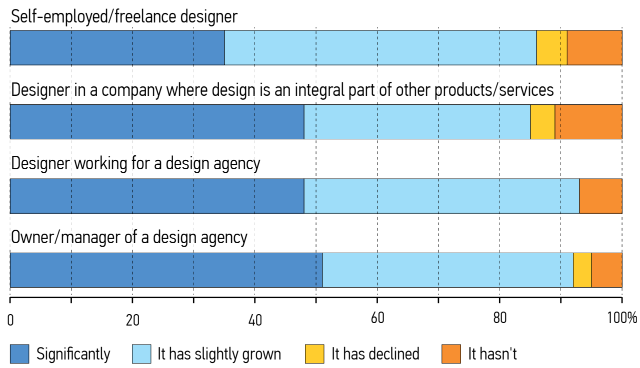
Market players business

The design market is at the initial growth stage. The key to growth is the increase in the number of projects and market players (designers, manufacturers, consultants).

The results of the study indicate the extensive nature of growth of the design market in Ukraine which is prioritized by the increase of quantitative rather than qualitative indicators. Given that design is a relatively young field of the domestic economy and the demand for it is just emerging, this situation is expected.

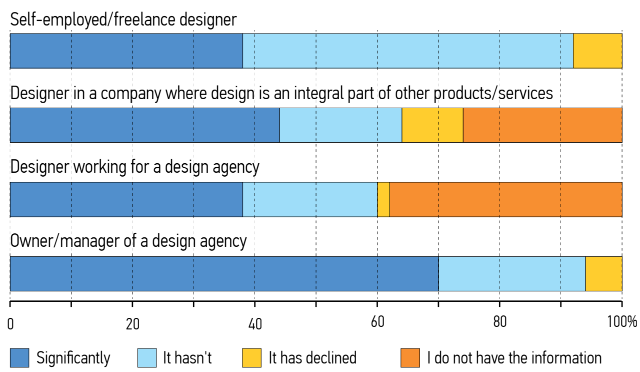
However, if the trend persists in the long run (5 years or more) and the market does not cross over to intensive growth (by virtue of competencies, technologies, high value-added products), the Ukrainian design sector risks becoming the industry of low-cost standardized services with low competitiveness.

Has the demand for design in Ukraine increased within the last 3 years?



Source: questionnaire survey results; percentage of the number of responses in each category of respondents; total number of responses – 289.

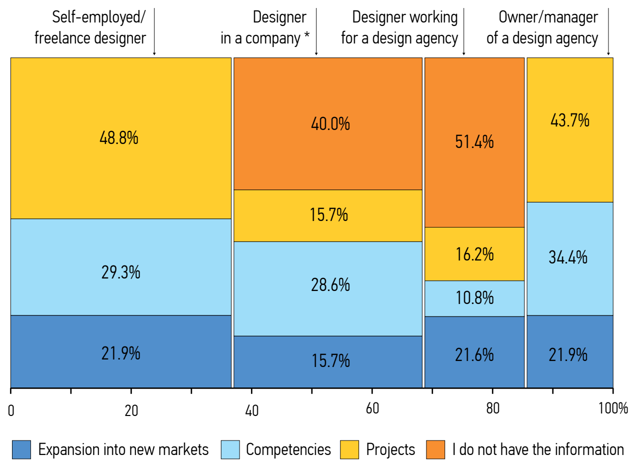
Has business of the designers in Ukraine grown within the last 3 years?



Source: questionnaire survey results; percentage of the number of responses in each category of respondents; total number of responses – 288.

Main marketeer: A customer who focuses on aesthetics (own perception) and dictates prices.

The key to the growth of designers' business in Ukraine



** a company where design is an integral part of other products/services*

Source: questionnaire survey results, total number of responses – 221.

Observations:

- in 45% of designers their business has grown significantly over the last 3 years, only in 7% it has declined;
- chaotic development of designers' businesses, lack of developed strategies and business models;
- lack of economic information about design at the macro level;
- limited growth opportunities due to lack of access to prototyping;
- the audience of design customers (business owners) is gradually getting younger and better aware of the value of design services;
- low, compared to foreign, domestic solvent demand for design product;
- customers do not understand the differentiation of design prices.

Prospects:

- formation of conscious demand for design: cultivation by the designers of the customer's understanding of the value and importance of a design product through interaction at all stages of its creation, rather than presenting ready-made solutions that the customer may either accept or reject.

Key problems of designers in the market:

1. Lack of understanding of business processes.
2. Limited access to facilities and equipment.
3. Access to knowledge of export opportunities.
4. Legal and financial aspects of interaction with foreign partners and clients

Ways for solving the problems:

1. More projects for developing business competencies of designers (pricing, customer contacts, service marketing, etc.).
2. Support programs to facilitate expansion into international markets taking into account the specifics of the design, financial and legal requirements.
3. Financial incentive of cooperation projects between designers and manufacturers.

Industrial design market[1]

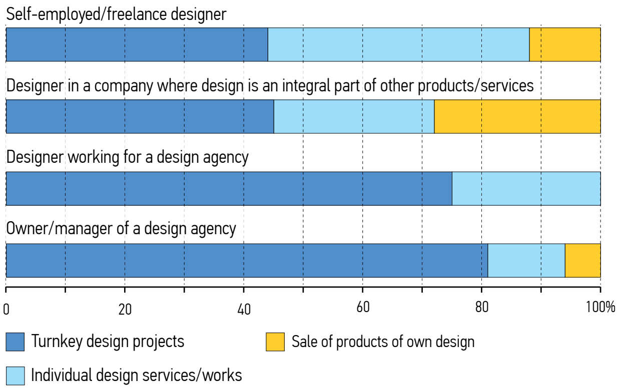
Key restrictions for industrial design market development: small number of ready-made design products to meet demand.

The results of the research suggest that the general trends of development of industrial design coincide with the trends of development of the design market in general. The main difference is the predominant focus of this design area on turnkey projects rather than work items.

Also, by contrast, industrial designers face the following limitations:

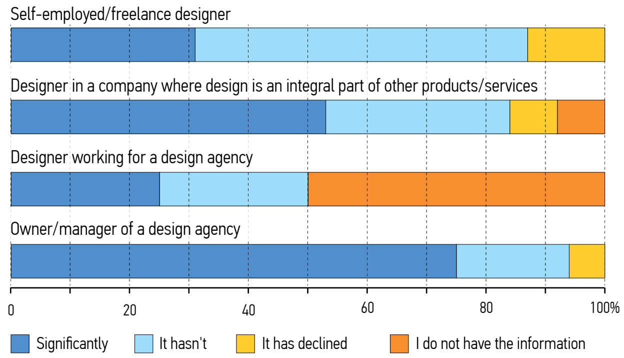
- they are most dependent on cooperation with manufacturers and suppliers;
- they must undergo formal certification procedures and procurement of other permits;
- they cannot rapidly increase the volume of sales of finished products (primarily abroad) because of the significant logistics costs and complex customs clearance procedures.

What do industrial designers make most money off in Ukraine?



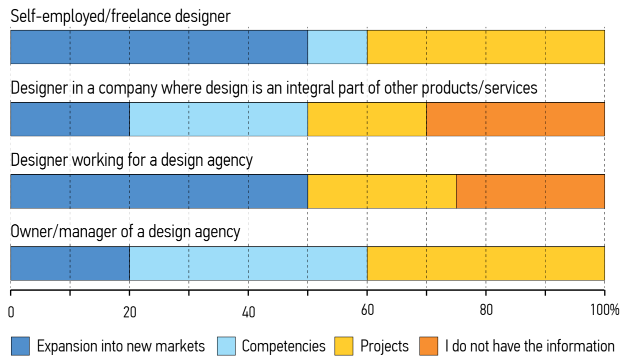
Source: questionnaire survey results; percentage of the number of responses in each category of respondents; total number of responses – 49.

Has business of the industrial designers in Ukraine grown within the last 3 years?



Source: questionnaire survey results; percentage of the number of responses in each category of respondents; total number of responses – 49.

The key to the growth of industrial designers' business in Ukraine



Source: questionnaire survey results, total number of responses – 49

Observations:

- limited access of industrial designers to local manufacturers;
- industrial design is now perceived as a complimentary service for business, not a full value product for the final consumer;
- open borders have significantly facilitated access of industrial designers to new knowledge and clients, presentations of their products at international events;
- the practice of implementing joint design projects is developing.

Prospects:

- financial and advisory assistance in expanding export opportunities for industrial designers.

1. Responses of respondents who present the industrial design are also taken into account in the totality (292). This sample of the totality (49 people) of the responses is intended to reveal the specifics of the development of the industrial design, based on the objectives of the study

Business Case
Yuliia Yalanzhi, Odesa

Design spotted from nature

www.objects.yalanzhi.com | +38 093 682-99-33

From idea to business

Yuliia Yalanzhi came to design having acquired a profession of engineer at a local university. The first projects were related to digital design, and later the designer began originating interiors for restaurants. At the same time, she started an original sculptural project 'Cellular practice' with the use of lamps, which developed specifically into industrial design and her main activity.

The first success came spontaneously 3 years ago at Kyiv Art Week festival[1]. The design lamps were intended to be used only for the venue decoration, instead they became the hallmark of the festival, and Yuliia took orders and received advances already within the first hours after the opening of the stand. After that, HIS[2] and other well-known showrooms got interested in the designer's works, and a year later the collection of the lamps was successfully presented and sold at Maison&Objet trade fair[3] in Paris.

Market and customers

90% of sales are from customers in Ukraine. Yuliia considers the experience of selling lamps abroad successful, the sales are constantly growing, but they are very few in volume. The production is located and the team is working on the issues of logistics, payment and conclusion of contracts in Odesa. A key source of finding new clients abroad for Yalanzhi Objects is participation in exhibitions. However, the designer emphasizes the difficulty of exporting Ukrainian items to other countries due to the high shipping fee, the complexity of thinking through packaging and the lack of competence in legal and economic matters to cooperate with foreign partners.

“ It is economically profitable to send abroad either 1-2 lamps or a truckload thereof. If a batch is shipped to showrooms, the cost of delivery erodes totally the economic dimension.

Business model

Yuliia thinks that the key to success of business in industrial design is the progressive proportional development of all links in the chain of product value formation.

“ If the system is balanced, it works. A sudden gravity-defying jump will never be successful. For example, we have always lacked production capacity. Everything is harmonious now, and we can meet the level of demand that is on the market.

According to Yuliia, production is the most problematic link for Ukrainian industrial designers, because it is the most expensive, and it is difficult to reach large manufacturing volume. The dependence of designers on domestic contractors is high, and there is an unresolved issue of application of designers' ideas by large companies that are more capable of launching large-scale production and sales..

“ Any idea can be spied on and produced with a different handle.

Another important issue is price setting. The designer says that you need to find the middle ground for the price, to understand that a product line is no longer a unique piece of art and may not cost too much. It is also helpful for beginner designers to consult showrooms concerning pricing.

In business development, Yuliia focuses on increasing exports and expanding production.

Vision of prospects

“ Every thing is going in the right direction, though not so fast.

The designer believes that accelerating the development and success of Ukrainian industrial designers at the international level will be greatly facilitated by education and informational support on licensing, certification and customs legislation. It is important to show that Ukrainian design can be created not only in Ukraine, and that it is advisable to attract foreign contractors if they have the necessary technologies and can easily satisfy the request.

“ It will be useful to gather a delegation of Ukrainian designers and take them to Chinese manufacturing facilities. It is important that you can come to a company, place an order and get the right product. Instead, in Ukraine you have to for a long time search and train your contractor so that he meets your needs.

Yuliia supposes that the educational support should be provided by organizing schools and training workshops where designers from different areas would be able to jointly work out ideas, gain collaborative skills, and rethink their own projects.

“ The most important thing in Ukrainian design nowadays is to rouse your brains and move away from the conforming level.

1. http://kyivartweek.com/
2. https://his.ua/
3. https://www.maison-objet.com/

THE CONTRIBUTION OF DESIGN TO THE ECONOMY OF UKRAINE

Registered businesses and taxes

The contribution of designers to the economy has steadily been increasing during 2016-2018.

It is difficult to estimate the contribution of design to the economy, since no methodology has been developed to estimate its input to the value of finished products.

To understand the contribution of designers to the economy, we have analyzed the cost of public procurement in the ProZorro system to understand the interest and need of government agencies in design, the total amount of taxes paid, the average cost of one project, and the average annual turnover of self-employed freelancers and designer companies.

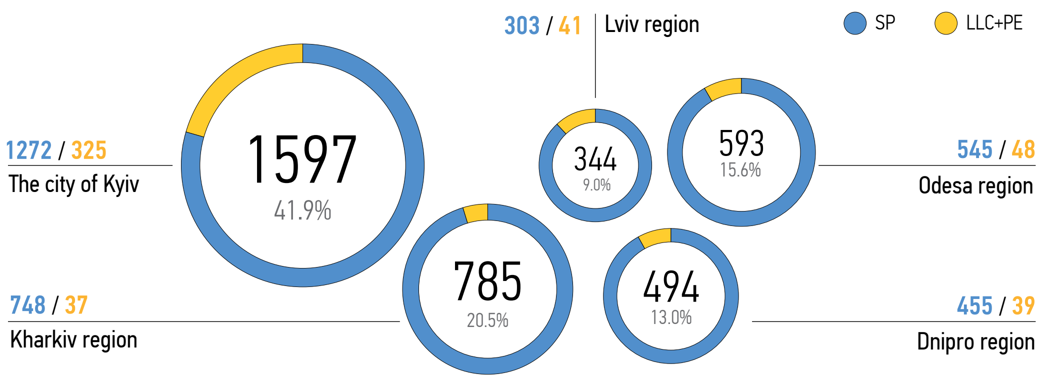
We could not establish the dynamics of change in the number of sole proprietors and companies for whom design is the main economic activity, since not all territorial bodies of the State Fiscal Service of Ukraine in the cities of the survey provided data for 2016-2018. Data from the city of Kyiv and Lviv region were provided as of the end of 2018. Data from Kharkiv, Dnipro and Odesa regions were provided as of August 19, 2019, the day the information request was received from the research authors.

Most designers work as sole proprietors under Classifier of economic activities (CEA) 74.10 “Specialized design activity”. It is impossible to find out their specializations, because there are no defined subclasses of this Classifier of economic activities class.

According to the classification approved in 2005, professional design services were not classified as a separate economic activity class but subsumed under subclass 74.8 “Provision of various services to consumers”. According to the classification approved in 2010, professional design services were classified as a separate class of Classifier of economic activities 74.10. This class includes object, industrial, graphic and interior design. It does not include web design, architectural and engineering designs.

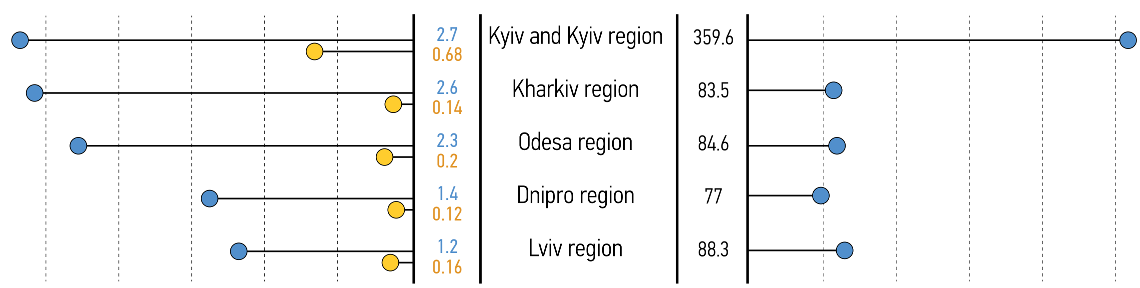
The fact that different types of design are combined in one class of Classifier of economic activities limits the ability to research and gather information on the activities of designers in specific areas. This, in turn, does not make it possible to find out the state of development of individual design areas and to develop effective incentive policies.

Number of registered legal entities and SPs according to Classifier of economic activities 74.10 «Specialized design activity» as of 2019



Number of SPs and companies in the survey locations per 10,000 of population *

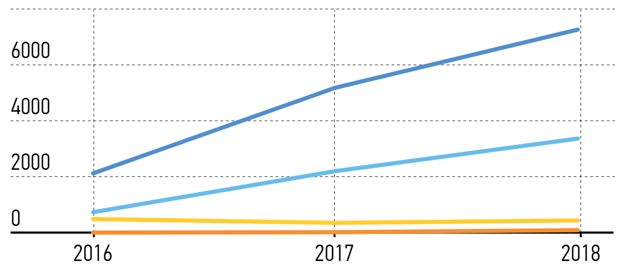
The total amount of taxes paid within 2016-2018 in the survey locations per 10,000 of population, thousand UAH *



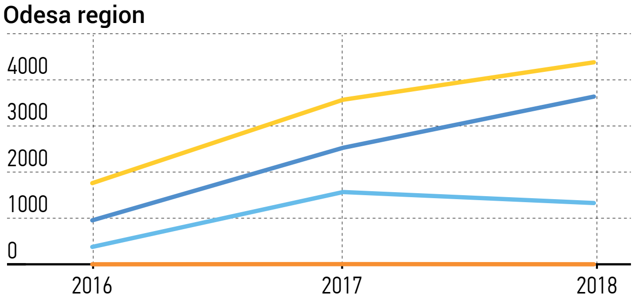
Source: compiled by the authors based on the data provided by the territorial bodies of the SFS of Ukraine in Kharkiv, Lviv, Dnipro, Odesa regions and the city of Kyiv.
** Population data taken as of August 1, 2019. Source: Ukraine State Statistics*

Dynamics of taxes paid by Classifier of economic activities 74.10 «Specialized design activity» in survey locations during 2016-2018, thousand UAH

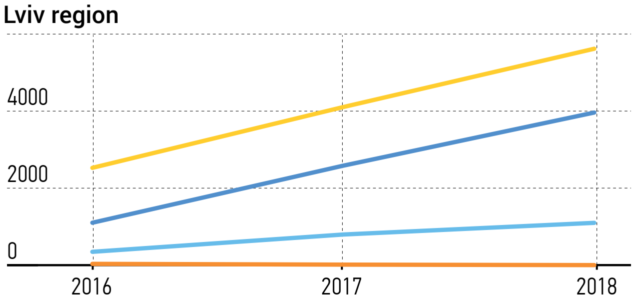
Kharkiv region



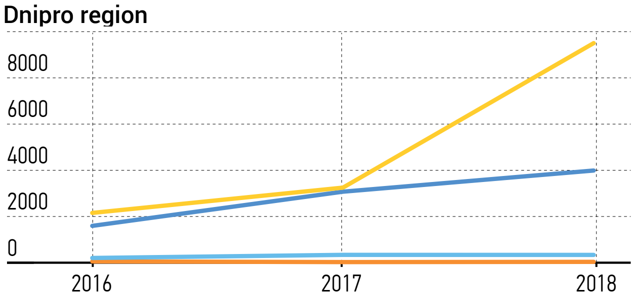
Odesa region



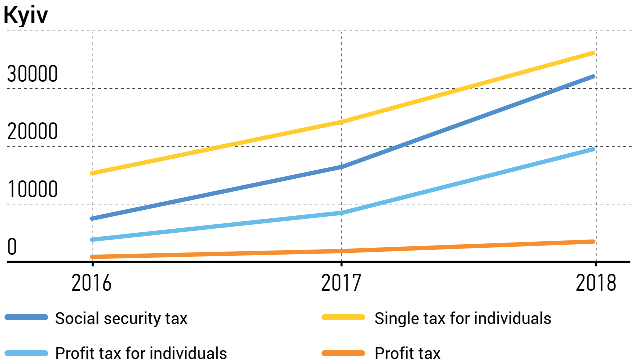
Lviv region



Dnipro region



Kyiv



Source: compiled by the authors, data provided by territorial bodies of the SFS of Ukraine in Kharkiv, Lviv, Dnipro, Odesa, Kyiv regions and the city of Kyiv.

The data obtained is difficult for analyzing tax payment by SPs and LLCs/PEs, since social security tax is paid by both SPs and LLCs as a payroll tax, and single tax can be paid by both LLCs and SPs. We are also aware that SPs can work in a city other than their place of registration.

Observations:

- the total amount of tax paid by the design industry within 2016-2018 amounted to UAH 259 million;
- Kyiv-centeredness: 65.5% of total taxes are paid by SPs and companies registered in the city of Kyiv and Kyiv region;
- outside Kyiv the industry (in raw numbers) is better developed in Dnipro, but in terms of intensity of development (by population) Lviv region is ahead of other regions;
- Kharkiv has considerable untapped potential for design development, especially given its educational potential (see section Education and Human Capital Assets);
- existence of design agencies with LLC/PE form of incorporation significantly increases the tax revenues from the design industry as opposed to the industry which is based mainly on freelancers with legal status (SPs): in Kyiv, there are by almost 8 times more legal entities than the average in the other 4 metropolises, so the revenues from the design industry are higher;
- in Kyiv and Kyiv region, there is the largest number of SP designers and design companies per 10,000 of population – 2.7 SPs and 0.68 companies specializing in design services;
- the results of the questionnaire showed that SPs do not come over to other forms of business ownership.

Prospects:

- encouraging SP designers to unite into agencies (or other types of companies) to strengthen their institutional capability;
- preserving the legal status of a sole proprietor as the most convenient legal form of employment for freelancers.

Public procurement

Positive growth dynamics of cost and quantity of design services public procurement.
The main performers are SPs.
The largest customers are state-owned companies.
The most common object of procurement is the design of visual communication materials.

Authorities (central and local) can support the development of design by ordering design services. In terms of economic domain support tools, this may be more effective than financing development projects, events, forums, etc.

KYIV REGION AND KYIV

The main customers are Naftogaz, Ukrzaliznytsia, Public broadcaster as a manager of funds for Eurovision 2017, Verkhovna Rada, Krymskyi Dim, Mystetskyi Arsenal, Boryspil Airport, Ukrenergo, and Ukroboronprom.

The most common object of public procurement is the design of visual communication materials, design of events.

DNIPRO REGION

The main customers are the Department of Humanitarian Policy of the Dnipro City Council, the Protocol and Mass Events Department of the Dnipro Regional State Administration, the Youth and Sports Department of the Dnipro Regional State Administration.

The most common object of public procurement is the design of events and exhibitions.

KHARKIV REGION

The main customers are the Kharkiv City Council, the Kharkiv City Youth Leisure Center, the Department of Families, Youth and Sports of Kharkiv City Council, the Municipal Center for Cultural Initiatives, Derzhprom, the Department of International Cooperation of the Kharkiv City Council.

The most common object of public procurement is the development of visual materials, design of events and premises.

LVIV REGION

The main customers are the Lviv Regional Administration, the Museum of the History of Religion, the Opera and Ballet Theater, UkrPoshta, and Lvivenergozbut.

The most common object of public procurement is the design of visual communication materials, interior design and event designer support.

ODESA REGION

The main customers are the Odesa City Council, the Odesa Regional State Administration, and the Odesa Law Academy.

The most common object of public procurement is the design of visual communication materials, design of events.

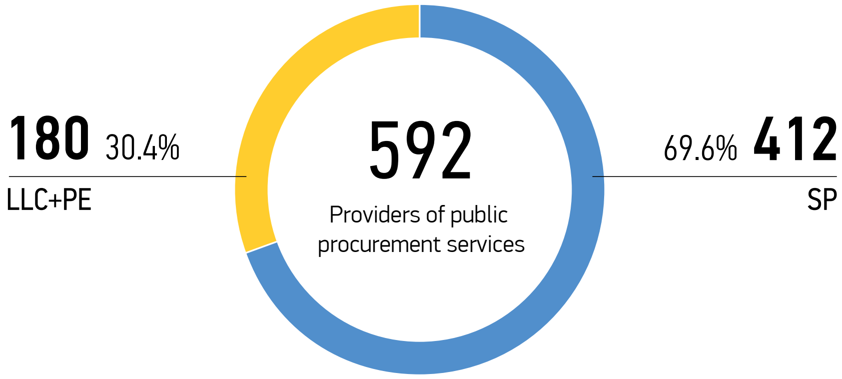
Observations:

- the total cost of procurement of design services from 2016 to August 2019 makes almost UAH 62 million; the total number of completed procurement procedures is 592;
- taking into account the number of authorities, state and public enterprises that fall within the purview of law “On public procurement”, this is a very small figure; the government does not use its role as a buyer of design services;
- most purchases are made in the Kyiv region, as it is the capital where there are concentrated most government bodies which are the customers of the ProZorro system;
- Kyiv-centredness: 51% of the amount and 82% of the cost of all completed purchases were made in the city of Kyiv and Kyiv region;
- SPs are the main providers of public procurement services, they have performed 412 of the 592 successfully completed procurements;
- the least purchases were made in the Lviv region.

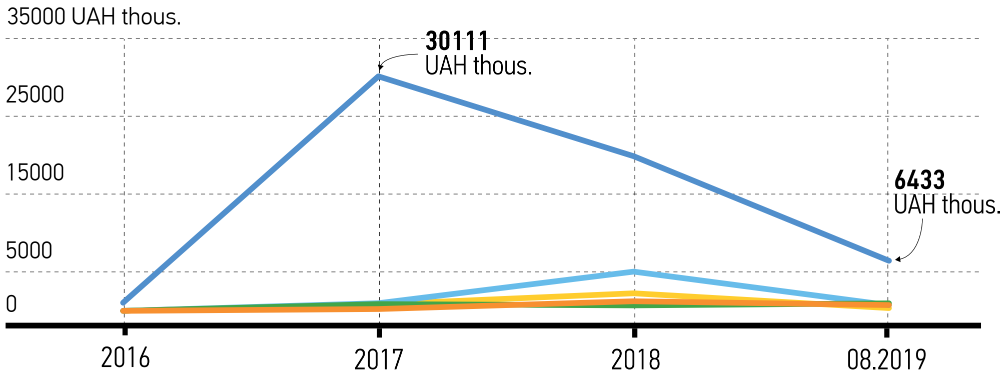
Prospects:

- increase of state expenses for professional design services;
- improving the procurement process through a more accurate description of the line items; availability of typical descriptions of procurement objects, explaining what purchases and at what stage are needed, can significantly expand the market for public procurement of design services;
- at this stage, we did not analyze the level of procurement competitiveness or procurement objects; at the same time, the collected data can be used as a basis for further analysis of the development of the role of authorities as customers;
- instructing the government bodies on how to apply design, design process, and the cost of such services will expand the market for public procurement of design services.

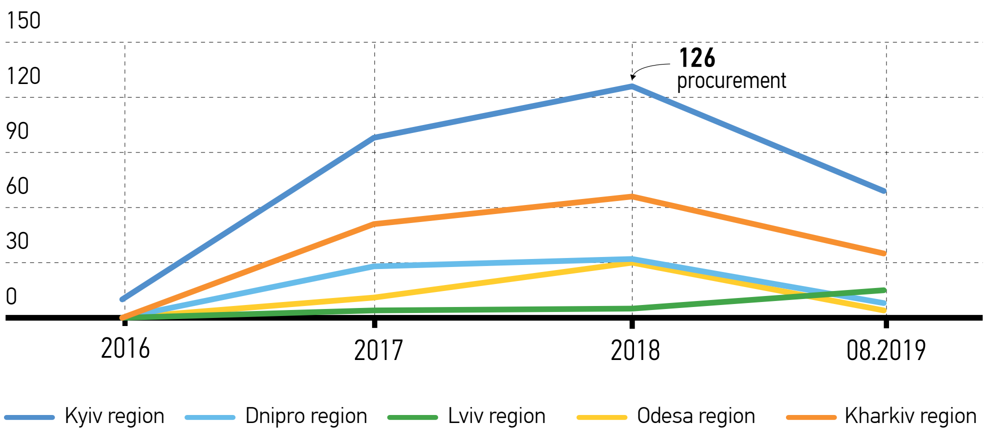
Structure of providers of public procurement services, dynamics of value and number of public procurement within 2016-August 2018 in the survey locations*



Dynamics of public procurement value



Dynamics of public procurement number



** by CVP 021:2015: 79930000-2 «Professional design services»*

Source: compiled by the authors, ProZorro system data, data for 2019 cover the period of January-August

Cost of projects and amount of business of the market players

Designer income key source:
short-term projects totaling up to USD 1,000

Observations:

- annual trade mainly does not exceed UAH 2 million and is growing due to the increase in the number of small projects;
- design agencies work with larger and more expensive projects than self-employed freelancers;
- there are few design agencies whose annual business volume exceeds UAH 10 million.

Prospects:

- incorporation of individual freelance designers into design agencies or other forms of collaboration that will allow them to enhance their own institutional capability;
- enhancing the business capacity of design agencies as an accelerating factor in the development of the design industry in Ukraine and their competitiveness at the international level.

Key problems of designers:

1. Low added value of the design product.
2. Competition is based on the dumping of prices by freelancers.
3. Intuitive pricing.

Ways for solving the problems:

1. Promoting innovation and uniqueness as values of design.
2. Increasing designers' awareness of the business processes and value chains of the final product.

The contribution of industrial design to the economy

It is impossible to determine the exact contribution of design to the economy.

Given that CEA 74.10 "Professional design activity" has no subclasses, it is also impossible to determine how many designers work in Ukraine and how much tax they pay into the budget.

Besides, public procurement is not differentiated by types of design services and often does not contain a detailed description of the project.

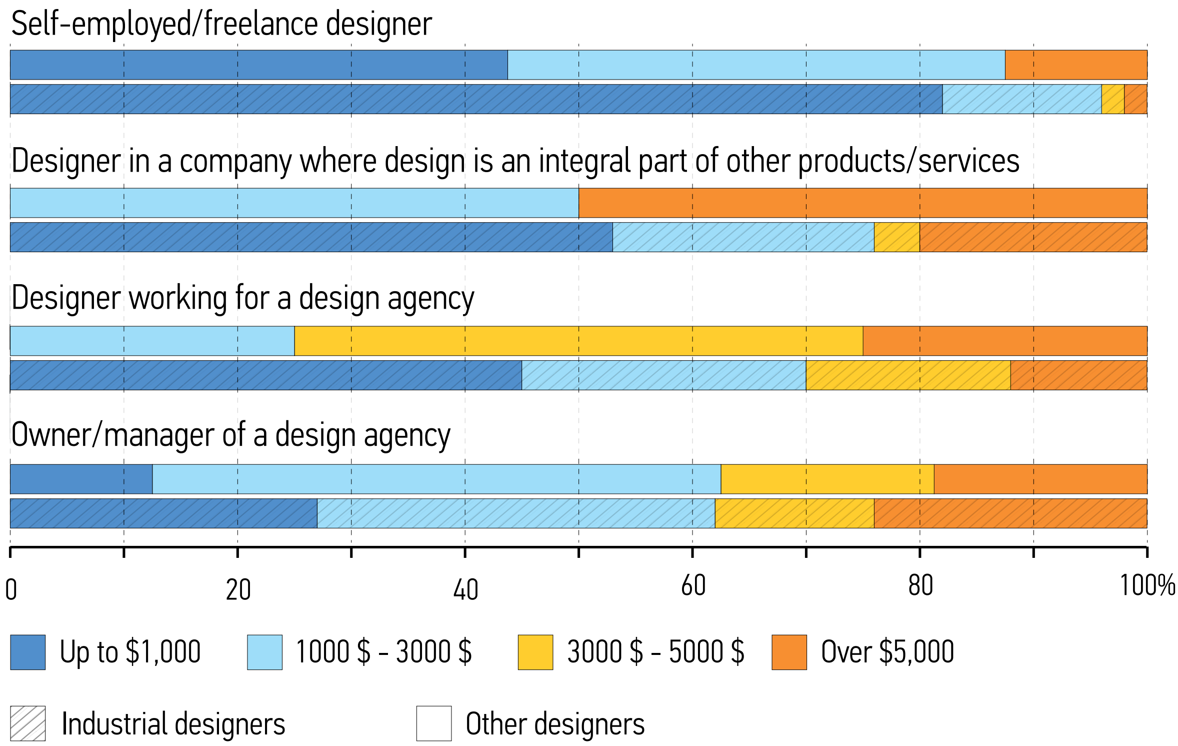
Observations:

- cash turnover of industrial designers is up to UAH 2 million, this coincides with a general trend in the design industry;
- the average cost of industrial design projects is higher than in the design market as a whole – up to USD 3 thousand and up to USD 1 thousand respectively.

Prospects:

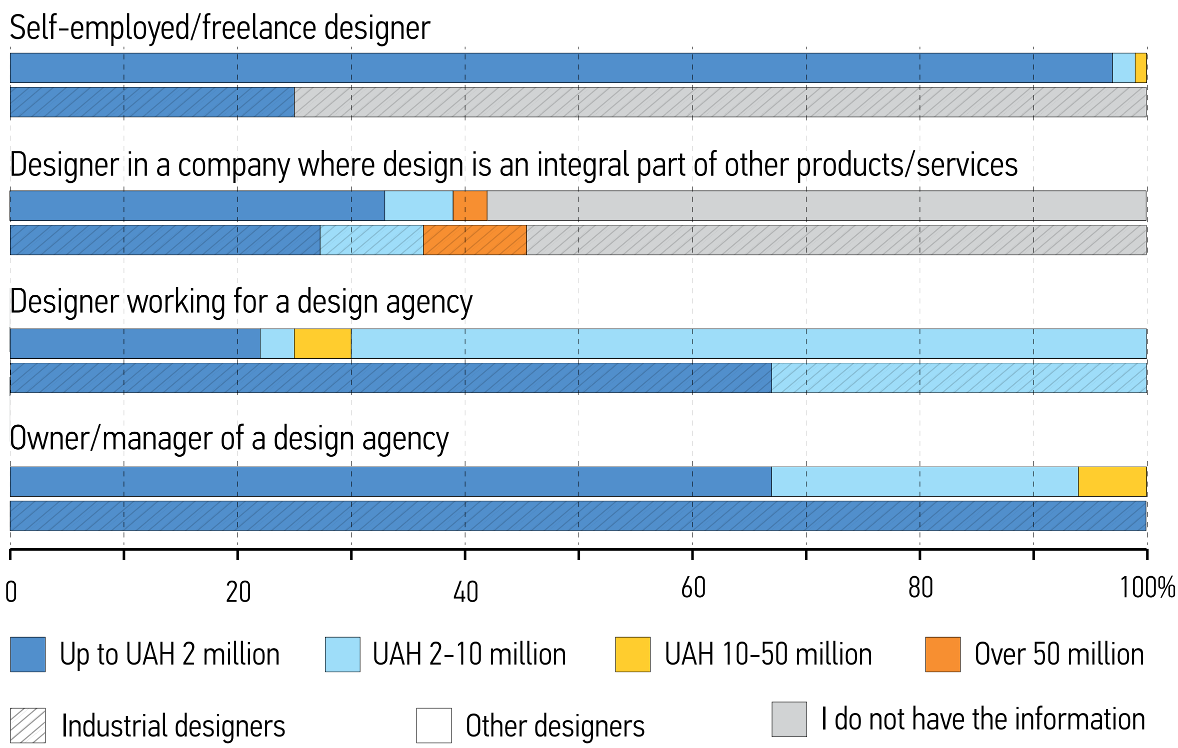
- separating industrial design into a freestanding CEA subclass, which will allow for better tracking of the industry development and its contribution to the economy, and producing policies;
- separating industrial design into an independent classifier for public procurement;
- stimulating an increase in the number of industrial design projects, because their cost is higher than that of the business area in general.

The cost of projects on the design market of Ukraine



Source: questionnaire survey results, percentage of the total number of responses in each category of respondents

Average annual turnover of designers in Ukraine



Source: questionnaire survey results, percentage of the total number of responses in each category of respondents

INTELLECTUAL PROPERTY RIGHT IN DESIGN

Key attitude of the designers to copyright problem: they believe there is a need for an effective national copyright policy, and that design standards should be delegated to professional associations, or there should be created a separate institution.

The urgency of developing standards for designers in Ukraine has been confirmed by the professional community at the stage of verification of the research methodology.

Over the past two years, initiatives have emerged to educate the representatives of creative industries to protect their property and non-property rights. Among these initiatives are the following:

1. PRO Prava project launched in 2019 by LAW NET company. It aims to create an online platform for legal counseling of cultural and creative industries to protect their rights through real-world case studies, questions/answers. At this point there is a separate section for designers on the platform, where there are collected answers to frequently asked questions about copyright protection and given the examples of model contracts in dealing with designers-residents and non-residents[1].
2. Initiative of the Ministry of Culture of Ukraine "Create. Ukraine", within the frameworks of which in 2018 there was organized a working meeting for discussion of intellectual property protection issues in design for further development of tools to support the creative industries[2].
3. Project "National Intellectual Property Strategy for the period 2020-2030", presented in September 2019. It reveals the problem of inefficiency of the existing regulations for creative industries and the lack of national policymakers' attention to this area. The design initiatives section proposes the creation of a collective management organization similar to that in the music industry[3].

Despite the existence of some experience, Ukrainian designers consider it important to address not only the issues of legal relations, but also the development of quality standards in design. If the first problem, in their opinion, should be solved by the state authorities at the highest state level, the attitude to the quality standards of the designer work, at another point, is quite controversial:

- designers are not able to apply the legal framework to their activity, emphasizing the absence of intellectual property consultants, but are not ready to spend time/resources on such consulting services;
- unwillingness of designers to assert their copyright, the key attitude is: "If your idea is stolen/copied, it means it has value".

The key need of designers:

- Access to advice and clarification on intellectual property issues.

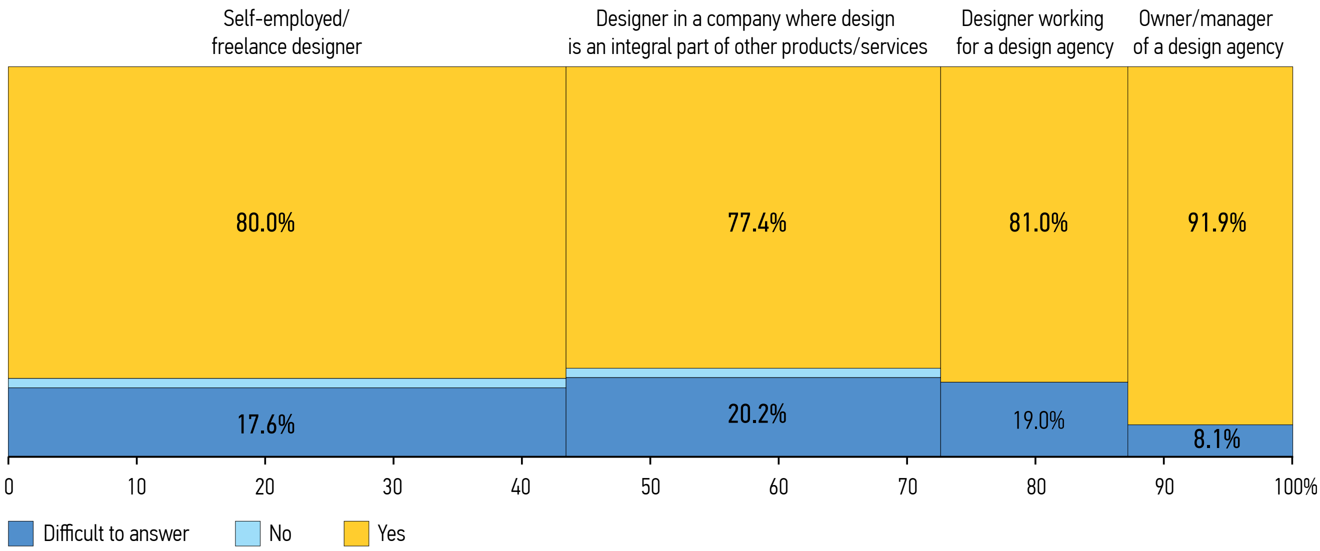
The key problem for designers:

- Low level of communication between consultants, developers of intellectual property policy and professional design community.

The approach to resolve this problem:

- State support and funding for training and consulting programs for designers on copyright protection.

Do designers see the need for policy making and improvement of the norms of copyright protection in Ukraine?



Source: questionnaire survey results, total number of responses – 288.

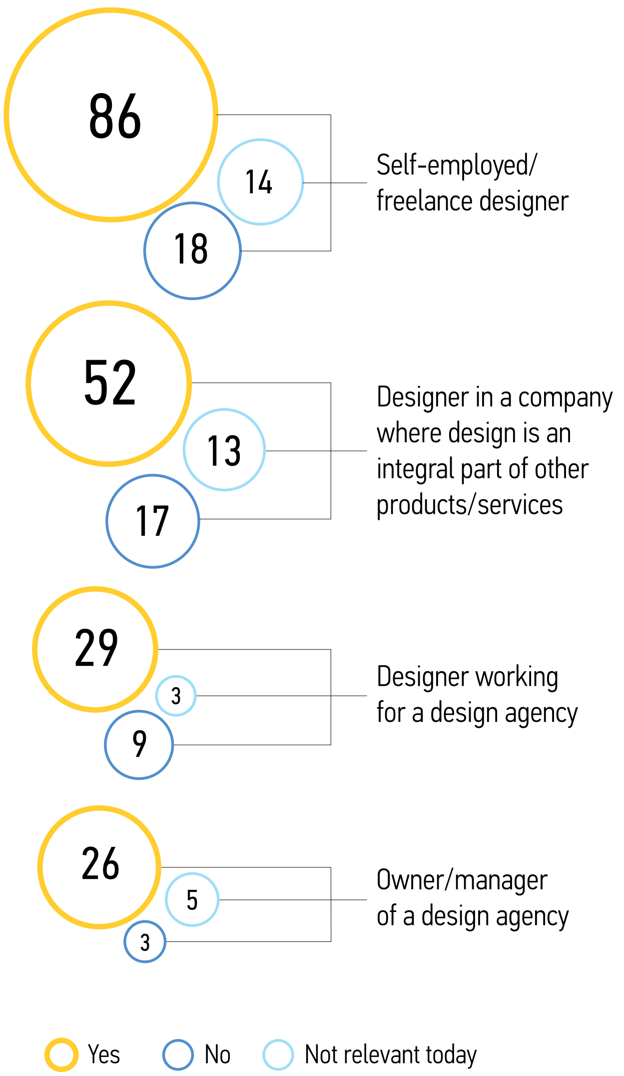
1. *Source:* https://lawnet.ua/ua/artnet/proprava/fordesigners
2. *Source:* http://mincult.kmu.gov.ua/control/uk/publish/article?art_id=245399706&cat_id=244913751
3. *Source:* http://nipo.org.ua/activity/stvorennya-efektivnogo-navchalnogo-centru-u-sferi-intelektualnoi-vlasnosti-iv

STANDARDS AND QUALITY CRITERIA IN DESIGN

Criteria and quality standards in designer work

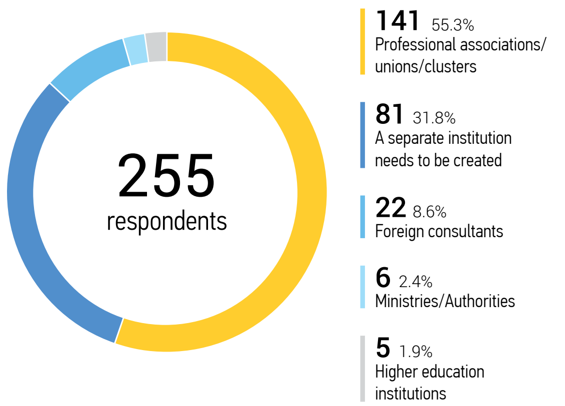
Designers consider the main criterion for the quality of their work an award in the competition. Instead, customers consider that this criterion is solving their primary problem which was submitted to the designer.

Do designers see the need to develop standards for design in Ukraine?



Source: questionnaire survey results, total number of responses – 275.

Who, according to designers, should develop standards for design in Ukraine?



Source: questionnaire survey results

Observations:

- one third of survey respondents believe that quality standards should be set by a state institution, and two thirds say that this should be done by professional associations without let or hindrance from the state;
- design standards are generally identified with state standards in construction and architecture;
- quality standards of products and works of designers within the country are set as vectors by the most eminent agencies;
- participation and victories in competitions and exhibitions are the main factors of weight (prestige) and quality of work of the designer in the professional community;
- lack of opportunities for designers to participate in international competitions (lack of access to information on evaluation and selection criteria, financial restrictions for participation);
- according to the focus group members, quality standards of design should only concern functionality, not aesthetics;
- the first local associations of design agency founders appear, implementing initiatives in the field of standardization of designer work (model contracts) and consultations on participation in international competitions; for example, in 2018, NGO Dnipro.Design has developed Principles of visual organization of placement of advertising means, signs and plaques on the facades of buildings in Dnipro, which were approved by the city council and are now being actively implemented[1].

Prospects:

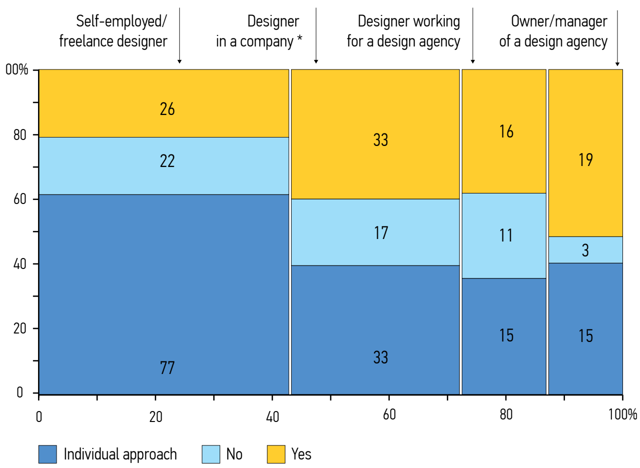
- to encourage the creation of professional design associations and their local representations, which will become the centers of initiatives for the formation of criteria and quality standards of Ukrainian design, will be engaged in its promotion at national and international levels.

1. Source: https://dniprorada.gov.ua/uk/articles/item/30119/rishennya-vikonavchogo-komitetu-miskoi-radi-vid-18-12-2018-1250-pro-zatverdzhennya-principiv-vizualnoi-organizacii-rozmischennya-reklamnih-zasobiv-vivisok-i-tablichok-na-fasadah-budivel-m-dnipra

Standards in the designer-customer relations

Absence of formalized procedures for interaction with the customer at the stages of product creation by designers.

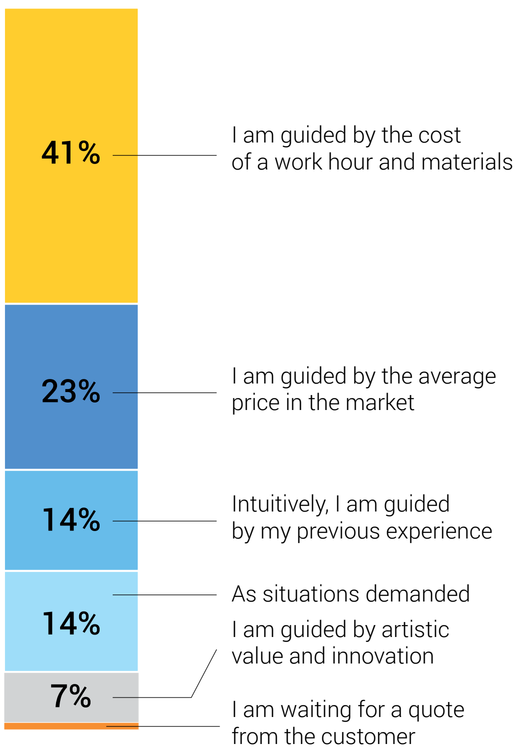
Do designers in Ukraine have a well-established/ documented procedure for working with clients?



* Company where design is an integral part of other products/services

Source: questionnaire survey results, total number of responses – 287.

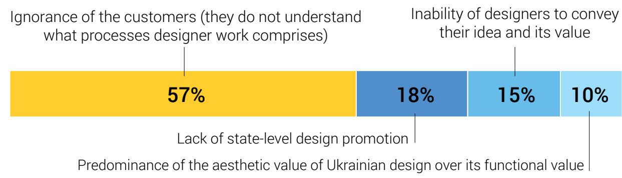
How do designers in Ukraine price their products/services?



Source: questionnaire survey results; percentage of the total number of responses; total number of responses – 278.

The customer relations stages for which designers see the greatest need for standardization are negotiation and contracting.

The main reason, according to the designers, of the misunderstanding by clients of the design value in Ukraine



Source: questionnaire survey results; percentage of the total number of responses; total number of responses – 267.

Observations:

- one third of designers in Ukraine do not know how to calculate the price for their services;
- a quarter of designers are guided by the average market price during price setting, although there is no recognized mechanism for estimation of the average market price;
- predominance of individual approach in the work of designers, depending on the intentions of the customer;
- misunderstanding by designers of methods and tools of customer relations standardization;
- cost of a work hour is the main criterion in the pricing of a design product, leading, as a result, to high subjectivity, large variations in market prices and undervaluation of the cost of the designer product (depreciation of both the cost of work and the value of the product);
- designers do not convey to the customer the algorithm and information on input resources for their work, providing instead a final decision, with two thirds complaining about the misunderstanding of the value of design by customers because of their ignorance;
- difficulty of identifying the level of influence of a designer's decision only on the achievement of the customer's objectives, hence the problem of formulating criteria for the quality of the designer's work;
- the need to formulate and explain quality criteria at the stage of selection of alternative ideas together with the customer.

Prospects:

- professional design quality standards should be developed by professional designers' unions or associations, not created by government institutions such as the Design Institute;
- such Ukrainian professional associations should involve foreign experts to share experience, elaborate and implement designer-customer relationships.

Standards in the designer-manufacturer relations

The key problem for designers is the inefficiency of copyright protection mechanism and the distrust of manufacturers in the honesty of royalty calculation.

Observations:

- predominance of oral agreements between designers and manufacturers, rather than conclusion of contracts;
- designers do not apply mechanisms to protect copyright against copying by idea generators and prototype manufacturers;
- a large proportion of production and sales are in the shadow economy, leaving designers unable to get fair royalties;
- conflicts in the distribution of rights to the created product, including when submitting it for competitions and exhibitions.

Prospects:

- development of consulting support for designers on standardization of relations with manufacturers through the conclusion of contracts: separate contracts both at the stage of prototyping and at the stage of production;
- manufacturers' organizations and associations, such as the Ukrainian Association of Furniture Manufacturers, can develop and implement a system for guaranteeing honesty of royalty calculation by their members, with appropriate arbitrage and reputational mechanisms.

Standards and quality criteria in industrial design

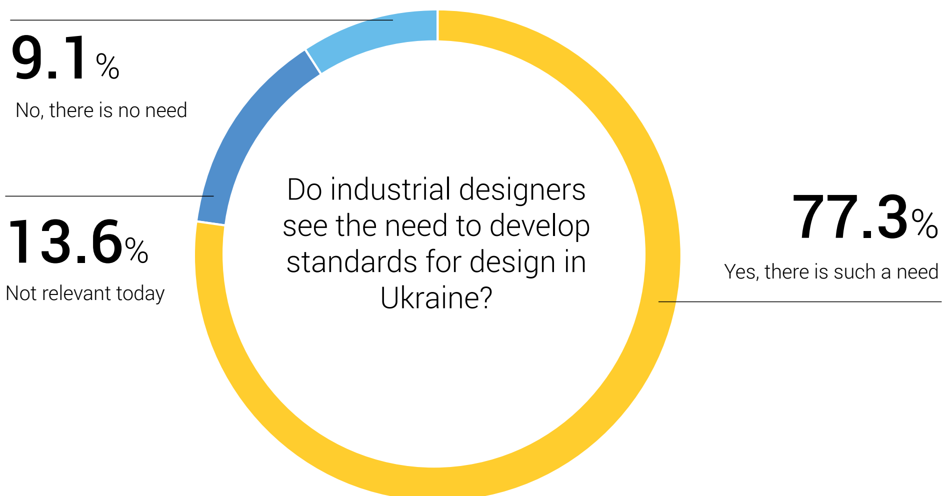
Difference between international and Ukrainian certification standards for industrial design.

Observations:

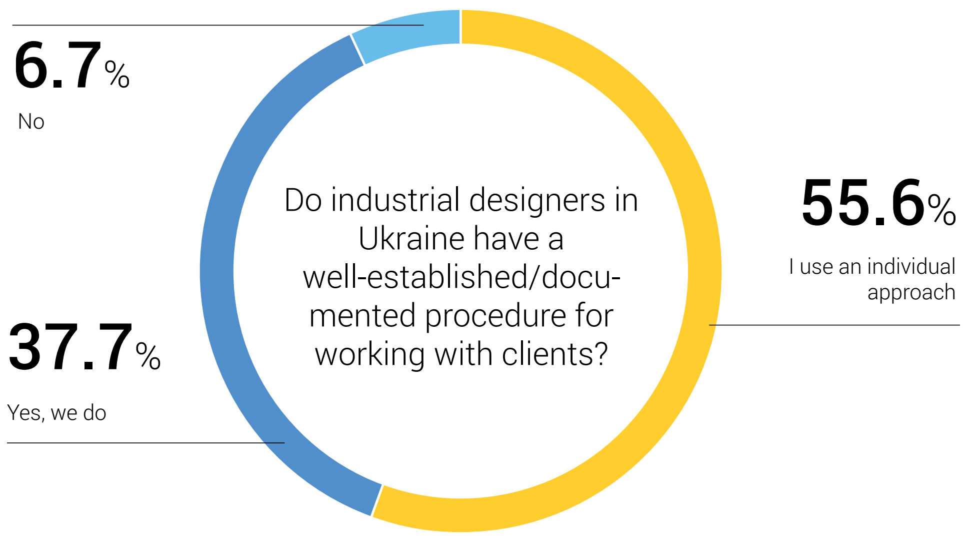
- limited ability to work with foreign clients due to lack of knowledge of standards in other countries and a lengthy and expensive certification process in accordance with their legislation;
- industrial designers underestimate the resources needed to certify products when trying to market it independently in other countries.

Prospects:

- introduction by domestic export support organizations, such as the Export Promotion Office, consultations for industrial designers on standardization and certification of products for sale in foreign markets.

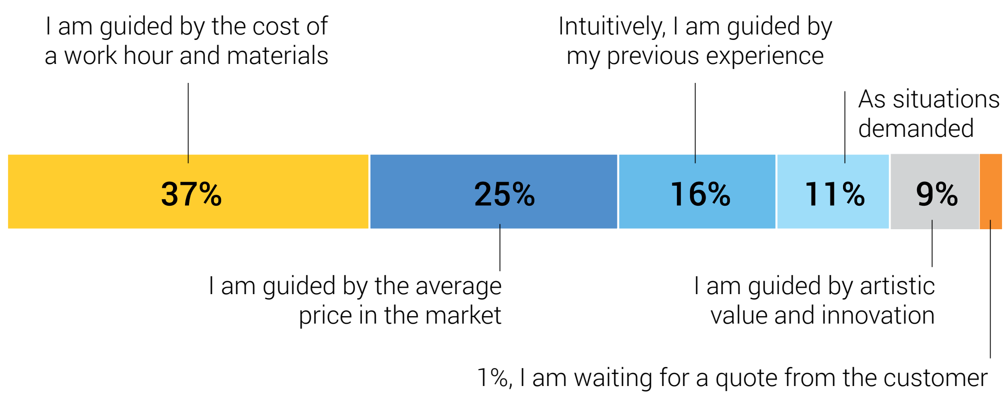


Source: questionnaire survey results, percentage of the total number of responses, total number of responses – 44.

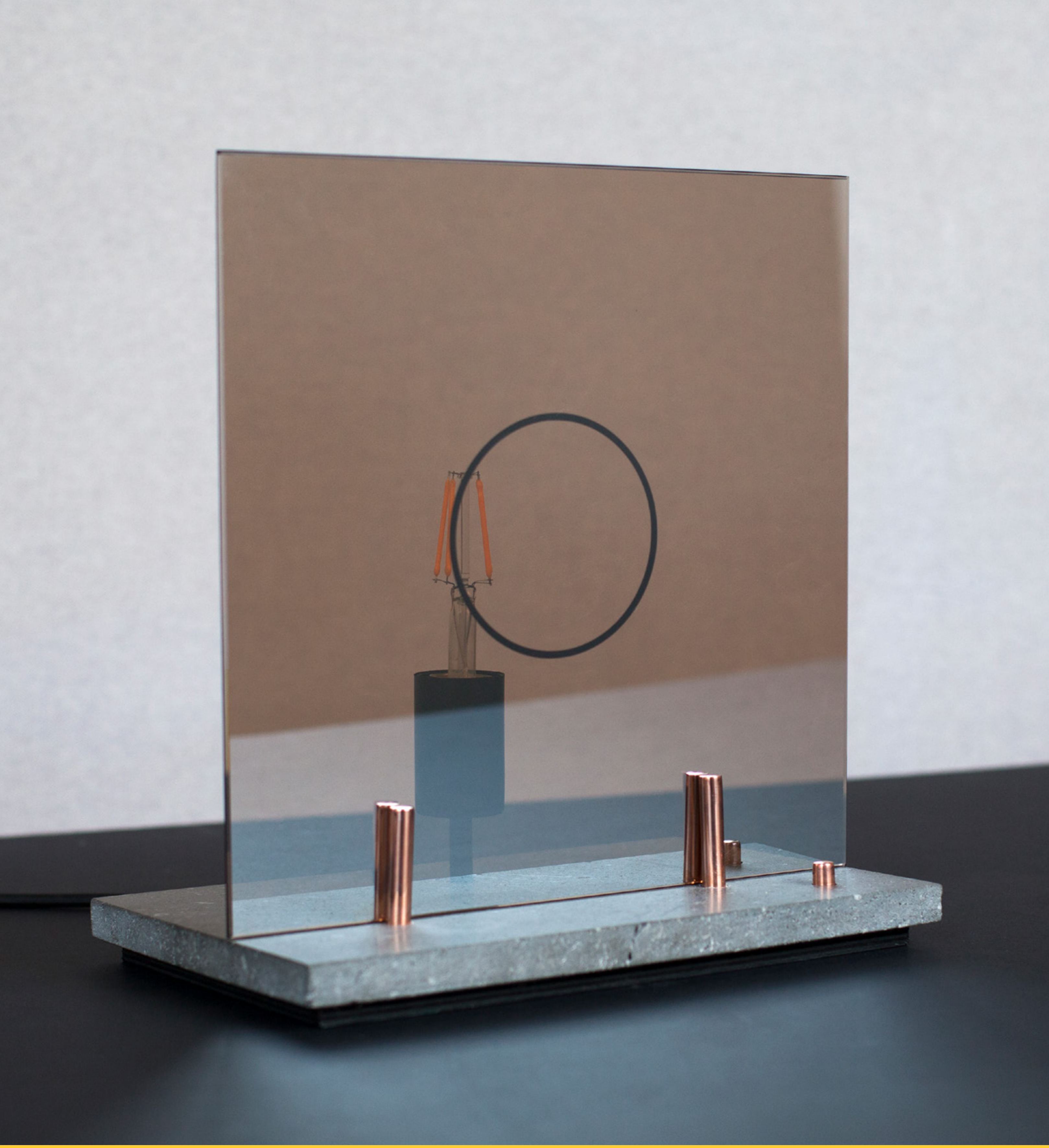


Source: questionnaire survey results, percentage of the total number of responses, total number of responses – 45.

How do industrial designers in Ukraine price their products/services?



Source: questionnaire survey results; percentage of the total number of responses; total number of responses – 44.



Business Case

Nottdesign, Dnipro

Design on the verge of art and functionality

www.nott.design | +38 068 500 58-00 | info@nott.design

From idea to business

> “ Industrial design is a sculpture with a functional specification.

Industrial design for Serhii Hotvianskiy, the founder of an interior design studio, was foremost a hobby. Architectural projects are long-lasting, creation of objects instead gives a faster and more interesting result.

> “ Industrial design is more wowie than architecture and interior design. A small object can say more than a large building.

The new line of business aimed at further promoting the company and attracting new customers. Today, the Nottdesign product line consists of desks, light fixtures, mirrors, candlesticks and lamps. Some of them have been awarded reputable international honours, including the Red Dot Design Award[1].

Market and customers

Currently, the company operates mainly in the Ukrainian market, although in the near future it plans to increase the share of exports. Serhii notes that there is a number of problems for industrial design related to sales both in Ukraine and abroad. Everything created by Ukrainian industrial designers is produced in very small batches or single prototypes. Hence the high cost and price that makes the product uncompetitive. After all, Ukrainian consumers are not ready to pay the same price for domestic design items as, for example, for Italian ones.

Serhii believes that to enter the foreign market already with the final product it is necessary to have a relatively big brand and cooperate with a high-status reputable manufacturer. This is because prototype development requires considerable startup capital to build molds and matrices or to launch production lines.

Nottdesign divides its target audience into two groups. The first one are the clients who come with the task and a specific item is developed for them. Here, a key role is played by the functional component.

.

> “ We have to first find out the portrait of the consumer and then do something for him.

The second group of consumers are those who buy items that have been already developed by the designers of the company. They have a more distinguished artistic component and are rarely used for their intended purpose. As an example, Serhii describes a cross-shaped salt cellar he developed.

> “ It is unlikely that by buying this salt cellar, the consumer will salt food with it.

According to the founder, it is difficult to describe a portrait of their consumer by age, gender or status.

Business model

The success of the Nottdesign business model is based on partnerships and several areas of project implementation. In the first direction there lie own development of objects and partnership with local manufacturers. This is the release of small batches of product and self-performed sales.

Another direction is the partnership of the company with the manufacturers who order the design of objects. Such cooperation is based on royalties, which, depending on the size of the batch, range from 3% to 10%. There is also the first down payment on future royalties, the amount of which is calculated from the cost of the product being designed by the designers.

> “ If it’s a table, then the cost of three tables is taken. They do this in order to give the customer an incentive to continue cooperation.

At present, Serhii Hotvianskyi doesn’t find the direction of industrial design financially successful for his company. Given the cost of work of the team and contractors, materials and sales, it is possible to reach breakeven result. The founder associates such indicators with the fact that industrial design is not now the main focus of their business, and emphasizes the prospects of growth of its share in the nearest future.

Vision of prospects

The Nottdesign team sees the development of industrial design in Ukraine in the establishment of cooperation with successful manufacturers. At present, such cooperation is ineffective due to manufacturers’ failure to comply with deadlines, rapid decline in quality of work, constant price changes, and copyright infringement.

> “ A manufacturer is like fuel for a designer. Only in connection with the manufacturer we can do something. Or the second option – we will simply work not for Ukraine, but for Europe.

Serhii Hotvianskyi also sees prospects for expanding the industrial design community. He has now, together with other professionals, started a community in a club format, where they jointly develop standards for relationships with customers and contractors, elaborate contract templates, negotiations on delivery terms, and copyright protection procedures.

> “ It feels like you are at the origin of something great, and here it is – just coming into the world. It is interesting that we are at the very beginning because the potential is very high.

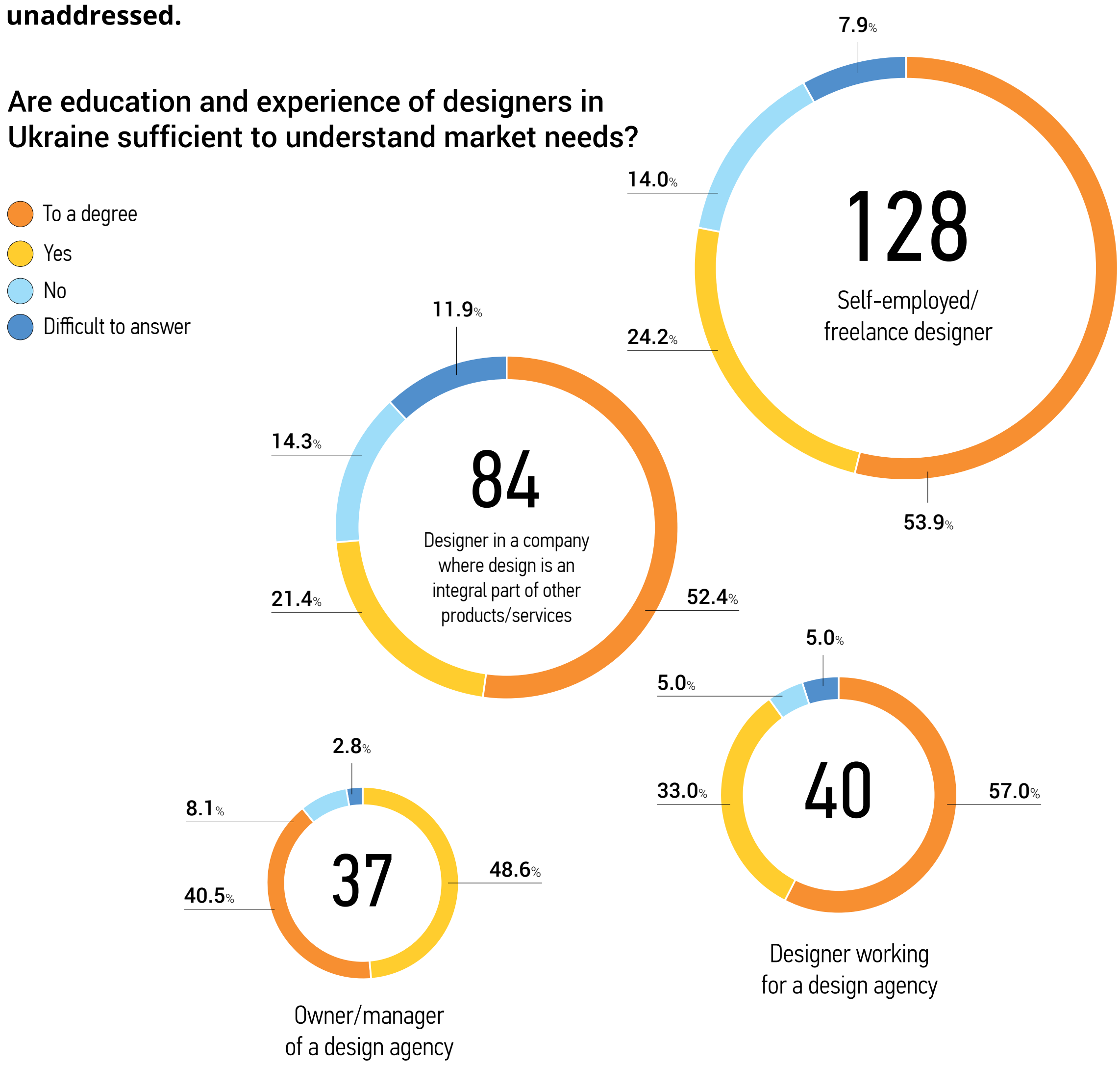
1. https://www.red-dot.org/

EDUCATION AND HUMAN CAPITAL ASSETS

Designers' competencies and market needs

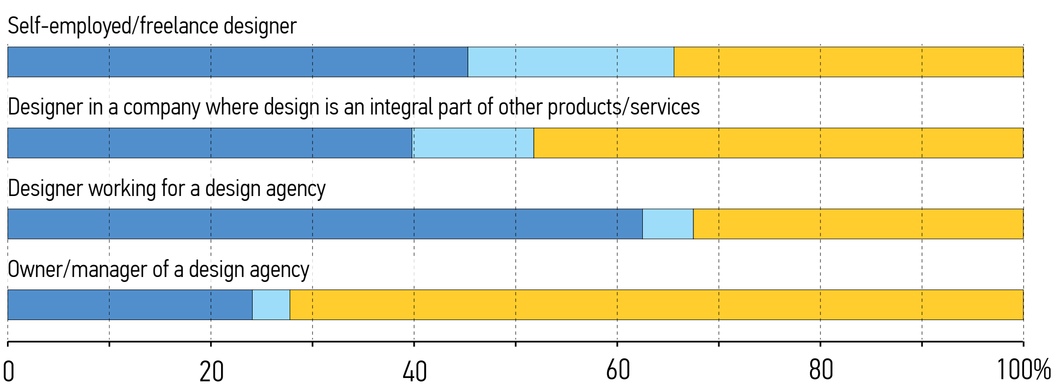
Designers lack business competencies, and formal and non-formal education leave them unaddressed.

Are education and experience of designers in Ukraine sufficient to understand market needs?



Source: questionnaire survey results, total number of responses – 289.

Do designers in Ukraine understand their business model?



Source: questionnaire survey results, percentage of the total number of responses in each category of respondents, total number of responses – 288.

Formal design education

The majority of design practitioners do not have a higher design education. The education available is not sufficient to understand the market needs and conduct business.

Increasing popularity of designer profession: the number of enrolees in HEI and licensed volumes in the specialty 022 "Design" is growing.

Center for formal design education: Kyiv.

The design market is oriented and dependent on skilled personnel. As design is a product of intellectual activity and creativity, it is the specialists in this field who largely ensure its development. That is why we have identified education and human capital assets as the main factors in the development of the design market in Ukraine.

While working on this section, we faced the problem of lack of information about available educational opportunities for designers in Ukraine. The only state electronic database on education does not contain complete information about higher education institutions, the number of entrants and graduates, the availability of pedagogical staff of the design departments with the degrees of research doctorate or full professor. Besides, the data is often missing or very fragmented.

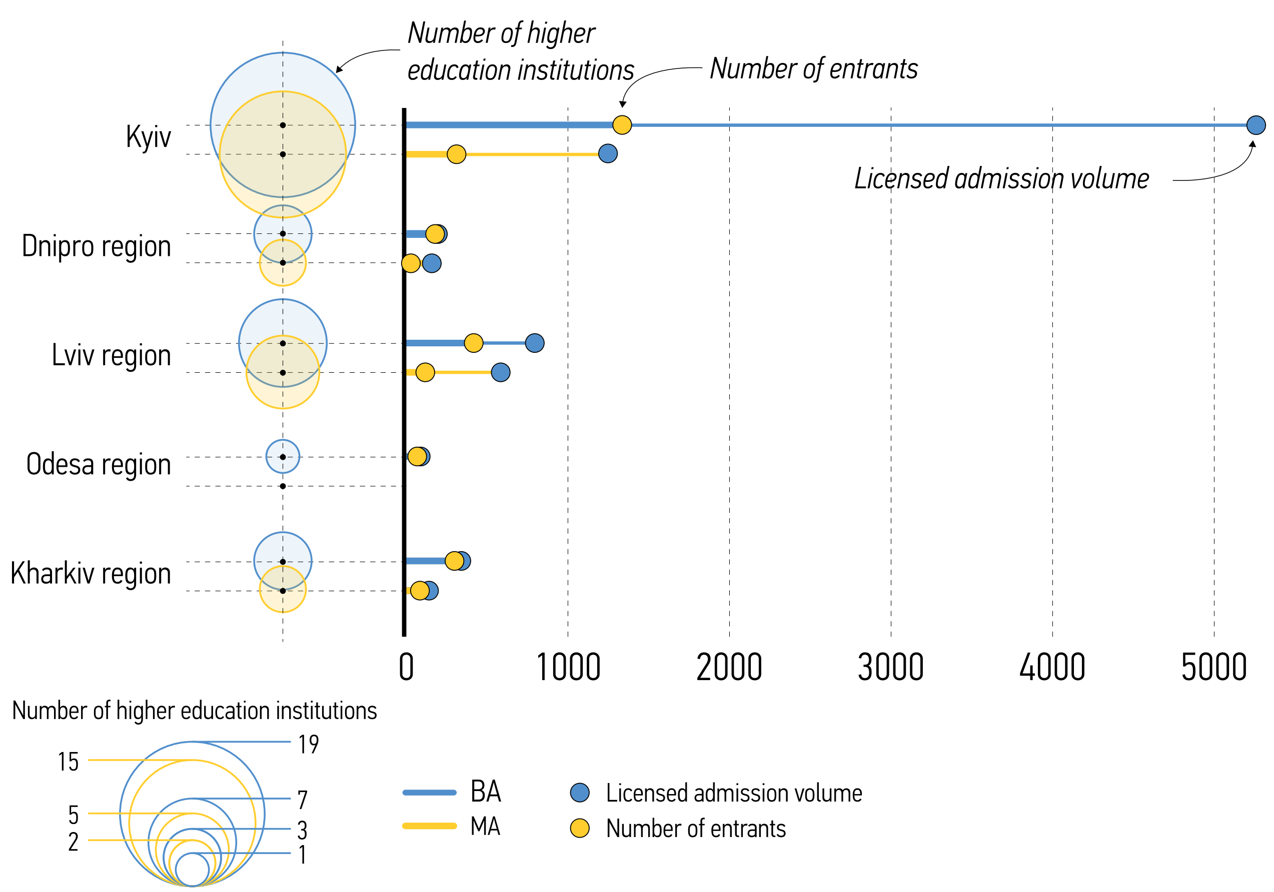
At the same time, the higher education institutions which we requested for public information in 90% of cases did not respond within the deadline established by law. The information available was insufficient to draw relevant and valid conclusions.

That is why we have not been able to determine how many young specialists graduate from Ukrainian universities, how many pedagogical staff work in design departments, how many of them have academic degrees of research doctorate or full professor and what international student mobility programs are available for design students.

Key features of formal education:

- universality of the specialty;
- small number of specializations;
- tendency towards artistic disciplines;
- considerable theoretical component.

Licensed volume of admission of higher education institutions in the specialty 022 «Design» in monitoring centers in 2018

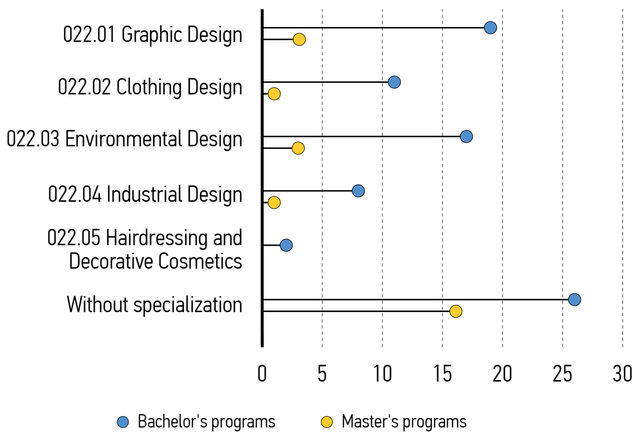


Source: compiled by the authors, data provided by USEDE.

Aggregate licensed admission conducted by educational institutions in the speciality 022 “Design” in 2018 was 6,665 for bachelor’s degree and 2,133 for master’s degree. For comparison, in 2018 2,293 entrants undertook the bachelor’s degree, and 528 – the master’s degree.

Among all bachelor’s and master’s degree programs in design, 40% have no specialization.

Number of specialized bachelor’s and master’s degree programs of higher education institutions providing education in the specialty 022 «Design» in monitoring centers as of 2018.



Source: compiled by the authors, data provided by USEDE.

The existing design specializations offered by Ukrainian higher education institutions are largely inconsistent with the current occupational classification.

According to the current Occupational Classifier SC 003:2010, there are 13 specializations of design professionals. Of these, 12 belong to the group of professionals in the artistic field:

- 2452.2 Designer (Art Designer)
- 2452.2 Visage Designer
- 2452.2 Graphic Designer
- 2452.2 Hairstyle Designer
- 2452.2 Interior Designer
- 2452.2 Furniture Designer
- 2452.2 Designer of Multimedia Objects
- 2452.2 Clothing Designer
- 2452.2 Packaging Designer
- 2452.2 Designer of Industrial Products and Objects
- 2452.2 Fabric Designer
- 2452.1 Designer-Researcher

Specialists in landscape design (code 2213.2) belong to a group of professionals in the field of agriculture, animal breeding, forestry and water management.

The specializations defined in the Occupational Classifier do not match the design specializations offered by higher education institutions. This leads to the formation of a gap between the need for specialists and expectations in the market and the compliance of graduates in the specialty 022 “Design”.

According to the letter of the Ministry of Education and Science of 05.06.2018 No. 1/9-377, higher education institutions have the right to create separate programs within the specializations. The specialization education program must ensure that the higher education standard in the specialty 022 “Design” is met and is capable of providing training for specialists whose professional skills and competences would be in line with the professional standard.

The educational program acquires specialization status after its entry into the unified database of specializations introduced by higher education institutions by which higher education students at each higher education level are trained, and which is formed by the National Agency for Higher Education Quality Assurance.

Observation:

- a study was conducted in cities, in which 33 higher education institutions involved in training students in the specialty 022 “Design” at the educational qualification level “Bachelor’s degree” and 24 institutions engaged in training at the educationally qualified level “Master’s degree” take part;
- Critically low recruitment for specialty 022 “Design” is in the Dnipro and Odesa regions, given the growth rate of the professional environment and employment in the field of design in these cities;
- in the Odesa region there is only one bachelor’s program in design, but no master’s program;
- more educational institutions that train designers are located in Kyiv, which affects the number of applicants, students and graduates;
- a large gap between the licensed volume and the real set: the licensed volume for undergraduate doubles the real set, and for the magistracy exceeds four times.

Prospects:

- Improving and supplementing the Unified Electronic Database on Education;
- revision of volumes of the license order for specialty 022 “Design”;
- opening of new bachelor and master programs in higher education institutions of Odesa, Kharkiv and Dnipro;
- higher education institutions should develop individual specializations within the framework of specialty 022 “Design”, corresponding to the needs of the market, especially at the educational and qualification level “Master’s degree”;
- Higher education institutions should form communities of graduates and keep in touch with them in order to understand the trends in their employment.

Table 1. Correlation of the standards of the competence of the graduate of the specialty 022 "Design" and the necessary the competence of the designer according to the decision of the United Kingdom Design Council

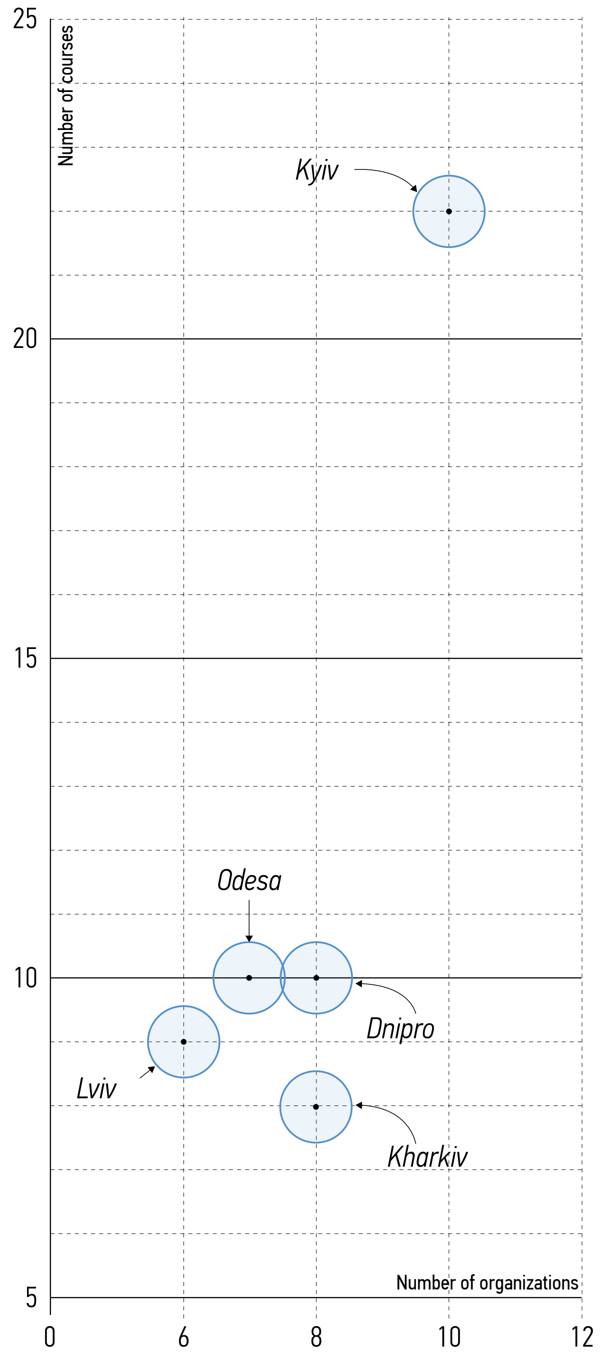
Standard of the competence of the descriptor NQF (National Qualifications Framework) (022 "Design") of the Department of Education and Science[1]	TOP of Skills Needed for Designers by the United Kingdom Design Council[2]
The General competence: • knowledge and understanding of the topical area and understanding of professional activity; • the ability to communicate in the state language both orally and in writing; • the ability to communicate in a foreign language; • the ability to search, process and analyze information from various sources; • the ability to work in a team; • the ability to evaluate and ensure the quality of work performed; • value and respect for multiplicity and multiculturalism; • the ability to exercise their rights and obligations as a member of society, to realize the values of a civil (independent democratic) society and the need for its sustainable development, the supremacy of the law, human and civil rights and freedoms in Ukraine; • the ability to preserve and multiply arts and cultural, environmental, moral, scientific values and achievements of society based on an understanding of the history and patterns of development of the topical area, its place in the general system of knowledge about nature and society and in the development of society, engineering and technology, to use various types and forms of physical activity for outdoor activities and maintaining a healthy lifestyle. **Special (professional) competencies:** • the ability to apply modern design techniques for single, complex, multifunctional design objects; • the ability to put into practice the formation of forms, prototyping and modeling of design objects; • the ability to apply the skills of project graphics in professional activities; • the ability to apply the knowledge of the history of Ukrainian and foreign art and design in art and design activities; • the ability to apply special techniques and working methods in the project activities and artistic activities in the relevant materials (in the field of specialization); • the ability to use modern software to create design objects; • the ability to carry out the coloristic decision of the future design object; • the ability to depict environmental objects and human figures by means of plastic anatomy, special drawing and painting (in the field of specialization); • the ability to apply knowledge of applied sciences in professional activities (in the field of specialization); • the ability to achieve success in an employment career, develop and present visual presentations, a portfolio of own works, own entrepreneurial skills for the implementation of design activities.	• Design. Knowledge of design techniques, tools and principles used in the production of precise technical plans, drawings, diagrammatic sketches and models. • Operational analysis. Analysis of needs and product requirements to create a project. • Programming. Writing the necessary programs for various purposes. • Drawings, prototyping and fixtures of technical devices, their component parts and equipment. Providing documentation, detailed instructions, drawings, specifications to explain to others how devices, component parts, equipment, or structures should be manufactured, constructed, assembled, modified, maintained, or used. • Engineering and technology. Knowledge of the practical application of engineering sciences and technologies. This includes the application of principles, techniques, procedures and equipment for the design and manufacture of various goods and services. • Figurative arts. Knowledge of the theory and techniques necessary for the assembly, manufacture and execution of works of music, dance, art, drama and sculpture. • Technological design. Creation or adaptation of equipment and technologies for the needs of users. • Building construction and design planning. Knowledge of materials, methods and tools that are used in the construction or repair of buildings, structures or other structures, such as roadway network. • Computer technology and electronics. Knowledge of cards, processors, microcircuit chips, electronic and computer equipment and software, including programs and programming. • Geography. Knowledge of the principles and methods for describing the characteristics of land, maritime and air masses, including their physical characteristics, location, relationships and distribution of plants, animals and people. • Visualization. The ability to imagine how something will look after it has been moved or when parts have been removed or rearranged. • Creative thinking. Development, design or creation of new applications, ideas, relationships, systems or products, including artwork. • Interaction with computers. Using computers and computer systems (including hardware and software) for programming, writing software, setting up functions, entering data or processing information.

1. Source: https://mon.gov.ua/storage/app/media/vishcha-osvita/zatverdzeni%20standarty/12/21/022-dizayn-bakalavr.pdf
2. Source: https://www.designcouncil.org.uk/sites/default/files/asset/document/UK2070%20response.pdf

Informal design education

In Ukraine, a market for informal design education has formed. Designers prefer informal education for its greater compliance with market needs, flexibility and efficiency.

The number of informal education organizations for graphic and industrial designers in the monitoring division as at date of August 2019.[1]

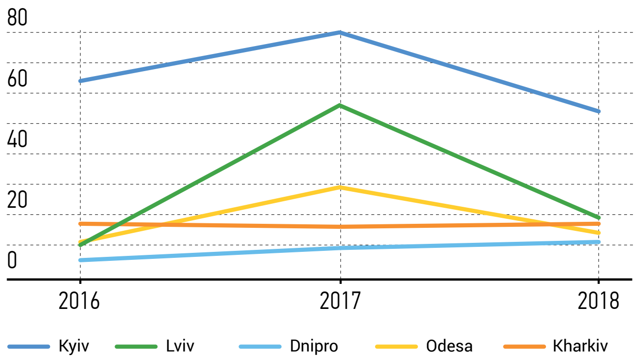


Source: built by authors, data from open sources.

Key aspects of informal education:

- focused specialization according to the needs of companies;
- training based on practical cases.

Dynamics of the number of events for graphic and industrial designers conducted by informal education organizations in monitoring division during 2016-2018.



Source: built by authors, data from open sources..

Observation:

- lack of a unified database of information on affordable courses and other educational opportunities for designers; the authors of the study were forced to collect information from several sources (social networks, specialized media for designers and IT workers)
- the most popular topics of educational and public events are interaction with customers and algorithms of market pricing, which is not in the program of higher educational institutions and informal courses;
- informal education provides awareness of the problem on individual examples, but does not provide universal tools for work;
- more courses and events are organized in Kyiv and Dnipro;
- The most popular educational product of informal organizations is 3-month courses worth up to UAH 8,000.

Prospects:

- A professional association of designers could create a unified base of informal education organizations and a platform to track the emergence of new courses, including online courses, training opportunities based on design agencies;
- development of timeconsuming courses (6-9 months), allowing to make informal education for designers complete;
- the professional environment, for example, associations, should develop a clear framework of competencies for specializations of designers and develop recommendations for informal education courses with reference to specific competencies or specializations.

1. Data from open sources is collected by the authors using open source intelligence (OSNIT). The authors took into account those organizations for which the educational services for designers is the core or one of the core assets. Sources of information: social media and specialized sites.

Key aspects of formal education:

- Weak technical base.
- Use of outdated technology.
- Discrepancy of graduate training to market needs.

Key issues of informal education:

- Low quality teaching materials.
- Focus on quick results.
- Fragmentation of the knowledge gained.

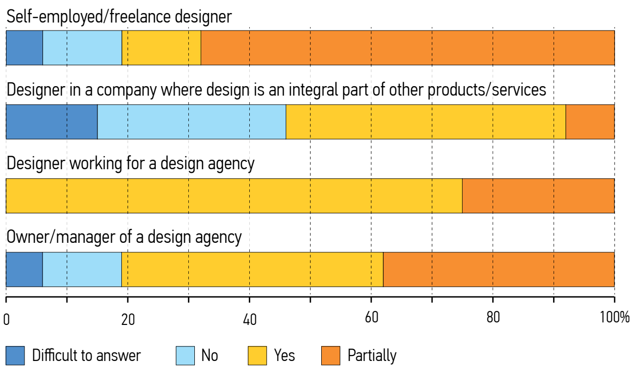
Directions for solving problems:

- An increase in the number of training programs for designers in the Dnipro, Kharkiv and Odesa regions.
- Creation of specializations in the framework of university curricula in the specialty 022 "Design".
- Inclusion of business competencies in training programs for designers.
- Improvement and refinement of the Unified State Electronic Database on Education.
- View and update the descriptor NQF (National Qualifications Framework) (022 "Design") by the Ministry of Education and Science of Ukraine.
- The development of a professional framework of a clear framework of competencies in design specialties.

Education and industrial design

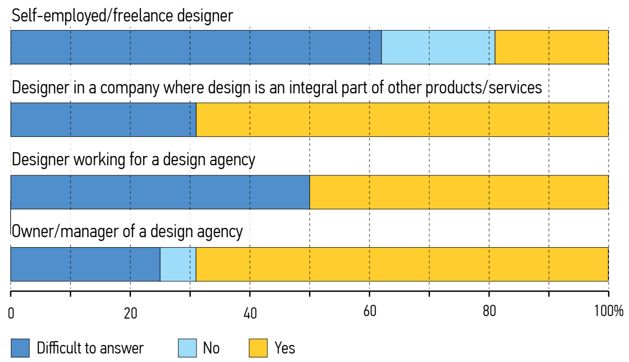
Industrial designers in Ukraine are significantly limited in their ability to receive formal and informal education. They come to this type of design in other specialties.

Is the education and experience of industrial designers in Ukraine sufficient to understand the needs of the market?



Source: questionnaire survey results, percent of total answers in each category of respondents, total number of responses - 49.

Do industrial designers in Ukraine understand their business model?



Source: questionnaire survey results, percent of total answers in each category of respondents, total number of responses - 49.

Observation:

- The majority of industrial designers consider their education and experience sufficient for doing business and understanding the market;
- There are significantly fewer courses and events for industrial designers than for graphic designers.

Prospects:

- The creation of more informal education courses for industrial designers.

SO
KO
LO
VA
DESIGN

Business Case
SOKOLOVA design, Krarkiv

A design that creates a public image

www.sokolova-design.com | +38 050 303-61-42

From idea to business

The idea of creating her own business came up with Kateryna together with designer Arkadii Vatranov after participating in Dutch Design Week, where they brought prototypes of their lamps and vases. The items received great interest, and designers received offers from manufacturers for coproduction and sale in showrooms.

> As can be seen from the above we realized that there is interest and we need to create our own brand.

It was at the facilities of the workshop of Arkadii that production began, and he became a business partner in SOKOLOVA design projects.

Market and customers

Having chosen for their fixtures and vases positioning as an exclusive designer product, the founders began their promotion in foreign markets and today they also focus on them. The team has a sales manager who deals with export issues. As of today, all sales processes have been effectively established, although in the beginning the issue of processing export operations was a significant problem for designers.

> In Ukraine, we practically do not sell anything. Or is it prohibitively expensive for Ukraine, or we are not promoting ourselves enough in the Ukrainian market...

The largest sales volumes are in France, Italy, USA, Japan and Kazakhstan. In times past, SOKOLOVA design products were sold in 15 countries. Customers mainly represent the middle price segment.

To search for new customers, the team uses social networks, publications in specialized publications on design and architecture, as well as international exhibitions.

Business model

> Not every designer wants to be a startup or businessman. This is a completely different role.

Kateryna notes that at the start they and Arkadii did not have a business model or business plan and the whole project was an experiment.

> If we had approached this from the very beginning with mathematical calculation, this project would probably not have been. It was more an emotional, creative push to make something cool and unique.

In positioning and conveying the value of its products, SOKOLOVA design notes craft production and a large share of manual work.

> We made a video about how all this is done, how many processes each product goes through...

Despite a steady increase in sales and profits, Kateryna notes that the business cannot be considered financially successful so far, because all the money earned goes to investing.

The founders build partnerships mainly with European manufacturers and brands. This situation is explained by the complexity of doing business with Ukrainian contractors and their frequent financial shortcoming. Designers note that in Ukraine there it is impossible to check the real sales volumes of partners and receive their royalties in the absence of a business culture and bookkeeping by double entry.

In the long term, SOKOLOVA design plans to simultaneously try to enter the segment of a more mass product.

Perspective vision

> Good design is various. It can be both aesthetic, image-building and functional.

In Kateryna opinion, Ukrainian industrial design has great prospects for development in the case of orientation to foreign markets due to the fact that manufacturers underestimate it, it is easier for them to copy the finished product than create a new one together with the designers. Today in Ukraine industrial designers are faced with the problem of finding a job and gaining contestable compensation. The only option for them remains the creation of startups and the search for foreign donors for their implementation.

> Of my entire course, there are a maximum of two people involved in industrial design besides me[1].

The advantage of Ukrainian designers at the international level is that they can study and work on free software, more competitive due to the low cost of labor and not worse competencies.

Having worked for a long time with foreign customers, Kateryna emphasizes that Ukrainian industrial designers greatly underestimate themselves and few of them decide to try their hand at new projects or go to contests, send sketches to international companies.

> We must not be afraid and experiment. This is awesome.

1. Kateryna Sokolova graduated from the Kharkiv State Academy of Design and Arts.

ECOSYSTEM OF DESIGN SUPPORT IN UKRAINE

Ecosystem participants

The most active and influential participants in the ecosystem: centers of informal design education, organizers of professional events for designers, professional design communities.

The study of the development of the design support ecosystem was aimed at identifying key participants, existing and potential areas of support for the Ukrainian design industry to reach a new level of development.

Therefore, in the questionnaire we learned from the responding designers about the activity of their appeals to those who can provide them with various support in their work, and also invited ecosystem representatives to focus groups. It should be pointed out, that today the design ecosystem in Ukraine is only in its infancy, which is accompanied by:

- lack of understanding by designers of the benefits of interacting with participants in the ecosystem of design support and reluctance to independently seek new opportunities for financing, promotion, etc.
- inactivity and remoteness of state institutions, representatives of formal education from interaction with the professional community; cases of cooperation are formal in nature and are not aimed at close continuous cooperation.

Designers are not actively using partnership opportunities with foundations, grant makers and public authorities that have emerged in recent years.

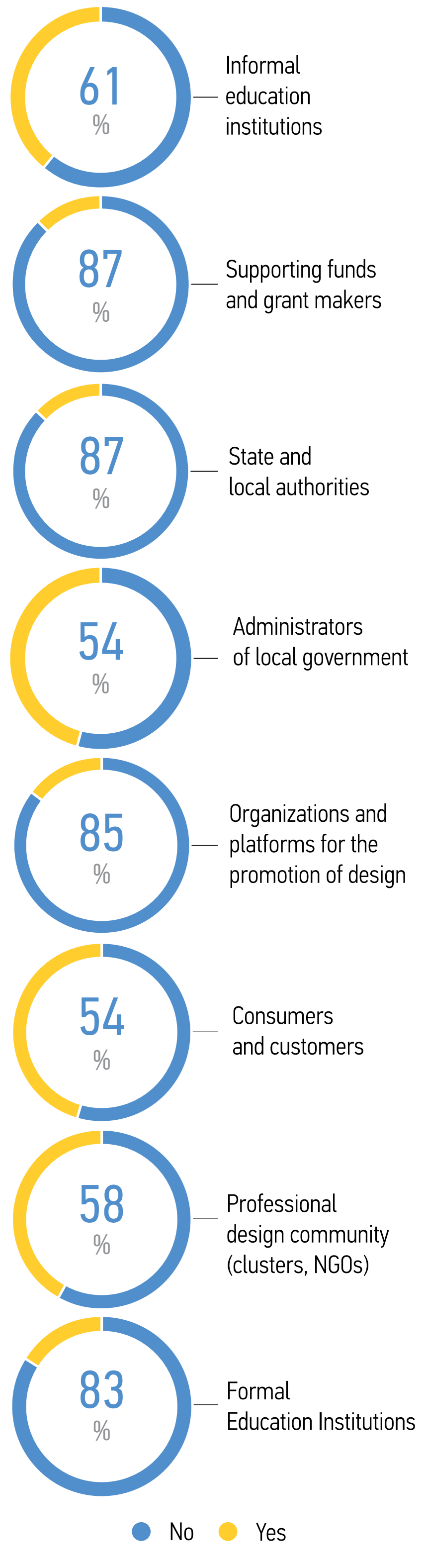
Observation:

- the unwillingness of designers to devote time to interaction and common noncommercial initiatives;
- inconsistency of activities and other activities between ecosystem participants;
- there is no expert core in the field of design around which the ecosystem would develop;
- the closeness of designers to the exchange of experience;
- randomness of initiatives in the ecosystem;
- positive trends in gaining new knowledge in large companies that order design and initiate measures to support it (training of managerial staff, marketing specialists who then effectively interact with designers, clearly know how to set technical specifications for them and understand the value of design);
- informal education organizations become points of ecosystem formation, conducting events, initiating projects, stimulating interaction.

Prospects:

- to stimulate cooperation between participants in the design ecosystem through the implementation of joint initiatives and the involvement of support organizations, authorities and formal education in events held by the professional community;
- local authorities can order services from ecosystem entities, thereby enhancing their institutional capacity.

Have designers have cultivated a relationship with partnerships over the past 3 years with members of the design support ecosystem in Ukraine?



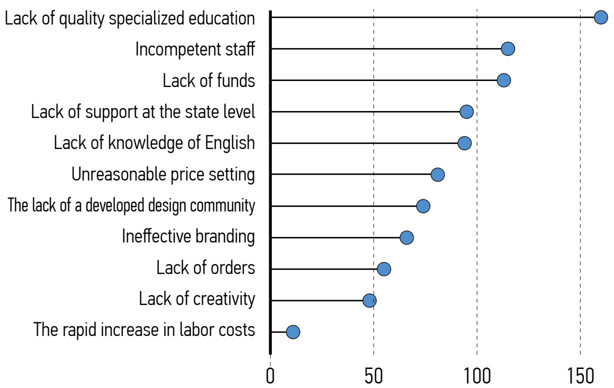
Source: questionnaire survey results; respondents had the opportunity to select multiple answers.

Ecosystem Needs and Trends

A key factor in the development of design: the activities of design communities.

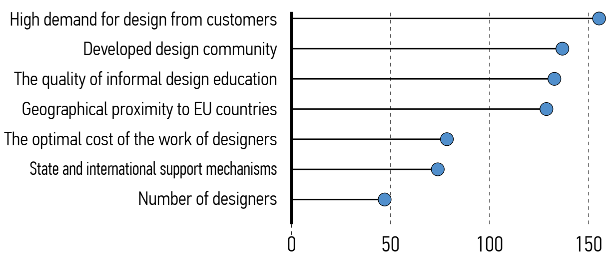
A key barrier to design development: lack of quality specialized education.

What exactly do designers think slows down the development of the Ukrainian design market more?



Source: questionnaire survey results; respondents had the opportunity to select multiple answers

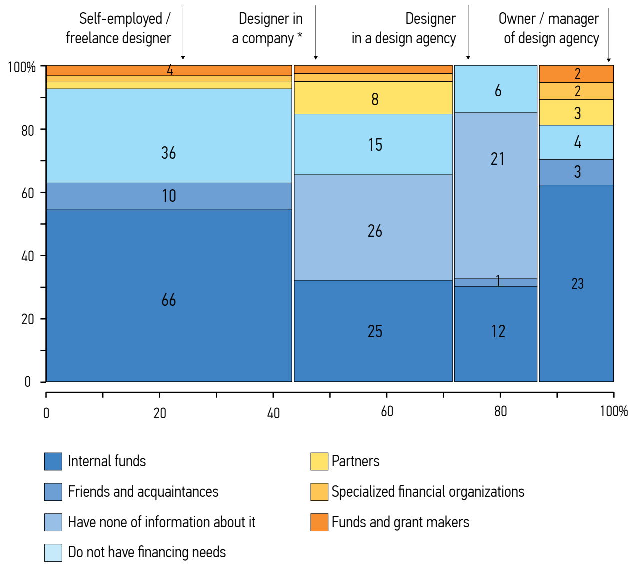
What exactly do designers think is the most stimulating development of the Ukrainian design market?



Source: questionnaire survey results; respondents had the opportunity to select multiple answers

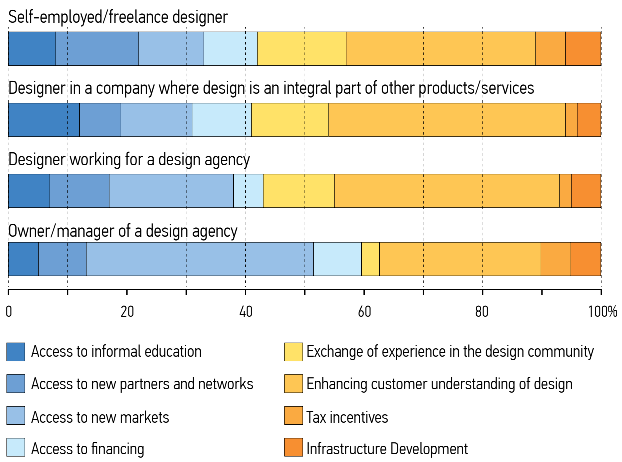
Financial support for design development: designers do not apply to financial institutions and support organizations, but rely only on their own resources.

How is the need for financing most often solved for designers in Ukraine?



Source: questionnaire survey results, total number of responses – 276.

The key need for designers today in Ukraine.



Source: questionnaire survey results, percentage of the total number of responses in each category of respondents, the total number of responses – 287.

Observation:

- formal design education inhibits the qualitative growth of the design sphere in Ukraine, since it does not satisfy the needs of designers and companies for competencies relevant to the market;
- designers are not interested in finding new financial opportunities, despite this they remark on a significant lack of funds;
- demand stimulates designers to develop;
- the greatest need for designers is an understanding of design by customers
- the design community is actively developing and launching important initiatives, but is closed to cooperation with other ecosystem participants;
- a critical lack of special programs to support designers and financial organizations, for example, foundations and business angel investors specializing in the field of design.

Prospects:

- joint interdisciplinary projects in the design ecosystem;
- implementation of projects aimed at increasing the level of understanding of design by clients;
- stimulate the authorities to order design services.

Key ecosystem issues:

- immaturity of ecosystem participants: low institutional capacity, lack of implemented initiatives, poor communication between participants;
- lack of high-quality analytical and informational materials about the Ukrainian design market;
- lack of education from the ecosystem about the value of design and the importance of stimulating its development at the national level;
- designers do not see for themselves the advantages and prospects of interaction with other participants in the ecosystem, as a result, this leads to the absence of synergistic effects in the ecosystem.

Directions for solving the problem:

- creation of an institution (organization) of a national level that would take on the functions of developing the design ecosystem and integrating all groups of participants into it, for example, the design institute;
- state co-financing of awards (available) to enhance the trust of the professional community;
- creation of a panel of respondents for further monitoring the status of design development.

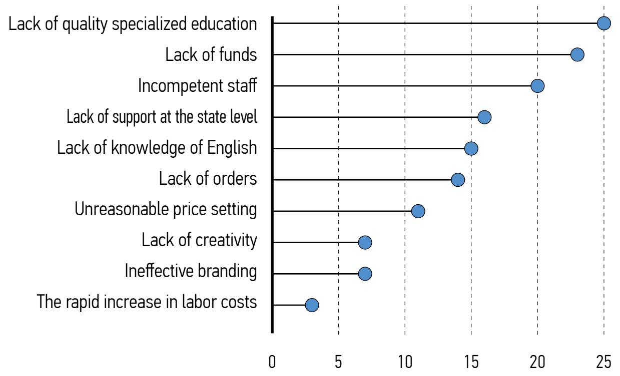
Ecosystem and industrial design

Organizers of professional events (festivals, exhibitions, competitions, design weeks, etc.), which play a key role in maintaining the industrial design in Ukraine.

A key factor in the development of product design: high customer demand for design.

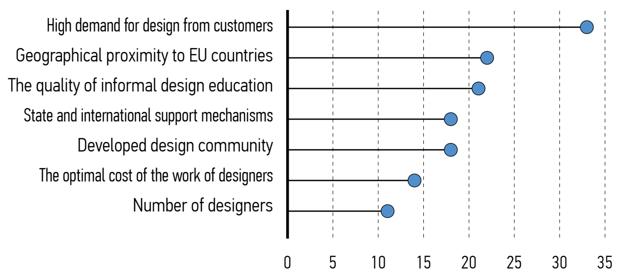
A key barrier to the development of industrial design is the lack of quality specialized education.

What slows down the development of the Ukrainian market of industrial design to a greater extent?



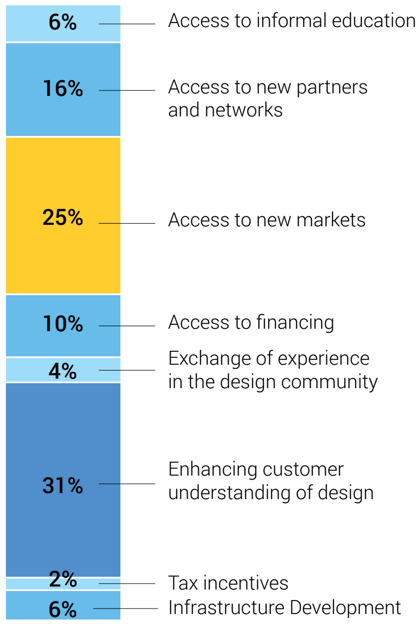
Source: questionnaire survey results; respondents had the opportunity to select multiple answers.

What stimulates the development of the Ukrainian market of subject design to a greater extent?



Source: questionnaire survey results; respondents had the opportunity to select multiple answers.

The key need of industrial designers for today in Ukraine.



Source: questionnaire survey results, percentage of the total number of responses in each category of respondents, total number of responses – 48.

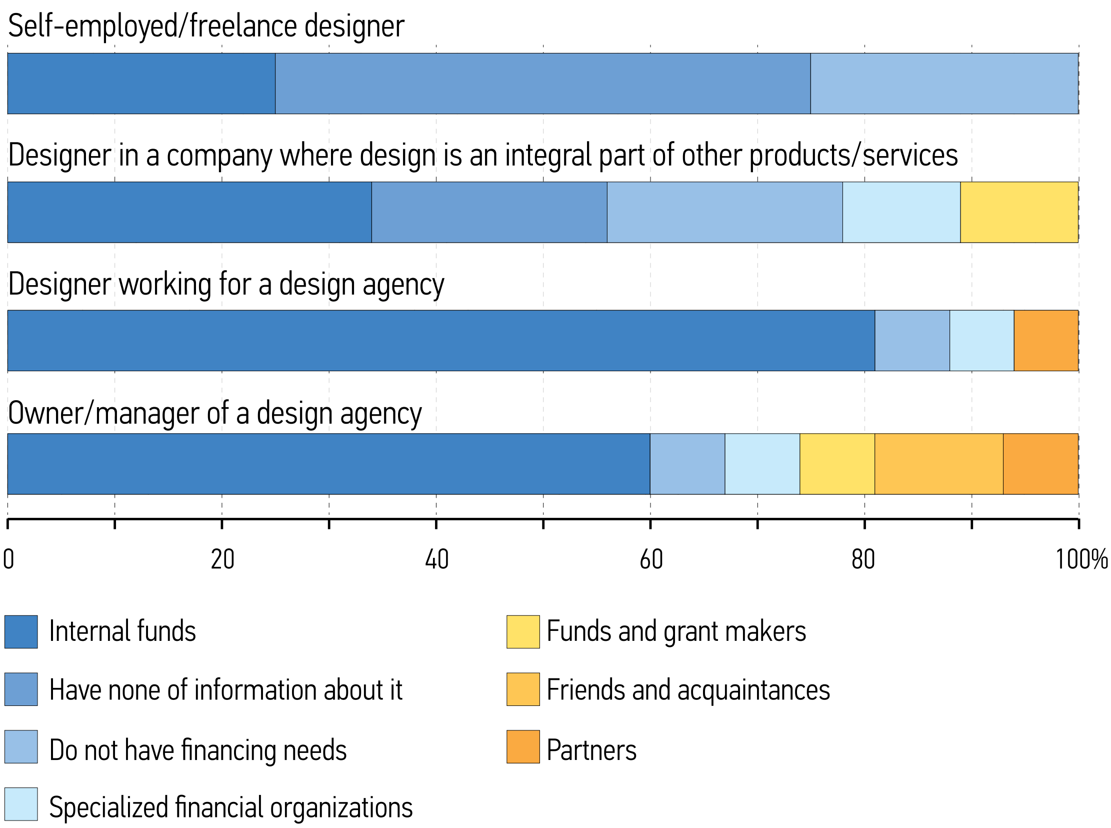
Observation:

- predominately industrial designers stimulated by the development and growth of the number of orders and the opportunity to gain experience abroad;
- for industrial design, the lack of high-quality specialized education is mainly associated with the lack of such specialization in most institutions of higher education;
- financial support from the ecosystem for industrial designers is most relevant.

Prospects:

- joint programs of financial and promotional support for the development of industrial design;
- stimulate the development of specialization in industrial design in institutions of higher education and in the organization of informal education.

How do industrial designers in Ukraine basically solve the need for financing?



Source: questionnaire survey results, percentage of the total number of responses in each category of respondents, total number of responses – 46.

HOCHU RAYU
INNOVATIVE DESIGN

Business Case

Hochu rayu. design bureau, Lviv

Design as a unique microcosm for business

www.hochurayu.com | hochurayu@gmail.com

From idea to business

Creating the agency in 2007, the brothers Yurii Kyryliv, Vitalii Kyryliv and Danuta Kril did not set limits on the areas of projects they want to implement. The key motivation was to create something interesting and important.

> “ There was a desire to create something really fabulous and generally start making design in Ukraine. When we started, there was no such thing as design.

The first projects were both spaces, and apartments, cafes. Designers tried to develop a portfolio and find exactly those areas of work that they would like. Subsequently, having entered a new stage of development and focusing on working with business, the agency began to independently invest in industrial design.

> “ In industrial design, we take on the needs, not the problems.

Industrial design in Ukraine, according to Yurii and Vitalii, is at the start and has prospects for successful development in the coming years. However, it is important to build interaction in three vectors: designers, manufacturers and consumers. Today it is absent, so this provokes misunderstanding and mutual accusations of incompetence.

Market and customers

In their projects, Hochu rayu do not have a clear focus on the domestic or foreign market. The main problem of the Ukrainian customer, they see solvency, because it focuses primarily on the functionality of the product. Designers note that the domestic market is not formed now, therefore there is no stability, constant updating of collections and complex trends.

> “ If you pay attention to the items that Ukrainians can buy, they have 90% of the functions and 10% of emotions.

Yurii and Vitalii argue that no one knows their consumer enough, and everything happens in a continuous process of testing and feedback. The team works in the “B2B” segment and uses various approaches to working with clients. This is both refinement of existing concepts, service design research and development of a new product, and self-creation of a product with the subsequent search for customers for it.

Business model

Integrated solutions and product philosophy are the key values that Hochu rayu offers. Such positioning helps to attract exactly those customers who understand the value and added value of design for their business.

The average duration of a team project is 1 or 2 years, and prices are based on the cost of an employee’s hour of work. This pricing principle is by far the most convenient, although a single template has not been developed, and the agency is trying to experiment with various customers.

> “ The problem of pricing for design in Ukraine both existed and exists. You have nothing to compare with, because there is no statistics of domestic or international practices.

The founders consider the financial results of the agency as a measure of success and the key to growth and note their steady growth. They are engaged in the development of business and the search for new opportunities themselves.

Partnership with other brands and retailers occupies an important place in the Hochu rayu business model, and cooperation with them is built as a communication network in which concepts and ideas coincide.

> “ In industrial design, this is the only way it works by way of marketing buzz.

Perspective vision

> “ Are we more about art or design? We are, in principle, about innovation.

The Hochu rayu team sees the prospects for the development of subject design through the formation, first of all, of a professional environment that will be involved in the overall development of Ukrainian design and its presentation at the international level.

> “ In design, the biggest problem is that no one shares with anyone. Everyone thinks that someone is stealing something from someone. And that is the problem.

Also, designers are convinced that improving legislation on copyright issues will help solve the problems of designers receiving license royalties and establish their successful cooperation with manufacturers. And the inclusion of design in the national strategy for economic development and active state support will be the key to growth not only in this area, but also in the economy as a whole.

> “ The question is that we need to move fast. Design is one of the tools that can really boost our economy.

MANUFACTURERS AND THEIR NEEDS FOR DESIGN

(Through the example of furniture manufacturers)

The contribution of design to the creation of production of manufacturers

Key value of design for manufacturers: aesthetic solution that allows you to increase the price of products. At the same time, the innovative component of design is underestimated.

The research results described in previous chapters showed that close cooperation between manufacturers and designers should become the basis for further development of design in Ukraine, because there is a high interdependence between these businesses.

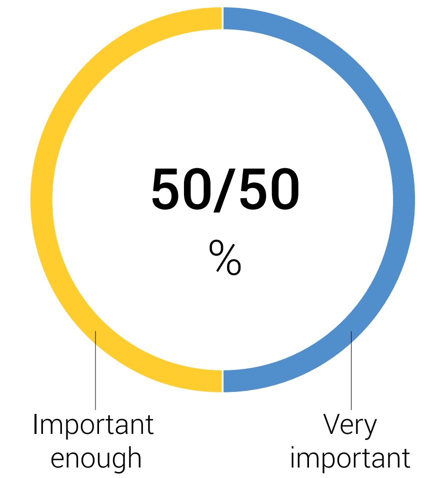
Considering that one of the focuses of the study is to identify trends in the development of industrial design, we selected those involved in furniture production in Ukraine to survey manufacturers. After all, they most often interact precisely with industrial designers. According to the methodology, we interviewed 10 manufacturers who started their business in monitoring cells (Lviv, Odesa, Kharkiv, Dnipro and Kyiv regions). Given the focus of the research directly to designers, the analysis of manufacturers is not representative, but rather was carried out to test hypotheses and compare with the thoughts of designers.

In 2017, the economic development agency PPV Knowledge Networks commissioned by the European Bank for Reconstruction and Development (as part of the EU4Business program) conducted research on the industrial design market in Ukraine. The surveys included design agencies, independent designers, and manufacturing companies from various fields whose business is small and medium in size. In total, 60 design agencies and independent designers and 56 manufacturing companies and brands from different spheres and regions of Ukraine took part in the survey.

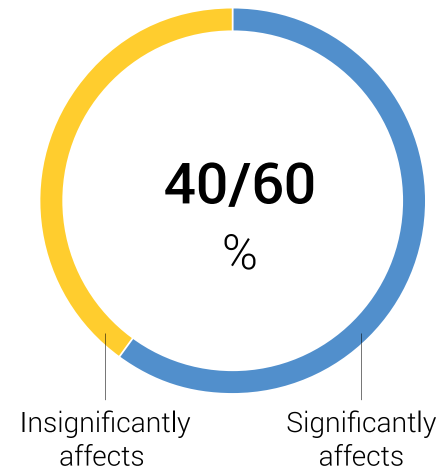
A 2017 study showed that the industrial design market in Ukraine is at an initial stage of development, but it shows a positive trend. Companies and manufacturers use design primarily in terms of its aesthetic function, which increases the attractiveness of their main product or service. Manufacturers using product design, noted its has positive impact on the recognition of their own brand and improved economic performance.

Conducted by the authors in 2019, a survey of manufacturers confirmed all of these trends.

How much does the design determine the demand for manufacturers' products in Ukraine?

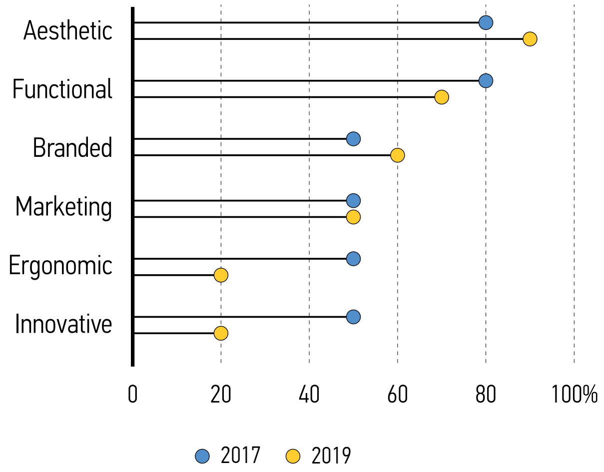


Does design add value to manufacturers' products in Ukraine?

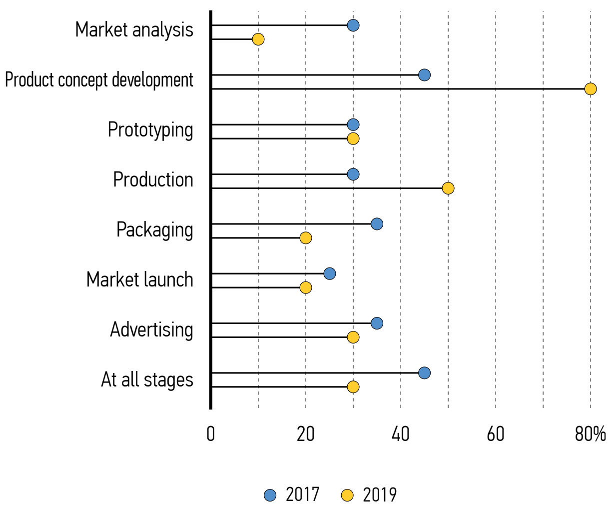


Source: questionnaire survey of furniture manufacturers, the total number of responses – 10

Key design purpose for manufacturers business in Ukraine*



At what stage do manufacturers in Ukraine apply design?*



** Comparison of the results of research on the industrial design market in 2017 and a questionnaire survey of manufacturers in 2019*
Source: data from a questionnaire survey of furniture manufacturers; respondents could select several answers.

Main place of design in the chain value of manufacturers: at the stage of product concept development.

Observations:

- manufacturers continue to perceive design primarily as beauty (an aesthetic function), and accordingly, most use design at the stage of developing new products, so it has not yet become an established conventional business process or business function;
- manufacturers do not perceive design as a tool for innovation and a way to increase competitiveness and business value;
- the passivity of manufacturers to develop and launch new products under the influence of design trends;
- high costs for manufacturers to create prototypes of designer products.

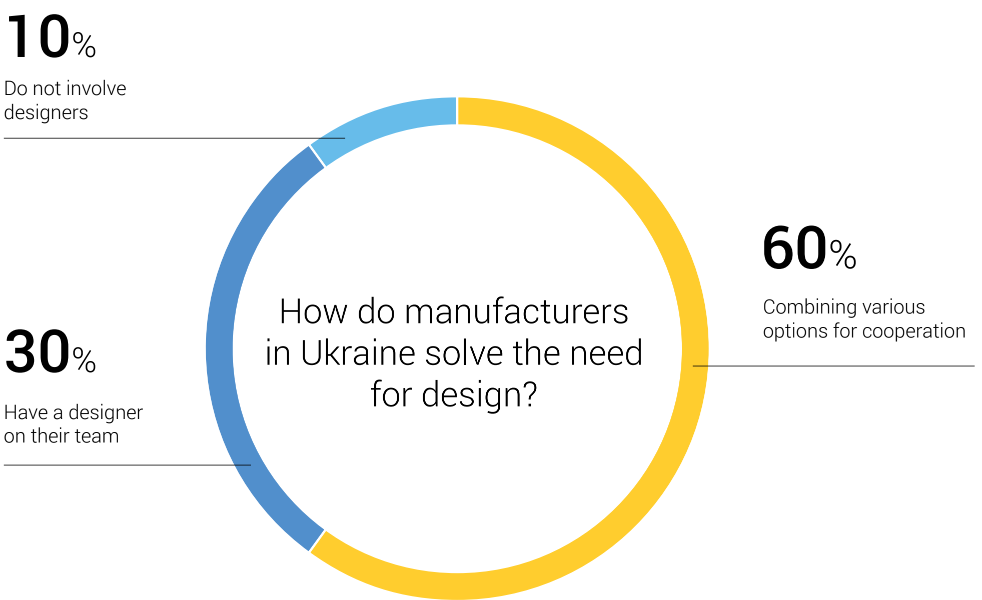
Prospects:

- promotion among manufacturers of the importance of design as an conventional business function, starting from prototyping to working with clients and stimulating the transition to the use by designers of design at all stages of the value chain of their product;
- development of competencies for working with designers (both with full-time and with external design agencies)
- initiatives of financial support for the introduction of innovations by manufacturers, that is, the development and implementation of financial instruments to support the launch of new types of products on the market.

Cooperation under the principle «designer-manufacturer»

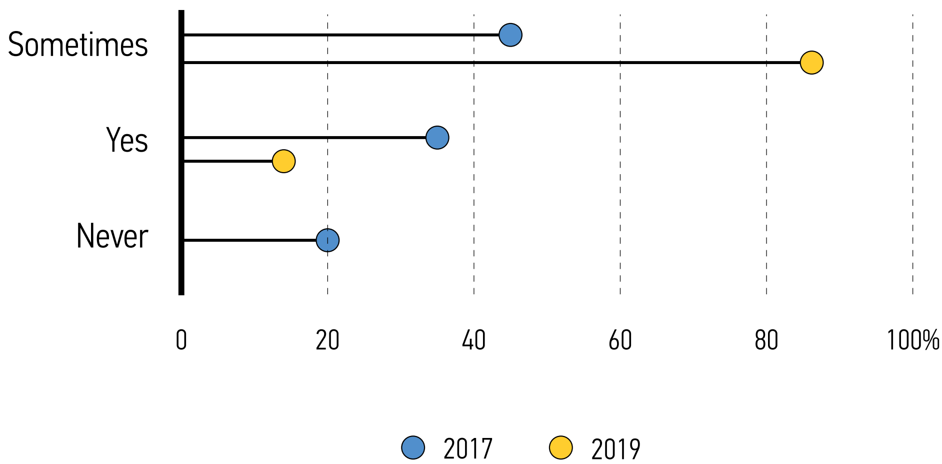
Key aspects of cooperation:

- Low percentage of completed projects due to inconsistency of design ideas of existing technologies and manufacturers' capacities.
- The passivity of the parties in building partnerships.
- The prevalence of oral agreements.

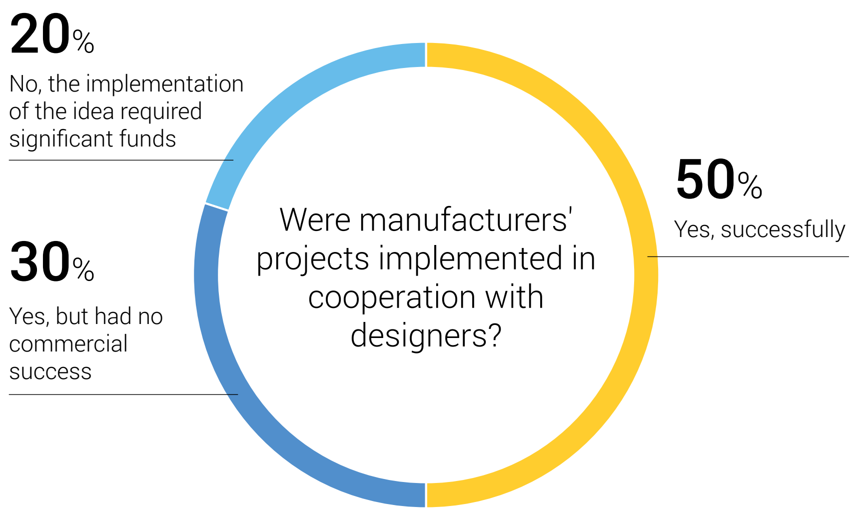


Source: furniture manufacturers questionnaire survey, percent of the total number of responses, total number of responses – 10.

Do designers of Ukrainian manufacturers turn to offers of cooperation? Comparison of the results of a study of the industrial design market in 2017 and a questionnaire survey of industrial designers

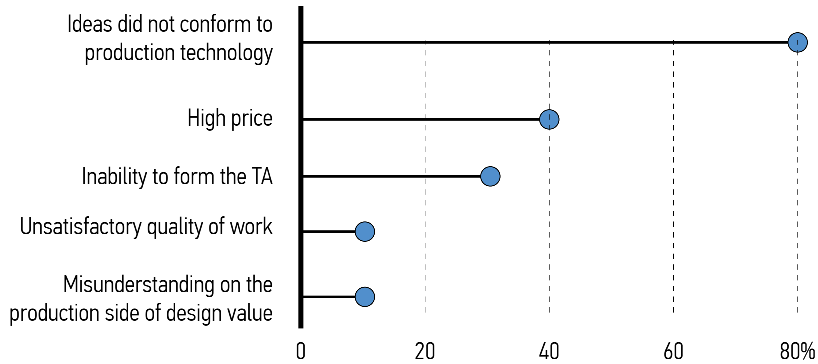


Source: furniture manufacturers questionnaire survey, percent of the total number of responses, total number of responses – 10.



Source: furniture manufacturers questionnaire survey, percent of the total number of responses, total number of responses – 10.

What difficulties did manufacturers have in working with designers?



Source: data from a questionnaire survey of furniture manufacturers; respondents could select several answers.

Observation:

- manufacturers mainly combine various options for cooperation with designers, while having full-time designers and using designers on a contract basis;
- the biggest difficulty for manufacturers is the inconsistency of the ideas of designers with production technologies;
- Most furniture manufacturers regard their cooperation with designers as successful.

Prospects:

- Establishment of interaction mechanisms between designers and manufacturers through standardization of relations on the basis of cooperation agreements. Professional associations, such as the Ukrainian Association of Furniture Manufacturers.

Key manufacturers problems in cooperation with designers:

- The high cost of creating prototypes for design projects.
- Lack of understanding by designers of existing technologies and features of the production process.
- Low commercial efficiency of cooperation due to a significant increase in costs and low domestic solvent demand.

Directions for solving the problem:

- Voucher support for prototyping, certification of new products and the launch of new products on the markets not only for manufacturers, but also for the designers themselves.
- Education among designers about the possibilities of implementing ideas on the basis of the material and technical base of manufacturers.

Business Case
MZPA, Kyiv

Design is not an advantage, but a necessity

www.mzpa.co | +38 050 238-69-57 | hello@mzpa.co

From idea to business

The furniture manufacturing initiative arose when the team worked in a noisy open space. Then the founder Dmytro Hazda came up with the concept of a chair in which one could retire and relax. Interest in the created piece of furniture grew and when office residents began to argue for the right to sit in an unusual chair, the team realized that it could be produced and successfully sold. Thereby the Planet chair appeared, which became a well-known MZPA product and appeared in the offices of leading companies around the world.

> “We realized that this is an amazing thing and we can sell it around the world.

In parallel with the completion of the first product, the company began to develop concepts for furniture and cooperate with designers to launch a line of lamps.

Market and customers

From the very beginning of its activity, MZPA has been guided by the foreign market, primarily the United States. The resonant news was the order of armchairs by Google in June 2019.

> “If you think, then think broadly and globally. If you set sights on, then these sights should be Google.

Products in the United States are ordered both for companies and hotels, and for private homes. The main tool for finding clients abroad for MZPA is the press-releases that they send to American publications.

The greatest difficulty in working in foreign markets is the adaptation of the product to their technical standards and certification. In launching new products, the team works on this principle: the concept is posted on the international portal and, if it receives positive feedback and popularity, it is put into production.

According to the founders, it is difficult for them to concentrate on one niche, although that would be right. Therefore, while they offer various products for various segments of consumers.

> “The re is always a product that attracts the most attention and brings the most money.

They also make a point that the importance of constant analysis of the market and competitors. However, here the company takes an individual approach, because it is difficult to identify who exactly are competitors for each of the products.

Business model

By measuring business performance, the MZPA team sees profit and their own job satisfaction.

> “This is a purely internal thing. Satisfaction from projects, sales, number of customers. We are perfectionists, we are never completely satisfied.

Forming the price of its own products, the company takes as a basis the cost criterion. The administrative costs for royalties of designers, as well as the commission of dealers and distributors, the rate of return are added to the production cost. Also, while laying the profit margins, the target audience is taken into account, which allows you to vary the price depending on the solvency of the customer.

At the heart of the MZPA business model is partnership. There is no full-time industrial designer in the company, and the terms of cooperation are determined for each individual item. At the beginning of its activity, the company independently searched for designers on the Behance[1], platform, now they themselves turn to MZPA with sketches and offers of cooperation. Selecting offers, the team focuses on the item’s compliance with the general product line, as well as potential market demand. An important criterion is also the convenience of export in terms of size, weight and the ability to assemble.

> “The launch of our items is scheduled for a year, so often we are forced to refuse the offers of designers.

Perspective vision

The key to the development of Ukrainian industrial design, the MZPA team sees the establishment of a copyright protection system and contracting. Indeed, today for Ukrainian designers there are high risks of copying ideas and finished products. The company itself faced such a problem when its chair design was unlawfully launched into mass production. Since then, by sending sketches and 3D models to contractors, the company enters into non-disclosure agreements for commercial information, and then another production agreement.

> “Manufacturers may not have the right to sell our product or have permission to sell only under our brand with price negotiation.

Also formalized, according to the founders of the company, should be a process of cooperation with designers with fixing the conditions of ownership, terms of payment of royalties, a way to confirm the number of sales, general obligations and tasks and which of the parties can apply for tenders.

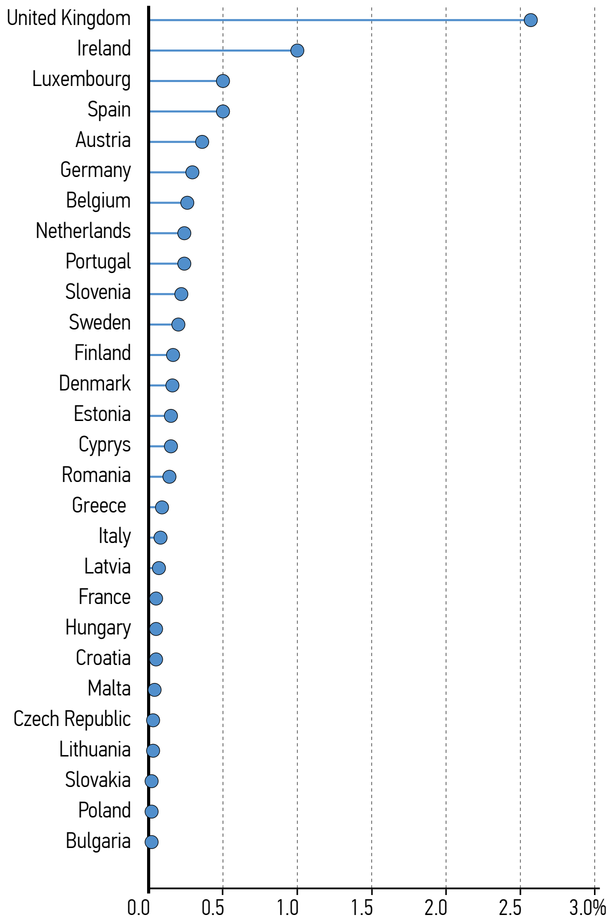
Furthermore, the prospects for the development of exports of Ukrainian design objects, according to MZPA, will increase significantly after simplifying the terms of currency settlements and international payments. Indeed, now it seriously complicates the cooperation of Ukrainian exporters with foreign customers and contractors.

1. https://www.behance.net/

EUROPEAN EXPERIENCE OF THE DESIGN SUPPORT

Design as a constituent part of the European Union (EU) economy

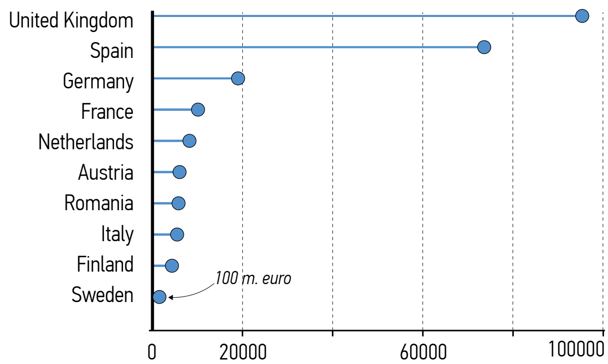
The share of officially working designers[1] in the EU countries relative to the number of population, in 2018[2].



Source: European Design Report: https://www.interregeurope.eu/fileadmin/user_upload/tx_tevprojects/library/file_1543245130.pdf

For comparison, 3,323 SPs and 490 companies are officially registered in Ukraine, but the exact number of employees in companies is unknown.

The top ten EU countries by highest sales in the field of design during 2018[3], m. EUR.



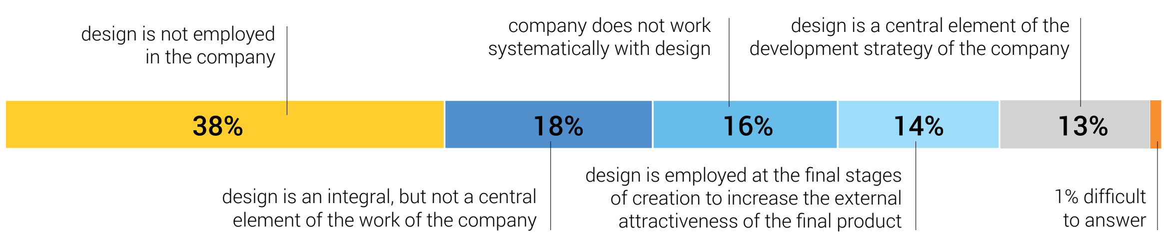
Source: European Design Report: https://www.interregeurope.eu/fileadmin/user_upload/tx_tevprojects/library/file_1543245130.pdf

Design as a constituent part of the economic development of European companies

Design is becoming a key strategic tool for the development of medium-sized European companies (more than 50 people). The longer a company has been on the market, the more likely it is that design is at the heart of its strategy.

The results of the survey conducted in 2015 of more than 14 thousand companies from 28 EU countries under the name "Innobarometer 2015", which included a number of questions about the role of design for business, were indicative. It turned out that only for 13% of respondents, design is a central element in the development strategy, while 38% do not employ it at all.

Features of the design employment by companies in the EU (2015 survey results).



Source: Innobarometer 2015: http://www.designforeurope.eu/innobarometer-2015

1. Designers' activities are determined in accordance with the European Union NACE 74.10. Its detailed description is given below in the section «Design Support Policies in EU Countries»
2. The data may have a margin of error considering the differences in presentation format in the report
3. Sales volume refers to the value of products and services sold in the field of design in the country; GDP per capita in the PPP - an indicator used in the EU to compare GDP per capita in each Member State relative to the EU average (the average value is taken as 100%); if the value of the indicator is more than 100%, then the level of GDP in the country is higher than the EU average.

Observations for European companies (Innobarometer 2015:

- companies with more than 50 employees mostly make design a central element of their strategy;
- manufacturing companies most often recognize design as an integral, but not a central element of their work;
- the longer the company operates, the greater the likelihood that it does not employ design;
- companies that do not introduce innovations, do not employ design systematically

Observations for European companies in the context of the prevalence of respondents by country (Innobarometer 2015):

- design is a central element of the development strategy of companies in Greece, Cyprus, the UK;
- design is an integral, but not a central element of the work of companies in Malta, the Czech Republic, Latvia;
- design is employed at the final stages of creation to increase the external attractiveness of the final product in Austria, Slovakia, Italy, Portugal - similar to Ukraine;
- companies do not work systematically with design: Hungary, Slovenia;
- design is not employed in companies: Switzerland.

Design Support Policies in EU countries

In the EU design is viewed more as an innovative development tool inclusively for different sectors of the economy, rather than as a separate area that needs to be supported.

Based on the results of a study in 2018 on the place of design in the economy of the EU countries, we systematized the data in the table. 2.

The classification of economic activities of the European Union distinguishes a separate class 74.10, which includes:

- fashion design, which includes textiles, models, shoes, jewellery, accessories and other interior items, other fashion goods as well as personal or household goods;
- industrial design - for example, creating and developing designs and specifications that optimize the use, value and appearance of products, including the determination of the materials, mechanism, shape, colour and surface finishes of the product, taking into consideration human characteristics and needs, safety, market appeal in distribution, use and maintenance;
- graphic design;
- Interior design.

This class excludes:
- Web design;
- architectural design;
- engineering design, i.e. applying physical laws and principles of engineering in the design of machines, materials, instruments, structures, processes and systems.

Ukrainian CEA 74.10 “Professional design activities” includes the same areas of design, which makes it possible to compare the economic development of design in Ukraine and in the countries of the European Union.

For comparison, Ukraine has also approved a special CEA for the activities of designers, but it is not divided into subclasses in accordance with different areas of design. Ukraine also does not have a national design development policy, but physical and legal entities in this area are indicated as structural elements of the national innovation ecosystem mentioned in the Strategy for the development of the field of innovation activities for the period until 2030[4].

Observation:

- a direct correlation between the presence of a national policy and the contribution of design to the economy: 14 out of 28 countries have a valid national design support policy, while others include it in other development policies or cultivate separate support strategies; EU countries in which there was no national design support policy or innovation policy in 2018: Croatia, the Czech Republic, Cyprus, Greece, Portugal and Romania; with the exception of Romania, the design industry in these countries is not a significant component of the economy;

- high-quality statistical information as the basis for effective state management of the design development: 16 EU countries have separate subclasses for design as a type of economic activity, which allows to generate and analyse statistical information on various types of design, to develop optimal solutions for various support formats of different types; most of these 16 countries are in the top ten in terms of the contribution of design to the national economy;

- national awards and competitions as a way to popularize and promote design in the country are common in 22 EU countries; however, without institutional backing by programs or support policies, such a component will not provide a high level of design development in the country.

4. Source: https://zakon.rada.gov.ua/laws/show/526-2019-%D1%80

Table 2. The place of design in the economy of the EU countries.

	Approved NACE 74.10 "Specialized design activities"	Approved NACE subclasses 74.10 "Specialized design activities	National design development policy	National design competitions/awards
Austria	+	-	-	+
Belgium	+	+	+	+
Bulgaria	-	-	-	-
United Kingdom	+	-	-	+
Greece	+	+	-	-
Denmark	+	+	+	+
Estonia	+	+	+	+
Spain	+	+	+	+
Ireland	+	-	+	+
Italy	+	+	-	+
Cyprus	-	-	-	-
Latvia	+	+	+	+
Lithuania	+	-	-	+
Luxembourg	+	+	-	+
Malta	+	+	+	+
Netherlands	+	+	+	+
Germany	+	+	+	+
Poland	+	+	+	+
Portugal	+	+	-	-
Romania	+	-	-	-
Slovakia	+	-	-	+
Slovenia	+	+	+	+
Hungary	+	-	-	+
Finland	+	+	+	+
France	+	+	+	+
Croatia	-	-	-	+
Czech Republic	-	-	-	+
Sweden	-	-	+	+

Source: systematized by the authors based on the European Design Report data: https://www.interregeurope.eu/fileadmin/user_upload/tx_tevprojects/library/file_1543245130.pdf

Activities of the European Commission

During 2009-2012, a number of studies were conducted on the initiative of the European Commission on the employment of design for innovative transformations in European countries and its important role for economic growth was recognized.

In 2013, the Commission introduced the main document on the implementation of an action plan for design-driven innovation for the period 2014-2020. It includes 3 strategic directions of activities recommended for implementation at national and regional levels:

1. **Promoting understanding of design impact on innovation:**
   - advocating design's role in innovation to policy makers across Europe;
   - measuring the role and economic impact of design alongside other intangible assets to value creation;
   - applying design methods in multidisciplinary research and innovation programs;
   - development of competencies and the introduction of design-driven innovation in education;
   - facilitating continuous dialogue between key stakeholders of design-driven innovation.

2. **Promotion of design-driven innovations in different industries to strengthen the competitiveness of European countries:**
   - creating opportunities to support the introduction of design-driven innovations in European business;
   - strengthening European SMEs' ability to employ design as a strategic tool for higher value of their goods and services;
   - strengthening cooperation among companies that invest in design as an asset;
   - promotion of design-oriented innovative strategies and practices that enable new business models;
   - integration of design into research and development to enhance the commercial and societal importance of development programs.

3. **Promotion of design as a driver for renewal in the public sector:**
   - building the capacity of public sector administrators to use design methods;
   - introduction of design innovations to improve the efficiency and customer focus of public services;
   - promoting peer learning and cooperation among public-sector actors looking for design-driven solutions.

Table 3
Projects and programs founded by the European Commission to support the development of design.

Program/project	Duration	Objective	Key activities
Programs			
Design for Europe	2014-2016 pp.	Support for design-driven innovations in Europe, led by the UK Design Council with the participation of design organizations, universities and business support organizations (a consortium of 14 organizations).	Case studies, systematization of expert opinions on the impact of design on innovative development and their publication on the program website; conducting a number of events and workshops by experts to develop competencies in design-driven innovations; networking and partnership to incorporate design into innovation policies.
Design for Enterprises	2016-2018 pp.	Training for SMEs, business support organizations on their use of design tools and approaches in business.	A series of free training courses on design-oriented innovations as the basis for modern competitive and sustainable development of SMEs. Full courses - 20 courses across Europe, structured into modules with webinars, e-learning and a series of games. Short courses - 30 one-day courses to present the benefits and possibilities of employing design in an innovative SME strategy.
Programs			
IDeALL – Integrating Design for All in Living Labs	2012-2013 pp.	Creating a common platform among designers and innovative ecosystems.	Exchange of methodologies and experience between design and innovation centres, formal design education institutions to create design-oriented innovations and disseminate them through partner networks in Europe.
EuroDesign – Measuring Design Value	2012-2014 pp.	Creation of prerequisites for the development of innovation policies with the inclusion of design as part of economic development.	Conducting analytical studies on the contribution of design to the GDP (economic impact) of European countries and its importance at the macroeconomic level.
DeEP – Design in European Policies	2012-2013 pp.	Measuring the impact of design-based innovation policies at the micro and macro levels.	Developing theoretical and practical tools for public authorities and private organizations to assess the impact and effectiveness of innovation policies in Europe.
SEE Platform: Sharing Experience Europe – Policy Innovation Design	2012-2014 pp.	The interaction among the 100 state authorities of European countries on the development and implementation of a policy monitoring system and design development programs.	Creating a platform and a benchmarking model based on it for studying current and new trends in design policies and programs across Europe; conducting seminars and workshops for policy makers.
EHDM – European House of Design Management	2012-2014 pp.	Transfer of competences from the private to the public sector on the use of design management tools.	Distribution of design management tools for public authorities; conducting training modules; formation of practical manuals and other publications based on the results of the project.
REDI: When Regions support Entrepreneurs and Designers to Innovate	2012-2014 pp.	Supporting territorial eco-systems and bridging the gap between supply and demand for design services.	Development and dissemination of models for the design integration into innovative SME development processes.

Activities of the Design Council, UK

Businesses supported by Council programs exist on the market longer: 91% of companies work efficiently over the next 5 years.

Businesses supported by Council programs are becoming more active in seeking new opportunities: 85% of companies have participated in various government support programs.

Businesses supported by Council programs are growing on a larger scale compared to others: the average growth over 5 years is 40%.

Businesses supported by Council programs are more productive, with 91% of companies growing the turnover faster than the number of employees[5].

The Design Council is an independent organization founded in 1944 by the UK Government to promote the economic recovery of the country by enhancing the role of design in British industry products.

Main objectives[6]:

- growing the British economy and improving public services through the employment of design in their processes and product creation;
- protection and restoration of the natural and architectural environment through design;
- raising the level of public education (using design tools) on sustainable development;
- promoting the study and advancement of design value for business, the public and the state.

The main activities:

1. Developing a design environment through expert advice from organizations and local governments, working with stakeholders on the role of design in local economic development; comprehensive programs are being developed to realize the economic and social potential of the territories through design[7].
2. Product development through innovative ideas of the Design Council Spark support program launched 2014.

The Design Council Spark provides financial, mentoring, and expertise support for innovative projects. Since its inception, it has benefited 150 entrepreneurs, and 55 of them have received funding and mentorship. The Council has its own network of design experts and mentors involved in this program. The key feature is that the Design Council does not encroach on any proprietary or non-proprietary rights to the ideas and inventions of the participants, but they undertake to contribute a share of the proceeds from further sales of the products to the program fund for its financing for the next year. The fund also attracts sponsorship and charitable contributions. The competition is announced annually, among the applications 10 finalists are selected, who receive:

- £ 15,000 to develop their product with subsequent access to the final pitching to investors in the amount of £ 150,000 to bring the finished product to the market;
- A 16-week training program, which consists of 5 workshops led by expert designers and individual mentorship[8].

3. Social innovations that are implemented through programs to introduce design tools into the work of the public sector, public organizations and social entrepreneurs to improve the level of service for their consumers and achieve effective management within organizations. There are 2 types of programs implemented in this direction:

    - design in the public sector is implemented through training for project teams from local authorities; the aim is to improve the quality of public services in communities through design and introduce design tools for local government decision-making; includes 5 one-day workshops over 18 weeks and 2 coaching sessions for each team by design experts[9];

    - Transform Ageing - a 3-year training program (2017-2019) for social entrepreneurs, healthcare and social services institutions introduce; the goal is to introduce design into social services to better meet the needs of the ageing population; also, within the framework of the program for social enterprises, the opportunity to receive funding in the maximum amount of £ 50,000 for the implementation of their initiatives was providedв[10].

4. Design studies relate to exploring its value in various sectors for economic development and addressing the social challenges of Great Britain. Research topics: market and design environment, public sector and social innovation, business innovation, measurement of design

5. Source: UK 2070 Commission: Call for evidence. Design Council response: https://www.designcouncil.org.uk/sites/default/files/asset/document/UK2070%20response.pdf
6. Source: Governance: https://www.designcouncil.org.uk/about-us/governance
7. Source: Built Environment: https://www.designcouncil.org.uk/what-we-do/built-environment
8. Source: Design Council Spark: https://www.designcouncil.org.uk/what-we-do/accelerator/design-council-spark
9. Source: Design in the Public Sector: https://www.designcouncil.org.uk/what-we-do/design-support/design-public-sector
10. Source: Transform Ageing: https://www.designcouncil.org.uk/what-we-do/social-innovation/transform-ageing

value, design education. In 2019, it is planned to publish research on competencies, the employment of design in infrastructure, healthcare, inclusivity[11].

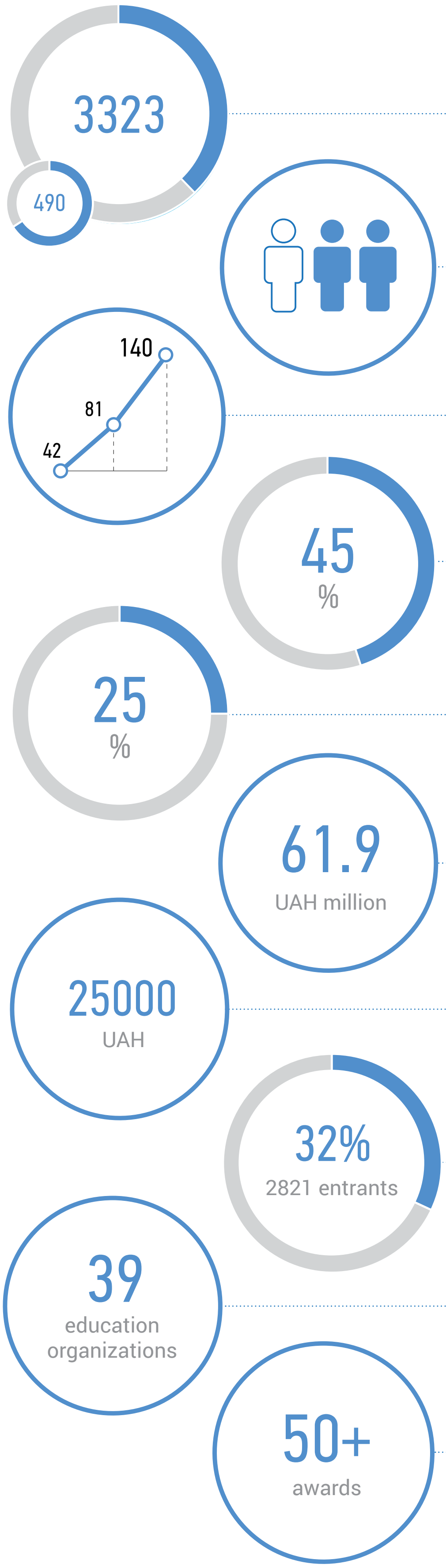
5. Design support integrates programs for academic institutions, companies and other ecosystem participants to better the design employing for their own development. Programs:
   - Design Academy - a 4-day training course for students from the 2nd year of study to postgraduate at the school of design, engineering and economic education institutions that are interested in innovation; the goal is to acquire design competencies and test them to solve problems in innovative projects; an important feature is the student's collaborative work in interdisciplinary teams and the active generation of ideas throughout this course of study[12];
   - custom design support offers a range of educational services in various formats (trainings, seminars, workshops, coaching and mentoring) for business on a commercial basis; the goal is to provide business with design tools to improve products, services and business strategy; customer needs are individually tailored, and the cost depends on the duration of support; during the program period, more than 5 thousand companies across the country have benefited from it[13];
   - Design for Europe (2014-2016) - a design-driven innovation support program led by the Design Council (see Table 2).

Key observations on the european experience, useful for ukrainian practice:

- design can become an effective industry provided the development of policies/strategies for its support and development at the national level - both the individual vertical (sectoral, industrial policies) strategies for the development of design as a creative industry, and horizontal - by incorporating design as a tool in the policy of innovative development;
- the goals of developing and supporting design without integrating its tools into public services and governance will not be achieved (due to the lack of understanding of its value by government officials and policy makers and lack of user orientation), it is therefore necessary to gain competencies by public sector employees at all levels, including design thinking and service design (trainings, workshops, etc.);
- high efficiency of design development support is ensured only by the interaction of all participants of its ecosystem, the involvement of public and commercial organizations that cultivate design and its tools in the development and implementation of state programs;
- educating businesses on the value created by design, and the benefits of its employment at all stages of the product value chain - as an integral part of the implementation of strategic changes at the country level;
- the introduction of collection and analysis of statistics on the NACE "Specialized Design Activities" by the state bodies and the introduction of its subclasses to obtain objective conclusions about the effectiveness of state initiatives to support the design and assess the structure (directions) of its development;
- design support programs should include intersectoral engagement and create collaborative platforms for cooperation of all design ecosystem participants in the country and region.

11. Source: Research & Insight: https://www.designcouncil.org.uk/what-we-do/research-insight
12. Source: Design Academy: https://www.designcouncil.org.uk/what-we-do/design-training-and-education/design-academy
13. Source: Bespoke Design Support: https://www.designcouncil.org.uk/what-we-do/design-support/bespoke-design-support

KEY FACTS



490 companies (LLCs and PEs) and 3 323 SPs for which design is the main activity are functioning in the metropolises of Ukraine (Dnipro, Kyiv, Lviv, Odesa, Kharkiv). 66% of companies and 38% of SPs are incorporated in Kyiv.

One SP corresponds to two off-the-books designers. Survey results show that 70% of self-employed designers and more than one third of designers in agencies are not incorporated.

Taxes paid by designers increased by one and a half to two times each year during 2016-2018. In 2016, taxes paid amounted to almost UAH 42 million, in 2017 – nearly UAH 81 million, and in 2018 – nearly UAH 140 million.

The market is growing: 45% of designers have grown significantly over the last 3 years, with only 7% of businesses declining. The highest growth rate is in design agencies.

A quarter of agency owners who took part in the survey were clueless about their business models.

Over the last 3 years, the total value of public procurement in the centers of the survey (Dnipro, Kyiv, Lviv, Odesa, Kharkiv) amounted to UAH 61.9 million, of which 82% of purchases were carried out in Kyiv. Self-employed freelancers (SPs) were service providers for 70% of purchases.

The cost of most projects in the design market was up to UAH 25 thousand. However, design agencies focus on projects priced over UAH 100 thousand. The cost of industrial design projects is comparatively higher than the average cost of design projects in other areas.

Aggregate licensed admission conducted by educational institutions in design speciality in 2018 was 6,665 for bachelor's degree and 2,133 for master's degree. For comparison, in 2018, 2,293 entrants undertook the bachelor's degree, and 528 – the master's degree.

In five Ukrainian metropolitan areas (Dnipro, Kyiv, Lviv, Odesa, Kharkiv) there are 39 non-formal education organizations providing specialized educational services for graphic and industrial designers.

Since 2009, Ukrainian agencies have received more than 50 Red Dot Design Awards, more than half of them in the Brand&Communication design category.

KEY OBSERVATIONS

Market participants and their projects

- one SP corresponds to two off-the-books designers;
- freelancers are steadily working in the market and are reluctant to switch to work in the company;
- SP is the most common and profitable form of employment for both founders of design companies and for their employees;
- the focus of freelance designers and small agencies on the analogous projects with quick commercial results and minimal effort;
- copying of common (mainly European) trends and a low percentage of original products from Ukrainian designers;
- uncertainty of designers in their own competencies and ideas for entering foreign markets;
- there are no medium-sized and costly projects on the market: there are either very cheap and of low quality, or very expensive and professionally executed;
- The international design community knows the leading Ukrainian “star companies” who receive most of the awards and set trends in the development of the domestic market.

Business of the market participants

- for 45% of designers, the business has grown significantly over the past 3 years, only for 7% the business has declined;
- chaotic development of design businesses, lack of developed strategies and business models;
- lack of economic information about design at the macro level;
- limited growth opportunities due to lack of access to prototyping;
- the audience of design customers (business owners) is getting younger and has a better understanding of the value of design services;
- compared to foreign one, low domestic solvent demand for a design product;
- customers do not understand the differentiation of design prices.

Registered business and taxes

- SPs do not transfer to other organizational and legal forms of doing business;
- the largest number of registered SPs and legal entities in Kyiv: 38% of all SPs and 66% of all companies.
- short-term projects with a cost of up to $ 1,000 prevail.
- annual turnover is generally less than UAH 2 million and is growing due to an increase in the number of small projects.
- the average cost of industrial design projects is higher than in the design market as a whole – up to $ 3,000 and up to $ 1,000 in accordance.

Intellectual property rights in design

- designers are not able to apply the legal framework to their work, emphasize the absence of consultants on intellectual property issues, but are not ready to spend time/resources on such consulting services;
- the unwillingness of designers to assert upon their copyrights, with the key attitude: “if your idea is stolen/copied, then it has value”;
- the prevalence of verbal agreements between designers and manufacturers, rather than contracting;
- designers do not apply copy protection mechanisms to manufacturers of ideas and prototypes;
- most of the production and sales are underground, leaving designers unable to get fair royalties;
- conflicts in the distribution of rights to the created product, including when applying for competitions and exhibitions.

Criteria and quality standards of designers

- design standards are generally identified with state standards in construction and architecture;
- quality standards for products and work of designers within the country are set as vectors by the most renowned agencies;
- participation and victory in competitions, exhibitions is the main factor in the authority (prestige) and quality of the designer’s work in the professional community;
- lack of opportunities for designers to participate in international competitions (lack of access to information on evaluation and selection criteria, financial restrictions for participation);
- design quality standards should only concern functionality, not aesthetics;
- the cost of an hour of work as the main criterion in pricing for design, as a result – high subjectivity and a large variation in market prices;
- designers do not convey to the customer the algorithm and cost of resources for their work, but provide the final solution, while complaining that customers do not understand the value of the design due to the lack of education;
- the difficulty in identifying the influence level only of the design solution on achieving the goals of the customer, hence the problem of forming a quality criterion for the work of the designer;
- the need to formulate and explain quality criteria at the stage of selecting alternative ideas together with the customer.

Formal Design Education

- in the places where the study was conducted, there are 33 institutions of higher education providing training for students in the specialty 022 “Design” for bachelor’s and 24 institutions providing training for master’s degree. There is only one bachelor’s degree program in design in the Odesa region and no master’s program in design;
- the largest number of design training schools is in Kyiv, which further affects the number of applicants, students and graduates.

Non-formal design education

- lack of a unified database of available courses and other educational opportunities for designers. The authors of the study were forced to collect information from several sources (social networks, specialized media for designers and IT workers);

- the most popular topics of educational and public events are customer interaction and pricing algorithms in the market;
- most courses and events are organized in Kyiv, the least – in Dnipro;
- the most popular educational product of non-formal organizations – 3-month courses costing up to UAH 8,000.
- most of the industrial designers consider their education and experience sufficient for doing business and market understanding;
- There are significantly fewer courses and events for industrial designers than for graphic designers.

Ecosystem participants

- unwillingness of designers to devote time to interaction with other participants of the ecosystem and joint non-profit initiatives;
- inconsistency of events and other activities between ecosystem participants;
- absence of expert core in the field of design around which the ecosystem would develop;
- unwillingness of designers to exchange experience;
- randomness of initiatives in the ecosystem;
- formal design education slows down the qualitative growth of the design sphere in Ukraine, does not satisfy the need of designers and companies for competencies relevant to the market;
- designers are not interested in finding new financial opportunities, despite complaining about a significant lack of funds;
- demand stimulates designers to develop;
- the greatest need of designers is the understanding of design by customers
- the design community is actively developing and launching important initiatives, but is closed to cooperation with other ecosystem participants;
- for industrial designers, financial support from the ecosystem is the priority;
- manufacturers recognize that design is important for their business and increases added value, but limit directions of its employment;
- manufacturers do not perceive design as a tool for innovative improvement of their products;
- passivity of manufacturers in developing and launching new products due to the influence of design trends;
- high costs for manufacturers to prototyping of designer products.

Design as a component of the economic development of European companies

- a direct correlation between the presence of a national policy and the contribution of design to the economy: 14 out of 28 countries have a national design support policy, while others include it in other development policies, or elaborate separate support strategies. EU countries that lacked either a national design support policy or innovation policy in 2018: Croatia, the Czech Republic, Cyprus, Greece, Portugal and Romania. With the exception of Romania, the design industry in these countries is not a significant component of the economy;

- high-quality statistical information as the basis of effective state management of the design development: 16 EU countries have separate subclasses for design as a type of economic activity, which allows to generate and analyse statistical information on various types of design, to develop optimal solutions for various support formats of different types; most of these 16 countries are in the top ten in terms of the contribution of design to the national economy;

- national awards and competitions as a way to popularize and promote design in the country are common in 22 EU countries; however, without institutional backing by programs or support policies, such a component will not provide a high level of design development in the country.

RECOMMENDATIONS

1. **To improve the business competence of future designers by** introducing the appropriate components into the curriculum of students of the specialty 022 "Design" or by presenting special programs/online courses/trainings (for higher education institutions).

2. **To introduce educational campaigns** (informational and training) among freelance designers regarding the benefits and methods of doing business legally. The transfer of the activities of designers working illegally into the legal field by raising awareness, which is a simple and fast way to increase the economic contribution of design to the Ukrainian economy.

3. **To stimulate the integration of SPs into full-fledged agencies** (limited liability companies and private enterprises). This will allow them to increase their resources, the number of projects, their size and cost. Companies look more attractive to foreign clients than individual contractors (for state authorities).

4. **To encourage manufacturers financially to employ design.** Manufacturers often refuse to use innovative design solutions because of the high cost of prototyping and the product itself. For example, voucher support could have reduced financial risks (for business support organizations).

5. **To promote design value among consumers and manufacturers.** The study showed that the main role of design for manufacturers is aesthetic and functional. The innovative component turned out to be the least interesting for them, although it adds value to the product the most (for participants in the design support ecosystem).

6. **To make the mechanisms of protection of intellectual property rights in design work.** Encourage existing copyright protection tools to work in the Ukrainian design market (for public authorities).

7. **To introduce quality standards in design.** Currently, there are no standardized procedures for designers to work with customers and contractors, no classifications and quality criteria for designer products. This leads to a lack of understanding of the value of design by customers, intuitive pricing and a large number of analogous copied projects with low cost (for the institution of the design development).

8. **Creating a design competency framework.** So far, MES (Ministry for Education and Science) has developed a general competency descriptor for the specialty 022 "Design". There are no detailed descriptions of competencies, as well as design specializations. It negatively affects the quality of training programs and causes the limited skills of young specialists who only enter the labour market after graduation (for the Ministry for Education and Science of Ukraine).

9. **Higher education institutions in Dnipro and Odesa should increase the enrolment in the specialty 022 "Design"** for bachelor's and master's programs and provide these programs with qualified academic workers. Non-formal education organizations are developing well in these cities, indicating the demand for design education that local higher education institutions cannot yet satisfy (for higher education institutions).

10. **Reviewing the number and quality of state-supported training programs in the specialty 022 "Design"**. There is a big difference between the licensed volume, the state order and the actual number of applicants. In addition, a deeper specialization of programs should be introduced, which will allow higher education institutions to meet the real requirements of the design market in Ukraine, and to provide graduates with more employment opportunities (for the Ministry for Education and Science).

11. **Co-financing the existing design awards from the state budget for and encouraging the creation of new ones.** Recognition at such a level will significantly increase the credibility and attractiveness of designers among Ukrainian clients, especially large companies (for public authorities).

12. **Strengthen the role of governmental and non-governmental institutions in the design support ecosystem.** This will help to establish links between market participants and increase awareness of existing and potential sources of support and development (for state authorities, formal education institutions and non-governmental organizations).

13. **Creating a panel of respondents to further monitor the status of the design.** The proposed monitoring frequency (once every 3 years) will allow to qualitatively monitor the development trends of the design market and create effective solutions to its problems, and the constant panel of respondents with a survey once a year (or more often) will optimize the conduct of express research and allow to get intermediate results that would describe the state and expectations of the design market (for authors and initiators of the study) (see Methodological recommendations).

14. **To approve subclasses of NACE 74.10.** "Specialized design activities." The authors of the study were unable to establish the contribution of industrial design to the economy, since CEA 74.10 has no subclasses at all. The introduction of subclasses will help to better understand the level of development of individual design areas, the need for their regulation or stimulation (for the State Statistics Service).

15. **Create a State Agency for Design Development as an institution** that would help develop the design ecosystem and stimulate its growth in Ukraine (see Strategic Approaches Recommendations).

Methodological recommendations

The authors of the study aimed to draw up a design market research methodology that would be universal and effective, regardless of the regional context.

Barriers to research

During the research, the authors found it impossible to collect all the methodology provided information due to lack of data and objective circumstances independent of the researchers:

- To find out the number of registered SPs and legal entities under the CEA 74.10 "Specialized design activity" in the dynamics is problematic. But, the territorial bodies of the State Fiscal Service can provide relevant information at the time of receipt of the official request.
- It is impossible to collect complete information about the number of applicants, students, graduates, scientific and teaching staff of the departments of design and student exchange programs within a short period of time. The Ministry for Education and Science does not agree to provide systematic data, and the Unified State Electronic Database on Education, to which the ministry itself refers in official responses to requests, contains incomplete or contradictory information. Higher education institutions often do not respond to formal requests.
- It is impossible to establish the contribution of certain types of design, because all of them are combined in one CEA 74.10 without division into subclasses.

Effective research methods

Instead, the authors suggest a number of approaches that have proven effective:
- The total amount of taxes paid over the years can be determined by submitting official requests for public information.
- Focus groups and in-depth interviews are effective methods of collecting information to identify trends and problems in the design market. To track the dynamics of the market and the accuracy of research, a permanent panel of respondents should be created, which would allow the use of longitudinal research methods.
- The authors consider case-based research to be an effective method of conducting field research in terms of access to at least one research object.
- Online questionnaires are an effective method of collecting information, as it allows to collect large amounts of data in a short period of time. However, this method requires efforts to disseminate the survey and communicating it properly.

In-depth design studies (individual sub-industries), which would include a wide range of the above methods, are recommended once every 3 years. Such a frequency of monitoring will allow to qualitatively monitor the development trends of the design market and create effective solutions to its problems, taking into account the political decision-making cycle (political cycle of strategic planning).

The constant panel of respondents surveyed once a year (or more often) would optimize the process of conducting an express research and will allow to get intermediate results describing the state and expectations of the design market (for authors and initiators of the study) (see Methodological recommendations).

Panel research

To keep track of the dynamics of the design market (as a creative industry), we recommend creating and launching a tool – a graphic design panel, an industrial design panel, and the like. Such studies are based on the UN recommendations for Economic Tendency Surveys (ETS, Handbook on Economic Tendency Surveys, Dec 2016).

The goal of the ETS is to timely signal cyclical changes in the economy. This may be a Business Tendency Survey (BTS) or a Consumer Tendency Surveys (CTS)

The principle of choosing questions for the questionnaire:

- questions should measure the development of business activities in the early stages (to identify changes in the economic cycle in a timely manner)
- questions should reflect topics that are dependent on changes in economic conditions/environment;
- questions should primarily address estimates, expectations and plans, although some may contain quantitative information requests;
- In addition to questions on the business cycle, question about restrictions and barriers can be added.

The number of questions should be kept to a minimum, with best practices – 10 questions for a monthly survey, in quarterly and semi-annual questionnaires, several additional questions can be raised. The type of questions – qualitative assessment with predetermined assessment options, for example – remained unchanged, worsened or improved, worsened and the like. Frequency – a balance between the burden on respondents and the organizer of the survey and the need to timely signal about economic development. Best – monthly, minimum – quarterly survey.

The design of the survey should comply with the requirements of the international standards of the Joint Harmonized EU Programme (EC DG ECFIN, 2014). The survey shall be conducted no later than the 3rd week of the current month, the results shall be published no later than the following month.

For panel research on design in Ukraine, we recommend the following:

- Draw up a panel of respondents, taking into account the total number and structure of participants in the design market (universe), as determined by this research. In our study, for the first time the number of businesses (SP, LLC/PE) in the regions was determined – these figures can be taken as the basis for the formation of a representative sample. The factors outlined in this study (legality/illegality, size, regional distribution, etc.) can also be taken into account when sampling for a panel study.

- Invite companies and freelance designers to participate in a panel research through ecosystem participants in their respective cities.
- Identify no more than 5 questions (whether the turnover has increased during the last quarter, whether the turnover will increase in the next 3 months, whether employees were hired in the last quarter, or are planning to hire employees in the next quarter, etc.).
- Conduct a panel research on a quarterly basis at national level.
- Inform the media widely (especially in social networks) about the results – trends, market sentiment.

The authors of the study realize that such a panel research will not comply with the best scientific sociological practices. At the same time, at this stage of development of design and data availability, this will allow us to have a permanent anchor tool for assessing the development of the design market(s) in Ukraine.

Recommendations for strategic approaches (policies)

The study has shown that design (in particular graphic design) is actively developing, creating jobs and generating tax revenues. We also found that industrial design is in its infancy and is suffering from a lack of market tools and a low level of customer education, the active development of non-formal education and the lack of entire classes of ecosystem participants. Together, these factors indicate, on the one hand, the active development of markets, and on the other hand, the presence of several market failures: when the free market is not able to solve the issue and when intervention at the state level can help.

Design development issues where intervention at a strategic level (in order of importance) is justified:

1. **The lack** of transparent **mechanisms** for calculating and paying **royalties** to industrial designers.
2. **Molecularity of the industry** – a large number of independent entrepreneurs and a small number of large agencies, despite the higher economic performance of the agencies.
3. **Lack of business competencies** among designers, in particular among graduates of higher educational institutions.
4. **Low activity of manufacturers in attracting industrial designers** to develop new types of products. **Lack of financial resources** from manufacturers to employ design.
5. **Lack of** knowledge and **skills of interaction with designers**, especially industrial ones, among manufacturers.
6. **Lack of recognized design quality standards** by market participants and relevant pricing principles.
7. **The lack of passports of professions,** which makes it impossible to develop specializations in educational programs and improve the quality of non-formal education programs.
8. A high proportion of designers in the underground economy (illegal activity).
9. **The lack of** graduation of **designers** by universities in **Odesa** and **Dnipro**.
10. **Lack of** continuous **monitoring** of design development.

There are two approaches to addressing these 10 essential issues: the state should help design where it cannot help itself, and not complete tasks that can be better accomplished by private players. Strategic approaches should be aligned with other policies to avoid duplication and conflict. There is a risk/desire to copy the best models and practices (for example, the UK Design Council) without taking into account the Ukrainian institutional context and the stage of development of the economy as a whole.

Not to replace, but attract the players of the design ecosystem.

In Ukraine, the design ecosystem is being actively formed (see the section “Design Support Ecosystem in Ukraine”), mainly represented by private companies and public initiatives. State intervention should be positive for the development of this ecosystem – to attract existing participants as performers, partners and experts (to finance projects, to attract as contractors and experts), as opposed to creating parallel mechanisms and structures or leveraging private players’ business models by providing free services.

To combine horizontal and vertical policies.

Design is an important tool for other horizontal strategies: innovation, SME development, spatial development, education, regional development and the like. At the same time, design is one of the 12 creative industries in Ukraine and requires an industrial (vertical) policy for the development of both industry and sphere. It is necessary to take into account the existence of other thematic, brach and sectoral policies, policy instruments and institutions (policy coordination). Otherwise, conflicts (wars for subjugation, control and resources) and functions duplicates can be triggered.

Recommended strategic approaches to address these design issues:

1. Development, in collaboration with stakeholders, piloting and implementing, through the ecosystem participants, framework models for the design industry – royalty accrual and payment mechanisms, competence frameworks and passports of professions, design quality standards, and the like.
2. Development and implementation of financial instruments to expand the use of design by manufacturing companies, such as voucher programs.
3. Educational campaigns (including those with a training component) to explain to designers the advantages and methods of doing business legally.

4. Information campaigns among authorities to increase the use of design by authorities, especially local and municipal institutions.
5. Development and implementation of financial and non-financial tools to encourage designers to associate into agencies, such as start-up grants, voucher programs, mentoring and the like.
6. Development and implementation by the councils of the largest cities of Ukraine (Dnipro, Kyiv, Lviv, Odesa, Kharkiv) of medium-term design development strategies.
7. Structuring and dissemination of teaching materials for the development of business competence training in higher education institutions and in non-formal education.
8. Launch of a design Support service for intellectual property rights – analogous to the European IPR Desk.

Given the potential of the industry and the growth rate of design as an industry, we recommend (9) to create the State Agency for Design Development (SADD) at the institutional level – a small state institution whose activities should focus on solving 10 significant issues that impede the development of the design industry in Ukraine, in collaboration with market and ecosystem participants.

So, the recommended functions for the State Agency for Design Development (SADD) are:

1. **A platform for developing the necessary framework conditions for the market** – for developing mechanisms for paying royalties to industrial designers, quality standards, competency frameworks, process passports etc.

2. **Development of tools for design development and coordination of their implementation** – development, piloting and support of implementation (through other state funds and programs, such as UCF, SFRD and regional programs) of business support tools through design and development of design as a creative industry (voucher programs, information campaigns, training modules and programs, information resources, etc.).

3. **Expert support of authorities in the development of the local design ecosystem** – assisting local governments in opening new educational programs in higher education institutions, selecting and implementing tools to support business through to design, and supporting design as a creative industry.

4. **Analytical centre** – a source of data on the development of design in Ukraine, lobbying for necessary changes in other authorities or systems.

5. **Support service for designers in matters of intellectual property rights.**

The issue of creating a museum and/or institute of design to promote the field requires further consultation with stakeholders. As of 2019, there is no established position on the necessity and feasibility of creating such institutions.

Material issue	Role/Functions of SADD	The role of ecosystem and market participants
Lack of royalty mechanisms	• a platform for the development of royalty mechanisms – between manufacturers and designers; • to order pilot projects of mechanisms with industry associations; • to lobby for the inclusion of a mechanism in innovative development strategies (in particular, intellectual property policies); • creation and coordination of the Ukrainian analogue of IPR helpdesk – a project that would provide qualified assistance to designers in the field of intellectual property, legal aspects of doing business, etc.	• join in the development and piloting of royalty mechanisms in design (industry associations of manufacturers and professional associations of designers) • experts for the Ukrainian counterpart IPR helpdesk.
Molecularity of the industry	• designing (developing) tools to encourage designers to associate into agencies, in particular start-up grants, voucher programs, and lobbying for their inclusion in financing programs (regional programs, State Startup Fund).	• to be the managers of producer incentive programs (operators of support programs are participants in the ecosystem).
Lack of business competencies	• a customer of methodological materials for the development of business competencies in institutions of higher education and non-formal education; • distribution of materials in formal and non-formal education (lobbying for universities).	• developers of teaching materials (project executors are ecosystem participants).
Low activity of manufacturers	• designing (developing) tools to encourage manufacturers to employ design, in particular voucher programs, and lobby for their inclusion in financing programs (SFRD, UCF, regional programs); • to order standard technical tasks for design work for authorities and municipal institutions and distribute them among target audiences; • to lobby for the inclusion of tools in the SME development strategies, regional development, etc.	• to be the managers of incentive programs for manufacturers (operators of support programs are ecosystem participants) • joint projects with SADD on the promotion of design (industry associations) • developing technical specifications for design works for authorities and municipal institutions (contractors).
Lack of interaction skills with designers	• designing (developing) tools to encourage interaction (joint pilot projects, voucher programs) and lobby for their inclusion in financing programs (SFRD, UCF, regional programs).	• to be the facilitators of interaction incentive programs (operators of support programs are ecosystem participants).
Lack of design quality standards	• a platform for the development of quality standards – for manufacturers/customers and designers.	• to be involved in the development and implementation of standards (industry associations of manufacturers and professional associations of designers).
Lack of passports of professions	• a platform for the development of passports of professions; • customer of projects for the development of passports of professions; • promotion of developed passports in higher education institutions for changes in existing ones and planning the new curricula.	• joining the working groups on the development of passports of professions; • carrying out projects for the development of passports of professions.
Illegality	• developing formats of new educational programs for entrepreneurs and microbusiness on the benefits of legal activities (modules, campaigns, information resources); • coordination of implementation with business development organizations, the SME Development Office; • involve (on a commercial basis) formal and non-formal education players in the implementation of programs.	• introducing educational modules, information campaigns and trainings for entrepreneurs and micro-businesses;
Lack of designers (Odesa, Kharkiv)	• collaboration with authorities and local educational institutions to launch new programs.	• to join as experts in program planning and implementation.
Lack of monitoring	• a platform for the coordination of methods for analysis and monitoring of design development; • an owner of open data, data support; • lobbying for changes in methodologies and surveys (State Statistics Service – for statistics, Ministry for Development of Economy – for monitoring SMEs, MON – for data on education).	• to join as experts and executors (ecosystem players); • coordination of monitoring financing projects (UCF).

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- Belka&Strelka
- volo.design
- We.design
- Creative design school
- Pinsel AR
- Vataga Agency
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