CREATIVITY AND INNOVATION IN THE DESIGN OF PUBLIC SERVICE ANNOUNCEMENTS: CLASSIFICATION AND DESIGN MODELS

Nataliia SKLIARENKO [iD] *, Ivan GRYSHCHENKO, Olena KOLOSNICHENKO [iD],
Natalia OSTAPENKO, Marina KOLOSNICHENKO [iD]

Department of Ergonomics and Design, Faculty of Design, Kyiv National University of Technologies and Design, 2 Nemyrovycha-Danchenka Street, 01011 Kyiv, Ukraine

Abstract. In the study, we analyzed the relationship between creativity and innovation in the design of public service announcements. Their synthesis became the basis for the creation of dynamic visual communications that changed the perception of social message. Using widely known examples of public service announcements, we rethought the content and project features of such phenomenon as public service announcement from a design point of view. We consider innovative public service announcement as a set of dynamic processes which are based on different types of interactions. Therefore, we put a focus on the integration of visual communications with the environment and, moreover, with a human being as an integral part of the information message. The study resulted in the classification of innovations in modern social advertising, which is based on creative experiments related to composition, human sensory sensations, communication and environmental technology. It has been proven that the creation of creative artistic images is based on universal design models, formed as a result of the synthesis of design thinking and innovation and, therefore, they are suitable for solving a wide range of social problems. The study substantiates the system of strategic goals for the development of innovative public service announcements which are aimed at sustainable development of society.

Keywords: creativity, design thinking, dynamic visual communication, innovations, integral designing, public service announcement, sustainable development.

Introduction

Public service announcement (PSA) penetrates deeper and deeper into the life and consciousness of society. Everyday people see this advertisement on billboards, on television screens, on the pages of newspapers and magazines; also, they come across such kinds of advertisements on the Internet. Public administrations as well as non-profit organizations take on the functions of promoting socially important information through various systems of visual communication, focusing on the problems of society and the need for sustainable development of

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*Corresponding author. E-mail: *skliarenko.nv@knutd.edu.ua*

society (Goodwill, 2019). With a constantly changing audience and a rapidly renewing media landscape, there is a continuous search for various means and methods of mass communication to engage the audience into solving social problems (Goodwill, 2019). We realize that it is becoming increasingly difficult to capture a person's attention, since lots of the information is no longer perceived effectively in an environment overloaded with "information garbage" (Skorupa, 2014; Tungate, 2007). Research on the effectiveness of PSA is connected with various problems such as environmental issues (Searles, 2010; Schartinger et al., 2020; Skliarenko et al., 2021), crime, drunk driving (Sar & Anghelcev, 2015), drug addiction and smoking (Bigsby et al., 2013), human immunodeficiency virus infection and acquired immunodeficiency syndrome (AIDS) prevention (Treise & Weigold, 2001) and *etc.* However, scientists et al. (2017), and Docherty (2017) argue that design is the strategic basis for improving the effectiveness of social initiatives through innovation, and design thinking provides the value of knowledge within the innovation process. The introduction of artistic components, creative forms and innovations in the design of information messages attracts people's attention, forming the context of socio-cultural communications on different levels (Pryshchenko, 2019).

Over the last ten years, we have seen the emergence of innovative forms of social advertising. These are moving structures, visual effects, as well as living plants, bacteria, insects, animals, people and even natural processes and phenomena that become an integral part of visual communication. Moreover, we can note that visual communications are being transformed today. They are no longer static advertising media, but processes that form different types of interactions between visual information, people and the environment. Such changes in visual communications are aimed at improving the effectiveness of the perception of basic human values and the formation of social and environmental culture of society. At the same time, the space of dynamic visual communication is in a situation that has no commercial incentives, and this allows for a freer implementation of design thinking and experimentation. The synthesis of design thinking and social innovation opens up perspectives for finding new solutions to the problems society is facing (Docherty, 2017). By conducting this research, we want to promote a better understanding of innovative processes in the design of PSA and go beyond the traditional approach to the visualization of social messages that no longer cope with the functions of modeling the behavior of society. Therefore, we seek to systematize knowledge about innovative design methods, types and methods of their implementation in practice, which will provide an opportunity to form a theoretical scientific basis for effective social development of design in the future.

It should be emphasized that the phenomenon of innovative dynamic PSA, which includes both people and the environment, has not been definitively studied so far, which indicates the scientific novelty of the work. Given the urgency of the problem, the aim of our study is to classify and theoretically substantiate the basic schemes of designing innovative social advertising, as well as to summarize the latest trends in the field of visual communications.

1. Methodological concept of the study

The research is interdisciplinary and has a systemic character, which is determined by the integral specificity of modern objects of social advertising. They represent a dynamic innova-

tive communication system that integrates visual images, people and the environment as its structural parts. The methodology of research of such social visual communications involves the implementation of the following three stages, which are important for effective results.

At the first stage it is necessary to analyze and systematize the research material. This will allow us to create a powerful base of creative examples of PSAs from all over the world. More than 200 samples of advertising created by world-famous advertising agencies were selected for analysis, including *BBDO*, *DDB Worldwide*, *Saatchi & Saatchi*, *Ogilvy*, *Forsman & Bodenfors*, *Leo Burnett Worldwide*, *BETC* and others. They have been key players in the global advertising industry since the early twentieth century, and their work has great potential for ideas and unexplored opportunities that are ahead of their time (Tungate, 2007). These samples contain effective innovative tools that lead to dynamic interaction with the environment and a human, as well as radically change the meaning of the word "communication". Their significant diversity, differences in conceptual, constructive, spatial and communicative interactions will be a useful base for the formation of theoretical foundations for the design of dynamic PSAs.

In the course of the research we use empirical methods – observations and comparisons. These methods allow us to assess the location of the information message in the context of a natural and socio-cultural environment as well as to identify the main factors influencing the formation of its design model. The difficulty of the analysis lies in the fact that examples of innovative PSAs are presented without proper scientific justification, mainly as an impressive illustrative example of creative design at the local level. In addition, the intense pace of life and development of the advertising industry leads to the rapid loss of creative examples of PSAs among the vast mass of rapidly renewed commercial visual communications. Therefore, there is a need to create a systematized base in order to highlight the essential properties that have an applied strategic nature for the design of dynamic social communications.

The second stage of the study includes selection and classification of innovations that can radically change the properties of the entire system of visual communications and, accordingly, it includes a new approach to the analysis of its perception. Based on a systematic approach, we use a number of design analyzes, including functional, constructive-technological, compositional, artistic and figurative, to identify the innovative properties of PSA objects. To systematize information, we use the method of data classification which allows to consistently detail the properties of different sets of objects, divided by certain characteristics, and to take into account the processes of integration of different types of innovations within a single visual message. Non-standard creative solutions push to overcome the traditional hierarchical classification scheme and make us take into account the dynamic changes caused by the presence of the human and the transformation of natural processes.

The third stage is the formation of design models of innovative visual communications and evaluation of the parameters of their effectiveness from the standpoint of design. At the basis of the innovative model of PSA design creation process we have put the method of two cycles integration – analytical and synthetic design (Taura & Nagai, 2017). This allows us to consider modeling as a heuristic process of creating a material structure of the information carrier based on a systems approach involving components of the surrounding space. Such components include natural phenomena, cultural and historical factors, morphological

parameters of material structures, structural and technical capabilities and an individual with his social needs. Creating a design model is a universal synthetic nature, so we can apply the model to a number of similar systems in similar modes of operation. In the future, this will expand the use of project models to solve a wider range of social problems. Based on the visual analysis of the studied samples and the formed classification, it is possible to give recommendations for the design of innovative objects of social communication).

2. Results of the research

As a result of the research, we identified specific features of innovations in PSA, formed their classification and theoretically substantiated the choice of design models of dynamic visual communications that can be applied in practice.

2.1. Synthesis of innovation and creativity in social advertising

Design has always sought to capture the attention of consumers, to make design developments benefit consumers, manufacturers and society as a whole (Dahlen, 2021). Today, design is used to help solve social issues by combining innovations and creativity (Chick, 2012). We see innovation in the design of social advertising as a form of dynamic social development and a transforming force of society associated with creativity and the latest concepts. Sources of innovation in the social sphere are changes in the external environment, advances in science and technology (Vorobchuk & Skliarenko, 2022; Kolosnichenko et al., 2021) and social innovations that lead to the formation of a dynamic perception of advertising messages. Ambient advertising and guerrilla marketing are now very common in the world (Levinson & Lautenslager, 2009). Ambient communication is today an unconventional method of messaging that uses elements of the urban environment to convey social messages and involve people in solving social problems. This exciting method of communication is creative and used as an effective tactical tool in social campaigns (Sorrentino, 2020). Its effectiveness is not achieved through economic investment, but through the use of creative energy and imagination (Levinson & Lautenslager, 2009). It has been proven that social ambient advertising, located in unexpected and unusual places, has a stronger impact on consumers compared to traditional advertising media (Hutter, 2015). It surprises people, seeks to create positive impressions and emotions, which provides increasing relevance. The creation of such dynamic visual communications is based on the mechanism of the dynamic nature of associations (Taura & Nagai, 2017). They are more complex than the static associations to which we are accustomed and which are centered on specific concepts.

The synthesis of innovation and creativity also results in the use of living beings, such as animals and humans, as an integral part of social initiative. The real presence of people in the advertising message is an innovation that encourages communication. However, with the help of innovative computer technologies, designers have the possibility to transform the real environment into the virtual one to program people's thinking and behavior and provide a virtual presence in PSA.

As a result, the active use of associations as the way to find new solutions makes it easier to realize the social importance of the innovative design systems, which include environment, natural phenomena and processes, people and living creatures. The emergence of creative innovations in social advertising outlines new prospects for the development of visual culture and society as a whole.

2.2. Classification of innovations in public service announcement and their design models

We have formed a classification of innovations used in the design of social communications. From the standpoint of design technical, technological, organizational and environmental innovations can be considered as the most effective creative solutions (Figure 1). Project models, created on the basis of a combination of creative concept and innovation, demonstrate the emergence of a dynamic artistic image.

The group of technical innovations is represented by new or improved material objects, resources, elements, which are structural parts of the social message, which in its turn acquires a dynamic character. This group involves the use of a movable structure of a technical object to create an artistic image. The communication channels of this group are social advertising on/in transport, on escalators and in elevators, as well as in the form of dynamic installations of out-of-home advertising. Their main advantages are the duration of exposure; people see this social advertising constantly throughout the day. The advertising message "comes to life", and its speed and constant movement allow it to convey information to a large number of individual viewers.
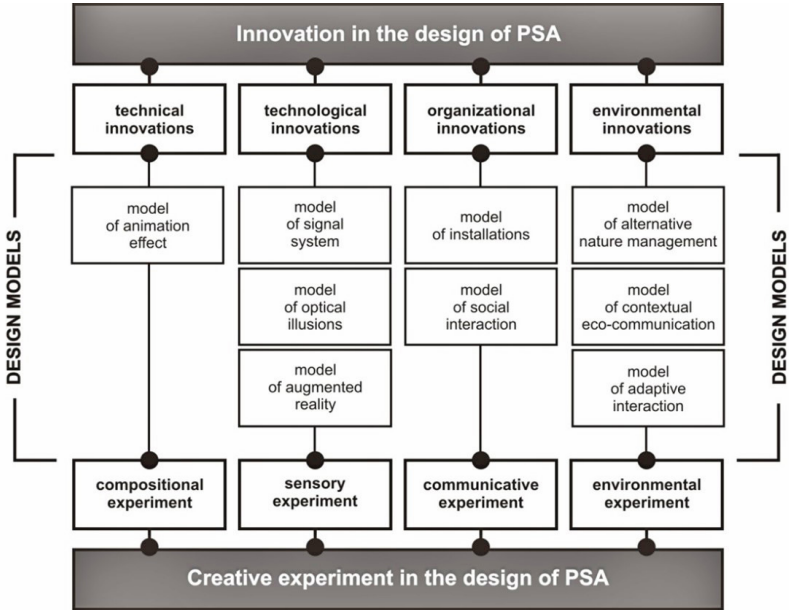

Figure 1. Classification of innovations in public service announcement and their experimental basis (source: created by authors)

Technical innovations form an animation effect model for conveying a visual message. A common way to create dynamic artistic images is to combine graphic images with moving elements of vehicles, elevators, escalators, *etc.* A moving design of escalators gives the ability to create an animated image from many static frames. The traditional technique of animation provides the formation of an artistic image through the movement of a material object.

Another way to keep people's attention for a long time is to "revive" installations aimed at activating human sensory sensations. For example, the Austrian Red Cross launched the *Donating Blood Saves Lives* (originally in Germain: *Blut spenden rettet leben*) campaign in Vienna, Austria, aimed at attracting donors, the main feature of which were city-light posters with a mechanical design of "living" blood bag – their movement created the effect of a pumping heart. These are mechanical visual communications, the transformation of which depends on the design and technical characteristics of the material object.

The animation effect model is effectively used by designers to visualize changes related to fundraising. For example, in the advertising construction "Mit 2€ viel bewegen" at Hamburg Airport, Germany, the coin works as a trigger of the chain reaction and makes the medical system work, turns on the electricity and starts building schools (YouTube, 2013b). Thus, the basis of technical innovations in PSA is the use of mechanical transformation of visual communication.

The object of technological innovation is not a new design product, but a basic technology that helps to create an artistic image and undergoes evolutionary or revolutionary transformations in the process of experimental research. In the last few years, the so-called "smart billboards" (Brown, 2017) are gaining popularity. This is digital or interactive social advertising, which presents a new stage in the development of mass visual communications and is based on technologies of interaction with humans. The use of technological innovations underlies the design models of the signal system, optical illusions and augmented reality.

A common way to create a dynamic artistic image is to use a signal system, which is realized through the built-in motion sensors, eye-catching, odor and temperature sensors and more. For example, the PSA of the animal shelter "Dogs Follow People", created by *Ogilvy* in the United Kingdom (UK), captures the human movements to which dogs respond from the screen (Ads of the World, 2022). Inanimate objects can also be a key process that triggers the movement of the image. For instance, the train, the flow of which flutters hair and tears the wig, makes people pay attention to children with cancer (YouTube, 2015a).

Interactive screens, whose special cameras capture people's eyes, have become the latest technology in the design of PSAs. The signal of the camera, which monitors the movement of the eyes, after a few seconds of direct view of the image, causes it to change (YouTube, 2015b). The creative idea of using temperature sensors that respond to human body temperature was embodied by the *Saatchi & Saatchi* advertising agency in interactive constructions in Warsaw, Poland (Brown, 2017). They are designed to remind patients to start treatment. The model of the signal-based visual system is formed not only on the basis of the transformation of the visual image, but also with the help of sound signals that respond to certain human actions. For example, a smart billboard equipped with smoke detectors coughs when smokers approach (Brown, 2017). A special type of signal communication system is the use of personal gadgets, which can be used to resolve social conflict.

Obviously, the programming of appropriate social behavior is based on the principles of gaming. This design model is also effective in *McDonald's* and *The Coca-Cola Company* advertising campaigns, to offer free food in exchange for in-application play.

An unusual technological innovation in the creation of social advertising is lenticular printing, which simulates optical illusions. We get a dynamic image that changes from the observer's point of view. This visual effect was used by designers from the *Gray Group Spain* in advertising against domestic violence (YouTube, 2013a).

Augmented reality modeling is the latest small group of innovative social communications, which is now developing rapidly. The high-quality dynamic 3D environment model makes it possible to interact with photorealistic characters in real time. For example, the creative integrated campaign *Arctic Home* campaign, aimed at drawing attention to climate change in the Arctic, conducted by World Wide Fund for Nature (WWFN) with *The Coca-Cola Company* in London, UK (YouTube, 2013c). The use of augmented reality in social advertising creates a unique media platform that can teach, entertain, and engage individuals and groups through a combination of real world and digital content.

The creative group of effective anthropo-social visual communication is organizational innovation as the latest methods of forming interactions, activities, and communication. At the heart of these innovations is the development of new or improved social and communication strategies involving people and other innovation groups. Their visualization is carried out in the form of installations and modeling of social interaction.

To work out a creative image of social advertising, designers use the installation as an artistic technique, formed by various means, including objects, graphics, sound, and light and even living beings. Accordingly, we distinguish between types of subject and "live" installations. The creation of an artistic image during the modeling of subject installations is based on the development of a holistic concept, the implementation process of which is represented by a dynamic visualization of the result, such as changing the image, emotion or social action. An effective method of involving people in action is the concept of dynamic image formation, formed on the principles of the game. A vivid example of this concept is money collection boxes. The image of the advertising message at the beginning of the social initiative is hidden, but people's actions gradually create a visual image. For example, houses are a dynamic symbol aimed at solving the problem of homelessness, models of human organs are a call to fight against bad habits, and symbols in the form of animals call for the protection of nature. To create social advertising real household items that the poor can take are also used (*e.g.*, bread, milk bottles, blankets, clothes).

Subject installations not only inform about the problem, but also involve people in various social interactions and organize real centers for development and long-term play. Examples of the synthesis of technical, technological and organizational innovations are installations that, for example, offer to read with a child, learn angles, swing, measure height or weight, and so on. Creation of a social space based on triangular billboards which imitates housing for the homeless is a good example of creative and at the same time useful organizational innovation in PSA.

Another group of organizational innovations are live (personalized) installations, the structural parts of which are people themselves. They visualize a model of social interaction

of an individual or mass nature. Man as an advertising medium becomes an effective source of information for the target audience. A specific example of anthropo-social advertising is body art, in particular inscriptions on the body in the form of seals with printed or coded information that advertises a particular social problem. Modeling of individual interactions is also carried out on the basis of analysis of personal characteristics of the consumer, such as social status, field of activity, age, *etc.* This information allows you to correct people's behavior through the use of means of communication, in the form of gifts, mails or emails, addressed personally to the user.

An innovative tool for modeling social interactions is the use of light and shadow to create a dynamic artistic image. Light and shadow installations encourage passers-by to become participants in the advertising process, to symbolically intervene and help the child. This is successfully demonstrated by the advertisement in South Korea "Child Abuse. You Can Prevent It", which aims to combat violence against children. The model of social interaction based on light and shadow design is today a promising direction in environmental design as an alternative to outdoor games on children's playgrounds.

Anthropo-social visual communications of a mass nature are, first of all, actions that are in the nature of a performance or a flash mob, organized according to a script. Flash mobs against human trafficking, sexual violence, and AIDS are the most relevant form of mass social interaction. Another type of organizational innovation of social content is the use of daily activities of the masses to obtain a dynamic visual result. In this way, a social footprint poster for the protection of animals was created, located under the feet of people in the subway (YouTube, 2011b).

Environmental issues have led to a significant number of different types of green social innovation (Schartinger et al., 2020). Eco-innovation is a group of various creative experimental solutions aimed at protecting the environment using environmentally friendly and energy-saving technologies. The introduction of these innovations in the design of PSA allowed the formation of three project models: the model of alternative nature management, the model of contextual eco-communication and the model of adaptive interaction.

Active use of the environmental component in the advertising message allows forming a project model of alternative nature management. First, in recent years, experiments aimed at creating biological design systems with plant elements have become widespread. A new direction in the design of social advertising was the use of "green" billboards in outdoor advertising. The use of methods of vertical and horizontal gardening allowed, along with advertising, to implement the environmental function – improving the environment.

Vertical innovative designs of billboards with planted plants; phyto-walls continuously or partially covered with greens are made of individual flower pots. They require constant care, provide compensation for carbon emissions and purify the air. *The Coca-Cola Company* and WWFN were the first to introduce such an innovation in 2011, placing a billboard in the Philippines with 3600 flower pots for air purification. And behind them, as part of the creative strategy of the brand "Imagination at Work", the agency *Abbott Mead Vickers BBDO* created a "living picture" of 8000 flower pots in London. The need to eliminate the ecological catastrophe in the Philippines on the Pasig River led to the emergence of an innovative horizontal billboard made of plants in 2014. Live plants, lying on a pond, form

the inscription "Clean River Soon" and absorb wastewater by cleaning the river (CLIO: Fashion & Beauty, 2015). The use of billboards capable of cleaning the air from smog, eco-installations made of plants capable of absorbing carbon dioxide have become a social environmental trend in the design of advertising messages of such large companies as *Toyota*, *The Coca-Cola Company*, *Kropla Beskidu* and others.

The concept of green social innovations is also implemented through the design of processes for the restoration of wildlife from seed. Such creative ideas appear in printing (*e.g.* the book *My Father Was in the Jungle* (originally in Spanish: *Mi papá estuvo en la selva*) (Gusti & Decis, 2008)), which sprouts thanks to the seeds in the pages (YouTube, 2015c), and later in the social initiative Basia Irland, which created ice books with seeds (YouTube, 2012).

Secondly, the invention of biological dynamic visual communications of animal origin became a new ecological experiment in design. The world's first billboard with live bees in the UK in 2010 is an example of an open, self-organizing environmental design system. The problem of declining bee populations in the world is visually embodied in the word *SOS* (from *Save Our Swarm*), formed by a huge swarm of bees (YouTube, 2010). The history of social advertising has many examples of environmental experiments with living ants, flies, cockroaches, which are aimed at forming environmental thinking through design.

Third, another creative way to form a model of alternative nature management is the synthesis of environmental and technological innovations. It is based on the use of alternative energy sources – sun, water, wind and kinetic energy of human steps. Equipping advertising structures with new installations for obtaining water from the air, electricity from solar panels expands the functionality of social advertising and demonstrates its effectiveness. For example, inventors from the University of Engineering and Technology, Peru, have transformed conventional billboards into special structures that collect drinking water from moisture in the air (YouTube, 2017). Moreover, in addition to solar or wind energy, researchers have now invented the ability to convert the kinetic energy of human steps into electricity. This technology was developed by the British company *Pavegen*, which created the *Pavegen* floor tiles and installed it on the sidewalk (YouTube, 2021).

The analysis of ecological innovations related to the introduction of natural objects as an integral part of the information message allowed to substantiate the model of contextual eco-communication. Designers transform existing natural objects, such as trees, bushes, grasses, moss, into a contextual design system, using associative thinking and based on a certain event, situation, and occasion. A less common way to form a model of contextual eco-communication is to use the natural environment as a background for advertising. A person who falls into the "scope" of advertising becomes a direct participant in the advertising process. For example, *Nike, Inc.* has created social advertising to promote park jogging, using the natural environment of the park and the frame of the billboard.

The model of adaptive interaction in the design of social visual communications is based on the use of natural phenomena, such as the action of sunlight, rain, temperature, *etc.* to implement effective social initiatives. Under the influence of precipitation, the image changes, certain elements appear that did not exist before or disappear completely. For example, in New Zealand social advertising against speeding used the technology that allowed imitated

blood appear on the boy's face under the influence of rainwater (YouTube, 2009). *Shikun & Binui* invented a creative approach to solving the social problem of using alternative energy sources. The conversion of the black and white image in the magazine into the colorful one took place under the action of sunlight (YouTube, 2011a).

From the standpoint of design, identifying types of innovations and identifying the nature of the dynamics of communication is an important step in developing models of visual communication systems that go beyond everyday life and attract the attention of users. The synthesis of design thinking and innovation becomes a source of creative solutions to social problems.

In conclusion, we emphasize that creative solutions for PSA are the result of close connection between technical, technological, organizational and ecological innovations and experimental creativity. Their synthesis helps to create design models that are aimed to correct people's behavior.

Discussion and interpretation of results

The created classification of social innovations is an important theoretical basis for revealing the multifaceted potential of communicative design based on creative experiment. This classification reflects the current level of knowledge and skills demonstrates the directions of innovative creative processes and opens up opportunities to predict the development of social advertising design.

The implementation of every innovation in PSA is an experimental area that requires the integration of creative approaches, scientific and technological achievements of mankind, social and communicative interactions and the laws of nature. Therefore, the study of creative experiment in the field of social initiatives is a new field of design theory and practice.

Experimental basis of social advertising innovations

The implementation of each group of innovations in design development involves conducting creative experiments which serve as the mechanism for finding new solutions to complex social problems (Docherty, 2017). Experimental searches of designers, embodied in the development of social advertising, allow to reveal the project potential of each type of innovation.

To create a moving artistic image, designers develop a compositional experiment. It is based on kinetic shaping as an experimental method based on combining the movable structure of transport objects and hoisting devices with a graphic image. In this way a dynamic image is formed as an organic unity of content and form. The visual effect of movement is provided by the associative search for context, which leads to the creation of an idea.

The design model of the animation effect of changing visual parameters is realized due to a continuous linear cycle of movement and depends on the type of moving structure. To form a composition, we use a wide range of artistic means, including symmetry/asymmetry, metric repetition/rhythm. Solving the composition by means of dynamics is one of the most expedient and fast ways of practical realization of the idea. Therefore, we consider the composition experiment as a creative design concept that takes creativity beyond traditional means of information visualization.

The introduction of the latest technologies in the design of social advertising demonstrates the sensory experiment. Its purpose is to materialize intangible processes of interaction through visual, tactile, sound, taste and olfactory sensations of man. Thanks to innovative technologies of motion, sight, heat, the latest printing technologies, multimedia and virtual technologies, visual illusions are formed, which cause contradictions between the sensations of different modalities. In this way, the visualization of processes activates human sensory systems and encourages subconscious social behavior.

The advantage of the sensory experiment is interactive communication with a person, which is realized with the help of "smart billboards" that actively communicate with the consumer (Brown, 2017). The processes of increasing interactivity have resulted from the development of innovative digital technologies and changes in the psychology of human perception. Today there is a transition of social advertising to a qualitatively higher level, which opens up the possibility of changing the visual content depending on the sex and age of people, reactions to facial expressions, environmental phenomena, weather and more. This indicates that digital visual communications have adaptive properties and are a powerful tool for capturing people's attention. We believe that the use of dynamic personalization is a promising area of digital visual communications, which will offer services and correct the behavior of different social groups. Computer databases and social networks are becoming an analytical tool for personalized information and the possibility of creating personalized content based on the emotional response of observers. Now social advertising attracts the consumer to the game, invites him to assess the current problem, to take the position of not just an observer, but an active participant in the advertising process. The sensory experiment outlines the process of synthesis of innovative digital technologies and social communications, thus approaching the communicative experiment.

The communicative experiment is related to the modeling of social interactions of individual and mass character, which are the most intensive and widespread in the design of dynamic visual communications. Designers use unusual interpretations of space, movement, images, and interactive experiences as integral elements of communication strategy (Koeck & Warnaby, 2014). It helps to realize visual performative functions through the creative installations and various social interactions with a big number of people involved.

On the one hand, the communicative experiment changes the role of human beings – they are being transformed from passive observers to active participants and creators of the advertising message. The creation of PSA can be visualized as a game. The participants consciously perform certain actions (buy dirty water, throw money in the donation box, stick a sticker, leave a palm print, write a note, *etc.*). This visual communication can be described as constantly updated interactive installations, which are made by a continuous flow of people, who realize designer's concept of choice. The received result is presented as art or tab installations and has the properties of a finished design project that is suitable for exhibiting and further research.

On the other hand, the communicative experiment is aimed at the intensification of mass social communication. This led to the emergence of so-called "live advertising". Real people that are open to communication appeared on the advertising installations, and the human body became an advertising platform, presenting the so-called advertising body art. The

conceptual approach to the creation of mass advertising communications is implemented in the form of organized actions, such as flash mobs and advertising performances. As a result, installations and various social interactions become an experimental space for visual communication of a new type, which can be dynamically changed during a long period of time by a continuous flow of people.

The use of ecological innovations is accompanied by the planning of an ecological experiment. In this way, designers create a controlled natural system that functions as a design laboratory (Sorrentino, 2020) and is characterized as a media-neutral form of ambient communication (Biraghi et al., 2015).

Design systems with flora and fauna elements are professional means of solving environmental problems, participating in universal natural processes of air and water purification, and improvement of the general ecological situation. Ecological experiment is the design of a continuous dynamic process, organized by the formation of not objective but global unity according to the laws of nature. The emotional connection with the environment conveyed by the means of design reveals the great potential of effective social communication (Searles, 2010; Chang et al., 2015).

Emotion in the design of innovative social advertising

Creativity and innovation are important factors in programming a person's social behavior through emotional coloring. The perception of a social message is associated with the formation of a person's strong positive or negative emotional response. It is emotion that has the greatest impact on behavioral intentions, as well as on people's attitudes to the problem visualized in the advertising message. Studies by Keene and Lang (2016) show a close link between the emotional content of a social message and the emergence of motivation over a period of time.

Positive emotions have been shown to increase the credibility of social message and create trust in it (Skalski et al., 2009), meanwhile, negative emotions, such as fear, should influence the formation of intentions and reasonable actions (Treise & Weigold, 2001). As a result, a positive attitude tends to a global perception of the social message, and a negative mood promotes involvement in local action (Sar & Anghelcev, 2015). These provisions underlie the design of innovative social advertising.

The catalyst for creating an emotional color of the advertising message is always a surprise from the unexpected association, a creative combination of elements of the environment with which users interact. And it is this surprise that determines the attention to advertising arouses interest, promotes the formation of a positive intention to act (Ozer et al., 2020). The main principle of the psychological impact of all non-standard advertising is a powerful positive emotion – the emotion of interest. Interest acts as a motivational state of man due to the novelty and unusualness of the situation.

PSA gets an emotional coloring also by means of the design of visual communication as a game. The gamification used in designing models of all innovation groups sets people up for a positive perception of social message. Communicating with the carrier, a person is immersed as much as possible in the reality that is offered to him, which means that the

maximum effectiveness of advertising appeal is achieved. Therefore, compositional, sensory, communicative and environmental experiments in social advertising are designed to attract the attention of even the most indifferent people by the activization of their emotional and volitional sphere.

Strategic goals of social advertising design

Dynamic PSA which actively interacts with people, attracts to the game and evokes emotions is promising for the implementation and realization of socio-cultural needs of society. Indicated innovations allow outlining strategic goals, to set the vectors of development of social advertising design and to determine the areas of concentration of efforts for designers in the coming years:

1. First of all, the priority area of the concept of dynamic PSA is the comprehensive involvement of all innovation groups and rethinking design as a strategy of cultural transformation (Valentine et al., 2017). Active implementation of the latest electronic, multimedia and virtual technologies in design development should be based on associative and metaphorical design thinking. An important area of organizational innovation is the need to attract potential audiences as creators to actively participate in the advertising process, which is characterized by an emotional and playful vibe;

2. Secondly, the huge, but not yet fully unleashed, potential is accumulated by environmental innovations. The type of advertising which is becoming relevant is the one which not only visualizes the existing problem, but also brings direct benefits to society. Artistic images of useful dynamic communications are aimed at creating a new generation of environmentally friendly, energy-saving and waste-free technologies, means of monitoring the state of the environment and more. Ecological innovations aim to restore balance, balance in the relationship between nature and society through the design of various forms of communication;

3. Moreover, we emphasize that the developed classification of innovations and design models to create creative and effective examples of PSAs are aimed at supporting design for sustainable development. Innovative forms of social design practice already go beyond the usual functional interaction with consumer culture. Design becomes a way of innovation, which is a set of methods and tools that guide people to new social innovative solutions (Chick, 2012; Rabadjieva & Butzin, 2020). The integration of all innovation groups into PSA products is gradual and allows us to trace the transition from techno-centric to human-centric and nature-centric levels, which are associated with the formulation of concepts of sustainable development (Ceschin & Gaziulusoy, 2020). Determination of the effectiveness of design developments of a social nature is conducted through a comprehensive assessment of compositional, sensory, communicative and environmental experiments, which will allow in the future forming a dynamic visual-communicative space that realizes educational goals (Skliarenko et al., 2021). In the long run emotionally colored dynamic social advertising is economically beneficial to the state, as the elimination of many social problems in a natural way will lead to the welfare of the state.

Conclusions

In this paper, we have reconsidered the phenomena of innovative PSA, the vivid feature of which is the visualization of the dynamic art image. Its design is based on the synthesis of innovations and creativity, which is aimed to involve the environment and people into the design system through the use of associative thinking mechanisms. As a result of the analysis of PSAs we identified four groups of innovations, including technical, technological, organizational and environmental innovations, which formed the base for the design experiment. The potential of the dynamic art image of PSA is revealed through the composition (compositional experiment), multisensory experience (sensory experiment), interactions (communicative experiment) and environmental factors (environmental experiment). Informational and technological parameters, the level of communication and environmental efficiency and the analysis of compositional features within each type of the experiment allowed us to focus on priorities in the process of design and also to form universal design models. They are perceived as both special concepts and as the tools for increasing visual dynamics in PSA design. The use of the latest technologies in PSA requires people to be involved in the interaction through play. It causes a wide range of emotions that forms the strategies for the further development of dynamic PSA. The creative experiments which designers consciously use in every design development will help to go beyond traditional approaches to creating social advertising and better understand the potential for innovation and design thinking. The formed system of strategic goals is the basis for determining the priority of changes in design activities in general and the possibility of its flexible reform in accordance with the social challenges of the local and global levels. The results of the study can also be used as a systematized source base, which for the first time theoretically substantiated the peculiarities of creating project models of innovative social advertising. The practical significance of the study lies in the possibility of implementing the results in the project practice of PSA aimed at sustainable development of society.

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