

RESTART_4Danube

**Boosting cREative induSTries in urbAn Regeneration for a stronger
Danube region**

D.T.3.2.2 Training Handbook- Creativity and Urban Governance (NOVUM)

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Contents

1. List of Abbreviations	4
2. Introduction	5
3. What's the role of creativity in urban development?	7
4. Assessing the vulnerability of cities, managing through strategies and a resilience framework	13
5. Explaining the Creative City Index	22
6. The ten key indicators of a Creative Place	25
7. Developing strategies roadmaps to make cities more resilient, involving all sectors of the population	27
8. Effectively and ethically use data and innovative technologies to develop intelligent solutions to support the sustainable development of creative industries	31
9. Mobilizing stakeholders to build sustainable partnerships and smart cities – CREATIVE HUBS AS THE CORE OF CREATIVE CITIES	33
Bibliography	36

1. List of Abbreviations

Restart_4Danube	Boosting cREative induSTries in urbAn Regeneration for a stronger Danube region
UPB	Universitatea POLITEHNICA București
UR	Urban regeneration
SME	Small and Medium Enterprises
R&I	Research & Innovation
R&D	Research & Development
S3	Smart Specialisation Strategy
CCI	Creative & cultural industry
DR	Danube Region
ITT	Innovation Tehnology Transfer
DTC	Danube Transfer Center
KPI	Key Performance Indicators
ICT	Information and communication technologies
UCCN	UNESCO Network of Creative Cities
NGO	National Government Organization

2. Introduction

With the majority of the world population living in urban environments today and in Danube region as well, cities have become the engines of economic development and innovation. At the same time, cities have been forced to confront many of the world's most pressing challenges: poverty and inequality, migration, pollution, natural disasters, and other consequences of climate change. In the face of these complex challenges, urban resilience and smart city solutions have become important concepts in the urban governance agenda, providing a way forward for urban local authorities, city planners and urban policy makers.

This handbook explores the relationship between “creativity” and “innovation”, and the forms and practices of “governance” in an urban context. It highlights, in particular, the “double” creativity of governance, both in terms of its potential to foster creativity in social and economic dynamics and to creatively transform its own capacities. It argues that there is no simple equation between the characteristics of a “creative city” and a “creative” mode of urban governance. Instead, the handbook advocates a multi-level approach to the dimensions of urban governance through which to identify qualities of governance activity, which, in specific contexts, have the potential to encourage creativity and innovation.

This training handbook on urban governance focuses on strategies, frameworks and tools to strengthen cities' resilience: their ability to develop and adapt to modern challenges, through the support and development of creative industries.

Here you will find information:

- What's the role of creativity in urban development?
- Assessing the vulnerability of cities, managing through strategies and a resilience framework;
- Explaining the Creative City Index;
- The ten key indicators of a creative place;
- Developing strategies and roadmaps to make cities more resilient, involving all sectors of the population;
- Effectively and ethically use data and innovative technologies to develop intelligent solutions to support the sustainable development of creative industries;
- Mobilizing key stakeholders to build sustainable partnerships for sustainable and smart cities. CREATIVE HUBS AS THE CORE OF CREATIVE CITIES

Governance is a central topic among policymakers. Policymaking is evolving from a traditional top-down government approach towards a system of governing that focuses on engaging the citizens within an area. New forms of governance targeting urban competitiveness are increasingly oriented to vertical (between lower and high levels of government and cooperation forms between entities and firms along the production chain) and horizontal (between firms or different municipalities or public and private entities) cooperation. The handbook is seeking to contribute answers to the following questions: what is the role of governance in the processes of urban regeneration? What is the role of governance in the development of creative processes for urban regeneration? And what is the potential of governance to support urban regeneration strategies based on creativity and creative industries?

In conclusion, the training handbook contains information on the kinds of interventions, which may help to transform such capacity and the the imaginative resources and mobilising power, which may contribute successful innovations to develop from experiments to “mainstream”.

3. What's the role of creativity in urban development?

"Creativity is a new form of capital related to human development. This is the ability to use most of the opportunities and potential. Creativity allows people to clearly see future scenarios, which means creating the desired future, not just responding to the demands of the times. "

Charles Landry,
British urban planner,
specialist in urban planning and urban development,
author of the concept of a creative city.



Urban Melodies: Photography Series by Alessio Trerotoli
www.pinterest.com/pin/337910778271353990

Creative industries have been a lucrative sector of the economy in many countries for many years. Recently, they have become increasingly integrated into urban development, democratization processes, the development of territorial communities, and the rights and freedoms of civil society. Creative industries contribute to the formation of innovative markets. Due to the fact that creativity is a key vector for a society based on knowledge and economy, which influences politics, business,

culture, art, as well as all spheres of public life, and which contributes to the stable development of the country, the development of creative industries is extremely important. The focus of scholars and practitioners is to find ways to create favorable conditions for stable socio-economic and cultural development of regions and cities based on the maximum use of scientific and socio-humanitarian progress of countries. Creative industries influence the formation of budget revenues, the creation of additional jobs, export earnings, investment

attractiveness, the development of intellectual capital, which confirms the feasibility and relevance of the research topic.

The last decade has seen a growing scientific interest in research on the formation and development of creative industries, which in turn requires a more detailed consideration of the new creative economy in terms of its impact on building the creative potential of national and international economic space.

Any city has a hard and soft infrastructure. The first includes buildings, roads, water supply or sewerage. And the second includes people who create the mentality of the city, which indicates the opportunities and problems, the atmosphere of the city, the incentives for development and regulation.

Creative cities are developing their soft infrastructure: they are trying to attract a highly skilled and flexible workforce, thinkers, creators and performers. Therefore, it can be creative not only to generate and apply ideas, but also to create opportunities for their emergence by stimulating the development of human resources.

The creative city thus nourishes, attracts and supports talents, and as a result can mobilize ideas and creative organizations to solve problems. The anthropogenic environment - its configuration and use - is crucial to create an attractive urban environment. The creative environment is a place that contains the necessary requirements for hard and soft infrastructure and which thus creates a flow of ideas and inventions. Such environments can be buildings, streets of a district, part of a city or region.

The old way of functioning of the economy and cities no longer works as in the past. The education system no longer trains quality staff adapted to the demands of the new world, and the organization, management and leadership with its ethos of top-down management and hierarchy do not provide the flexibility, adaptability and resilience to cope in a highly competitive environment.

Cities where the atmosphere, appearance and quality of design are low will not be attractive and competitive. Public spaces play an important role in the development of urban creativity. These hubs, accessible to all categories of people, allow citizens to spend time there comfortably, express themselves freely, share experiences and ideas on how to work together to improve the quality of life in cities.

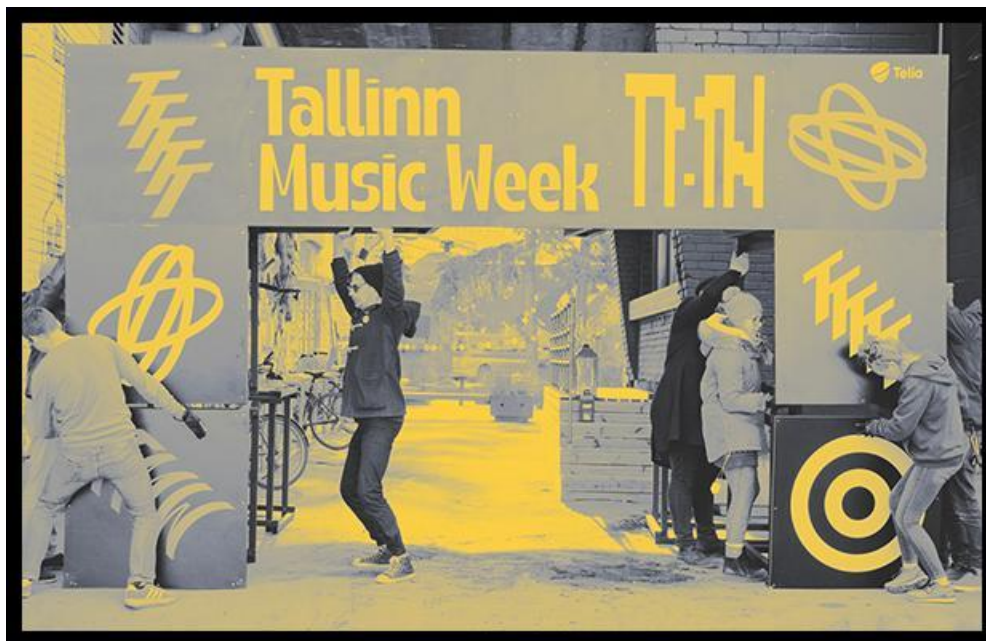
These are the best places for communication and constructive communication, where every citizen feels part of a great cause and responsibility for their own city, where they can

improve, learn and inspire like-minded people. Community involvement in improving the city plays an important role in improving living conditions and trust in the government, uniting like-minded people, setting a good example for the younger generation and cultivating patriotism.

Examples of European cities that use a creative approach to development and form communities based on public involvement:

Tallinn, Estonia

Tallinn has become home to most of Estonia's creative companies thanks to the support of universities that train artists and graphic artists, and development centers for all key creative industries. In addition, the city hosts Tallinn Music Week, an annual music conference and the largest festival "under the roof" in the Baltics and the Nordic countries, which combines styles from classical to hip hop.



Rotterdam, The Netherlands

Half of Rotterdam's population is under the age of 35, and the city's uniqueness is reflected in its creative atmosphere, created by events such as Wake up in Art. As part of this unusual festival, participants can spend the night in special creative constructions created by local artists.

Amsterdam, The Netherlands

The problem of frequent accidents on narrow streets and the rise in gasoline prices in the 1970s gave impetus to the launch of a campaign to promote bicycles in the Netherlands. The project created experimental cycling routes in the cities of Aarhus, Odense and Herning and launched a broad program across the country. As a result, Amsterdam is now called the cycling capital of Europe. There are about 800,000 bicycles in the city and 63% of the city's residents use this type of transport every day.



Berlin, Germany

Kreuzberg, a district in Berlin is famous for its creative approach to the socialist heritage. Here you can see the open-air gallery East Side Gallery - a series of works on the last fragment of the Berlin Wall. After its fall, many empty houses in the eastern part of the city were "captured" by creative youth, who turned them into a fortress of alternative art and fun. For example, one of the city's oldest squats, the Bethanyen Art Center, located in the former St. Bethany Hospital, houses art galleries, exhibitions and a music school.



Budapest, Hungary

Budapest is known for its status as a creative city of UNESCO design. During 2015–2019, the city implemented several projects aimed at developing design as an industry:

- In 2015, World Design Day was held there together with the International Council of Industrial Design Societies (ICSID). The name of the event, held in 2015 - "Redefine design" - was also a program: the organizers aimed to develop a new definition of industrial design;
- 2016 (and every year since then) - Budapest Design Week focuses on the diversity of relationships between human and his environment under the slogan "Design - Anatomy" with 230 single events. The week attracted 50,000 visitors.
- 2017 - StartUp Guide - an event mainly aimed to support small creative enterprises working in the field of design;
- 2018 - Budapest Fashion Week from the Hungarian Fashion and Design Agency. Central European Fashion Week in Budapest is organized twice a year and features designers from neighboring countries, the Visegrad Four and Italy;
- 2019 - The Budapest Fashion and Technology Summit aimed to give young talents and international designers the opportunity to make their debut.

Galway, Ireland

Ireland's most dynamic city has divided its cultural year into seasons, according to Irish tradition. Among the interesting events - art runs, installations, various outdoor activities - designed specifically for the changing Irish weather, concerts of symphony orchestras and others.

Ukraine

The term "creative cities" is becoming increasingly popular in Ukraine. It is often used in urban development strategies, and is given more and more attention by policy makers at the local and state levels. Creative urban development strategies have been invented by (urban) planners and urban planners to address issues such as improving the environment and creating favorable living conditions for residents. There are many approaches to understand creative strategies in different countries, cities and international organizations. Creative strategies are city development strategies that use successful innovative ideas, an original approach to solving problems, usually with an emphasis on the development of culture, art, preservation of historical heritage, support of prominent locations of the city and the development of its uniqueness.



The purpose of this handbook is to review approaches to understand creative strategies and roadmaps in urban planning and development, define the role of creativity in urban development, to assess the vulnerability, the managing strategies and the sustainability systems, to visualize the work of creative spaces with local people, business and government, and to explain of the creative city index.

4. Assessing the vulnerability of cities, managing through strategies and a resilience framework

One of the features of modern urbanization is the concentration of a significant number of people mainly in large cities and, accordingly, their further growth. Thus, there is the formation of an urban environment or urban ecosystem, which is a qualitatively new physical and geographical state of the geoenvironment, which arises as a result of long-term development of the city. During its formation, all components change: atmosphere, climate, vegetation, fauna, soils, surface hydrosphere, geodynamic state of the territory. At the same time, the larger the size of the city, the time of its existence and the degree of development of industry in the city - the more significant changes happen in its natural environment. A large city is usually characterized by certain microclimatic features:

1. Differences in thermal regime (formation in the city, the so-called heat island - OT);
2. Presence of specific circulation - rural breeze (formed in windless weather due to the existence of the island of heat);
3. Changes the wind regime of the city;
4. Decrease in relative humidity in the city (formation of a dry island);
5. Features in the formation of the cloud regime over certain parts of the city;
6. Increase in precipitation and cases of fog;
7. Reducing the duration of snow cover

The combination of the negative effects of urbanization and climate change in large cities poses a direct threat to environmental, economic and social stability in the world. The intensification of climate change and the analysis of its negative effects in cities show that climate change causes unique problems in cities that are uncharacteristic of other types of human settlements. Climate change can cause direct (physical) risks (flooding, abnormal heat, exacerbated by urban microclimatic features, etc.) and indirect - disruption of the normal functioning of certain city systems and difficulties in providing basic services to the population (water supply, urban transport, energy, etc.)

And while local risks, vulnerabilities, and adaptability to climate change vary from city to city, there are a number of key points that are common to most cities:

- a. Climate change affects city citizen differently - depending on their gender, age, wealth;
- b. The inability to adjust the zoning of the already formed city, as well as the inconsistency of building codes and standards with the expected changes may limit the adaptive potential of infrastructure and endanger the lives of people and their property;
- c. The effects of climate change are long-lasting and global;

d. The most dynamically growing urban areas are the least adapted to combating the threat of climate change, as in such areas, as a rule, there is a significant deficit of management, infrastructure, etc.

Climate change affects the material infrastructure of the city - buildings, roads, sewerage and energy systems, and this, in turn, affects the way of life of its inhabitants and their wealth. Significant destruction of the housing and administrative stock of buildings is expected in the event of an increase in the number of natural disasters and catastrophes related to climate change. From this point of view, flooding is considered to be the most destructive and costly. High temperatures can also affect not only the city's residents, but also the infrastructure - contributing to the destruction of the road surface, causing frequent road repairs, thus disrupting the normal operation of public transport. In addition, with increasing air temperatures, with the predominance of artificial heat-accumulating surfaces in cities, the population of large cities (estimated at millions) uses a significant amount of electricity to condition the premises, thus creating a significant load on the city's power system. Increasing the frequency and intensity of extreme weather events and long-term changes will increase the vulnerability of urban economic assets and, consequently, the cost of doing business. Climate change will affect a wide range of economic activities - trade, production of certain goods, tourism, insurance services and more. And thus, it will affect the financial situation of the broad masses of the city's population. It is well known that low-income populations are more vulnerable to climate change (lack of quality housing, less adaptability, poorer health care, etc.), and this population tends to be larger in large cities.

Therefore,

- a. concentration of a significant population in cities,
- b. features of the local microclimate that may exacerbate some of the negative effects of climate change (for example, the presence of a heat island may exacerbate heat stress in a city caused by a global rise in air temperature),
- c. change of the predominant reinforcing surfaces of the city (replacement of natural surfaces that absorb water well with artificial waterproof ones),
- d. high-rise buildings,
- e. the availability of urban transport network and well-developed infrastructure (which may suffer from the negative effects of climate change and cause significant discomfort to the city population) make the city much more vulnerable to climate change compared to other areas.

In addition, in case of negative consequences of climate change in the city, more material and human resources are needed to eliminate them.

The main potential negative effects of climate change that may occur in cities include:

1. Heat stress;
2. Flooding;
3. Reduction of areas and violation of the species composition of urban green areas;
4. Natural hydrometeorological phenomena;
5. Decrease in quantity and deterioration of drinking water quality;
6. Increasing the number of infectious diseases and allergic manifestations;
7. Violation of the normal functioning of energy systems of the city

I. Vulnerability of the city to thermal stress

The risk of heat stress in cities may increase with increasing air temperature, recurrence of heat waves in cities and increasing heat island. The high number of days with maximum air temperatures above certain summer limits (for example, above 30 °C and 35 °C), which has already occurred and the projected increase in temperature indicates a high probability of heat stress in the city and reduces the comfort of living.

An important factor for assessing the city's vulnerability to heat stress is also the structure of the city's population - according to physiological indicators, vulnerable groups are the elderly and children, as well as people suffering from chronic diseases (especially cardiovascular), socio-economic - low-income groups.

The higher the percentage of vulnerable groups in a city, the more vulnerable the city is to heat stress. Adequate medical care reduces the city's vulnerability to heat stress. The easiest way to assess the quality of medical care is the number of hospital beds, hospitals and primary care facilities per 10 thousand of population.

Limited access of the population to information about the weather and climate, about the rules of conduct during the heat make the city population more vulnerable to the manifestations of heat waves and long hot periods. Analyzing the population's access to sources of information about the weather, we should not forget that for the older generation the main sources of information are still radio, television and newspapers. An important role in raising awareness is played by large-scale state information campaigns on the problems of heat waves and rules of conduct during such periods, coverage of these issues within the school curriculum.

II. Vulnerability of the city to flooding

Flooding of the city can be caused by a significant amount of precipitation in a short time, rapid melting of large amounts of snow, rising water levels in water bodies of the city, floods on rivers, for coastal cities - a strong storm with high waves or rising sea levels.

Large areas of the city that fall into the area of potential flooding, the presence of the population living in this area (in particular, children and elderly in need of emergency evacuation in case of flooding) increases the city's vulnerability to flooding, and the location of strategic facilities (hospitals, liaison offices, etc.) in places where the risk of flooding is minimal, on the contrary, reduce the vulnerability of the city to the manifestation of this negative impact of climate change.

Analysis of floods in the city (destruction, casualties, damage, flooded areas; material, human and financial resources used to eliminate their consequences) will allow to develop a plan of measures necessary to avoid them (for opportunities) or minimizing their negative consequences and a detailed plan to provide assistance to the population.



III. Vulnerability of urban green areas

Not only climatic conditions are important for maintaining the green areas of the city in good condition, but also the work of municipal services of the city, which take care of greenery

(planting new trees, timely cleaning of dry branches, treatment from pests and diseases (if necessary), etc.). Quite often, the low level of agricultural techniques for the care of urban plants does not improve the condition of plants within green areas, and even harms them.

IV. Vulnerability of the city to natural hydrometeorological phenomena

Manifestation of natural meteorological phenomena can lead to disruptions in the normal operation of the city's infrastructure, destruction and other negative consequences. Heavy rains or squalls can lead to the destruction or damage of industrial facilities, which can lead to accidental emissions or discharges of pollutants into the environment, human casualties, disruption of urban infrastructure. The closer the enterprises are located to the densely populated areas of the city, the more potentially dangerous the consequences of their destruction or damage by natural hydrometeorological phenomena can be. In addition, strong winds can cause power outages and power outages and damage to trees in the city (which, in turn, also leads to negative consequences).

V. Vulnerability of the city to the deterioration of quality and reduction of drinking water

Lack of own sources of water supply in the city or inadequate water quality in them causes the use of imported water for the needs of the population. Limited own sources of water supply and use of imported water make the city more vulnerable to deteriorating quality and reduced drinking water. The use of water from surface sources increases the likelihood of deterioration of its quality (wastewater discharges, the spread of infections) and / or a decrease in quantity due to changes in air temperature, reduced rainfall and, consequently, river runoff. The negative trend of river runoff and the forecast of its further reduction significantly increases the vulnerability of the city, especially if it is dominated by surface water supply. If the city has powerful industrial facilities that use a significant amount of water, it leads to increased water consumption. In addition, urban wastewater discharges increase the risk of deterioration of surface water quality - even with proper water treatment, it is difficult to ensure that there is no adverse impact on the reservoir (which, for example, may occur as a result of an emergency discharge). This factor most increases the vulnerability of cities with a predominant surface water supply. Proper condition of the water supply network will ensure water supply to consumers and drainage without losses, which can lead to network accidents.

VI. The city's vulnerability to the growing number of infectious diseases and allergic reactions

Manifestations of natural meteorological phenomena can also contribute to the spread of infectious diseases (for example, heavy rainfall can lead to flooding and, consequently, to the faster spread of infectious diseases). Weakening of the immunity of most urban residents (caused by air pollution, daily stress at work, etc.) causes an increased susceptibility to allergies and the proportion of allergy sufferers in urban areas compared to rural areas increases significantly. In low-income population to the factors of weakening the immune system are added inadequate working and living conditions, poor nutrition, lack of adequate rest.

VII. Vulnerability of city energy systems



The load on the city's sustainable energy system is growing not only due to climatic factors, but also social - the growth of the city's population, which is happening rapidly, leads to an increase in electricity consumption in the city as a whole. As the load on the power system increases, it is important that its technical condition is satisfactory, so all worn parts must be replaced, maintenance and inspections must be carried out regularly and carefully. To reduce the vulnerability of the city's energy system, it is necessary to have several power sources in

the city (or the possibility of using alternative sources), which can ensure uninterrupted power supply in the event of a shutdown of one of the city's stations. Or at least the availability of autonomous energy sources for strategic facilities in case of emergencies.

The next step after completing the assessment of the city's vulnerability to climate change and identifying the consequences that may most negatively affect the city and its inhabitants, is the development of a plan for adaptation of the city to climate change. At this stage, it will be effective to involve in the plan "ready" adaptation measures that are already being implemented in other cities, and the development of "their own", which can be used only for a particular city and developed taking into account its features.

An action plan for adaptation to the effects of urban climate change is being developed to assess the city's vulnerability to the main negative effects of climate change; development of conceptual and practical adaptation measures that will unite the efforts of the community, local authorities, business and expert community and aim to reduce the city's vulnerability to climate change, overcome the problems and threats posed by climate change, strengthen local resilience community and providing more comfortable and safer living conditions in the city.

Adaptation to climate change in the city requires an integrated approach and implementation of measures at various levels. When forming a citywide adaptation plan to climate change, it should be noted that there are measures that help mitigate several negative effects of climate change (for example, increasing the area and number of green areas in the city, the use of porous surfaces for parking and sidewalks, etc.). therefore, their implementation will be most effective for adaptation. If the plan is developed by industry or by negative consequences - it should be carefully analyzed - whether there are measures that would contradict each other. This is especially important, if different specialists are responsible for each section of the plan. For some of the negative effects of climate change, it is important to develop a system for monitoring / early warning / risk management - this will at least partially minimize the damage caused by meteorological factors. One of the important organizational tasks in the development of measures for the adaptation of the city is to conduct a powerful information campaign aimed at different target audiences (from the youngest residents of the city to the oldest). Different ways of transmitting information for different target groups should be chosen for communication, but it is important to realize the main goal - to convince every city resident that the success of urban adaptation to climate change depends on it and provide information that will help people minimize the negative impact. on them (for example, informing the Rules of Conduct during heat / floods, etc.). It will be useful inform on the website of the city state administration about the adaptation of the city to climate change. In conditions when the problem of climate change is becoming more acute, any issue in the city

(planning of new areas, development of transport infrastructure, choosing a place for a shopping center, etc.) should be addressed taking into account the projected climate change - so at least these new objects will be resistant to changes in the urban ecosystem.

Economic measures play an important role in reducing the vulnerability of the urban environment to certain negative effects of climate change - because preferential taxation, subsidies, fines, differentiated pricing are effective in reducing water and electricity use, discharges and emissions of pollutants into the water and air environment. Movable and immovable property will help to quickly eliminate losses and repair damaged. When planning adaptation measures, it is important to remember that the scale and intensity of the negative effects of climate change depend on the amount of greenhouse gases produced by human activities. Therefore, at the level of each country and city, it is necessary to reduce greenhouse gas emissions to mitigate climate change and facilitate adaptation to the inevitable consequences.

Climate change is a global challenge that not only affects natural processes and threatens the planet's biodiversity, but also creates a number of social problems that affect the lives, health and well-being of people around the world. It is also a phenomenon that is closely linked to economic, political and social processes in the modern world. On the example of climate change, we can see how new structural inequalities are formed and deepen in societies. The need to adapt to climate change is undeniable and enshrined in international instruments, in particular in the 2015 UN-Paris Agreement. In addition, taking urgent action to combat climate change is part of the thirteenth United Nations Sustainable Development Goal 2030.

5. Explaining the Creative City Index (CCI)

The city can be understood as a complex system, where society, business and government should successfully coexist and solve urban problems, working on the basis of existing infrastructure.

The structure of the Creative Capital Index, a special project to compare world capitals, reflects the key elements of the ecosystem, which allows us to assess the creative power of cities as objectively as possible.

The main methodology of the Creative Capital Index has been modified by different urbanists in order to take into account the best international best practices in benchmarking. At the preparatory stage, the benchmarking was divided, according to the established structure, into five main sections: People, City, Government, Business and Brands.

The following is a list of quantitative and qualitative indicators reflect the key characteristics of each section. In turn, the indicators were divided into thematic subgroups. The indicators used in the study can be divided into objective and subjective. Data sources for objective indicators are taken from official statistics, individual state ministries, municipal and regional authorities, statistical digests and analytical reports of relevant associations and well-known companies, as well as ratings prepared by relevant analytical agencies.

Data for subjective indicators were obtained from a survey of creative professionals who were asked to assess the quality and competitive advantage of urban brands, creative initiatives and relevant urban infrastructure.

At the analytics stage, the selected indicators were converted to universal value using statistical methods, adjusted for population and urban area and standardized using the maximum values of cities for each indicator.

During the calculation of the final values for comparison, each of the main sections of indicators (People, City, Business, Government, Brands) was assigned unique weights based on the subjective significance of the section in the survey of creative professionals.

Such a project serves as an invitation to a long-term partnership for all public organizations and representatives of local authorities, business and the creative community interested in promoting innovation and the creative economy of the country and around the world. The term "creative cities" is becoming increasingly popular. It is often used in urban development strategies and is given more and more attention by policy makers at the local and state levels.

The City Creativity Index is a new approach to measuring and ranking creative global cities. CCI explores urban processes and projects to assess their creative pulse. It differs from most indices in that it considers the city as a whole. It examines the place from both an internal and an external point of view, considering several broad areas that are pervasive.

CCI is designed to measure and track a city's creativity over time, to compare with peers and exemplary cities around the world, and to provide a mechanism by which cities can be formed internationally.

The CCI is used to:

- provide a more complete rating of a subset of global cities;
- improve policy development and implementation;
- promote the development of creativity and innovation;
- evaluate the effectiveness of support for the creative sectors;
- provide a tool for those whose goal is to turn their city into a well-known global creative city

However, thanks to CCI, the city authorities can take a more careful approach shape the city's development strategy in accordance with their needs and available resources. The index allows to assess the capabilities of the city and a reasonable approach to the formalization of needs in the field of cultural development and creativity.

Therefore, the development of cities, regardless of their scale, largely determines the effectiveness of changes in the national character and affects the development not only of the region but also of the country as a whole. And a quality plan for such growth is a prerequisite for making the most constructive decisions. It is possible to objectively assess the positive changes in the living conditions of the local community through a system of socio-economic indicators, subjectively - through the direct feeling of community members of the level of personal comfort in the broadest sense of the word.

Given the growing importance that politicians attach to the concepts of creativity and the creative economy, the growing interest in defining and evaluating creativity indicators is not a surprise.

Cities need to know how well they work, and their evaluation is becoming a phenomenon. That's why many indexes have appeared in the last decade to help measure et.al. the creativity and potential of cities. To measure the creativity of cities, twelve main dimensions were identified:



1. Openness, diversity and tolerance
2. Connectivity, accessibility and network connections
3. Talent development, as well as art and creative education
4. Public structure, policy, rules and investments
5. Leadership, entrepreneurship and vision
6. Sightseeing, cultural tourism and attractions
7. Human capital, creative sector
8. Technology and innovation
9. Cultural environment: participation in cultural events
10. Ensuring life and well-being
11. Civic aesthetics, creation of place and place
12. Creative results: the scale of creative industries

6. The ten key indicators of a Creative Place

Understanding the concept of "Creative City", first of all, we must understand the essence of its key characteristics - whether the city contributes to personal development and individuality of the citizen or provides residents with an optimal environment for creative self-realization and formation of original cultural and economic context.

According to the monitoring of cultural and creative cities in 2019, conducted by the European Union, there is a separate set of indicators to illustrate the creative economy of European cities - this is primarily the development of economic elements, namely:

- jobs in the creative sector, especially in the digital, media, entertainment, vocational education and training sectors. Possibilities and dynamics of creation of new creative sectors as ability of the city to react to changes of the technological market are separately considered;
- innovation and intellectual property, in particular design patents, ICT patents, research and development in accordance with the goals of sustainable development, is how favorable the city is for innovation.

Analysis of the creative economy of cities is impossible without the analysis of brands, especially in the audiovisual sector, programming, fashion. In addition, it is necessary to take into account the number of creative hubs and spaces, the cost of culture and the share of cultural and creative products in the city's GDP.

Among the findings is the observation that the creative economy is better developed in large cities. This is due to the higher density and connectivity. If creative firms are close together, it is effective in terms of intersectoral synergy, because it promotes the exchange of knowledge and innovation.

The main key indicators of creativity, sustainability and capacity of the city in the future are:

political and social framework
 originality, diversity, vitality and expressiveness
 openness, trust, tolerance and accessibility
 entrepreneurship, research and innovation
 strategic leadership, agility and vision
 talent and educational landscape
 communications, connections and networks
 creation of creative places
 vital activity and well-being



The main resource of the city are ordinary people, who can do extraordinary things, if they get a chance. Empowerment can build confidence in them and enable them to engage in change. Then we will move away from tactical urbanism as the only way to make our environment comfortable, stop talking about the crisis of urbanism: if you want to have a comfortable city, “burn” old and build a new one in a new place. There should be a creative long-term master plan based on sound calculations and community support.

7 Developing strategies roadmaps to make cities more resilient, involving all sectors of the population



The city development strategy is an important part of building a quality environment for citizens. And it is needed to attract investment in infrastructure and local business. Therefore, such strategies usually have a marketing component, which should create advertising for a particular city to receive new funds from businesses, as well as increase the rating among tourists and locals.

Many cities in the world have long decided on master plans for the next 20 years and are effectively implementing the proposals contained in them.

Programming a city's development, how it should change over the next few years, is a huge challenge. Continuous improvement of meeting the needs of both current and future generations of residents requires the definition of a vision of the expected state of the city, as

well as long-term goals to achieve it. These issues should not be formulated in isolation form. The ideas and opinions of residents, local entrepreneurs, NGOs and business institutions should be considered, as these groups know best how the city works. In addition, they get influenced by the consequences of the actions taken. The general concept of city development is fixed in the document entitled "city development strategy".

For most residents, the city's development strategy is an unknown and abstract concept, is planning at a high level of generalization and in the long run. In order to change it, the involvement of the local community in the work on the strategy is required, first of all, inform them about the current activities and its purpose.

A fundamentally important point is to ensure the active position of representatives of the local community, their direct participation in the development strategy of the city. Numerous tools of public involvement in the process of strategic planning have been tested in world practice: - survey of residents in order to determine modern values and vision of the city in the long run;

- conducting seminars and round tables to discuss and study the reaction to the results of the survey;
- development of a special interactive website for dissemination of information on the course of strategic planning and constant feedback with local residents;
- thematic discussions online;
- communication with the mayor, members of the city council on the Internet;
- general presentations of the strategy and programs of its implementation, etc.

Quite interesting is the experience of Birmingham, where, in addition to regular polls and annual opinion polls, a permanent community group was created, consisting of thousands of representatives of the local community, selected from a representative sample.

The main topics for general discussion in Birmingham include the following:

- general perception of the city's image by residents;
- quality and demand for municipal services;
- determining the percentage of the population that periodically applies to the city council and how it happens;
- priorities of citizens in budget expenditures;
- The effectiveness of urban development is a key at the current stage of state building. Modern cities, especially megacities, are leaders of scientific and technological progress, initiators of changes in various spheres of public life: social, economic, scientific, political and others. Thus, it

can be argued that urban development largely determines the effectiveness of changes in the country and affects the development of the state as a whole.

The central place in the process of strategy development is occupied by the stage of goal setting. In general, the goals of the next level of different cities are quite typical. The goal, in most cases, is to improve the quality of life through economic growth. The difference in approaches becomes apparent only when considering specific tasks of a lower level "goal tree". In addition, each city formulates its own unique mission, for example:

- be an "open city", an international city and a city of culture (Amsterdam);
- become an "EU information capital" and a "transport hub" (Cologne);
- to develop as a center of technological innovation (Manchester);
- to acquire the status of a European metropolis (Lille)

Successful implementation of the strategic plan involves:

- development of a system for evaluating the development of the city;
- development of a budgeting system;
- introduction of annual monitoring of results of achievement of strategic goals;
- ensuring compliance between the structure of the annual report of the city and the goals and directions of strategic development.

The main indicators used in monitoring the development of the city include:

- level of employment;
- number of newly created jobs;
- working conditions;
- income, including wages;
- property differentiation;
- increase of the tax base;
- maintenance of developed companies and highly qualified personnel on the territory of the city;
- strengthening of industrial cooperation;
- improvement of the ecological situation;
- freedom of access to information on research and technology;
- investment in research activities;
- number of research centers;
- patent activity;

- newly created enterprises;
- quantity of marketable products and services;
- growing import substitution;
- development of recreational and business tourism;
- reduction of water pollution;
- improving the quality of groundwater and surface water;
- increase in foreign investment;
- increasing the availability of medical services;
- financing of art and culture;
- assessment of city residents, business circles, mass media

Thus, the successful sustainable development of the city can be ensured only if the system of continuous use in management practice of strategic management tools and effective cooperation of three sectors - the local community, government and business structures. On the other hand, strategic management as a joint work of the community to determine their own better future and achieve it effectively promotes community self-awareness and cohesion.

It can be concluded that local development strategies of developed countries use methods and developments that encourage the introduction of strategic management systems in the activities of local authorities, strengthening self-government, community synergies and building civil society.

8. Effectively and ethically use data and innovative technologies to develop intelligent solutions to support the sustainable development of creative industries

The core and semantic center of the new creative economy is creativity, an idea created by human. It is the creative potential of human resources represented by the center of the existing formation. The creative potential of an individual produces novelty, generates new discoveries and ideas, is able to productively solve complex problems, and, very importantly, decisively and immediately puts them into practice. In this approach, it is no longer information that plays a key role but creative people who generate new ideas and put them into practice. At the same time, creativity is the evaluative resource of the individual and the driving factor of socio-economic and socio-cultural development of the country. However, it is important to emphasize that in the modern economy, creativity is seen not only as a key factor in the economic stability of the country, but also as a mission of society, region, individual, etc. In turn, if the key factor of the knowledge economy is education and intellectual product, and the innovative economy sharpens attention to the ways of using this knowledge, the task of the creative economy is to provide conditions for generating ideas. Such scientists as T. Monroe, S. Arieti, R. Florida and others began to comprehend the new creative epoch in the second half of the 20th century.

According to T. Monroe, the main characteristics of the creative era are the presence of brilliant people to whom the state can provide jobs, and in this regard, there are people who are able to appreciate and recognize their creations. S. Arieti continued to study the new creative economy. According to the scientist, some cultures promote creativity more than others, and he called these cultures "creativogenic". He believed that people become creative due to the influence of three factors (stimulating culture, genes and interaction). The author identified socio-cultural factors of creatogenic society, among which are:

- the availability of cultural means and resources, openness to various cultural incentives, the desire of members of society to high achievements;
- free access to cultural means, freedom of thought and action;
- sensitivity of cultural stimuli to different and even contrasting movements;
- tolerance for different opinions;
- interaction of significant personalities, stimulation through awards and encouragement.

Creative intelligence has become a new form of cultural literacy that uses force to create, connect and inspire. Creativity and artistic expression give energy and inspiration, as well as strength. Design is a key dimension of creativity and a key component of culture. Increasingly, design is becoming a channel for the transformation and integration of scientific and

technological advances, including infrastructure development and digital production and manufacturing. Cities have become platforms and architects for positive change. Creative industries have become one of the most dynamic poles of growth in the world economy.

Creative economy is the most modern phase of economic development. Cultural and creative industries produce and distribute cultural goods, services or activities with cultural content that conveys ideas, symbols and lifestyles. Increasingly, knowledge, culture and creativity are becoming new keywords in the understanding of rapid urban transformation, which also coincides with the emergence of knowledge societies. Through growing inequality and migration cities become the center of new social divisions, alienation and discrimination. Cities have the ability to expand creativity.

The UNESCO Network of Creative Cities (UCCN) seeks to harness the ability of cities to unite creative people, stimulate economic growth, foster a sense of community and preserve the city's identity and heritage. UCCN members have chosen creativity as a strategic factor in their sustainable development. They also support the recognition that culture is both a stimulus and a driver of development. Network cities share experiences and knowledge, draw on best practices and inspiration from other urban centers, and contribute to cross-strengthening. Today, the pace of technological change continues to accelerate. From now on, creativity and sustainable development will be influenced by the dominant drivers and factors of our age - globalization, urbanization and megacities, the Internet, digitalization, artificial intelligence, robotics and big data.

Today in the business environment, profit is not a material product, but original ideas, intellectual and cultural creations, software, works of art and more. The consumer values the product of its social component. Therefore, modern enterprises need to learn to manage the choice of the buyer with the help of the creative component of this component.

9. Mobilizing stakeholders to build sustainable partnerships and smart cities – CREATIVE HUBS AS THE CORE OF CREATIVE CITIES



In order to understand the concept of "Creative City", first of all, we must understand the essence of its key characteristics - whether the city contributes to personal development and individuality of the citizen, or provides residents with an optimal environment for creative self-realization and formation of original cultural and economic context. National development and competitiveness of the country directly depend on the quantity and quality of its human talents. And the education of talents requires a certain urban environment of interaction, a kind of "developing brine", in which individual creative abilities are manifested and recognized. And the creation of such a developing environment - creative spaces - is one of the systemic long-term tasks of a creative city.

Cities have always been places, where artists and other people in the creative professions find themselves and succeed. New creative hubs or platforms, where professionals can create, meet, collaborate and showcase their work, become catalysts for urban regeneration, give new functions to abandoned industrial areas or unoccupied buildings, and attract to related services and businesses.

Creative hubs play an important role in community development. This is especially true for the Eastern Partnership countries, where a lack of trust still prevails. National funding

programs that create networks and clusters and organize creative hubs can help develop a culture of active involvement and collective participation.



This is still a new phenomenon in some Eastern Partnership countries, and most of these projects are private initiatives that are virtually unsupported by public authorities. These hubs demonstrate the dynamic entrepreneurial spirit of creative and business communities that meet global trends. Creative hubs have different shapes and structures. Most of them are physical platforms, although they can also be digital platforms and virtual networks or include coworking spaces, business incubators or accelerators, fab labs or urban laboratories, but they primarily embody the new community. In many cities, they are starting to occupy abandoned buildings in the center, abandoned premises or former / actual industrial sites and areas. By inhabiting and gradually restoring them, such hubs revive forgotten parts of cities and promote the development of cities and regions.

These are places for work, meetings, learning and interaction, where knowledge is exchanged. Creative hubs may have different functions and offer a variety of products and services: jobs and offices, workshops and seminars, mentoring and training, business clubs, coordination activities, "brainstorming" and more. Hubs primarily contribute to project implementation, business development and community building. This new work environment contributes to the blurring of lines between disciplines and verticals. When representatives of creative professions come together, meet, discuss, create and speak in an intercultural, interdisciplinary, multilingual and multidisciplinary format, more attention is paid to experiments and methodology. Interaction

in hubs stimulates artists and representatives of creative professions who are accustomed to concentrating on their own individuality, through which they associate and collaborate with the rest of the creative community and society as a whole. Interest in a collective organization is the key to surviving in a changing competitive environment. The exchange of knowledge, skills and resources within a common platform reduces skills shortages.



The development of spaces and hubs to generate ideas and projects requires both government support for existing creative spaces and the creation of new ones, such as a multifunctional creative hub divided into different sectors for people with completely different interests. It may be appropriate to create a city program to support such spaces. The city also needs to create more platforms such as accelerators and incubators, not only in the field of IT, but also in other areas.

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