
ROLE MODEL CITIES BOOKLET

IMPLEMENTATION RESULTS

RÖCK

Cultural Heritage
leading urban futures



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EXECUTIVE SUMMARY



The **ROCK Role Model Cities Booklet** presents the results of the implementation process performed by each of the 7 cities selected as Models due to their previous experience with transformation from Heritage cities to Creative and Knowledge-based cities: Athens (GR), Cluj-Napoca (RO), Eindhoven (NL), Liverpool (GB), Lyon (FR), Turin (IT), Vilnius (LT).

Each city has a dedicated section, showcasing the transition from the initial ROCK model to the upgraded version, as well as the achievements obtained through ROCK project at the very local level. This section explains where and how did ROCK approach step in and facilitated the upgrading process of different practices already in place and accentuates the need for clustering and peer-to-peer learning exchanges between cities confronted with common challenges. The journey through the specific actions of each city highlights both soft and technological tools that have been used or tested to support the transformation of historic city centres, grouped under two main sections: achievements at local level (quantitative and qualitative assessment depending on action specificity, technological tool deployed, etc), as well as obstacles and barriers (bottlenecks or obstacles encountered in tackling different challenges). The relevancy of ROCK local actions and achievements is captured through a set of successes, opportunities and lessons learnt, reflecting broader opportunities aroused from the action and

interaction process. Since transferability and up-scaling play an important part of the entire ROCK process, Role Model cities provide a series of tips and specific recommendations for the transfer of ROCK implemented actions/ tools to other cities, but also grasp some key facts for ensuring the sustainability of ROCK actions and initiatives on the long run, beyond the official end of ROCK project. Each city profile closes with an inspirational quote given by a member of ROCK city partner's tea, expressing what ROCK process meant to him/ her and for the city as a whole, at professional and personal level.

Finally, a dedicated section will be focused on the ROCK role model cities facing coronavirus – how resilience has become the new normal (COVID-19 impact on the ROCK implementation process), capturing a short overview of immediate impacts of the pandemic on the ROCK implementation process, management of the crisis and changes occurred in the workplan.

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MUNICIPALITIES



Role Model



Replicator

ATHENS

CLUJ-NAPOCA

EINDHOVEN

LIVERPOOL

LYON

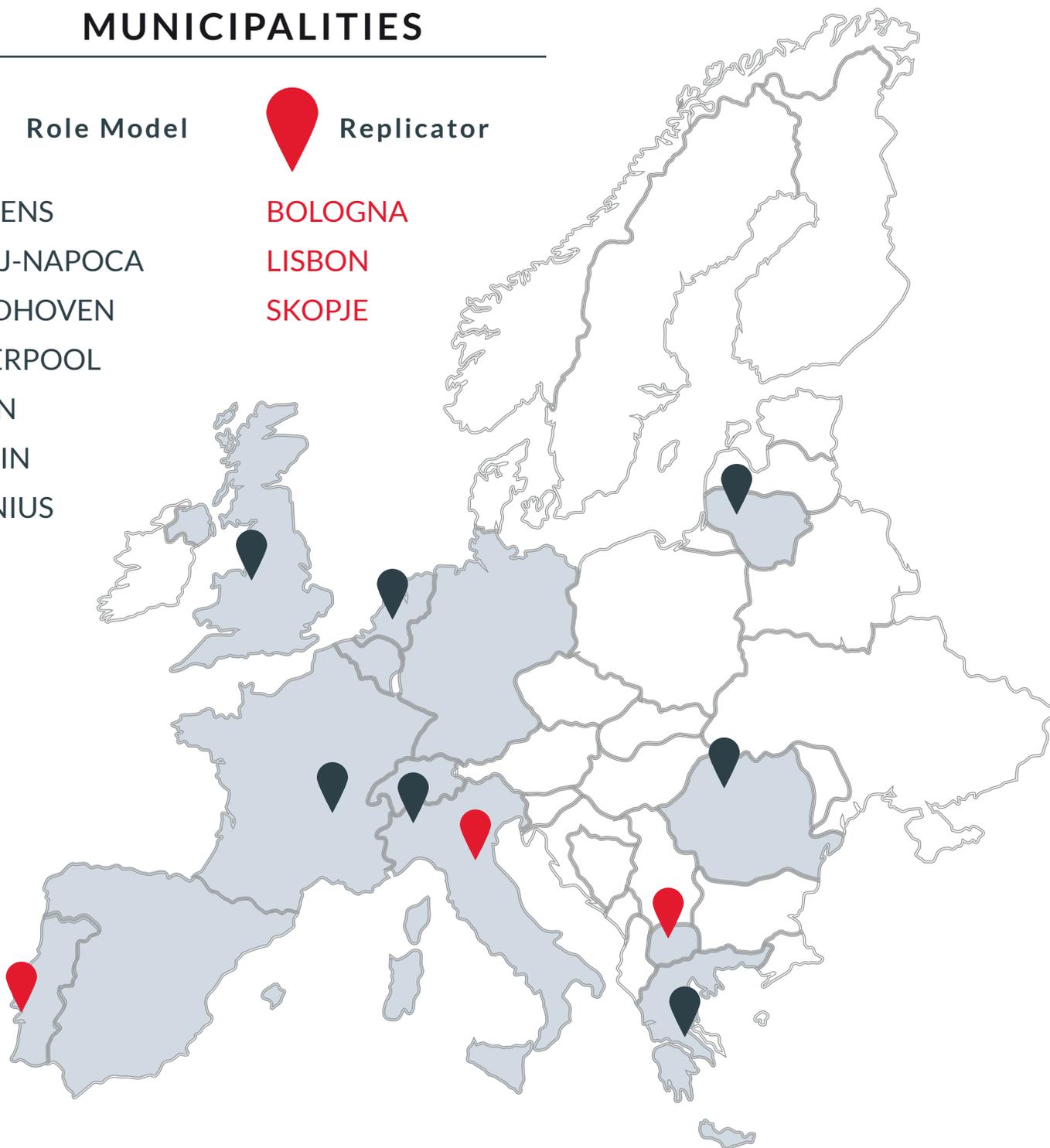
TURIN

VILNIUS

BOLOGNA

LISBON

SKOPJE



INTRODUCTION

Reflections from Urbasofia, partner responsible for the implementation process coordination

Chasing the opportunity to solve the conflict raised from finding the right balance between cultural heritage preservation and future-oriented development needs, the implementation process of ROCK tools and technologies represents a natural step in addressing this contemporary pressing challenge. Cultural heritage (CH) assets and historic urban areas are not solely a witness and symbol of the past, but notably a resource and potential for future urban development. According to sustainable development principles, Role Model Cities' assumption lies in the responsibility to handle what they have inherited from the historic times to present and future generations to use, enjoy and benefit from them. Specifically, a mix of "soft" and technical solutions are tested in different historic urban centres, with a wide range of cultural heritage values. Overcoming their initial role as City Models in different thematic areas (from community-based design practices and living lab approaches to innovative funding models and new smart services for the old town regeneration), the 7 Role Model Cities (Athens, Cluj-Napoca, Eindhoven, Liverpool, Lyon, Turin and Vilnius) have performed themselves an implementation process, aimed at unlocking the next level of their recurring practices through the testing phase of fresh models and innovative tools.

Not only based on the current situation analysis, but also on the forthcoming development demands, an iterative plan has been drawn to guide Role Model Cities in the implementation

process, with the specific aim to facilitate the integration of new tools and technologies in the cultural heritage environment. Starting from the ROCK Circular approach, simply put as the ROCK Circle (shown in figure 1), the implementation process is grounded on six interconnected pillars: creativity, culture, regeneration, knowledge, security and green circles that draw strength from each other to determine the future of cities. Throughout the outlined implementation processes in each Role Model City, you will discover a wide range of soft actions and technological tools, which set the basis of the locally embedded actions and drive the achievement of their specific goals. The Implementation Plan stands as the planning tool for the entire process, although it is not envisioned as a static document, but instead as a flexible one, supporting gradual changes as cities test new models and tools through on-site actions. These site-specific actions are strongly dependent on stakeholders' involvement (local actors, associations, businesses) as a key element to create the city's future in a collaborative way. Lastly, the monitoring and feedback phase is essential in assessing new values and meanings given to the initial model; strengthening and expanding the local knowledge into an upgraded and more powerful model.

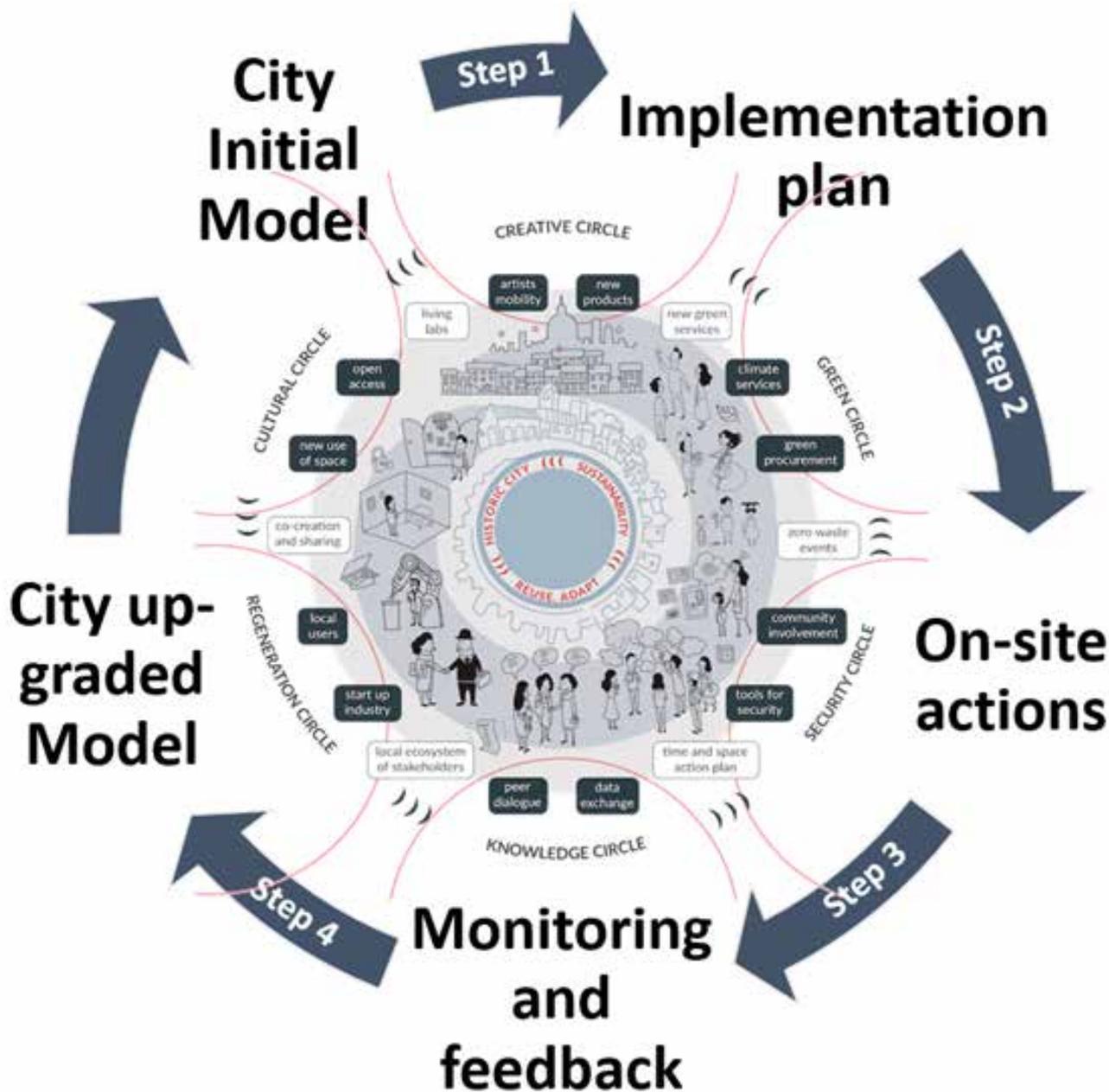


Fig. 1 - ROCK implementation process in Role Model Cities

Investing with adequate urban policies in the enhancement of cultural heritage does not only mean regenerating neighbourhoods or redeveloping buildings or public spaces. Investing in cultural heritage means knowing how to reinvent, and therefore innovate, the practice of citizenship: improving the usability of contemporary urban services and laying the groundwork for a future identity based on knowledge and multiculturalism.

Pietro Elisei
 Urbasofia Director

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ROLE MODEL CITIES

HIGHLIGHTS FROM THE IMPLEMENTATION PROCESS

From the initial ROCK model to the upgraded model

In the case of Athens, the ROCK project operated as an umbrella framework for the improvement of existing local cultural initiatives, especially:

The synAthina platform represents a co-creation tool used for engaging the local communities in problem solving and reform, by sharing their ideas for a better life in the city and vision on how to concretely improve the city. The platform acts as a connector between the community and the local government representatives, non-governmental organizations, as well as private businesses that can support in transforming ideas into reality. The synAthina platform is organised based on four main activities: collecting (mapping and documenting citizen-led initiatives), connecting (strengthening the ties between community groups, sponsors, and the municipality), sieving (identifying opportunities for citizens to partner with government) and incorporating (leveraging collective community voice to drive change in city hall).

“This is Athens-Polis” project, aiming at reactivating abandoned areas and closed shops in the city centre. In this context, ROCK supported the inauguration of the ViZ Laboratory for Visual Culture in one of the most problematic areas of the city centre, namely the Plateia Theatrou. The initiative brought together many stakeholders, involving also the Athens Schools of Fine Arts with the aim of creating new spaces for arts and culture.



The Implementation plan of Athens focused on engaging more with the local actors active in the cultural sector and on identifying and empowering a new generation of enriched and hybrid cultural activity and cultural exchange that goes beyond traditional perceptions of CH and mixes regeneration, creativity, social innovation, entrepreneurship and solidarity. For this purpose, the cultural professionals, organisations, institutions, funding bodies and the overall cultural community of the city have been invited to join the initiative “Museum World Cafe: Launching synergies for cultural professionals”, in order to facilitate the creation of a new cultural network that could assure the sustainability of the project. In this sense, the implementation plan allowed the beginning of numerous cross-sectoral synergies aiming at supporting a more sustainable cultural model for the city.





Implementation of ROCK actions

At local level, the main objective followed by the municipality of Athens was to support the cultural capital of the city and enhance the skills of their cultural professionals through the creation of new networks. The aim was carried out through the organisation of capacity building workshops and the creation of innovative partnership between different stakeholders.



Achievements at local level

- Creation of a local cultural network assuring the sustainability of the cultural initiatives;
- The attraction of new stakeholders to create partnerships with the city of Athens (e.g. Onassis Foundation in the case of ViZ Lab for Visual Culture);
- The participation of 91 professionals in the Museum World Café, raising awareness on the issue of accessibility to culture and on the necessity of utilisation of participatory methodologies in the creative industries;
- 60 participants sharpened their skills in the series of workshops organized with the Bodossakis Foundation;
- More than 1.000 people have been to/passed by ViZ Lab for Visual Culture from October 2019 to present;
- At ViZ, in the period October – December 2019, the following events took place: 11 workshops and seminars for ASFA students, 11 Public talks, 4 Exhibition openings, 3 performances – happenings;
- At Serafeio complex it was inaugurated the ATHsENSE Urban Data Lab, an interactive artistic installation that indulges the concept of a smart city through digital data collected by the citizens that are presented physically in the building.



Obstacles, challenges and barriers

For Athens, in the implementation process of a project which involves different stakeholders, the main challenge that the city has to face is fine tuning. Coordination and good timing have been among the most crucial factors in procrastinating the activities. Likewise, the attraction of the cultural community and especially the grassroots to participate in Municipality's projects always requires building networks of trust.



Successes, opportunities and lessons learnt

The most important lesson learnt regards the basic need to form a strong partnership, especially at local level, creating new collaborations among cultural communities in order to assure funding possibilities, and building a relationship of trust with the Municipality.

Lessons Learnt in a nutshell

- Create networks of trust between the different stakeholders involved (the local cultural community, local foundations, public entities, etc.).
- Learn to listen to your peers and people working in the cultural heritage field and other related domains such as arts & design, architecture, history, etc.
- Find creative ways to surpass bureaucratic obstacles.
- Always inform other relevant Municipal sectors about your project and create a communication pattern for future initiatives.



Transferability of tools/ actions to other cities

The transferability of the approach is assured by the cities working together as mentor and replicator, in a continuous process of action and feedback that allows the trajectory adjustment from time to time and the comparison between the results of the application of tools in different contexts.

Recommendations to cities who wish to follow the same path as Athens are:

- Know your city – Map the stakeholders you want to involve in your project
- Carefully select your partners
- Always engage citizens/residents
- Be ready to change if your initial strategy/methodology proves unsuccessful





Sustainability of actions

Concerning the activity VIZ Lab for Visual Culture, the financial help offered by the ROCK project will allow its pursuance until December 2020, supported by the Athens School of Fine Arts, ADDMA and the Onassis Foundation. The project ROCK will continue to leave its traces in the city, helping it to build new partnerships not only at local level, but also at Municipal and European level, through the maintenance of the networks and collaborations built during the implementation of the project.

“Culture is infamously hard to define. Sometimes you only know it when you see it. ROCK gave us the tools to see our cultural heritage more clearly, to build diverse partnerships and provide them with better support.”

Evangelos Vlachos,
CEO, ADDMA S.A.

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From the initial ROCK model to the upgraded model

The implementation of ROCK project in Cluj-Napoca was focused on testing the crowd analytics instrument developed by DFRC partner in Unirii Square neighbourhood and Central Park for a period of 3 years during large cultural events (i.e. Transylvania International Book Festival, Transylvania International Film Festival, Cluj Days, UNTOLD festival, Cluj Never Sleeps, Jazz in the park, etc). Testing the sensors for location-based analytics (LBA) supported the city in quantifying the participation in large-scale events that increase urban effervescence, contributing to the sustainable cultural development in Cluj-Napoca and achieving a better understanding of citizens' experience towards cultural events. The use of LBA tool represents a new means for better tailoring CH offers by correlating citizens' behaviour with city services and facilities provided. The integration between technological and soft tools was crucial for the city of Cluj-Napoca, specifically in the context of the Civic Imagination and Innovation Centre (CIIC), which recently became a permanent laboratory of the municipality in which to develop and test various forms of collaboration and partnerships between local actors, in order to support participatory practices and to encourage discussions on urban innovation projects.

The CIIC Centre coordinates and guides complex networks of participatory governance, including academia, NGOs, trade unions, professional associations. The concept was built around the idea of combining the importance of citizens'



engagement and the power of CH in order to create a learning environment and to share step by step the project development process, from design to implementation. Benefitting from ROCK knowledge portfolio and the exchange process among ROCK cities, CIIC became an even more powerful tool for triggering innovation in planning and regeneration processes of different heritage areas within the city.





Implementation of ROCK actions

The use of the crowd analytics instrument helped identify and understand the impact of transformative actions in heritage areas of the historic city centre. The tool was used to collect information about the visitors' habits, period of usage of the space, generating visual patterns of people's flow among various location within the city centre. The users' flows have been studied under two different circumstances: 1) during regular activities and ordinary uses of public space in the monitored areas and 2) temporary public installations, structures and happenings related to specific cultural events attracting large crowds. The main objective was to determine the footfall in real-time, as well as the change rate in crowd's size, dwell time and data concerning revisits of certain areas and locations. The end goal is to collect missing, but essential data for optimizing safety conditions and tailoring urban policies related to crowd management during ordinary (conventional/ average weekdays) and extraordinary conditions (i.e. cultural-based festivals and events) for the selected locations.



Achievements at local level

- The sensors placed in both indoor and outdoor areas of the city centre provided accurate analysis on spatial-temporal behaviour, based on collected data over time and real-time insights on mobility patterns within and between the monitored areas;
- The sensors generated a better understanding of the accessibility dimension to specific contextual data on crowd flows (during ordinary days and exceptionally events) in different CH locations of the historic city centre;
- Data acquired during the UNTOLD electronic music festival proved its attractiveness showing a relevant difference in the crowd flows of 342.262 people, if compared to a regular week's flow. During the festival week, the services, local commerce and the whole atmosphere of the city are revived by the event. However, UNTOLD brings this plus of well-being for a short period of time; at the end of the big event, the charts show a fall in the number of people in the areas of interest;



- ROCK knowledge and practices empowered the concept of the CIIC, which gained even more power as a tool for engaging citizens at local level in the regeneration process of different heritage areas within the city;
- The overall project helped collect around the idea of innovation a large community of individuals united by the will of improving the city sustainability and CH potential.



Obstacles, challenges and barriers

The biggest obstacle encountered during the implementation process was the preparation of the documentation for the study "Built Cultural-Historical Heritage and Adaptive Reuse in Cluj-Napoca" because of the many ownership and destination changes the space has suffered during recent years. Without proper mapping and understanding of the latest years' dynamics within cultural heritage areas, the city cannot develop an adequate regeneration strategy.





Successes, opportunities and lessons learnt

The ROCK project created the opportunity for the local administration to deepen the city's evolution over the past 10 years and brought awareness to the local institutions on the important role that cultural and historical heritage plays for the sustainable development of the city. Furthermore, it strengthened the importance of developing a "creative local base" under the form of a physical laboratory in which to share and implement together the project activities following the co-design, co-creation and co-implementation methods. On a different note, ROCK project opened up new perspectives related to future development paths for the city and supported the elaboration of a concept study for a flagship initiative: Cluj Science & Research Centre. The aim of the Centre would be to cultivate a retaining home-grown talent and create a collaborative ecosystem with talented people from all over the world, within an environment where innovation is a given. It would act as a 'living lab' to test out new concepts and ideas, where students and visitors can learn alongside research and business mentors, immersed in the STEAM environment (Science, Technology, Engineering, Arts and Maths).

Lessons learnt in a nutshell

- Cultural heritage can be an asset in developing a liveable and sustainable city.
- Develop a participative approach in the governance of heritage commons since collaboration is essential to ensure a long-term sustainable development of the city.
- Monitoring the results of the public policies and the impacts in the community represents a continuous activity and shall be pursued on a daily basis.
- The peer learning and exchanges between cities are fundamental for the improvement of the projects' performance at both local and international level.



Transferability of tools/ actions to other cities

The participatory governance tools (Civic Imagination and Innovation Centre; Participatory Budgeting) used to shape and consolidate community-based design model can be easily replicated and adapted to other city contexts for a successful regeneration of heritage areas.

Sustainability of actions

The knowledge gathered through ROCK project implementation (either as a result of the crowd flow monitoring through LBA sensors or as the outcome of a series of public debates and dialogues organised under the CIIC framework) triggered new initiatives related to the future development of Cluj-Napoca and will be incorporated into the city development strategy. For instance, mobility is a hot topic in the city, therefore creation of pedestrian corridors and shared spaces is a must for short and medium term, as well as the rehabilitation and extension of pedestrian space in the urban area (both in the central areas and residential ones – i.e. Grigorescu and Mănăştur neighbourhoods, the area of Republicii street). A balance between top-down and bottom-up approaches in the governance of heritage commons will continue to be pursued and encouraged and the local administration will be actively involved in supporting the cultural independent sector.





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Culture is the most powerful story that we can tell together. It is the value that we all recognize because it ties all our origins together; this is the reason why we have to build on this strong base and consider it one of the long-term strategic priorities.

Ovidiu Cîmpean

Local development director, Cluj-Napoca Municipality

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From the initial ROCK model to the upgraded model

In ROCK Project, the municipality of Eindhoven had two major objectives: (1) understanding and monitoring the impacts of cultural events (i.e. Dutch Design Week, King's Day) in order to create positive experiences for visitors and decrease the negative environmental impacts of such interventions in the city and (2) documenting and evaluating the planning process and the living lab approach of a new adaptive reuse area (NRE area) in Eindhoven. In order to achieve these goals, municipality emphasized the importance of collaboration with Eindhoven University of Technology (TU/e).

These objects were addressed focusing on three key actions:

1. Monitoring Cultural Events: the city of Eindhoven tried to understand the visitors' experiences during the cultural events in terms of accessibility and perceptions such as which areas are the most/ least visited, which routes have been taken, which transport modes have

been used and where people have had positive or negative experiences, in order to better plan and stage the cultural events in space. The environmental impact of cultural events was also investigated.

2. Evaluation of NRE area: the aim was to evaluate the regeneration process in the former gas plant. Interviews with the end users interested in the project helped Eindhoven to learn from the development process, i.e. which part went smoothly and was more appealing to end users or not.

3. Creating Synergy on data for culture & heritage: In Eindhoven, there are different national and international projects and initiatives going on regarding smart cities and digital tools. Open data platform of Eindhoven enables access to a variety of data from the city. The aim was to create possibilities for exploiting them also in the domain of culture and heritage.





Implementation of ROCK actions

Eindhoven has focused on collaboration between the municipality and the Eindhoven University of Technology (TU/e) in order to develop ideas and solutions for combining the culture aspect and smart city concepts. With respect to that, the main tool was “discussion” between the municipality and TU/e. They have gathered to develop ideas on utilizing data and open data platforms for culture and cultural heritage. TU/e has used people flow analytics tool to investigate a large-scale city festival Dutch Design Week and developed ideas to improve visitor experiences. Moreover, for the industrial heritage redevelopment NRE area, the focus was on the documentation of the redevelopment process, especially focusing on end-users’ satisfaction while carrying the cultural values of the area.



Achievements at local level

- During the Dutch Design Week in 2017, TU/e tested the People Flow Analytics tool which exploited GPS data from selected approximately 300 visitors in order to produce analytics on visitor flows and perceptions. The results of the monitoring during the Dutch Design Week event, showed that during the event (i) the East Area of Eindhoven was not visited as much as Strijp-S and Centre areas and (ii) that most of the visitors selected the exhibitions based on temporal restrictions of visitors (i.e. arrival time to event, intended duration of the event visit, combining the event visit with other activities) and the location of exhibitions instead of exhibition contents. As a result, a new approach based on different theme routes was recommended and further applied by the Dutch Design Week in 2019.
- Evaluation of the NRE area has provided a comprehensive overview of the regeneration process and on the efficiency of the living lab approach that has been used. This overview can be used as a start of a replication methodology for similar industrial heritage areas that will be transformed into mixed use districts. The acquired knowledge was turned into a booklet for future references.
- The knowledge exchange within the city created a synergy between different actors in Eindhoven. Moreover, it strengthened the collaboration between the city of Eindhoven and TU/e, especially for the topics of culture and heritage.



Obstacles, challenges and barriers

The biggest obstacle Eindhoven faced was the (internal) discussion about the usefulness of the ROCK project for the municipality as a role model city. Furthermore, in the implementation process, the Municipality found out that the budget could not cover all of the activities planned, making it difficult to participate in an active way.



Successes, opportunities and lessons learnt

- For Eindhoven, the project was not only an opportunity to share knowledge with the replicator cities, but also to learn from the other role model cities involved in the project;
- As a result of NRE evaluation, Eindhoven has learned in the process with the end-users to manage expectations of the redevelopment project upfront in order to avoid disappointments and to overcome conflicts;
- Eindhoven has learned to discuss internal issues in a larger context, which provides benefits for all involved parties. As a result of this discussion, the scope of the project changed from focusing on an already developed Strijp-S area to developing industrial heritage area NRE.



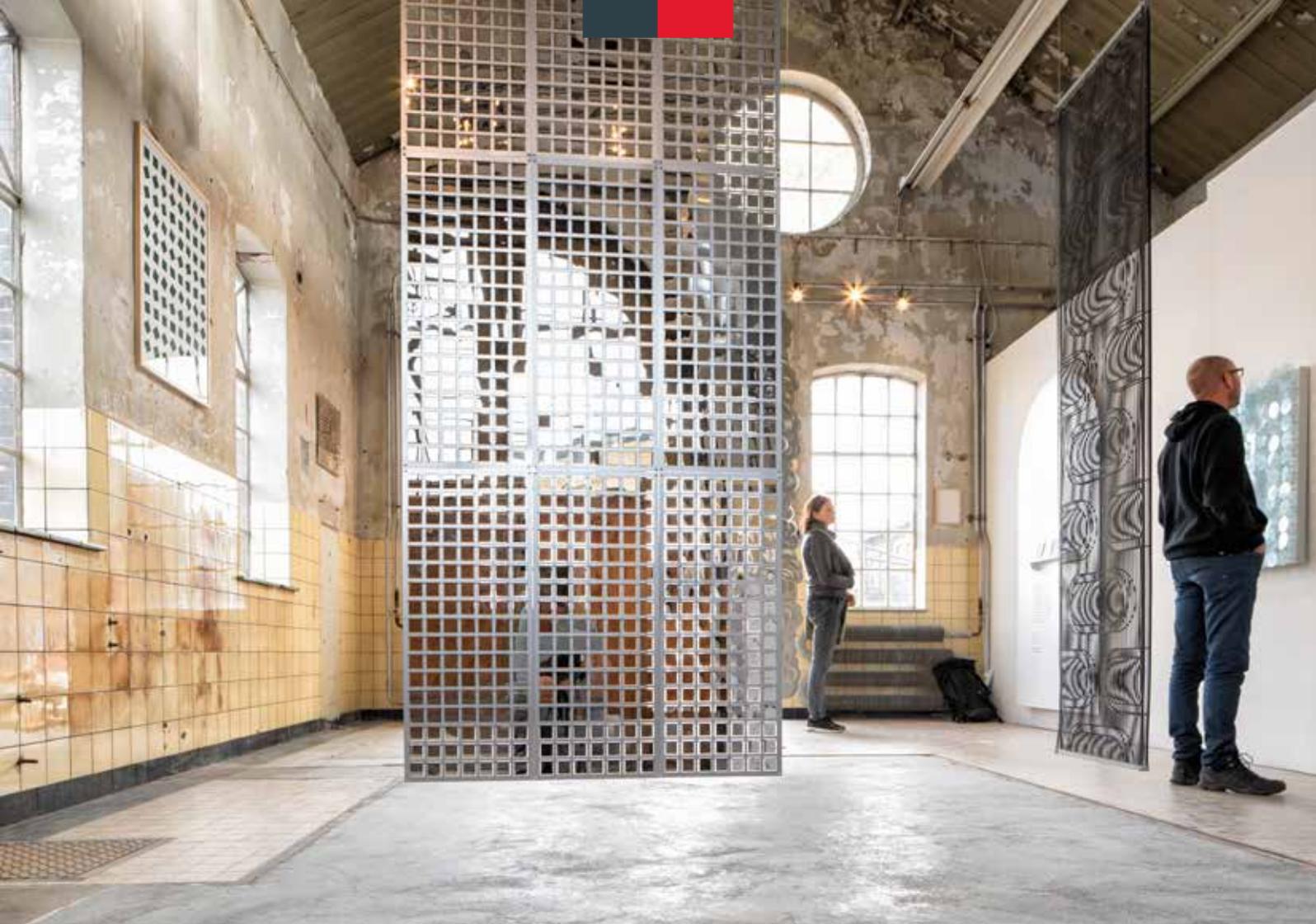
Transferability of tools/ actions to other cities

The Living lab approach results to be a good method of sharing knowledge, though it requires customization for the different cities through the application of place-based visions. This tailor-made approach takes more time than available in the ROCK project and requires a follow-up by the cities involved. The most important recommendation is to recognize the common topics in the Living Labs from the very beginning. This requires a strong cooperation between committed politicians, smart knowledge institutions, entrepreneurs (young and established) and, of course, the cities' inhabitants. Trust, transparency and long-term commitment are needed and encouraged to implement changes.

Sustainability of actions

Collaboration between the city of Eindhoven and TU/e has been the key for the sustainability of the actions taken during the projects. While the city can provide the ground for implementation of actions, TU/e provides the necessary skills to elaborate analysis and to deliver the outputs. This mutual relationship will result in new ideas and projects to enable the sustainability of current actions. The sustainability is assured also by the quadruple helix approach applied in Eindhoven, that foresees the strong collaboration between municipality, knowledge institutes, business and inhabitants.





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“You can foster trust as a municipality by demonstrating commitment, transparency and professionalism”

Tom van Tuijn

city planner at Eindhoven municipality

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In the process of reusing Cultural Heritage in co-creation with direct stakeholders, you must leave room for new initiatives and creative inspiration. As a municipality, it is difficult to let go in the urban renewal projects, but your project will gain new energy and ideas from stakeholders when they can really participate.

Marianne Willemsen – van Noppen

Project manager Gemeente Eindhoven

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From the initial ROCK model to the upgraded model

Liverpool has focused on improving citizen engagement and knowledge relating to sustainability and Cultural Heritage in the City. This has particular relevance to "non-traditional" audiences, those less likely to fully engage in debate and co-creation with the City municipality on urban regeneration. In order to propagate uplift in engagement, new thinking and solutions, tools engaged included Cultural Heritage "Living Lab" with local stakeholders and the use of digital tools, specifically the delivery of 3d model in partnership with the Royal Institute of British Architects (RIBA) and immersive cultural heritage application/s.





Implementation of ROCK actions

During the progression of the ROCK project, the City has engaged varied stakeholders using multiple communication and interaction approaches. This has enabled the City to maximise its engagement with diverse and sometimes non-traditional audiences, an approach focused on “meeting people where they are” that has significantly increased and engaged locals in the debate around CH governance and importance of World Heritage Site (WHS), including in areas where relationships have historically been more challenging and siloed. ROCK tools have been naturally adopted and accelerated due to complimentary working with ecosystem partners, and expansion of initiatives financed through EU funded infrastructure projects, programmes. Qualitative evaluation in Liverpool is focused on 3 areas.

- Direct evaluation of the digital applications (3d model/and immersive WHS pilot/delivery of pilot with Virtualware as ROCK technical partner).
- Direct evaluation of the uplift in civic engagement during the project lifespan.
- Aggregation of socio-economic metrics relevant to the spatial area.



Achievements at local level

During the progression of ROCK project, the City has engaged varied stakeholders using multiple communication and interaction approaches. This has enabled the city to maximise its engagement tactics, leading to the creation of a local cultural network that will assure the sustainability of the cultural initiatives. Among the relevant achievements, Liverpool counts:

- Improved governance and multi-layer stakeholder ecosystem, including the formation of first Mayoral Commission for Heritage;
- ROCK Engagement Programme at local level and formation of Youth Initiative with elected member for Heritage (legacy since 2017);
- Increased visitors number (by 2,573) at St Georges Hall (up from 147,846 visitors in 2017);
- Establishment of space at Mann Island dedicated to Urban Heritage Lab and additional access to 3d planning, 3d model for the City;
- Interactive and ready mechanism for ongoing consultation on the Ten Streets Heritage Regeneration area (public-private partnership).



Obstacles, challenges and barriers

- Obstacles: governance of Liverpool World Heritage Site (strictly enforced conservation frameworks within the WHS main footprint) meant that private landowners and building consent would have been required to deploy Virtualware proposed ROCK solutions. Also, the introduction of GDPR during the project timeline implied difficulties in accessing compliant stakeholder channels (experienced within LCC departments and civic actors).
- Barriers: stakeholder interest has been extremely buoyant, it was also noted that a number of stakeholder and related associations were keen to deploy similar approaches during the time period, which can be also considered an opportunity. In some instances, these organisations had far greater manpower, and marketing resources.



Successes, opportunities and lessons learnt

Engagement of civic actions in Liverpool has been extremely vigorous during the duration of the project and the coordinator has been approached regularly to contribute on a wide range of urban issues with colleagues and also externally with other Cities and academic institutions. Structural changes and transformation in house within the Council will offer far greater potential for pilots moving forward (for instance future mobility planning to optimise Citizens, responses to Covid19 and evaluation of CH infrastructure). Best practice from Bologna, Turin and Eindhoven, and light pollution strategies from Lyon have also already been integrated in approaches to citizen engagement. The process of knowledge exchange has accelerated and aggregated understanding of best practice initiatives e.g. Cluj approaches to human capital development and integrated innovation skills initiatives.



Along the project implementation, the Brexit process did not affect in any way the cooperation between Liverpool city and the entire consortium. Furthermore, having participated directly in international workshops and conferences organised by the European Commission, doubled by the participation in all 3 EU Commission roundtables, the City of Liverpool welcomes the opportunity to proactively and constructively participate in all future knowledge exchange with the EU, its valued partners and municipalities.



Transferability of tools/ actions to other cities

Liverpool City ROCK has benefited enormously from the City to City knowledge transfer and as a direct result of ROCK (coupled with experience of past ERDF and ESF implementation work) it has gained connections with wider EU knowledge transfer groups (including JRC, EU Commission Environmental, Finance, Social Inclusion Commissions, EU S3 and EU 5G IAA and EU technical ethics, and standardisation groups - ETSI). The delay in the deployment of dedicated AR ROCK WHS site way finder and model pilot due to Covid-19 is likely to result in additional opportunities moving forward, also due to bilateral activity complimentary EU Green Deal and Digital Europe. Knowledge transfer of strategic cross continental EU governance and standardisation networks which will remain post Brexit particularly in working sub sectors such as data, mobile communications and digital health.



Sustainability of actions

Multiple civic actors, associations, RIBA and knowledge economy intermediaries, Universities have already moved into this area via an increased focus on CH activity. On a practical pilot level Liverpool Business Improvement District have commenced hosting free heritage walking tours of the WHS for local businesses / employees, RIBA are generating income from paid heritage walks using previously EU funded Blue Badge Tour Guides during the progression of ROCK, SMEs and CICs offering cycling tours/meetups targeting young people and women have also increased. Close working with civic organisations such as Engage and Merseyside Civic Society means they are now pursuing their own direct funding applications to continue civic, heritage and urban engagement work. The establishment of SME cluster Immersive Liverpool has also increased focus on AR/VR (CreTech) in the City including dedicated funding from the Liverpool City Region Combined Authority (mapping, facilitation).

Additional applications for civic actions are also being progressed from a range of UK sources currently including Big Lottery, Historic High Streets, Mayoral Communities Fund (micro funds for green pockets and S106 Community Infrastructure Levies), Innovate, Nesta etc. Complimentary work with the EU Creative Europe Programme relating to artistic knowledge exchange (CreArt) and mobility and youth sporting activity has also progressed. ROCK project coordinator proactively engages in areas such as 5GUKgroups to align and assess future opportunities aligned to ROCK. For instance, the 5G infrastructure relevant to CH and Smart Tourism projects, social and creative economy pilots.



“ The most important role for a practitioner in urban regeneration is to listen. Reverent listening is the enabler of city co-creation and citizen engagement.

Suzanne Jameson
ROCK Liverpool,
Liverpool City Council

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“ We have benefited holistically across our entire ecosystem from the ROCK project. The importance of reciprocal exchange with our consortia partners, cities and groups has never been more important. The project was ahead of its time, having been fortunate enough to participate directly with the STI Taskforce for SDGs as ROCK Liverpool during lockdown, and recent EU knowledge transfer we will be better able to respond to challenges relating to the current (human) health, economic and climate crisis.

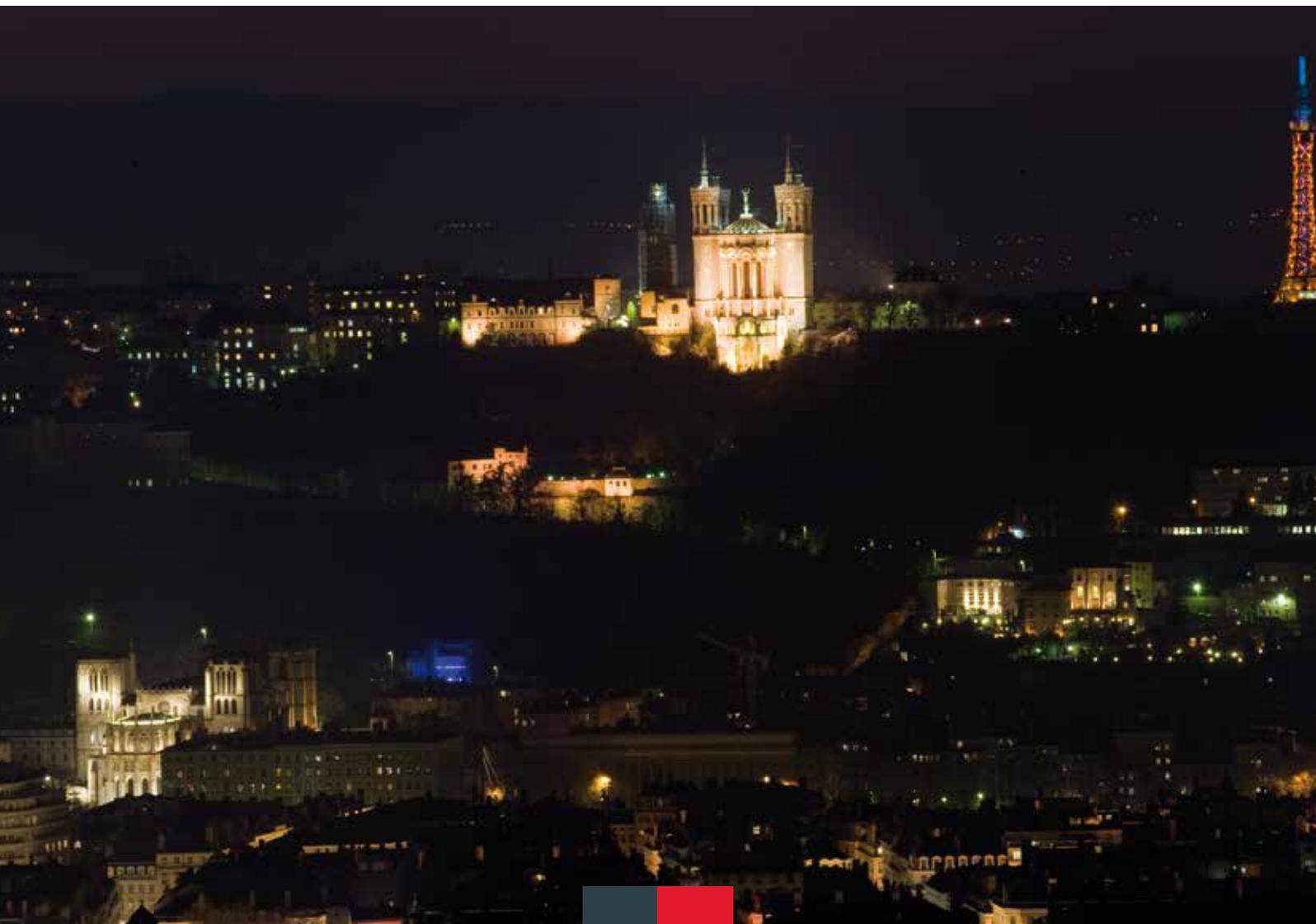
Suzanne Jameson
ROCK Liverpool,
Liverpool City Council

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From the initial ROCK model to the upgraded model

The Lyon model city in ROCK was based on three different elements:

- **City as a memory - City as a project:** It foresees the dialogue between the “historic city” and the “city as project”, assuming four main pillars: 1) Heritage refers to the whole city fabric with its tangible, intangible and natural assets; 2) The relation with inhabitants is one of the key for fostering heritage ownership; 3) A good governance and project management is dedicated to the interventions of all the relevant stakeholders, combining political guidance, scientific expertise and social adoption; 4) There is the need of a large-scale vision of the Heritage Site following the UNESCO recommendation on urban landscape approach.
- **Light Management:** Lyon is currently renewing its Lighting Plan, with the ambition to open the path for using light better for urban and social development, preventing the danger of luminous cacophony, reducing energy demand and nocturnal pollution, and integrating new technical possibilities. With the ROCK project the municipality has tried to understand the usage and perceptions of light by citizens at night and has developed tools about private lighting for a better coordination of the different stakeholders and for awareness raising on permanent lighting in general.
- **Festival of Light:** For the ROCK project, Lyon has committed to share, through a peer to peer process, its successful experiences on events as a lever for sustainable city heritage regeneration policies.



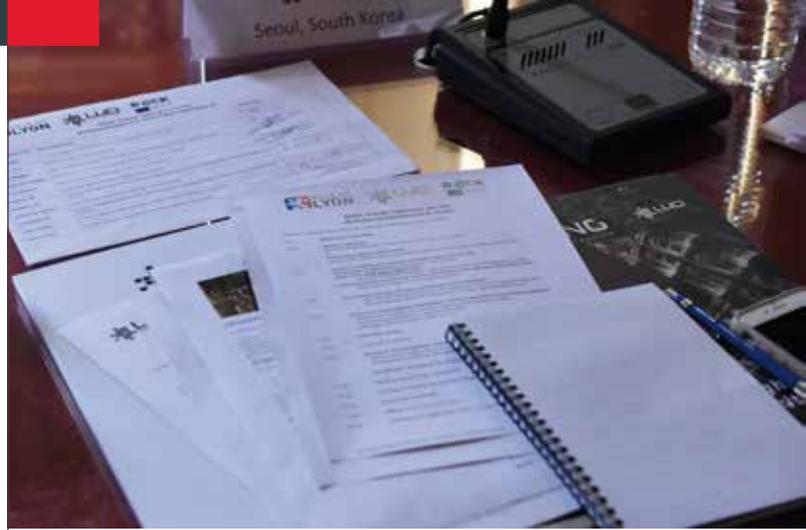


Implementation of ROCK actions

As a complement to the Urban observatory, a participatory group made up of technicians, inhabitants and users of the territory has been set up to work on new ways of living and working in heritage districts (flat sharing, AirBnb, co-living and co-working etc.). The experience brought to a reflection from different angles, supported by an important documentary work on behalf of the urban planning agency.

Several actions and tools have been implemented in relation with permanent urban lighting management:

- Realization of a study on the first lighting plan and the pioneering approach developed at this time, realized by a Master 2 student (Lyon 2 university) specialized in cities and urban environments;
- Development of tools to analyse the layers of the night landscape, developed by students from INSA (engineering school);
- Definition of light cacophony and its perception with the help of urban planning agency, INSA students and the LUCI international network;
- Work on the perception of commercial light by citizens to feed into recommendation booklets - based on those developed by the department of urban planning on the preservation of heritage buildings and facades on the UNESCO site (renovation of windows, stairwells, etc.). A steering committee was formed with different departments of the city and groups of stakeholders (shopkeepers, neighborhoods associations) to advice on the content of the booklets;
- Development of citizens tools such as a leaflet explaining the lighting plan in an accessible way and a conference at the Gadagne Museum (city museum) coupled with urban walks to introduce the lighting plan to a broad audience;
- Documentation of the notion of nocturnal landscape and its evolution throughout the years, with municipal archives libraries and citizens (call for photographs);
- Preparation of a publication on nocturnal landscape and urban public lighting policies: interviews of main actors (political, technicians, academics etc.) of 11 cities part of LUCI network;
- Realization of a study on the Festival of light to better understand key elements of this event: interviews to persons involved in the organization of the first editions.



Achievements at local level

- The agency has succeeded in creating a space for dialogue with a flexible and agile, inexpensive and innovative method on a citywide scale. The collaborative multi-stakeholders approach helped in raising awareness on the questions of public lighting as a tool for CH enhancement but also as a cornerstone of Lyon culture;
- The most important achievement is the development of a more transversal approach on urban lighting bringing together actors with different backgrounds: technicians, politicians, CH Architects, lighting designers, libraries, etc.;
- Urban planning and CH management now integrates the light dimension;
- Attention and political support was brought on the question of urban lighting through the creation of a booklet of recommendations about Innovative methodologies that have been applied in order to measure the impact of new usages in touristic areas of UNESCO sites, allowing a strong involvement of the citizens.



Obstacles, challenges and barriers

In the frame of the ROCK project we manage to get quite far in the experimentation and the development of tools. We now need to validate all the results at political level and foster ownership of methodology and tools developed. As regards urban lighting, we have managed to bring together many stakeholders. The question of light governance remains a subject to address in the future.



Successes, opportunities and lessons learnt

We have managed to raise awareness on the question of light cacophony that was still under the radars. We tried to understand the phenomena and to nourish our approach with different stakeholders' point of view through a cross sectoral approach. The main lesson learnt is that before thinking regulations or regulatory framework, it is very important to understand and qualify the subject, understand perceptions and usages of citizens in the context understand the difficulties or identified problems with all the stakeholders before regulating if absolutely needed. Participating in ROCK also allowed us to think of urban development in several dimensions from the single object (a monument for example) to the landscape and even the large landscape.



Transferability of tools/ actions to other cities

The Lyon collaborative multi-stakeholders approach, applied with the objective of overcoming the silo approach, is fully transferable to other contexts.

The lessons learnt could be reported as follows:

- Work in a collaborative way and take on board all the actors concerned
- Always consider the real point of view of the citizens/end users
- Integrate the current usages of the city in the elaboration of the decision

Envisage CH on the level of the large landscape (urban historical landscape) and related actions requiring a large variety of practices and skills.



Sustainability of actions

The sustainability of work will now lie in communication, diffusion and ownership of the tools developed and the subjects identified as important for the future. The work that will be done on private light governance will also contribute to sustainability.

The study on the Festival of Light presents the “philosophy” that is behind this event and how it has evolved from the origin to nowadays. These elements will be integrated in a broader reflection that is taking place at the moment with the new political team on how the Festival of Lights could evolve in the upcoming years.



“

The participation to the ROCK project brought us to the conclusions that Cultural Heritage: has to be considered and managed in a very transversal way; and Its enhancement is closely linked to territorial development at different scales. ROCK project has allowed us to raise these two points to our interlocutors and partners and integrate them in all our reflections. A third point also emerged: the question of landscape/cityscape and living environments are deeply connected when it comes to defining public policies and in particular territorial development.

Piérane Gausset

Head of CH service,
Direction for Cultural Affair Department, City of Lyon

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From the initial ROCK model to the upgraded model

Turin's model of sustainable reuse of spaces, through the ROCK circular approach, underwent an upscaling process, by leveraging on synergies between different types of stakeholders and the places themselves. The model has been upscaled in the context of temporary use of CH as a means of regeneration and economic spark in disadvantaged neighbourhoods, and as an occasion of collaboration among public institutions and private actors (the 2016 Common Goods Regulation, updated and modified in December 2019). Turin experimented with the development and management

of the phenomenon of "off" events, side events that usually accompany the presence of large-scale initiatives, involving a heterogeneous set of actors and generating micro-level effects. The primary objective of Turin was to monitor the number of visitors attending specific places and events in the city and to understand if those attending temporary events were visiting the permanent heritage of the city as well. Through ROCK, Torino also tried to implement its dataset on unused and underused buildings and spaces.





Implementation of ROCK actions

Turin applied 20 sensors for crowd analytics (Location-based Analytics Sense) in 3 main areas, allowing to monitor the crowd movements and identify mobility between monitored locations:

- Permanent CH related locations (museums,, historic buildings);
- Temporary events (Contemporary Art weekend, International Book Fair);
- San Salvario area (connection with other sensors deployed by the City of Turin through the H2020 MONICA project and others), to monitor safety and noise related to nightlife in the city centre.

For the purpose of the dataset implementation, the actors involved in Crowd Analytics were the museums' directors and managers, the temporary events' organizers, the owners of small commercial activities in the area of San Salvario. For the purpose of the dataset implementation, a mapping and data collection was deployed in the second half of 2019 and first half of 2020 to integrate the data already available, with the following tasks:

- Mapping and gathering the existing datasets
- Identifying missing data (e.g. state of conservation, last use in time, surrounding environment, measurements)
- Collecting missing data
- Identifying vacant spaces which could be employed in cultural activities/ events/ initiative thus favouring a positive development of the neighbourhood.

The stakeholders involved in the activities were: owners of public properties in Turin, representatives from the City of Turin, from the Metropolitan City, the Piemonte Region and the National Government, finally Research and technology institutes. After the analysis of the potentialities of the abandoned places, a call named "Innescare poteziali" has been launched in order to identify the service provider in charge of delivering analysis, mapping and suggest policy design for the areas. In the framework of the local dissemination activities, Turin has decided to spread the ROCK legacy by means of the new permanent exhibition of Torino Urban Lab, located in the very city center in front of the City Hall, renewing its premises with a new multimedia set up. This includes a video called "Liquid City" aimed at storytelling city-change through data, and a series of video interviews to relevant local stakeholders questioned about culture and local development. These contents reflect the role of Urban Lab as local living lab at citizens' disposal for a better understanding of the local policies and urban transformations, as well as a place where the local actors contribute in shaping a new vision of the future of the city.



Achievements at local level

The possibility of monitoring two editions of the same temporary event, Contemporary Art Fair 2018 and 2019, although with a different extent (only one sensor in 2019), allowed some specific analysis as well as a comparative one.

- Crowd analytics such as footfall, mobility, returning visitors count, can be extremely useful for security monitoring during large-scale events and city planning (transportation) during festivals and free outdoor events. They also allow measuring the success of a particular marketing campaign, thanks to the crowd's activity analysis;
- As for the data collected in San Salvario, the experience has brought to the writing of a study "Long term monitoring of noise pollution in social gathering places: time analysis and acoustic capacity as support of management strategies", that considers the monitoring period between 25th October- 31st December 2018 and correlates the crowd's flows to sound levels;
- The data collected have been made available via web-based dashboard and a mobile app. These user interfaces implement queries that are also available to the end users in the form of APIs, with the possibility of further and more detailed elaborations.





Obstacles, challenges and barriers

The principal obstacles were some technical difficulties emerged in the installation of SIM cards to give internet connectivity to DFRC sensors, causing an unexpected delay in the installation. Furthermore, in particular areas, the results of the analysis seemed inconsistent, suggesting a wrong calibration of the sensors. The stakeholders' involvement in temporary events has proven difficult for different reasons: from the lack of adequate communication between the administration and the fairs, or the lack of training on the subject offered to the events' organizers. Concerning the data collected, the issue encountered, in particular in 2019, was the lack of its sharing; given the experimental nature of the data, the administration preferred to further elaborate it before sharing it with the fairs. The mapping and data collection activity encountered difficulties partially due to the inadequate completion of the information requested (i.e. incomplete columns or columns with badly completed information) and/or difficulties in crossing different sources of information at city level (i.e. georeferenced property records and cadastral systems of classification relying on different geometric frameworks).



Successes, opportunities and lessons learnt

Considering the initial technical difficulties, the first lesson learnt is to foresee possible issues and to plan alternatives and to accompany the initial planification with preliminary studies and in loco inspections.



Transferability of tools/ actions to other cities

The activities foreseen in the ROCK project for the City of Turin have proven to be valuable tools for communication, marketing/ promotion and creation of a specific identity for the city and its cultural vocation. The deployment of LBA sensors and analysis of collected data helped framing the issues and provided deeper knowledge on the actual situation and existing (non-self-evident) connections, while the mapping and data collection to identify unaddressed potentialities in terms of available (unused/ underused) spaces which could be successfully used - by public or private actors - for cultural and creative purposes. The local administration has also acted as gatherer of the local stakeholders in coordinating specific cultural events into integrated calendars.

Sustainability of actions

Internal resources will eventually be deployed in terms of staff, while in terms of finance the use of other European, national and local funding, as well as eventual synergies with other European projects are envisaged.

Urban Lab Torino planned the inquiry on public property as a part of a city/ metropolitan level activity of data collection. It is working, since 2018, on the provision of a number of analytical and explanatory tools based on maps and data crossing all fields of urban policy and the work will continue even after the end of the project.



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“Despite the ROCK scheme connecting role model and replicator cities, the exchange process has been absolutely reciprocal. The ROCK living lab approach relating technological innovation with a user-centred perspective has been very inspirational for a city agency like Torino Urban Lab, which has the goal to encourage a larger and more effective citizens' engagement in the urban transformation process.”

Valentina Campana

Director, Torino Urban Lab

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From the initial ROCK model to the upgraded model

The main objective of the city of Vilnius, in the field of ROCK project, was to create a system to measure citizens' emotions in relation to places. Scientific research has been carried out through technological tools - sensors that have been applied in the Old town (UNESCO world heritage site) and in the industrial area and has led to the creation of a "happiness index". This index does not just measure happiness. Rather, it takes stock of 12 different emotions, as well as physical health and even career and educational opportunities, to construct an understanding of the all-round wellbeing of people in the city. The comparison between the results obtained in the two different fields helps in defining knowledge-based recommendations on how to better build

attractive public spaces and how to create positive emotions through the planning process, contributing to citizens' health and satisfaction of living in the city. Furthermore, the affective emotional and physiological maps created could serve as reference for the upgrading of the CH sustainability and efficiency. Another important action taken under the ROCK project was the rehabilitation of the Great Synagogue area.





Implementation of ROCK actions

The initiative was piloted with one of the new technologies - Video Neuroanalytics. It was developed by Vilnius Gediminas Technical University (VGTU) and Vilnius Municipality. This Neuro-analytical system measures average emotions, physiological parameters of impersonalized people in the Old town and finds out how people feel in public urban spaces. The municipality of Vilnius implemented several tools, both soft and technological, that can be divided according to the 2 different stages of implementation:

- **Design stage:** mainly soft tools were used, as working groups, peer to peer working sessions explaining the process to the key actors involved (VGTU scientists, city administration departments: Urban Development, IT, City Economy, Old Town Renewal agency, and City street lighting enterprises);
- **Implementation stage:** 8 sensors have been placed in selected public spaces: The Old Town, the recreational green areas and the heavily polluted industrial grey zone, collecting information for 30 months. An opinion survey has been submitted to the scientists participating in the process, to the Old Town Renewal agency and the City administration in order to collect their opinion in respect with the Great Synagogue area. The data collected were further united into a system which allowed their interpretation in the form of colours, that were exhibited on the most prominent places of the city for the first Light festival (held in January 2019 and then replicated in 2020).

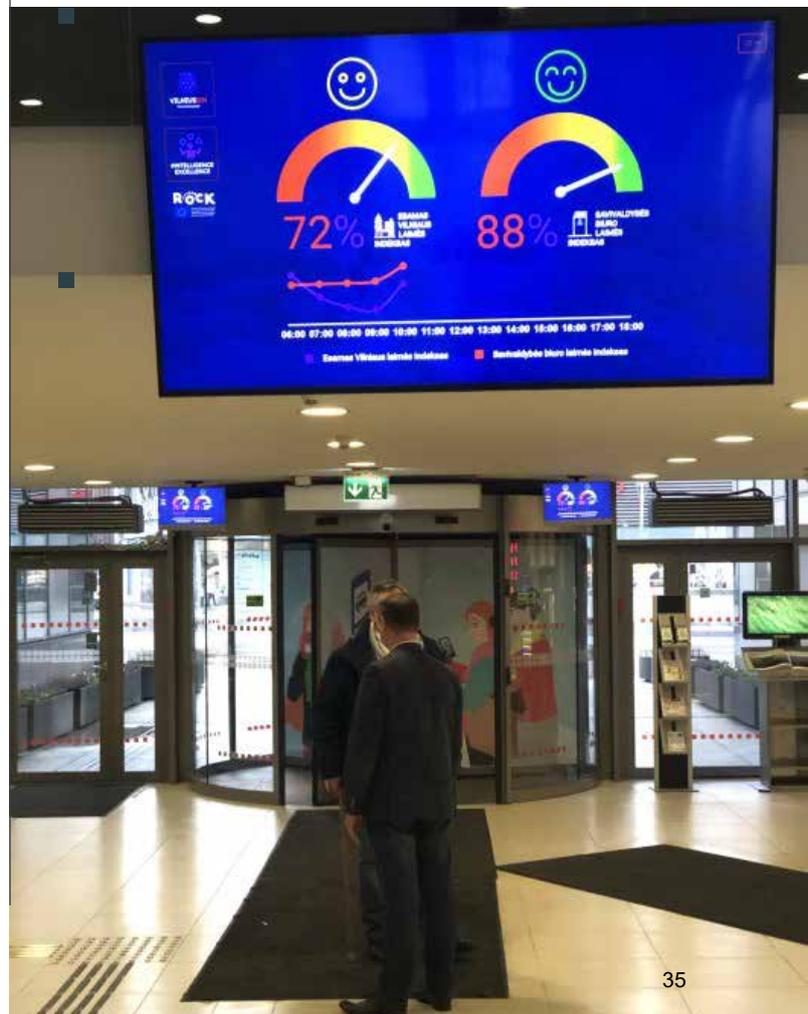


Achievements at local level

- Data from the Happiness Index have been used for the Strategy Vilnius2in, in order to measure and improve the city management. The Vilnius Happiness Index became one of the most important indicators of the quality of the city;
- The addition of the “Colours of the data” in the Vilnius Light Festival has increased its attractiveness not only at local level;
- The neuro-analytical system and the colour stand developed by the ROCK project working group of the City of Vilnius and VGTU did not go unnoticed, allowing ROCK’s team to take part to several major international

events and exhibitions, where it was possible to create new networks and spread the knowledge about the tool;

- In September 2020 Vilnius' team had submitted the application for the Secretariat of Guangzhou International Award for Urban Innovation (Guangzhou Award) with the project "The colour of data for strengthening well-being in the city;
- In 2020 an application by VGTU was submitted to ERASMUS program with the project MICROBE (open data and neuroanalytics technology for measuring citizens emotions);
- In the last 6 months over 20 articles were published on the city's main news portal. Vilnius ROCK team from VGTU were co-authors of two articles in the journal Science Direct. In total 46 articles have been written about ROCK results in Vilnius.





Obstacles, challenges and barriers

The biggest challenge that Vilnius municipality is facing - the project sustainability: huge data analysis is expensive, and the tool exploitation requires a lot of time. To assure its functioning city administration requires skilled employees, the availability of a budget that can be invested in its implementation and political support. Another obstacle - sensitive issue of personal data protection; to overcome it is necessary to combine the implementation process with a public information campaign.



Successes, opportunities and lessons learnt

The pilot testing of the technological tool gave the opportunity to experiment the cooperation between technologies and R&D in favour of a better knowledge of the city's main priorities. The main success was that the team managed to turn the project's activities into concrete results; a prototype for measuring a key indicator of the city. The team learned a set of lessons:

- Set a clear vision for the project from the very beginning. Communication between the public sector practitioners, scientists and technological partners is crucial. Involvement of all the stakeholders is necessary from the beginning (NGO's, local communities, IT sector, urban planners, politicians etc.);
- Understanding and support of citizens for gathering neuro-analytic data is overly sensitive, sometimes controversial. It needs a strong public information, PR campaign;

- Planning and implementation process of public spaces should be more "culture related", linked to the intangible values: traditions, events, festivals, etc. New - intelligent technologies can help making public involvement/ participation process a "useful utopian realism";
- The use of colour data can help CH to be more visible, giving the possibility to see people's satisfaction on city's tangible/intangible CH;
- The ability to see the city's current emotional state is a key tool for decision makers. It is a tool for seeing how their urban policies, budget allocations influence urban populations - their customers and reacting immediately to the outcome;
- The Flagman project shows a need for commercialization of a neuro - analytic tools, because the data gained by sensors is huge, takes time to analyse, requires specific skills in the administration, political support and budget.
- The ROCK project gives mutual possibility to discuss the local issues with other EU cities, to upscale knowledge and learn good practise.



Transferability of tools/ actions to other cities

The use of open data and neuroanalytics technology for measuring citizens' wellbeing is highly transferable. The open data policy is generating great returns for the city and can sustain itself into the future. With all municipal data on finances, public procurement, real estate and public transport readily available to the public, Vilnius has been actively engaging local tech talent to help create smart solutions with the aim of continuously providing new benefits to its citizens. Innovative neuro-analytic tools can give objective answers, helping at the same time measuring people's real feelings in real time. Furthermore, the idea of transforming data into colours could be used to valorise local CH and to further create positive emotions.



Sustainability of actions

Technologies, insights and data gathered through the ROCK project will be available for further improving citizens wellbeing in various ways - wellbeing index measurements, urban planning, advanced analytics, personalised recommendations. On the other hand, the video neuro-analytics is expensive to run. If the price is not driven down by demand in other cities, Vilnius will be forced to find alternative ways of collecting this data. A potential solution could be convincing users to use the cameras on their phones or personal computers to log their moods and emotions with a central database. Vilnius aims to monetize the results of the ROCK project, for example by linking technology to human resource and mental health. ROCK results are already upgraded at the city level, while being incorporated in the Vilnius City Strategic Direction Vilnius 2IN, which is a part of the wider operating strategy till 2030. The Vilnius 2IN encompasses three key performance indicators (KPS) – Happiness Index, Travel Time Index and Life Expectancy. By observing these three indicators the capital's local administration will measure the progress that has been achieved and will allow for the drawing up of a more complete picture of how Vilnius is transforming into a smarter and more intelligent city.

“ Probably the main achievement is not about the well-being algorithm, but about courage: the courage of the people involved in the project to think differently and without boundaries, the ability of city management to take innovation and accept risks. Being able to look at things from a different angle is our greatest achievement and being well is a symbol of it all.

Dr. Dalia Bardauskiene
Project leader, Advisor to the Mayor, City of Vilnius

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CONCLUSION

Reflections from Urbasofia, partner responsible for the implementation process coordination

The selection of the heritage-led regeneration initiatives to be implemented within the city's historical centres, have been guided by the integration of the two key concepts: creative city, that recognize creativity as a strategic factor for sustainable development, and the knowledge city in which the knowledge is considered the prominent landmark and driver for socio-economic and technological dynamics. The first part of the implementation process has seen a prevalence in the application of participatory approaches, seeking the collaboration both at local and at international level within the ROCK consortium. This has helped strengthen the networks between cultural actors, assuring a successful peer-to-peer international exchange and, locally, support and sustainability of actions and initiatives, triggering even further opportunities for the upscaling and upgrading process.

The application and adaptation of the tested tools into the local contexts has enabled the Role Model cities to envision future innovation paths in respect to the three main innovation domains:

organisational innovation, that refers to a change in the organization method in order to improve the use of knowledge and of existing capacities by creating synergies between different domains (i.e. Eindhoven which aim was to allow access to different domains for a common exploitation of the collected data) and by updating existing plans on a knowledge-base (e.g. Lyon which exploited

the resources and methodologies implemented throughout the project to renew its Lighting Plan); **technological innovation**, that brings to a research of new technological instruments supporting for a better understanding of the existent local phenomena (for example, Cluj-Napoca and Turin that monitored people flows during large-scale events in order to understand how the city reacts to these temporal usage of public spaces and what are the impacts at local level) and/ or improve the attractiveness of places through creative initiatives (this is the case of Vilnius that collected emotional data that have been further presented in the form of colours that lit up city's historical buildings during the Vilnius Light Festival, aiming to rediscover and valorise local heritage through a greater engagement of the citizens. Last but not least, **social innovation** has been addressed through participatory approaches for co-creating urban transformation's solutions in a collaborative and sustainable perspective, facing challenges related to urban regeneration of underused hotspots of cultural heritage as resources to be re-introduces into a continuous development cycle of the city (i.e. Athens, through the exploitation of synAthina model succeeded to create a local cultural network assuring the sustainability of the cultural initiatives; Cluj-Napoca put at the centre of its innovation process the CIIC centre as a place where testing various forms of collaboration and partnership and encouraging discussions on urban innovation projects).

Finally, the table below summarises the main ROCK soft and technological tools tested by Role Model Cities during the implementation process. The results of the implemented actions have been grouped under the three innovation domains (Organisational; Technological and Social

innovation). For the last three sections (Obstacles, challenges and barriers; Successes, opportunities and lessons learnt; Transferability of tools/ actions to other cities), the table showcases the three most frequent categories among ROCK cities' responses.

CITY DATA	ATH	CN	EIN	LIV	LY	TUR	VIL
Implementation of ROCK actions (soft and technological)							
Soft Tools							
Participatory approaches	●	●		●		●	
Accessibility and democracy to CH	●			●			
Light management					●		●
New usages in UNESCO area					●		
Technological Tools							
T2: CH data management (VWG)				●			
T4: Integrated CH Analytics							●
T5: Large crowd monitoring tool (DFRC)		●				●	
T10: People flow analytics (TA - GIS tool)			●				
Results of implementation actions							
Achievements at local level will be grouped under the three innovation domains							
R1. Organisational innovation	●		●		●		
R2. Technological innovation		●	●		●	●	●
R3. Social innovation	●	●		●			●
Obstacles, challenges and barriers							
Obstacles grouped under the three most frequent categories among ROCK cities							
R1. Bureaucratic obstacles (linked to political support issues, data protection policies and land ownership)		●			●		●
R2. External factors' influence (elevated costs and timing) or even unforeseen situations (COVID-19 pandemic impact)	●	●	●	●	●	●	●
R3. Network & Communication (referring to the internal communication between the different departments involved in the implementation process of the project (collaboration), external communication with the target groups and with the stakeholders).	●		●	●	●		

CITY DATA	ATH	CN	EIN	LIV	LY	TUR	VIL
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Successes, opportunities and lessons learnt

Successes, opportunities and lessons learnt grouped under the three most frequent categories among ROCK cities

R1. Change in the attitude (towards emotional well-being connected to places, towards the importance of non-tangible value of CH and of valorising an exploiting the benefits connected to it)		●			●		●
R2. Anticipation of possible complications and adaptability to update the initial plan to respond to new or unforeseen challenges	●	●		●			●
R3. Peer to peer exchange and comparison	●	●	●	●			●
R4. Strong partnerships (the collaboration between the different parties involved is needed in order to obtain satisfactory results and to assure the sustainability of the project)	●	●		●	●		●

Tips for transferability of tools/ actions to other cities

Transferability tools/ actions to other cities grouped under the three most frequent categories among ROCK cities

R1. Good knowledge about the local context (identification of pro-active stakeholders, regular mapping of the urban changes and dynamics for understanding the transformation process of city areas and cultural heritage property)		●	●	●	●		●
R2. Flexibility and malleability (to be ready to change the initial strategy to adapt it to the changing context and to the different expectations of the people involved)	●		●		●		
R3. Political support (acquire political support is essential for ensuring long-term changes in the attitude towards collaboration, engagement and courage for testing and implementing out-of-the-box ideas and solutions)	●	●					●



ROCK ROLE MODEL CITIES FACING CORONAVIRUS



HOW RESILIENCE HAS BECOME THE NEW NORMAL

COVID-19 IMPACT ON THE ROCK IMPLEMENTATION PROCESS

(Reflections from EUROCITIES, based on a survey
conducted among ROCK cities)

Author: Cécile Houpert, EUROCITIES

ATHENS



The crisis has been dealt with professionalism by the city of Athens and important services for citizens have been turned digital extremely fast. Also, during this time, the municipality has initiated several interventions in public spaces including regeneration of public playgrounds, schools, and open-air sports centres.

During the crisis, Athens has been in touch with several cities to see how they were coping in their local context. At local level, all ROCK activities have been suspended during the pandemic. But this gave time to project officers to prepare a ROCK booklet describing the experience of Athens during the project including testimonials from the local ROCK communities. It also allowed them to concentrate on a planned intervention in another neighbourhood in Athens. Given that the ROCK project has been extended, Athens team might be able to continue designing this new intervention in the timeframe of the project.

In the future, the switch to digital and the access to a large amount of cultural content which was previously absent from the digital sphere, is considered an opportunity for more people to have access to the cultural products of the city and the country and hopefully, local communities will be more keen on participating in cultural events and activities in the future (such as the ViZ Lab for Visual Cultural and ATHENSE urban.data.lab initiatives). Cities have already recognised and re-evaluated the role of culture as a driver for change, and especially during these times. The digital cultural "apocalypse" in Greece has manifested the rich cultural production in the country and the significance of culture in everyday life. Athens hopes for better integration of cultural strategies in city making to recover from this new crisis.

CLUJ-NAPOCA

COVID19 reactions in Cluj-Napoca were differentiated in 2 waves. Firstly, when everything suddenly got into lockdown from a Friday to a Monday, people connected spontaneously and created online support groups (i.e. on volunteering "We help you from Cluj-Napoca", on food supply "We support the local producers in Cluj"). In a matter of days, though, it became clear to the most engaged people in these groups that there is a need of coordination and better synergising in

order to have a working system that does not charge supplementary the authorities with hundreds of separate questions, trying to connect the need with the available resource of help/ support. This is where local expertise in organizing enormous community events (such as the city days celebration or large-scale cultural festivals) proved to be an important asset, all these stakeholders starting to use their already establish communication channels and logistic cooperation system that was normally used for the events. This is how the platform called "Only one Cluj" (<https://www.facebook.com/unsingurcluj/>) was born out of the energy and expertise of the festivals organising teams, in close cooperation with the Emergency executive team of the authorities (local administration, government, hospitals, etc). By joining forces, they managed to reach a real impact into the local community (i.e. money for emergency acquisitions, efficient matchmaking of temporary accommodation in hotels for doctors in the front line of intervention, volunteering matchmaking with vulnerable needs - like shopping for elderly, finding health supplies, etc). The second wave of reactions there was a phenomenon of resilient adaptation of expertise to the new medium (the "new normal"). Young entrepreneurs, start-ups and creative minds designed different solutions using digital tools and the new type of needs and took the offer or the community to a whole new level - creating business models for sustaining the matching of resources and needs (buying potential in the local market) on the long run (i.e. "Made in Cluj", an online platform for the local food suppliers generated a business model "Produs de Cluj", an crafters and local producers association, that previously sold their products in open-air fairs, all over Romania and Europe, created an online shop and put together the logistics and communication needs in one place, delivering all their products in an integrated way). If the first 4 weeks of the lockdown were focused on helping and donating materials and worktime to the urgent needs, all those providers reconsidered the needs on a longer term and created affordable access to a new market of supply - delivered through the newly created channels. An important aspect in this phenomenon was the existence of the Clusters in Cluj, which already worked as cross-sectoral bridges and performed an essential role of mediating and calming the shock of their specific industries by rapidly connecting them to the others. Thus, a very fertile context was created for all stakeholders to have quick and efficient access to other sector's expertise, therefore, to be able to redesign their business using tools that were too specific to them before the Covid-19. Furthermore, the city of Cluj-Napoca was in close communication with European institutions such as the





LIVERPOOL

The ecosystem of Liverpool was directly affected by the full closure of arts, performance venues, museums/ libraries and exhibition spaces primarily located in the City Centre. Culture Liverpool has funded the cultural sector over many years through the Culture Arts Investment Programme - CAIP (formerly CLIP/ACIP). In previous years, income was failing due to reduced Arts Council, LCC, ticket sales, earned income and product sales, but was replaced by increased donations, other private income, sponsorship, trusts and foundations, and other public sources (European, other lottery funding etc.). COVID-19 has paused development work with Liverpool City Council (LCC) to look at increasing income and gaining cross-sector efficiencies by sharing resources with other local cultural and CCI networks. During lockdown, work with communities as part of ROCK was put on hold. This was particularly the case with 'hard to reach' groups as engaging with audiences in their native community environments was directly affected by Covid-19 lockdown which commenced in UK 20 March 2020. The closure of outside city centre/ third spaces and community hubs hosting activity and events was severely impeded.

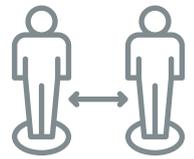
City Council focus pivoted to prioritise essential services directly to communities most adversely affected by Covid-19, including via quick enhancement of a digital cloud platform (Civica Community Helper), which assisted with support for vulnerable citizens shielding and self-isolating, focused on delivery of emergency food parcels, prescriptions, and social contact. The platform is used to manage incoming high volume enquires (c900 citizens a week at the outset of Covid-19), and co-ordinate city volunteer and partner agencies via a single routing and prioritisation data platform. LCC also provided interaction and support of local citizens and young people via the delivery of a dedicated Culture Liverpool portal which focused on 'soft' support services including; connecting communities, culture at home, "positive changes" advice, teaching support to the young, and links to online entertainment/ cultural content. In terms of the economic business base currently c38% of the City of Liverpool business rate revenue is generated from direct contributions from businesses spanning Cultural Heritage and Tourism Sectors, about 38,000 employees engaged in this economic activity. Surveys of the cultural organisations funded by Culture Liverpool showed an immediate massive drop in audiences and live activities due to the lockdown. Other organisations have furloughed staff, all have set to planning for the future after the restrictions and risk have reduced to sufficient levels. The impact of the pandemic is likely to be catastrophic to Liverpool's cultural sector without timely intervention. The City Council has been

European Commission, the European Committee of the regions, or the MPs - and this offered our ecosystem access to information regarding the emergency funding opportunities, and/or pan-European actions to fight the pandemic in a collaborative way (i.e. the Hackathon EU vs Virus <https://www.euvsvirus.org/>, supporting the reconnection of international networks).

EINDHOVEN

During the crisis, all planned events in Eindhoven were cancelled (until September 2020) but ROCK activities were mostly over at this time. Eindhoven relied a lot on international meetings and cultural events, the social distancing period really put a toll on the atmosphere and economics in the city. After many years of economic boom, the city feels that it must not feel weak now and fight the idea that it cannot afford a crisis like this. With a mix of cultural entrepreneurship, out-of-the-box, belief in one's own abilities, persistence and willingness to work together, to innovate and change, to keep the cultural infrastructure for audiences afloat, it is possible to come out stronger and keep the quality of life in a city worth living in.

The municipality draws some lessons from the pandemic and is orienting itself on enabling online participation of stakeholders in all kinds of projects. Everyone is also now more aware of the vulnerability of cultural values that we have so easily made use of. Eindhoven hopes that this crisis will lead to better sustainable alternatives to cultural heritage worldwide and perhaps more appreciation for values of the local heritage.



TURIN

responsible for delivery of emergency business support funded by UK government, and will also administer the newly announced £500 emergency grants paid for by national funds. It is likely that a number of CCI organisations will not survive, and there will be cascading impacts from this. The speed of response at city level is crucial in assisting businesses and organisations in all sectors adapt to change. Cultural city outside the capital, Liverpool is hoping for national CCI support to help the culture and creative sector recover from the crisis and has also assisted with local crowd funding initiatives for cultural content commissioning, city tourism post lockdown reactivation campaign (Liverpool Without Walls) and in commissioning with Capital Regeneration, the appointment of Arup to design pop up parks and street furniture to quickly enable outside dining direct response to social distance requirements of the tourism/ local hospitality sector.

LYON

The different local cultural heritage organisations have followed instructions provided by the French government: all events have been cancelled and organizations closed between mid-March and mid may. Structures (public, private, associations etc...) and people in charge of storytelling (guided tours, etc.) have stopped their activities. Major restoration sites have closed while the small restoration structures (with very few persons) have continued.

Reflections and intellectual activities thus have continued. ROCK activities in Lyon have stopped as well and have been two-to-three-month delayed. They nevertheless will continue as initially foreseen (apart from slight adaptations for a few of them) with the objective of sharing knowledge and experience during the ROCK open knowledge week at the end of October.

As soon as organisations have been authorised to reopen, they have been accompanied by municipal services and supported in the definition of conditions under which they could reopen. Restoration sites have reopened as well. Municipal services, together with other public funders, have tried to identify and map the various needs on the territory and the best way to support them. Administrative procedures have been lightened in order to ease funding, unlock cash and avoid cash shortage. Finally, French municipal elections have brought a new green-left executive to the municipality of Lyon. The executive team has decided to create an emergency fund for the cultural sector. The modalities of access to this specific mechanism is under definition at this time.

The Cultural Observatory in the Piedmont region (Osservatorio Culturale del Piemonte) calculated that in the first week of the emergency, more than 2,500 events and shows in Turin have been cancelled, which had a stronger impact on small private organisations and associations, mostly in the touristic sector. These amounted to a loss of €2.8M in Turin. All public and private museums have been closed but were highly active online during the crisis. Public libraries opened their services to citizens who were not registered to the library system. Online donation campaigns have been activated. A greater awareness has been raising in the cultural sector regarding the importance of online communication and tools.

At the time of the crisis, the collection of data on Turin's unused heritage performed by Urban Lab with the support of the Politecnico of Torino was almost completed. Onsite inspections were needed to collect some more data but had to be suspended and will restart after the lockdown. The state of the art has been presented with an online webinar on 24 March with the participation of several city offices. All other communication and dissemination activities will be moved to the second half of 2020. Turin would have liked to use the ROCK tools (LBA sensors) to monitor the difference in the fruition of cultural places after lockdown.

VILNIUS

Vilnius was hopeful that during the crisis the cultural sector would become much stronger, more resourceful and innovative, more resilient and socially oriented. By working together with other sectors, supporting each other and transforming culture to digital, it strengthens local communities; learn to be even more adaptive and more accessible. New public e-services, like meetings, public hearings on architecture and urban development, competitions, educational and training measures, etc. will continue when the crisis has passed and will become a common and much more constructive new work culture. This will encourage democracy as all the online events are accessible to all citizens.

ROCK activities were not impacted by the COVID-19 in Vilnius. Team members continued to work to evaluate available results, thinking about the legacy of the project and generating ideas for the final conference in autumn 2020. The ROCK sensors collected different but interesting set of data during the lockdown: the reduced number of people walking in the streets with masks affected the reliability of



centre. The Happiness Index in Vilnius was incredibly low during quarantine, reaching only 15% when it usually reaches 30%, and even 70% during holidays and fairs. The opinion survey tool was used to find the main Coronavirus indicator and showed that citizens were searching for information regarding the Coronavirus crisis in Vilnius.

Vilnius is confident that during periods of crisis, culture generates positive emotions that are particularly important in overcoming the depression that arises. E-culture and heritage do not have borders, many remote tools used in Vilnius and in other cities - e.g. exhibitions, museums, music, excursions, online competitions, etc. are accessible to all EU citizens. Focusing on cultural heritage and sharing it, cities can contribute to Europe's socioeconomic recovery in the aftermath of the pandemic.

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