ATHENS USE CASES

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DUET

01: URBAN TRANSPORT & MOBILITY

HOW DO CITY OFFICIALS AND CITIZENS PERCEIVE THAT TRAFFIC ISSUES AFFECT BOTH THE QUALITY OF EVERYDAY LIFE AND THE ENVIRONMENT IN THE CITY CENTER AND HOW MIGHT THEY TAKE UP INITIATIVES?

As a policy maker, I would like to establish strategic plans to reduce traffic issues in the city by enhancing the already existing Controlled Parking System and promoting the use of public transport means. To that direction historical data of the city on mobility, parking and environmental measures will be exploited, as well as real-time datasets.

As a city official (e.g. Head of Department of Resilience and Sustainability), I would like to take initiatives and proceed with strategic activities to reduce traffic issues in the city-centre by promoting the use of public transport means instead of private vehicles, and/or other types of transportation. I would like to have access to historical data of the city on mobility, parking and environmental measures.

As a city employee I will organize campaigns and events promotion through social media, printed informative material for the benefits of the use of public transport means and other types of transportation.

As a citizen I would like to become familiarized with the use of public means of transport in everyday life, to use less my private vehicle, discover pedestrian areas in the city, adopt environmental consciousness and contribute to the air pollution reduction.

The goal is to take existing policies and upgrade them by exploiting the Digital Twin decision making outputs and predictive features. Namely by using "what-if" conditions the impact of potential policies will be analysed and their usefulness and effectiveness will be evaluated. Hence, DUET's Digital Twin technology will support the design of new policies for the city.

02: HEALTHY MOBILITY

HOW CAN CITY OFFICIALS AND CITIZENS ADOPT MEASURES THAT TACKLE POLLUTION WITHIN THE CITY BY COMBINING ENVIRONMENTAL AND TRAFFIC DATA AND PROMOTE A GREEN CITY MOBILITY?

As a policy maker I would like to adopt new strategies and policies in healthy mobility by promoting effective routing and focusing on tackling city pollution. To that direction I will leverage the existing initiatives in the city by introducing an environmental aspect to them and by exploiting real-time data on monitoring of environmental conditions within Athens.

As a city official (e.g. Agency of Sustainable Mobility within the Department of Urban Planning), I would analyse and suggest policies and initiatives for better mobility within the city by combining different ways of transport e.g. my private car, walking, shared bicycles or electric scouter and public transport (bus, metro, trolley) routes for the citizens. I will also take into consideration public feedback and suggestions from citizen groups promoting active participation.

As a city employee I will promote initiatives and organize activities in order to highlight both the benefits of using different ways of transport in everyday life and the importance of a green mode of living and moving around the city.

As a citizen I would like to follow all the initiatives and activities proposed in order to express my opinion, give my feedback for improvement and surely to adopt them in my everyday life. Hence, I will promote green mobility, I will contribute to become my city greener and to have, as a member of this city, a green consciousness.

The goal is to adopt measures that tackle pollution within the city by combining environmental and traffic data, promote a green city mobility and actively engage citizens. The Digital Twin will combine data sources in order to forecast reliable measures to be adopted by the city,

03: POLLUTION REDUCTION

HOW CAN THE CITY SUGGEST AND IMPLEMENT STRATEGIES FOCUSING ON POLLUTION REDUCTION, URBAN ENVIRONMENT PROTECTION AND HOW CAN CITIZENS CONTRIBUTE TO THESE STRATEGIC PLANS AND ADOPT A GREENER WAY OF LIFE?

As a policy maker I would like to enhance the strategies for pollution reduction, to promote the green spaces in the city and to transform Athens to a green, healthy and vibrant city.

As a city official I would like the city to achieve an environmental change, green spaces to be increased and promoted such as the National Garden of Athens and finally alternative ways of transport/mobility to connect the green spaces/areas.

As a city employee I will suggest green routes within the city in order to decrease the pollution level. Moreover, I will raise awareness through diverse environmental initiatives in order to incorporate new behavioural attitudes in our everyday life.

As a citizen I would like to assist the city in promoting green routing within the city and to contribute to improvement of my city's environment. Finally, I would actively take part in initiatives that focus on my city, to express my opinion and to contribute to a greener Athens.

The goal is citizens to be actively engaged in the city's initiatives, to express their interest in a better and greener way of life and the citizens' voice to be an asset on policy making. In a wider scope, environmental change can be achieved only as a common goal by the whole community and individual and group interest is lately highly addressed. The Digital Twin will provide to the city a tool in order to visualize current pollution sources, green points of interest and routes and to test the environmental impact of different strategic plans.

04: CITY PLANNING

HOW WILL THE CITY REDESIGN POLICIES REFERRING TO TRAFFIC REGULATIONS IN SMALL AREAS OF THE CITY TAKING INTO ACCOUNT THEIR LOCAL CHARACTER, EXISTING DATA AND CITIZENS' PARTICIPATION, IN ORDER TO ANALYSE THE IMPACT OF SEVERAL POLICIES THROUGH A DIGITAL TWIN AND ADJUST URBAN PLANNING.

As a policy maker I would like to suggest, design and explore the potential of new policies regarding the traffic flow in different locations of the city to promote better mobility for citizens and visitors, and better city administration.

As a city official (e.g. Head of Municipal Police), I would like to reduce traffic issues by promoting and expanding the use of app to find free parking spots. I would like to correlate available data on spots coverage, duration of coverage with the geospatial and socio-economic data of each area.

As a city employee Il will correlate local environmental data (air-quality, emissions, PM particles, CO2, temperature, humidity etc) with data from the controlled parking system that provides the service of routing to the nearest free parking spot and the feature of pre-reserving a spot to reduce traffic flow. I will cooperate with policy officials in order to design the optimal strategy for the city in the field of urban planning.

As a citizen I am aware that a vast majority of private cars moving in the center is contributing to pollution since the difficulty in finding available parking spots is a current issue for Athens. I know that this challenge has already been addressed and the new services of pre-reserving and monitoring available spots are focused on having an environmental impact, since it will reduce the time of searching for a spot. Further on, I would like to be informed on several initiatives dedicated to this issue and take the opportunity to participate actively in policy making processes by suggesting solutions for the areas where I most frequently move (e.g. home neighbourhood, work location etc).

The goal is to correlate data analysis on parking spots coverage, duration of coverage with the geospatial and socio-economic data of each area e.g. Parking data analysis in order to design policies focusing on small areas of the city.