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Our Smart Indian adventure. Lessons, inspiration & insights

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 @avivest

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The Smart City Transformation Mantra:

**“To become a
self-sufficient city of
productive neighbourhoods
at human speed, inside a
hyper-connected zero
emissions metropolis”**

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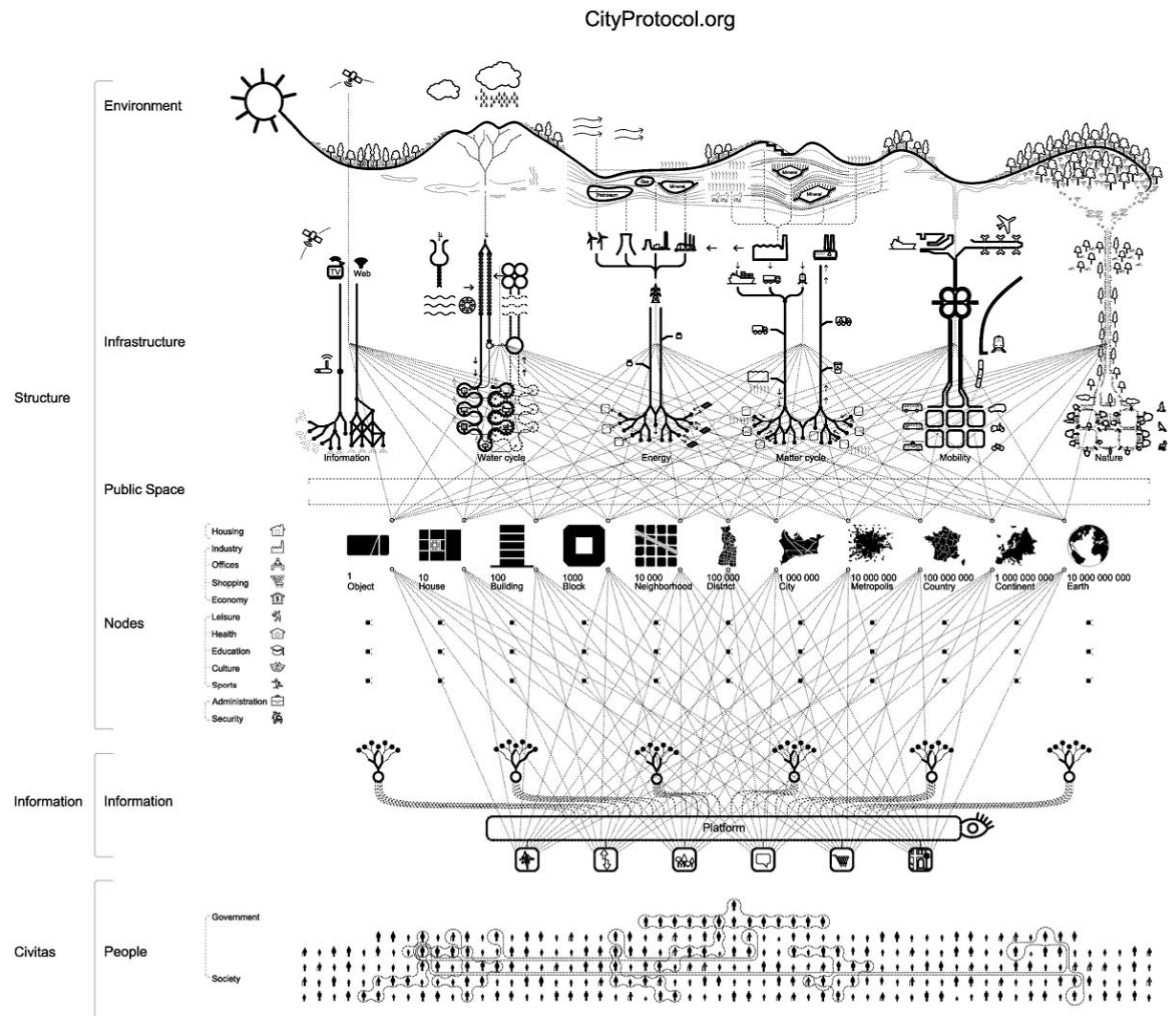
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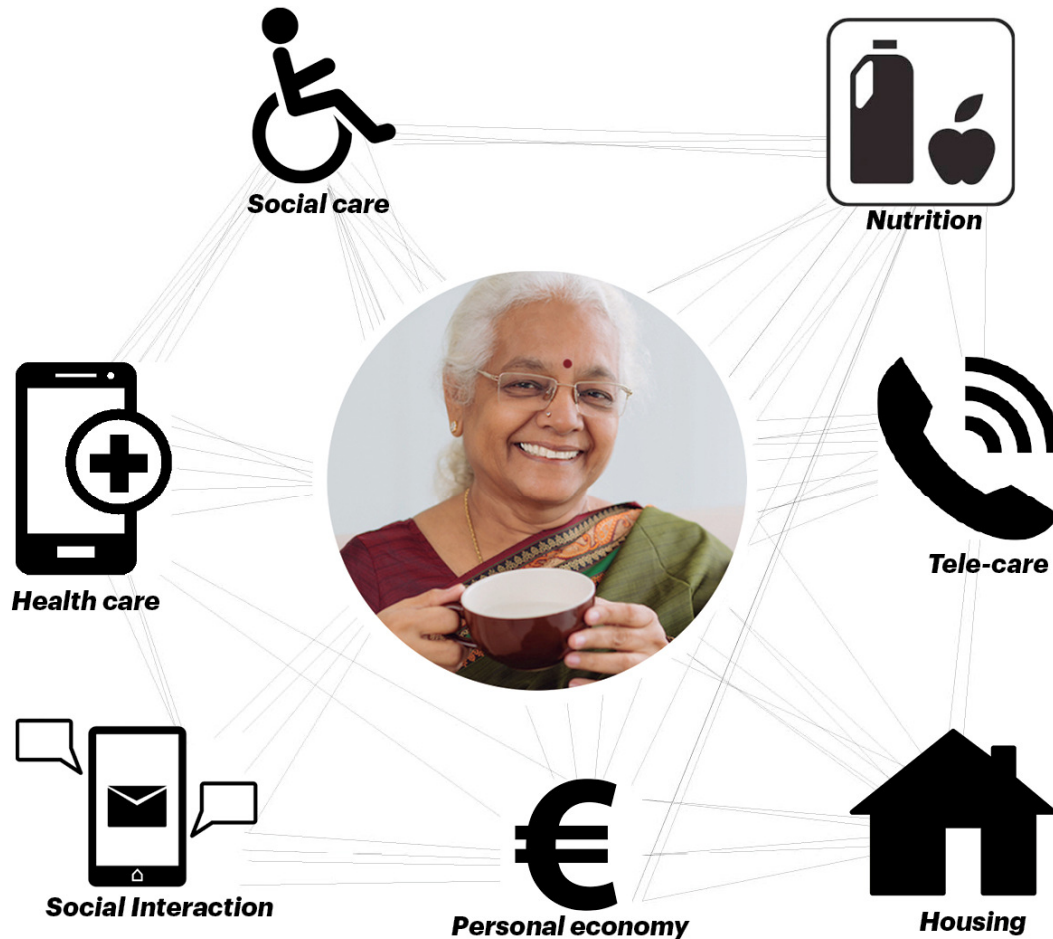


**We the people vs you the technology
(get your organizations ready!)**

Analysing the City Anatomy

People, information, nodes, public space, infrastructure and environment.





Is she eating?

Does she walk every day?

Can she afford electricity?

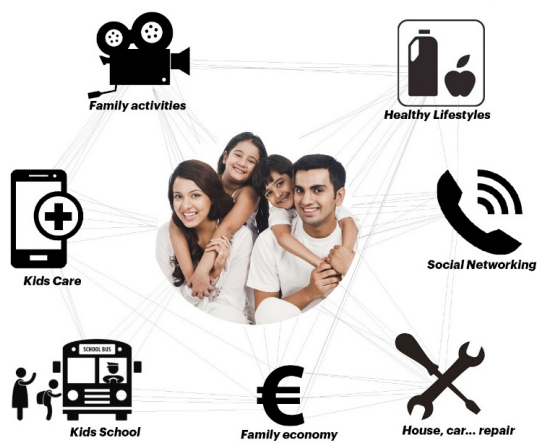
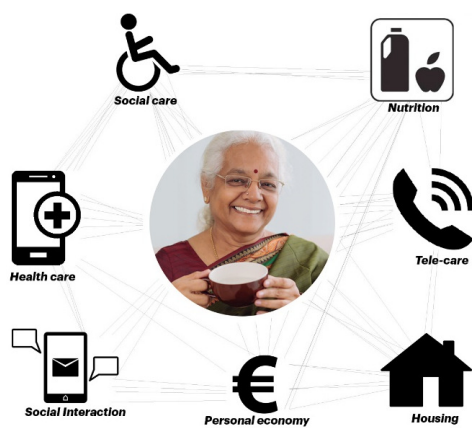
Is her home in a good condition?

How much is she spending for water?

Is the price of her house, affordable?

Does she see family, friends, neighbours?

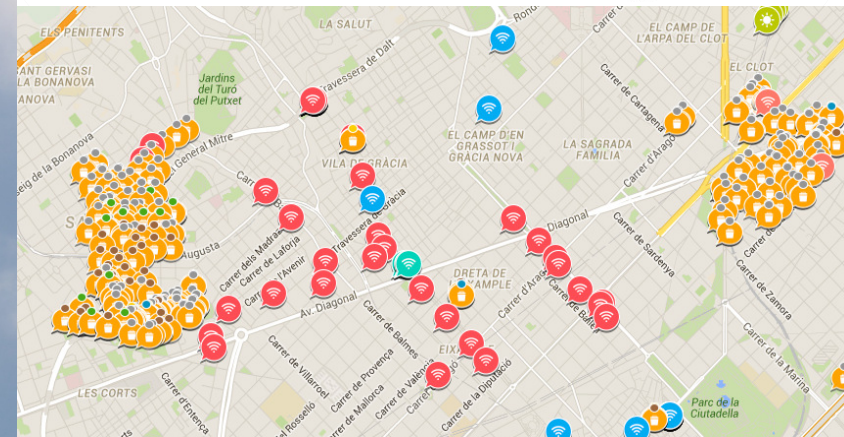
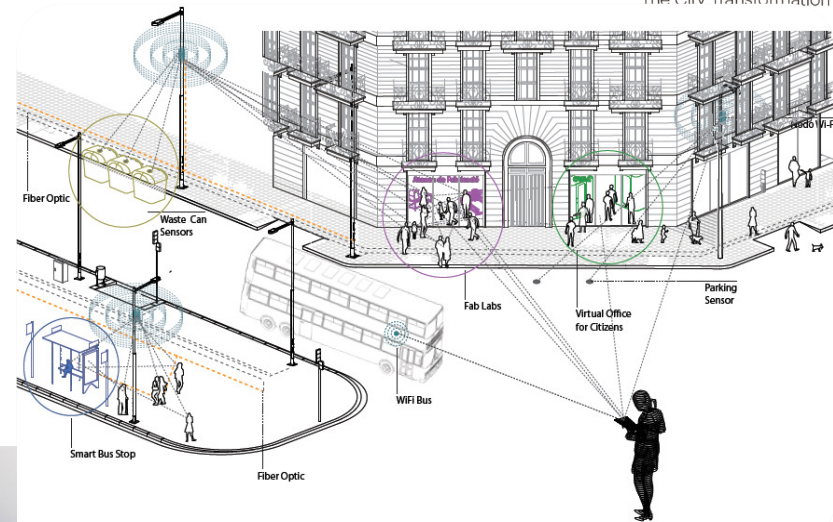
How is she feeling mentally, physically?



Designing Public Space and services with IoT

Sensorised elements in the City:

- Water Cycle
- Lighting
- Waste Management
- Green Spaces
- Public Transport
- Traffic Management
- Noise control
- Weather conditions



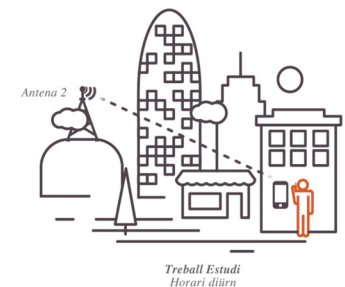
Big Data to monitor daily commuting

Data from over 300,000 cellphone users provided the basis for a new map of commuting patterns in Barcelona

Where people live who work or study in Marina del Prat Vermell - AEI Zona Franca

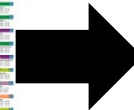


Where people who live in la Vila de Gràcia work or study



New Bus Network

- Improve the city's public transport system
- Provide better connectivity, a wider territorial coverage
- Improve waiting times
- 28 high performance new bus lines
- Easier to use and offers better service to citizens.



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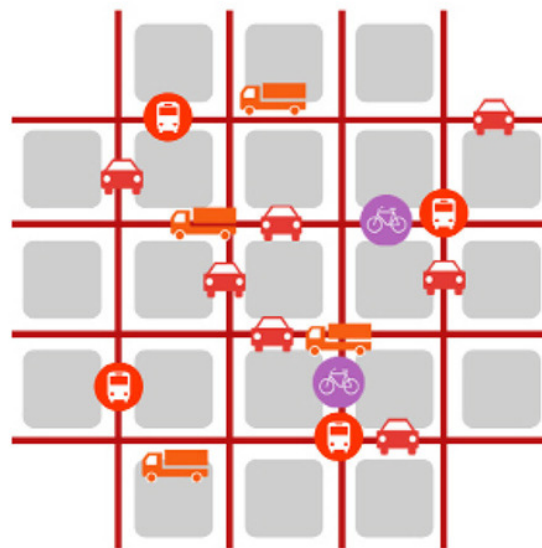
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New Standards According to the Ambition

Superblocks, new territorial model

Current Model



Superblocks Model



PUBLIC TRANSPORT NETWORK

BICYCLES MAIN NETWORK (BIKE LANE)

BICYCLES SIGNPOSTS (REVERSE DIRECTION)

FREE PASSAGE OF BICYCLES



PRIVATE VEHICLE PASSING

RESIDENTS VEHICLES

URBAN SERVICES AND EMERGENCY

DUM CARRIERS



DUM PROXIMITY AREA

ACCESS CONTROL

BASIC TRAFFIC NETWORK

SINGLE PLATFORM (PEDESTRIANS PRIORITY)



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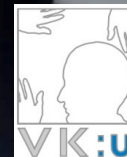




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Smart also means clearer, safer and... more \$

- WiFi city applications
- Contactless (QR and NFC technology)
- Wayfinding touchscreen
- Dynamic digital advertising.



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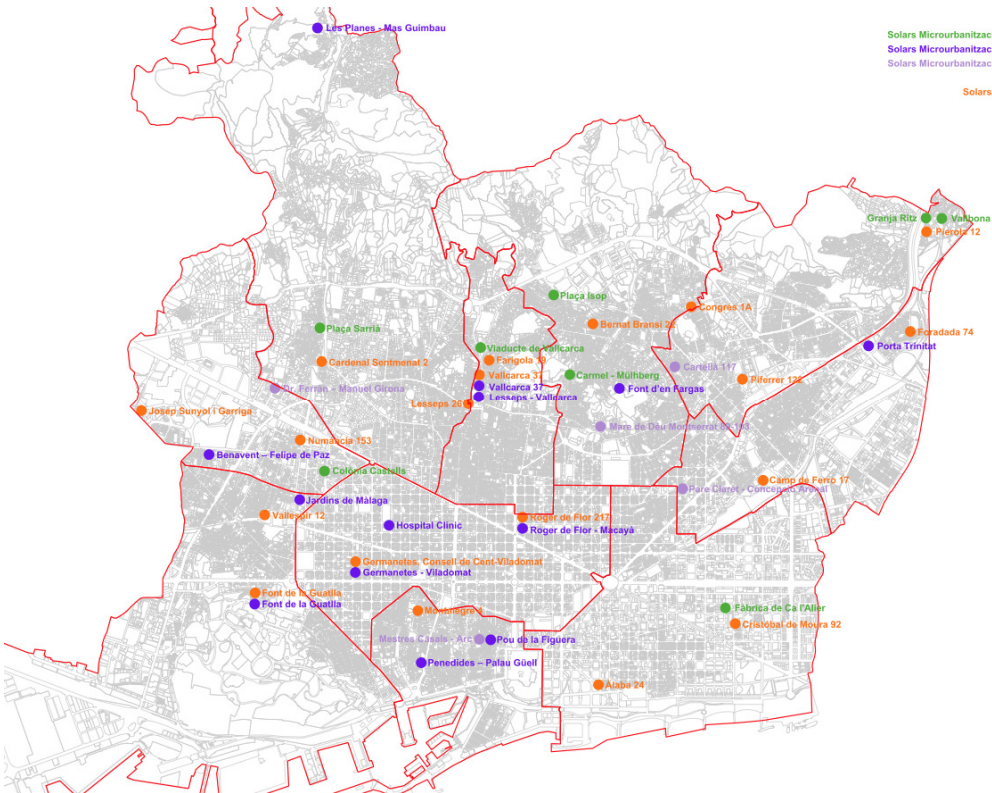
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Placemaking as the Smart Anticipation

Barcelona Case Study

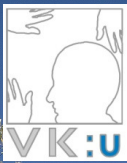
Smart Placemaking



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Barcelona Smart Urban Acupunctures

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Before



After

Barcelona Smart Urban Acupuncture

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Barcelona Smart Placemaking

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Before

- Empty plot for more than 4 years
- Reservation for an Urban Park in the General Plan
- No budget availability
- Marginalisation



After

- Temporary arrangement
- Low cost budget
- Playground area
- Reference public space at neighbourhood level
- Week-end market stalls

Barcelona Smart Urban Acupuncture

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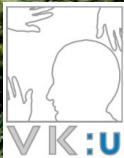




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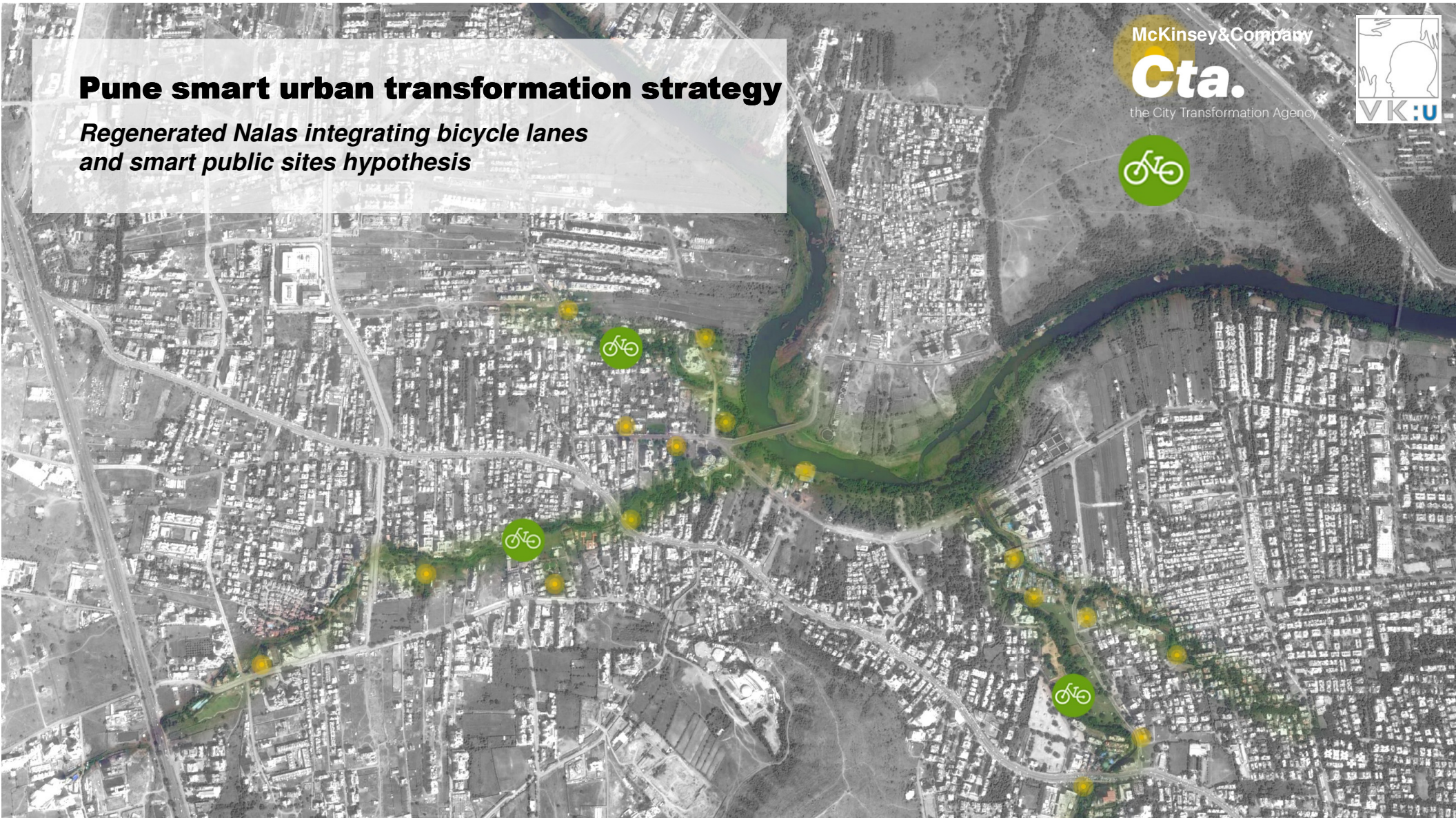
Pune smart urban transformation strategy

*Regenerated Nalas integrating bicycle lanes
and smart public sites hypothesis*

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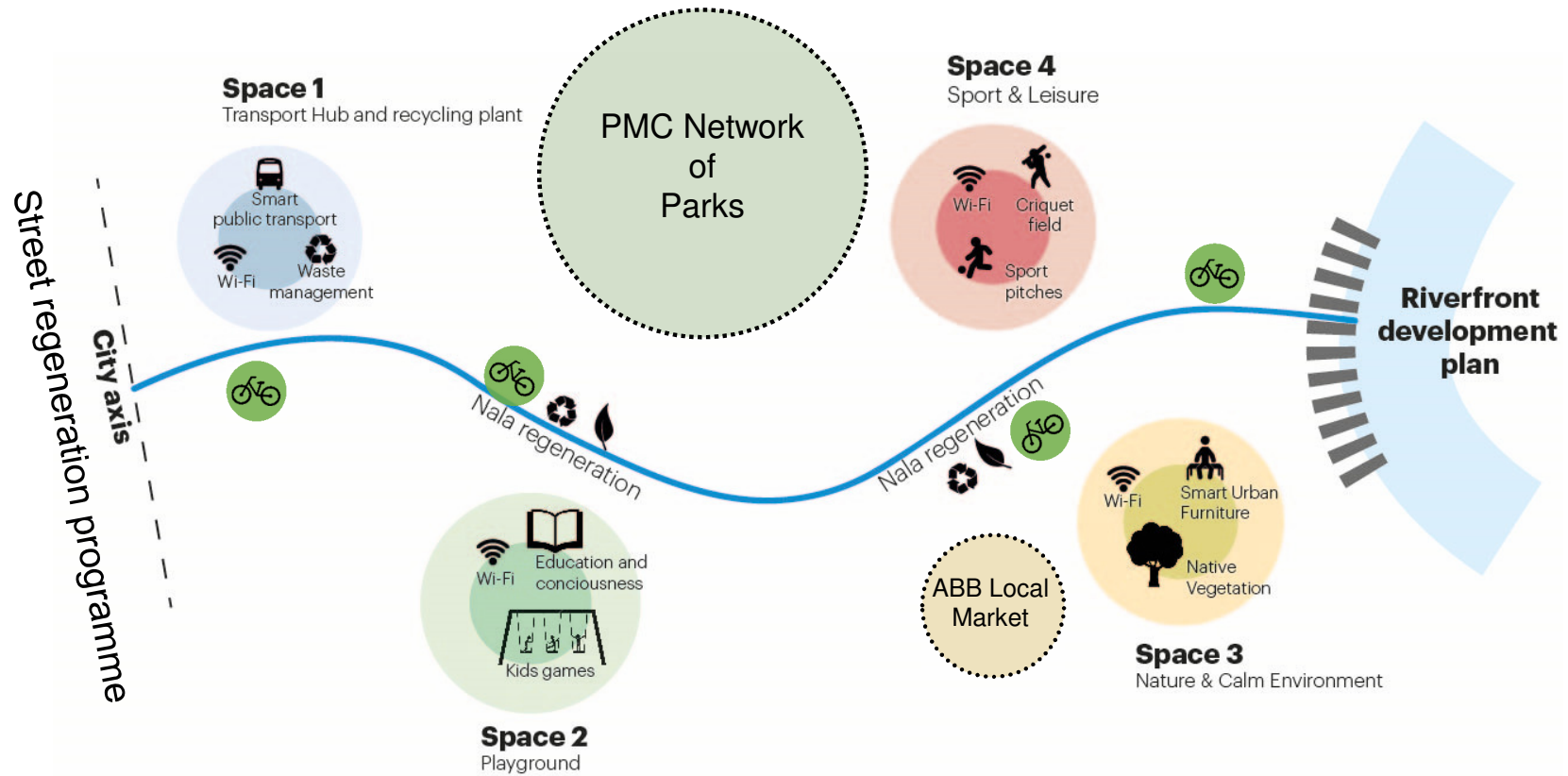
Pune Future Smart Public Places

Affordable High Impact Urban Transformation Strategies

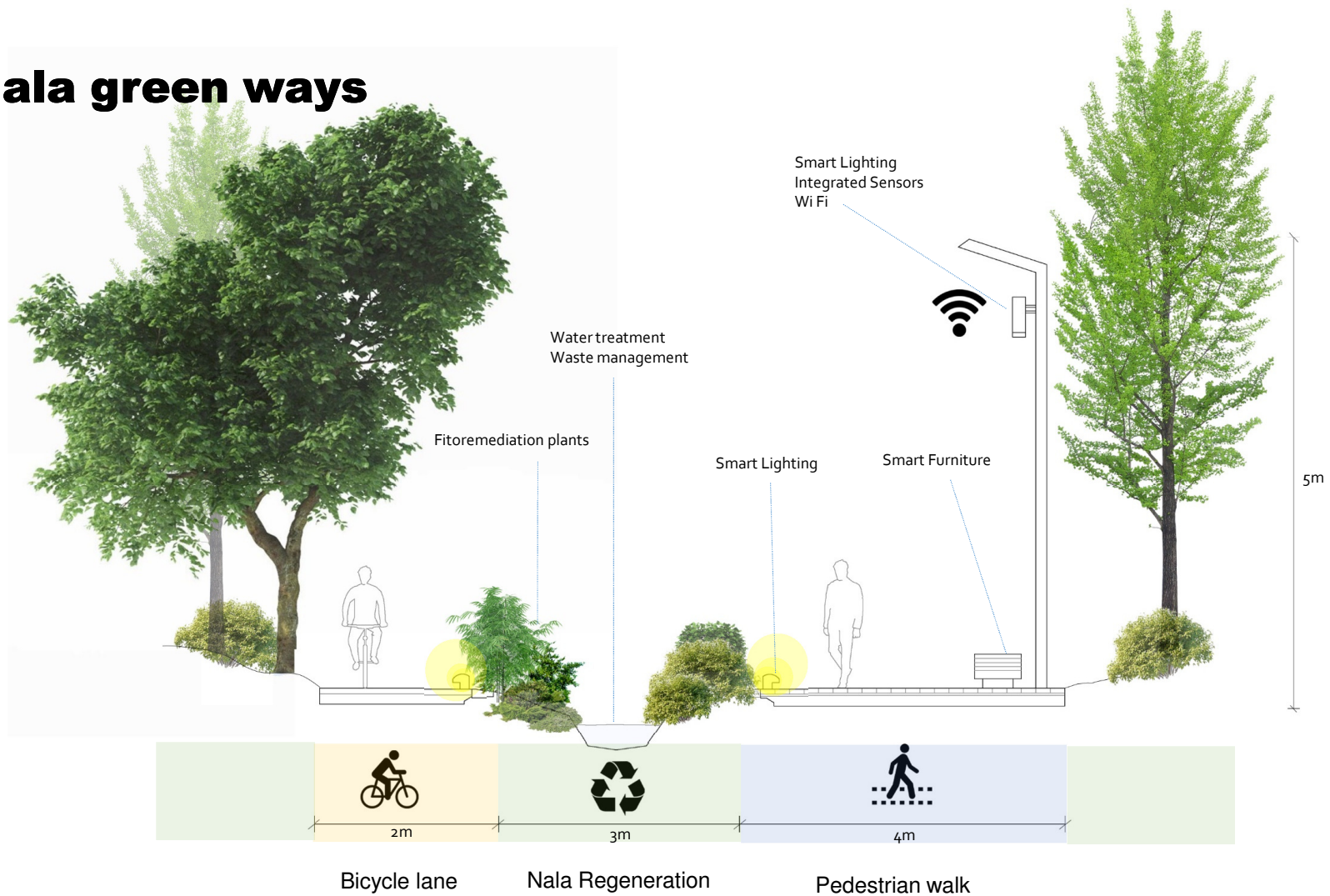
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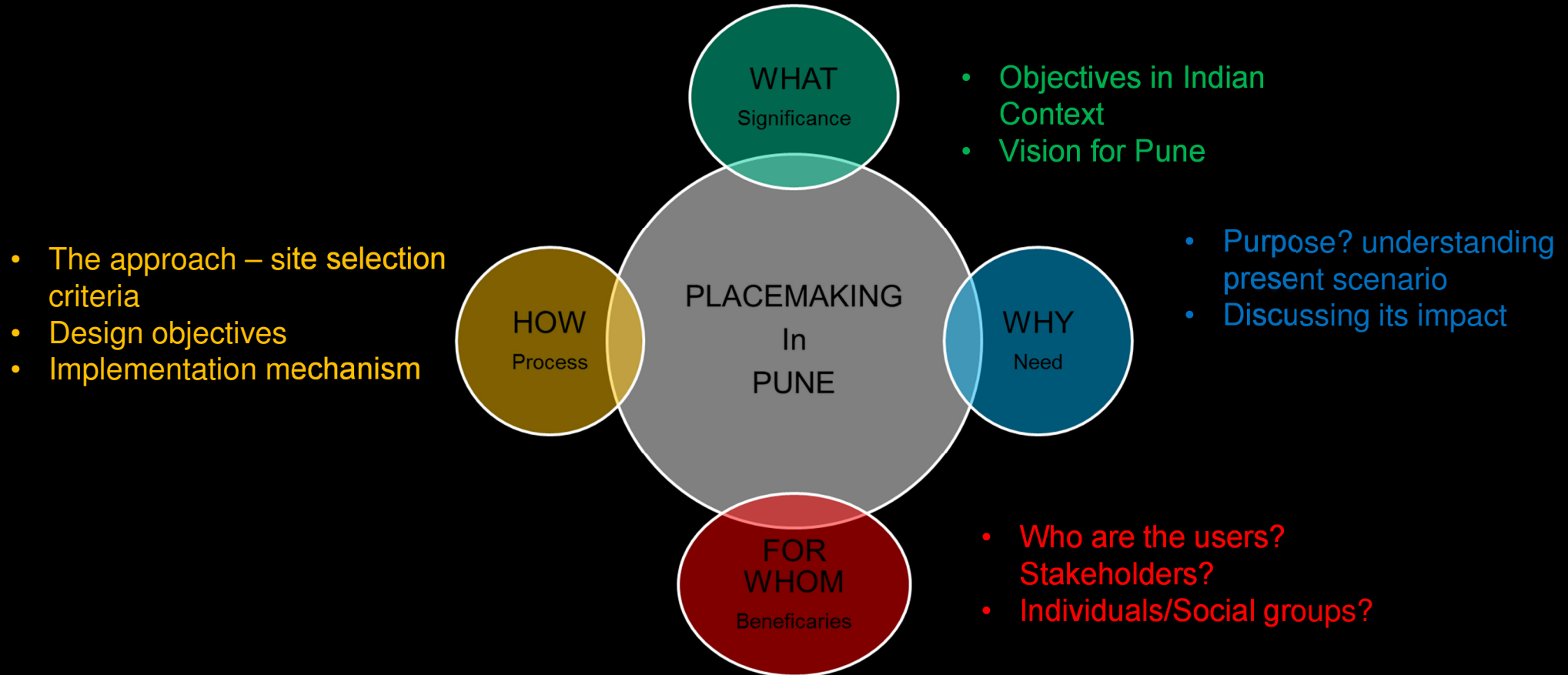
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Nala green ways



Place making –Indian Context



PLACE MAKING OBJECTIVES

- ✓ **Positively Impactful**
- ✓ **High Recall Value**
- ✓ **Economical Development Cost**
- ✓ **Platform For Citizen Involvement**
- ✓ **Smart And Sustainable Design Elements**

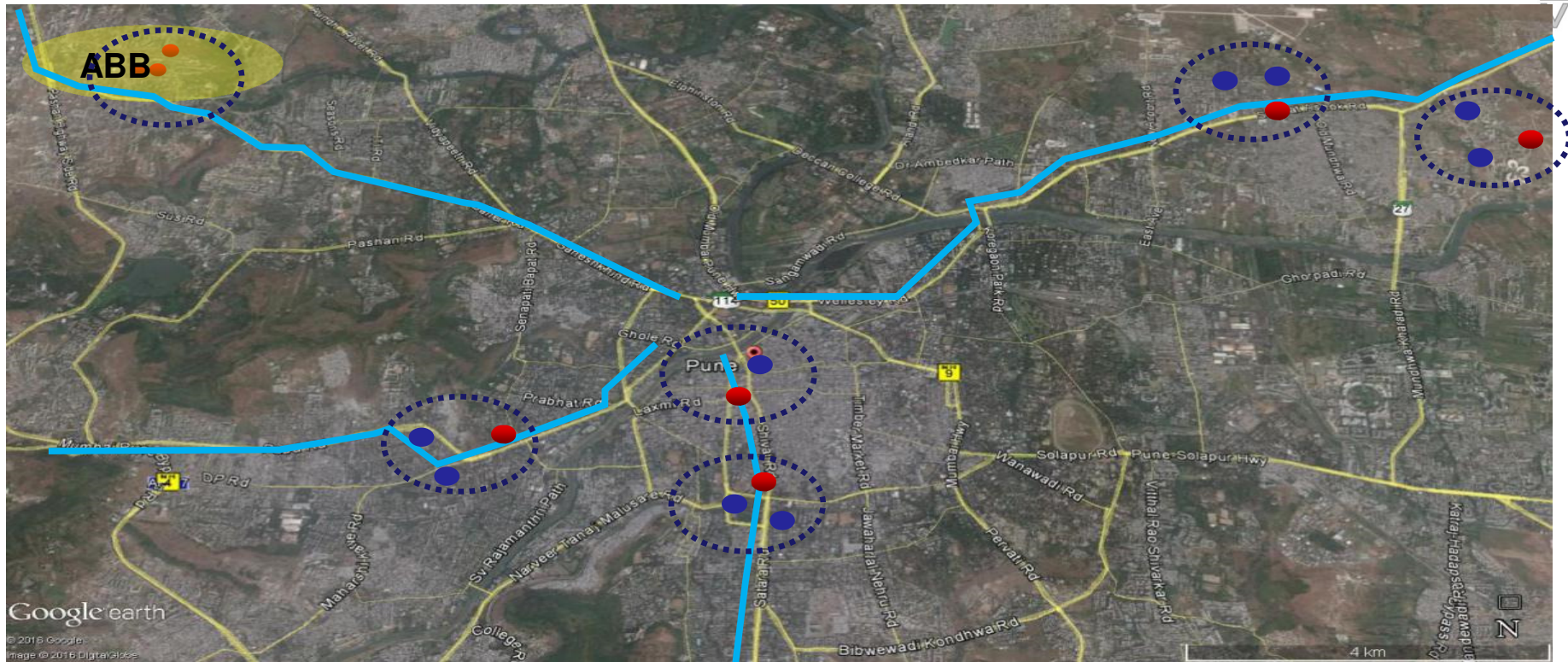
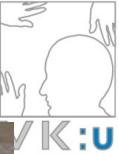
SIGNIFICANCE

- ❑ **Pune to be the first smart city in India to implement place making**
- ❑ **3-6 sites to be developed with various themes and smart applications in next 3 months.**
- ❑ **50-100 sites more to be identified for developing well –connected placemaking clusters spanning entire city**

Location of Identified Place-making sites

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- Total 9 sites - 3 sites in ABB. 2 sites in the city center, 1 in south-west, 1 in south and 2 in north-east part
- High Visibility & Community connect - Frontage on major roads or arterial roads
- Diverse neighbourhood, large catchment and landuse for each site
- Site area varies between 500 sqmt - 15000 sqmt

cluster	
Proposed sites	
identified sites	

PLACE MAKING PURPOSE

- Wide range in type of social interaction across various age groups.
- Typical format of gardens/playgrounds/ built interactive spaces fall short of providing the special requirements.

Understanding the dimensions of social interactions amongst enthusiastic PUNEKARS



Routine daily morning health regime

11/25/2016

Daily/weekly or periodical activities /hobbies of kids and home-makers

▪



Childrens' play areas



Students hang out areas

11/25/2016



Space for women to pursue their
hobbies



Ganesh festival dhol practices



College Fests

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During yearly cultural events/campaigns etc.



Social artists communities events

PLACEMAKING – USERS / STAKEHOLDERS

- Wide range in Users' profile
- Requirements vary for individuals and communities

MEET THE PROSPECTIVE PLACEMAKING USERS

Individuals



Profile

- Student/fresh employed
- Puneite/hostelite
- Professional/technical background

Activity

- Hangout/leisure
- creative hobby / sharpen technical skills.
- Individual study space



Profile

- Home makers
- Puneite or new-resident

Activity

- Learning
- Hobby
- In groups



Profile

- Senior citizens
- Puneite or visitor
- Active/dependent

Activity

- Leisure
- Learning
- Hobby
- In groups

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Profile

- Age group-2-15
- School students
- camps

Activity

- Daily playtime
- Hobby
- vacation camps

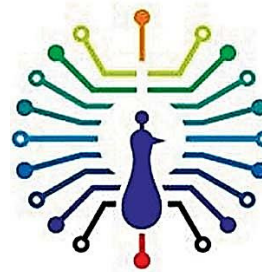
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Educational organisations/Social Communities/NGOs/Govt. Agencies /CSR initiatives



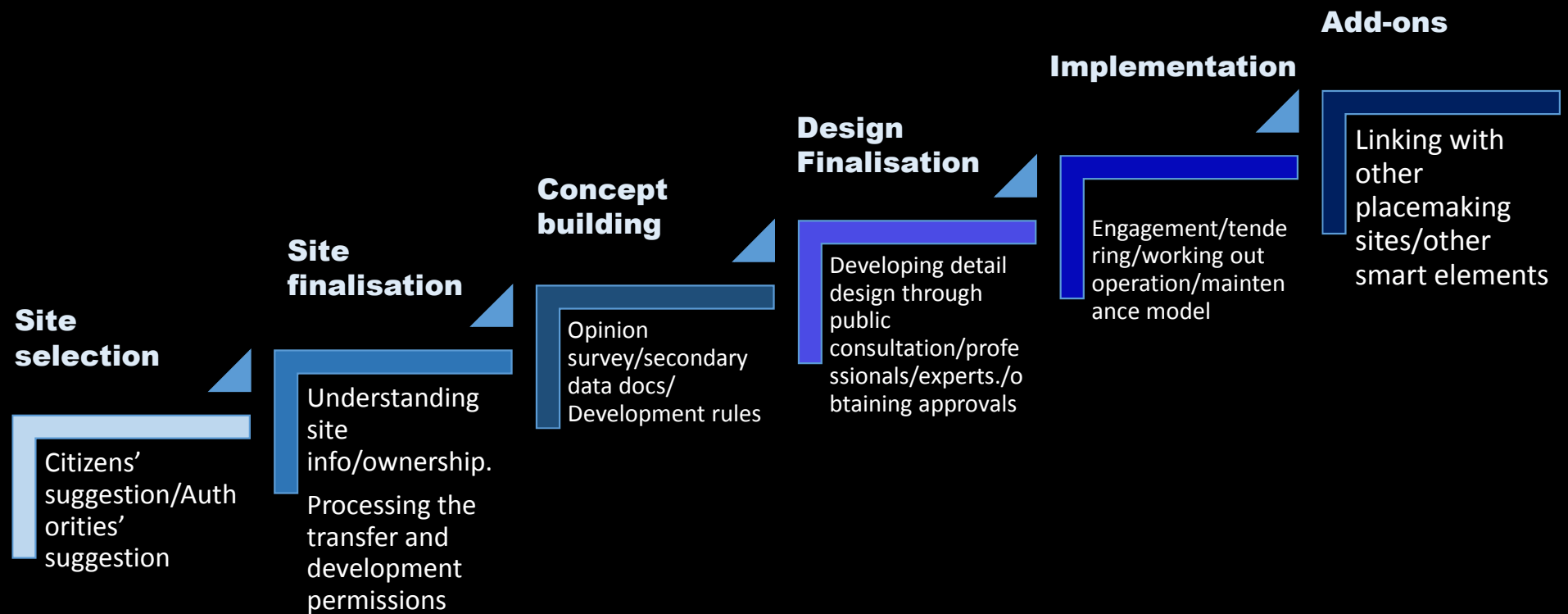
**PUNE
SMART CITY**
DEVELOPMENT
CORPORATION LTD.



CSR
FOR PMC SCHOOLS



PLACEMAKING – STAGES OF PROJECT



SITE FINALISATIONC

On site opinion survey



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Information from secondary data sources

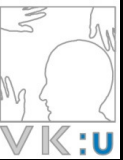


CONCEPT BUILDING

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Keep it Simple yet Impactful

Location - **High Visibility**, Close vicinity from major transit routes & Social Infrastructure, Acquired Land

User Profiling – **for all age groups, common citizens**, underprivileged as well as people with special needs

Design Mantra - Humane Scale and **Dynamic multi-purpose use**. Cost effective and High recall value.

Fast implementation - **Quick transition** (within a month?) Use of prefabricated, precast, modular elements.

Identity & Branding - An attribute or Design element binding all the sites throughout diverse themes.

Smart element – **ICT integration allowing theme specific contents** and functional enhancement

Sustainability - Green features, **re-use material, local resources and low maintainance**

Scope for **Citizen engagement** - During execution stage.

People's participation in managing Dynamic platforms with programmatic Smart Pods.

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CONCEPT BUILDING

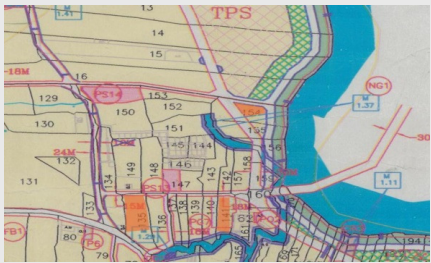
Baner Cluster

Youth & Education

Senior Citizen &
Wellbeing Park

Creativity Plaza

Play Park for all ages
& all needs



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ABB Baner, placemaking cluster -

- Its approximately 1 sqkm cluster comprising 3 diversified themed places + nala garden
- All 3 sites are on Main DP roads connecting Baner Road to Pimple Nilakh and Aundh
- Baner cluster to become a casestudy and benchmark for at least 20 more such clusters across Pune City



Catchment Profiling

Cosmopolitan Visitors
Young IT employees
Young families with Kids

What is around?

- Baner, Balewadi, New residential societies
- River front Development
- Adjoining landuse – Residential & Riverfront

Theme

Art and Culture Centre

Site area – 1614 sq.mt

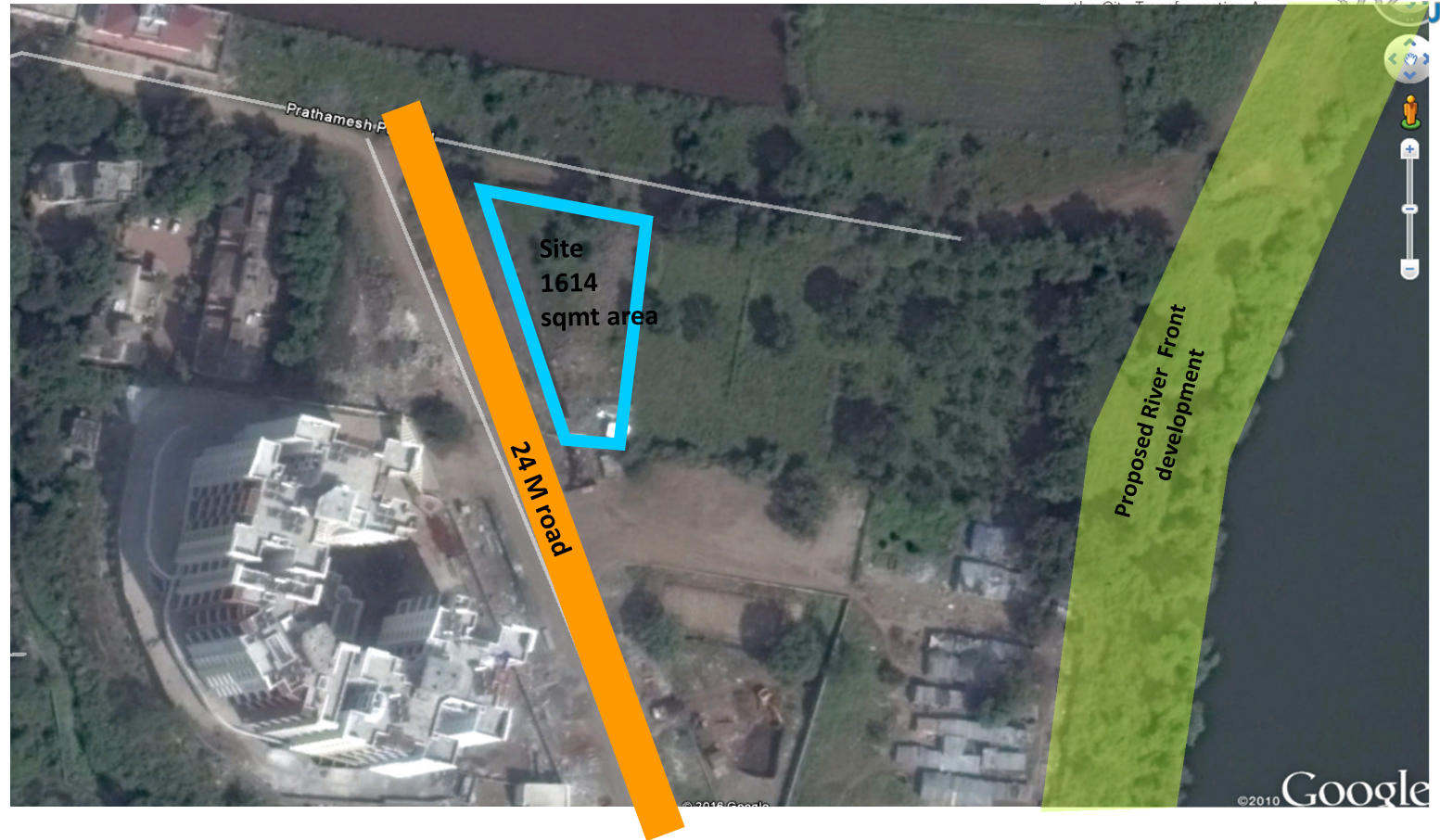
Purpose – Amenity Space



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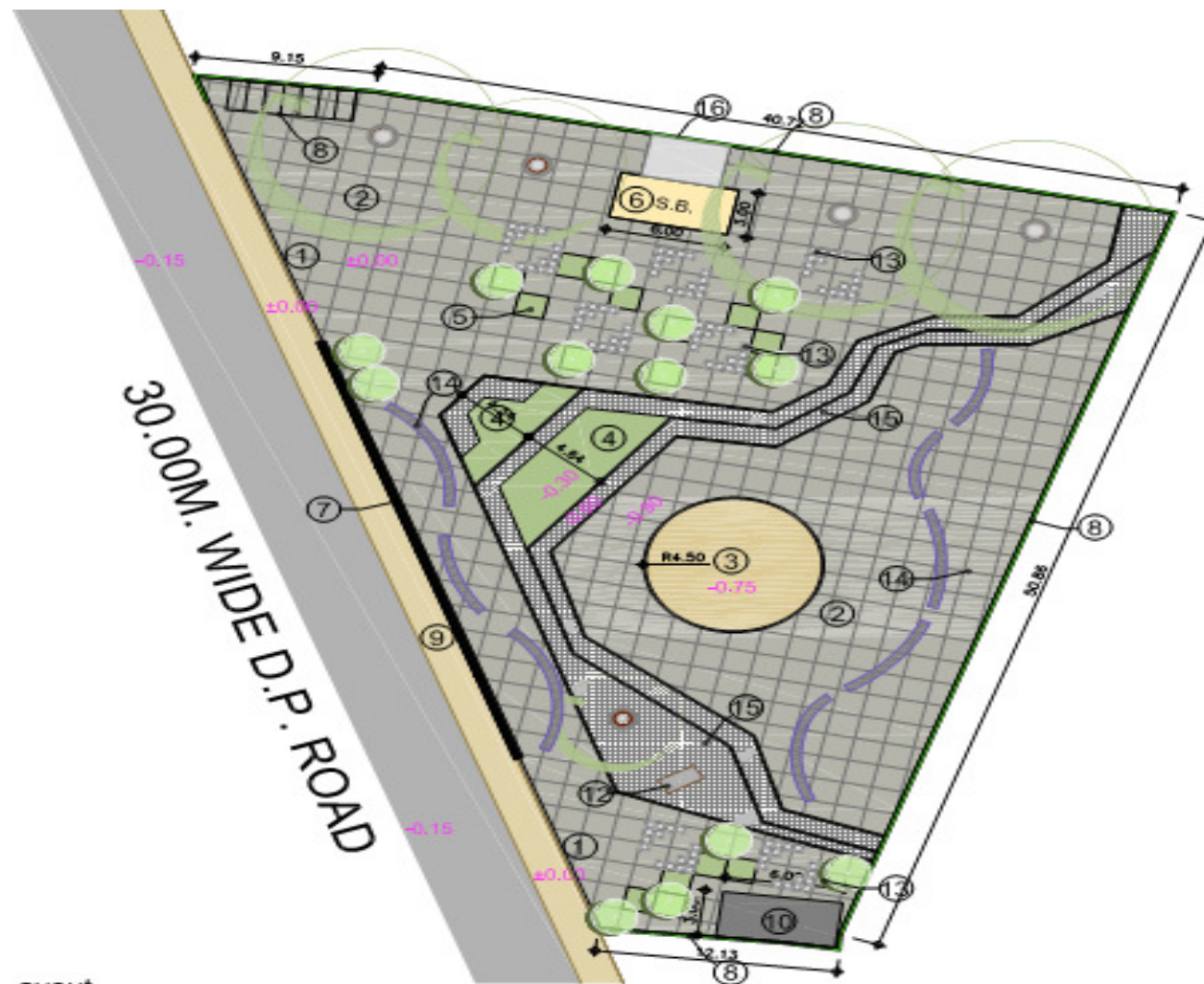
*'we wish to have a place
where we can
participate/experience the
arts/paintings/sculpture
making. Can take kids to
such a place where such
demonstrations/exhibits
/workshops happen
frequently so that they can
see the artists work and
develop interest in this field.*

Kavitha Menon
Working professional, Baner

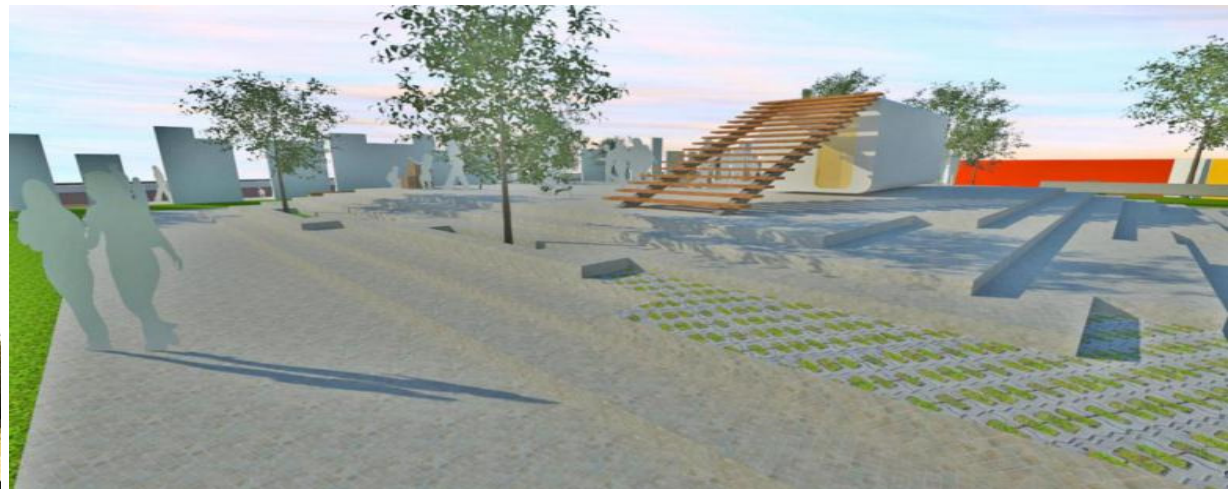


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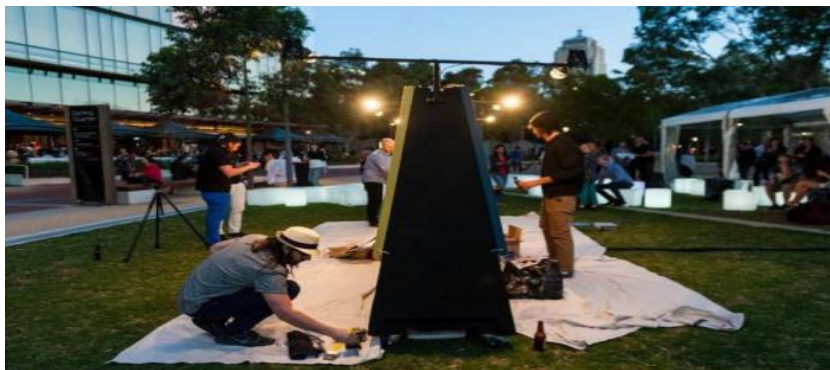
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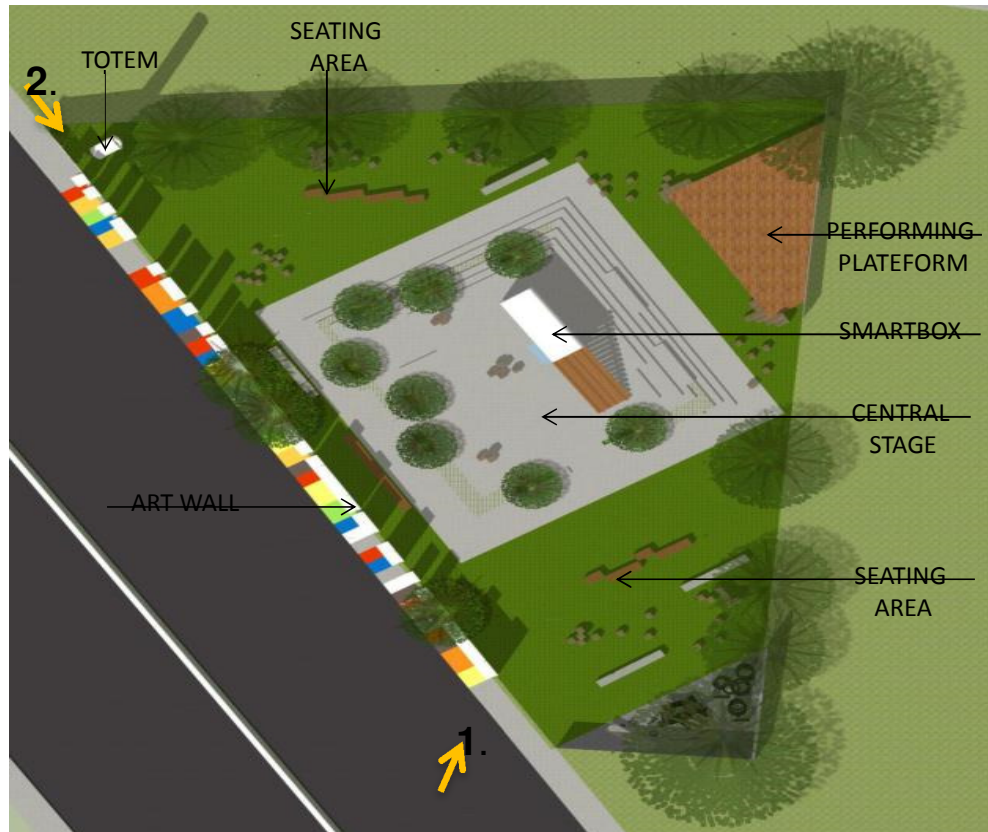
11/25/2016



11/25/2016



11/25/2016



- 60 m wide frontage - providing 85sq.m. of art wall space available for graffiti
- capacity for 200 audience
- 200 sq.m. space for exhibit and display
- team of 40 artistes can work for at one time for any art

11/25/2016

Nagar Road : Amenity Space 46/1 Wadgaon Sheri

Catchment Profiling

Cosmopolitan Visitors
Young IT employees
Matured families

What is around?

BRT, Malls, Hotels, Schools,
Offices, Residential colonies
Adjoining landuse –
commercial and institutional
Transport – BRTS corridor
BRTS bus station – Dharma
nagar

Theme:

Innovation & Ecology

Status:

Site Area - 2189 sqmt
Use - Amenity



Nagar Road : Amenity Space 46/1 Wadgaon Sheri



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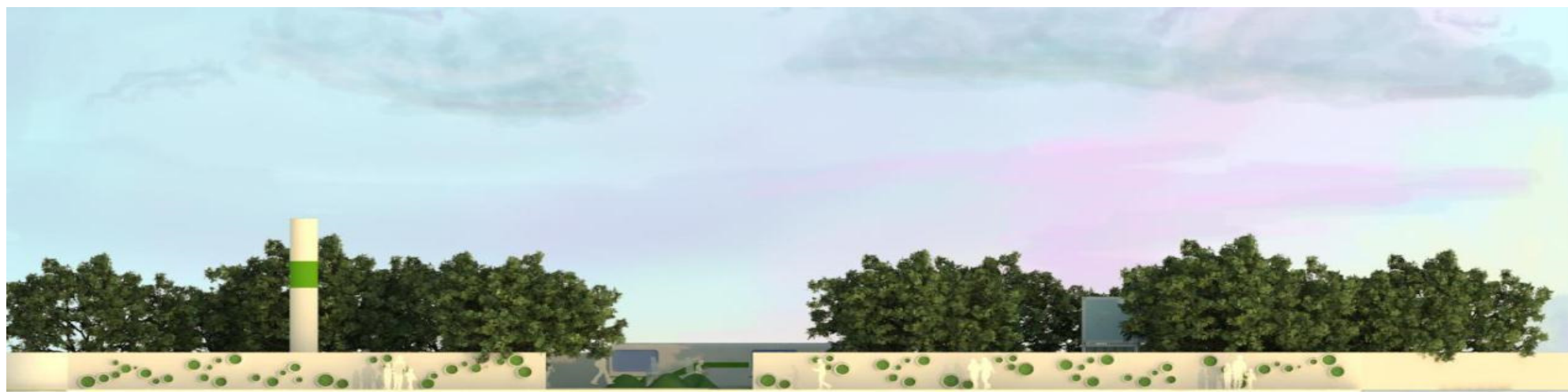


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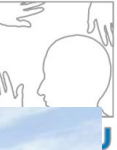
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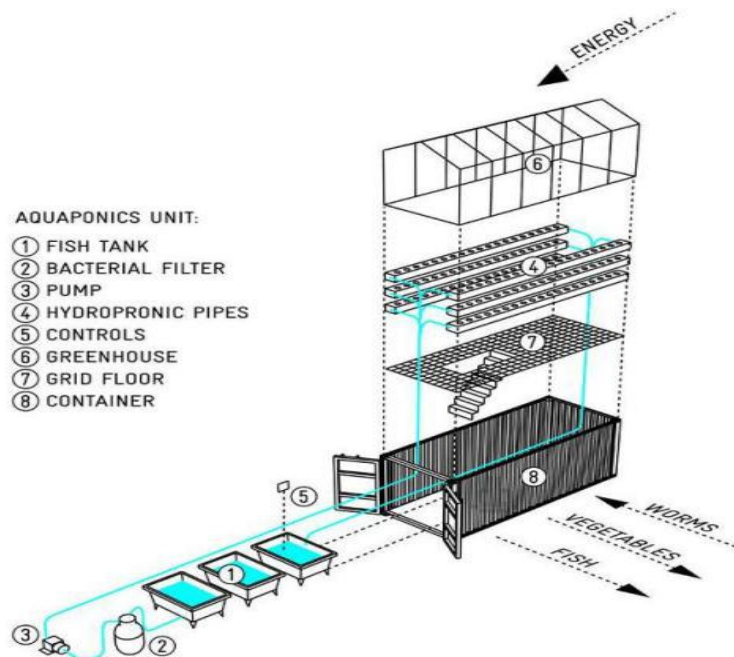


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11/25/2016

the Smart City Green Box



Satar Road: Amenity space 685 Bibwewadi

Catchment Profiling

Institute student
Residential people

What is around?

Residential, school, Colleges,
Commerical area
Adjoining landuse –
Residential and institutional
Transport – BRTS corridor

Theme:

Smart Lab /
Mobile Skill development

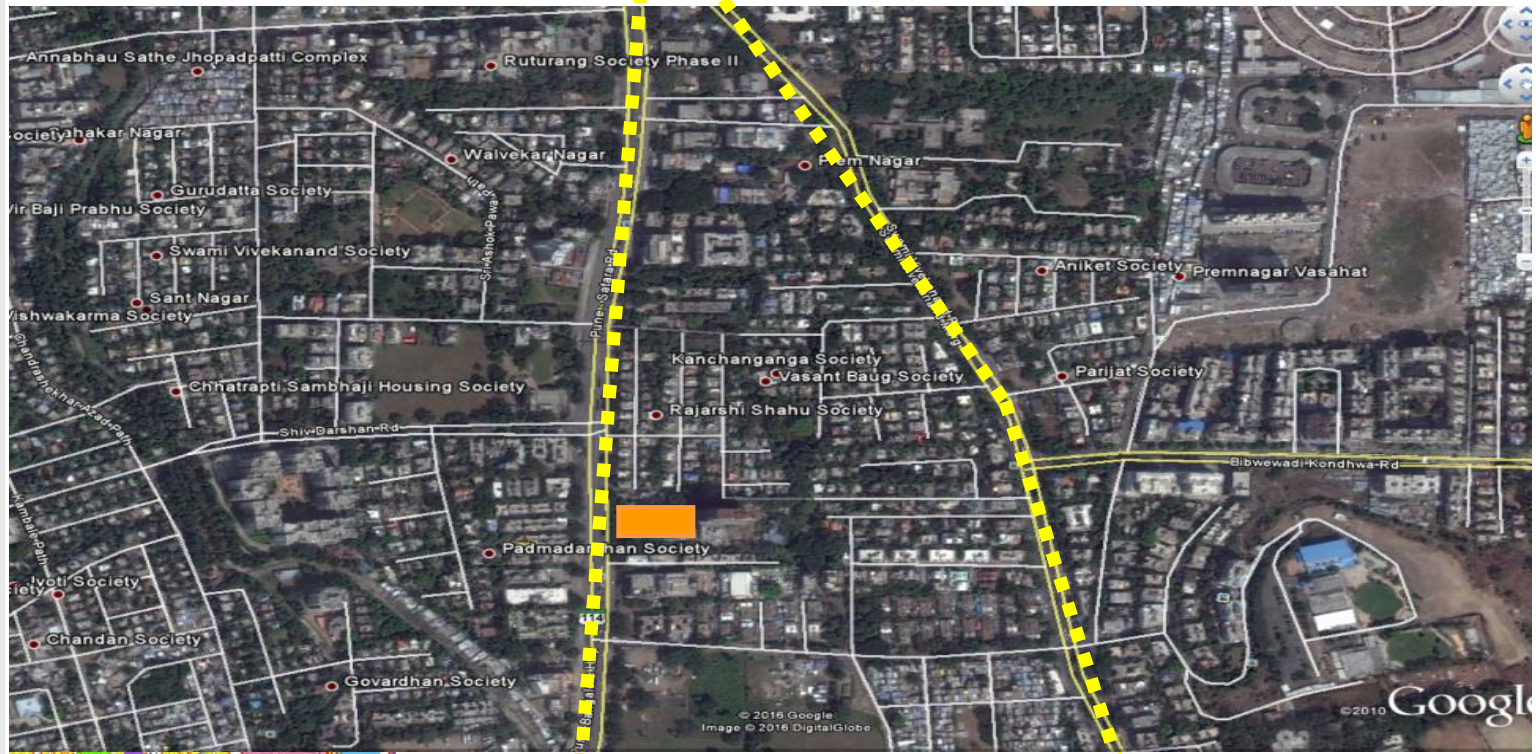
Status:

Site Area - 565 sqmt
Use - Amenity

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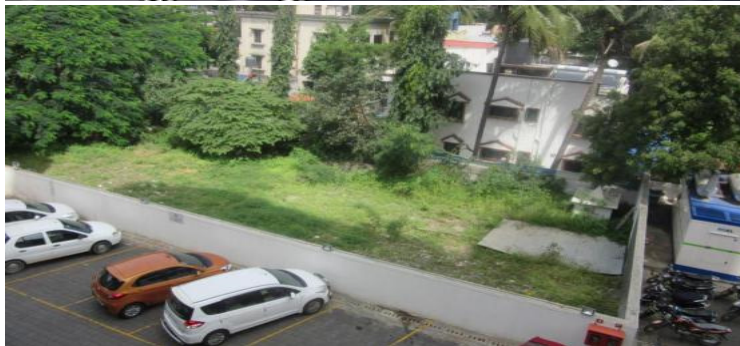
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Satar Road: Amenity space 685 Bibwewadi



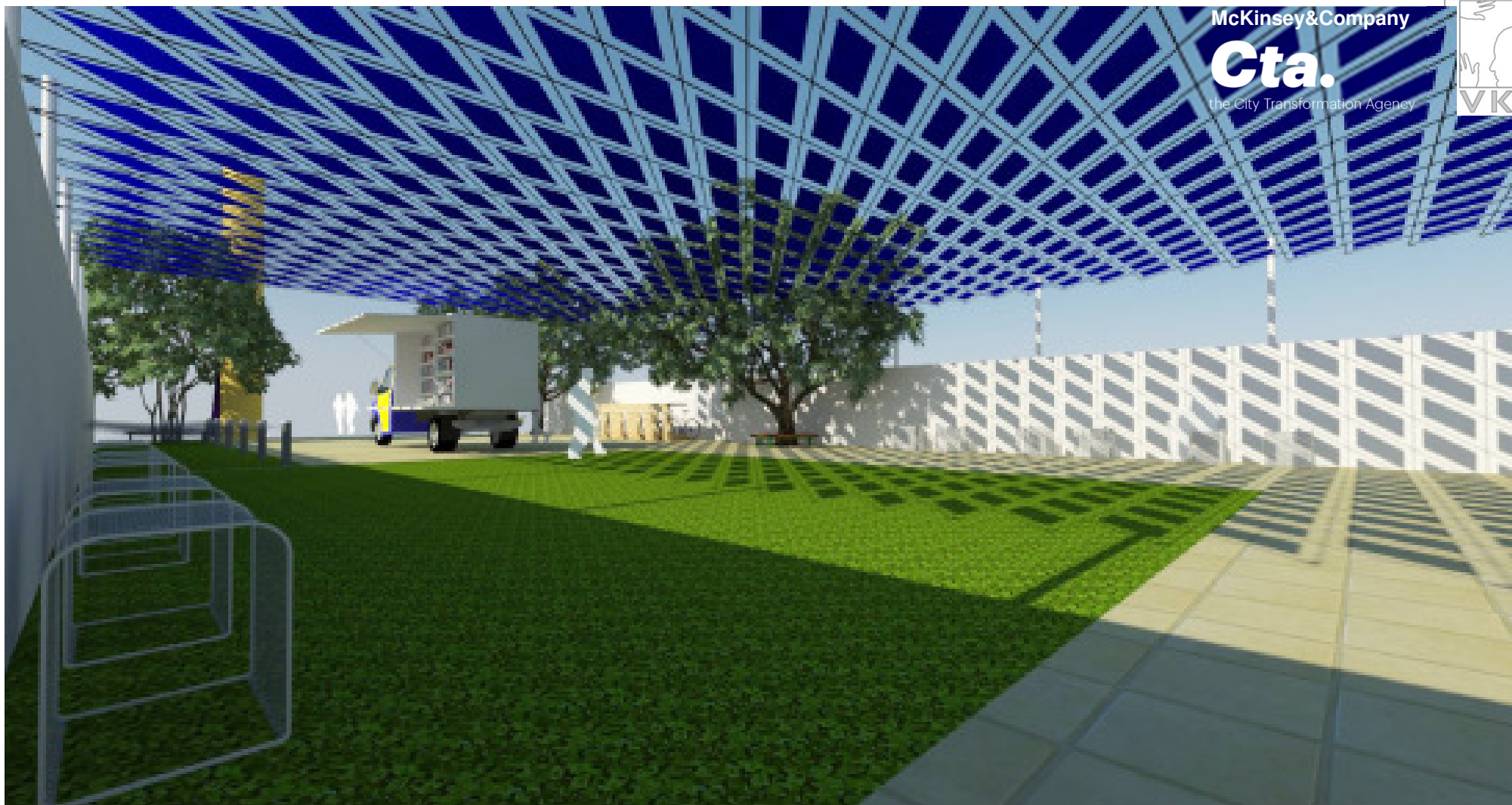
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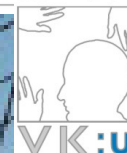




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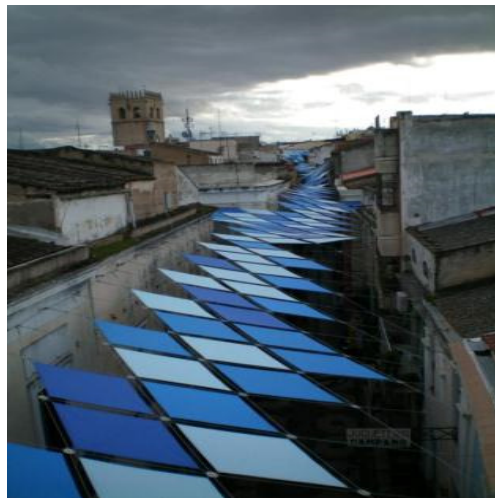
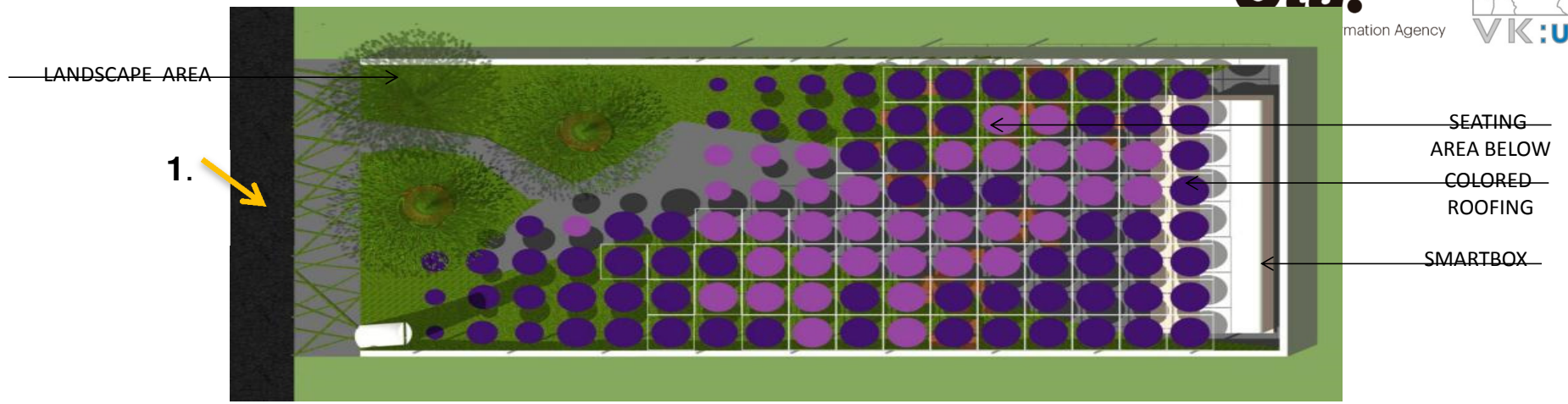
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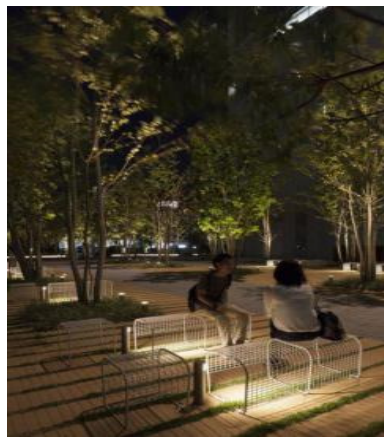


- Interacting space for 150 people
- smart box housing 10-12 work stations - approx. 80 trainees dai

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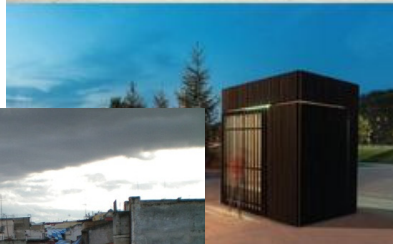
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ADD-ONS : SUSTAINABLE DESIGN AND SMART ITEMS

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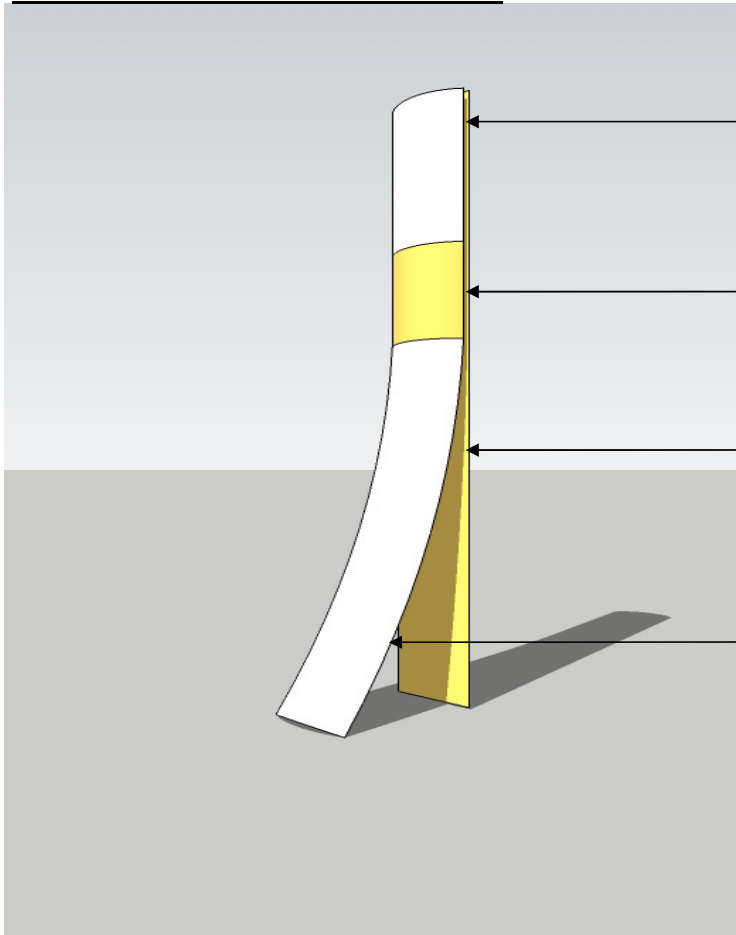
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ADD- ONS : SMART TOTEM



CCTV Surveillance to monitor the site for safety and security,
Smart lighting, WiFi, Public Announcement System, branding etc.

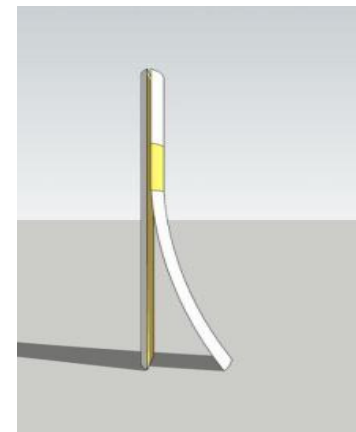
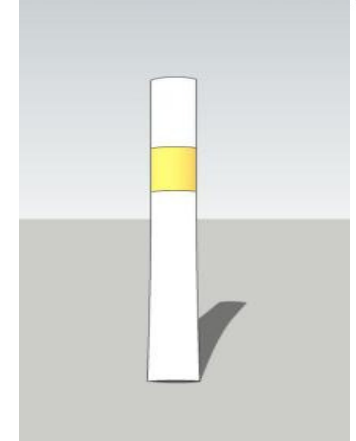
Colour bands representing basic activity themes, bringing each theme its own identity.

Minimal design, that is unique yet common for all Smart City place making spots. Added to it, its height that helps identify the spot visually from a distance

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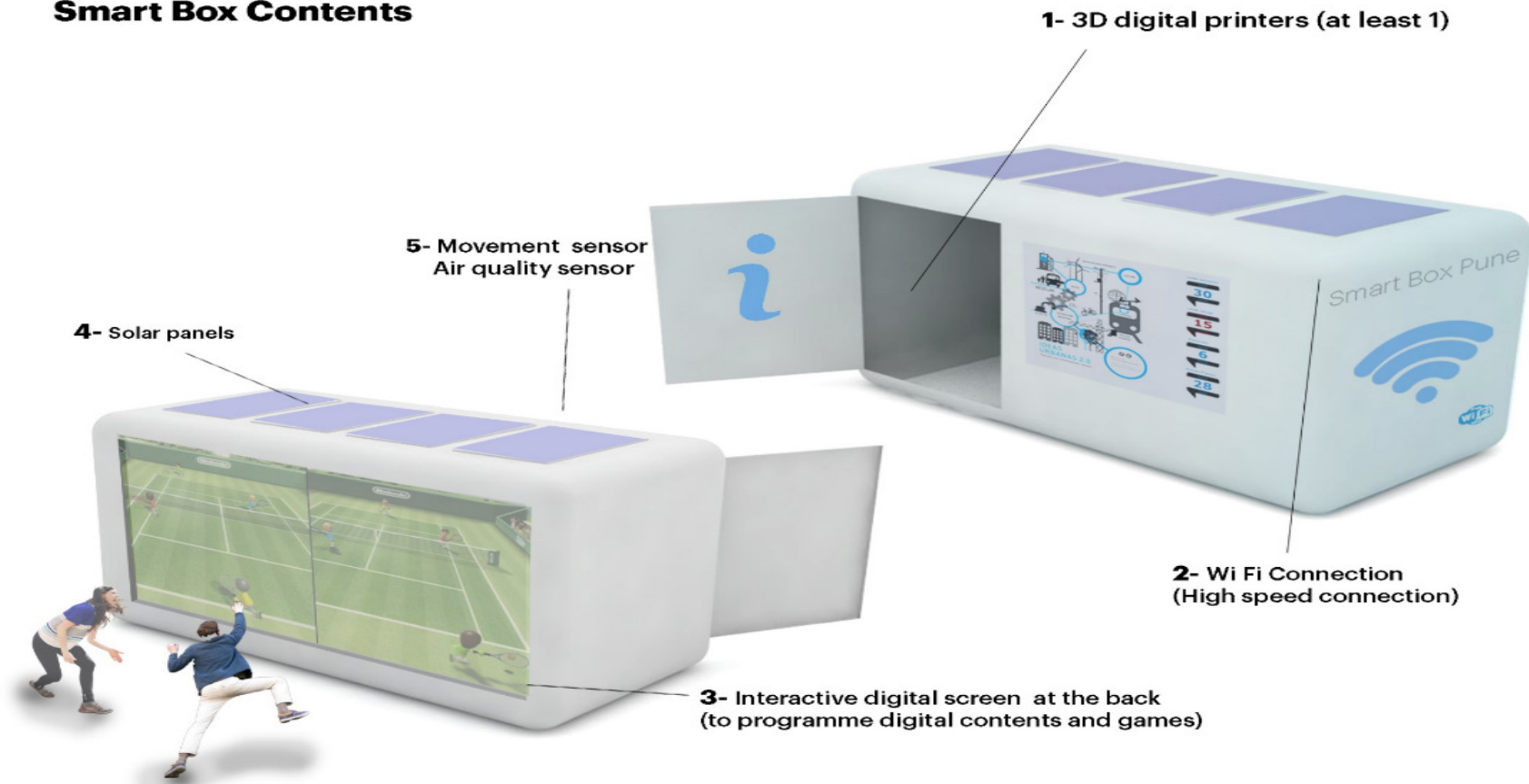
ADD- ONS : SMART BOX

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Smart Box Contents



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**City Identity is the
smartest
Planner trigger**



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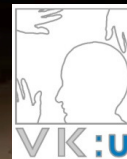


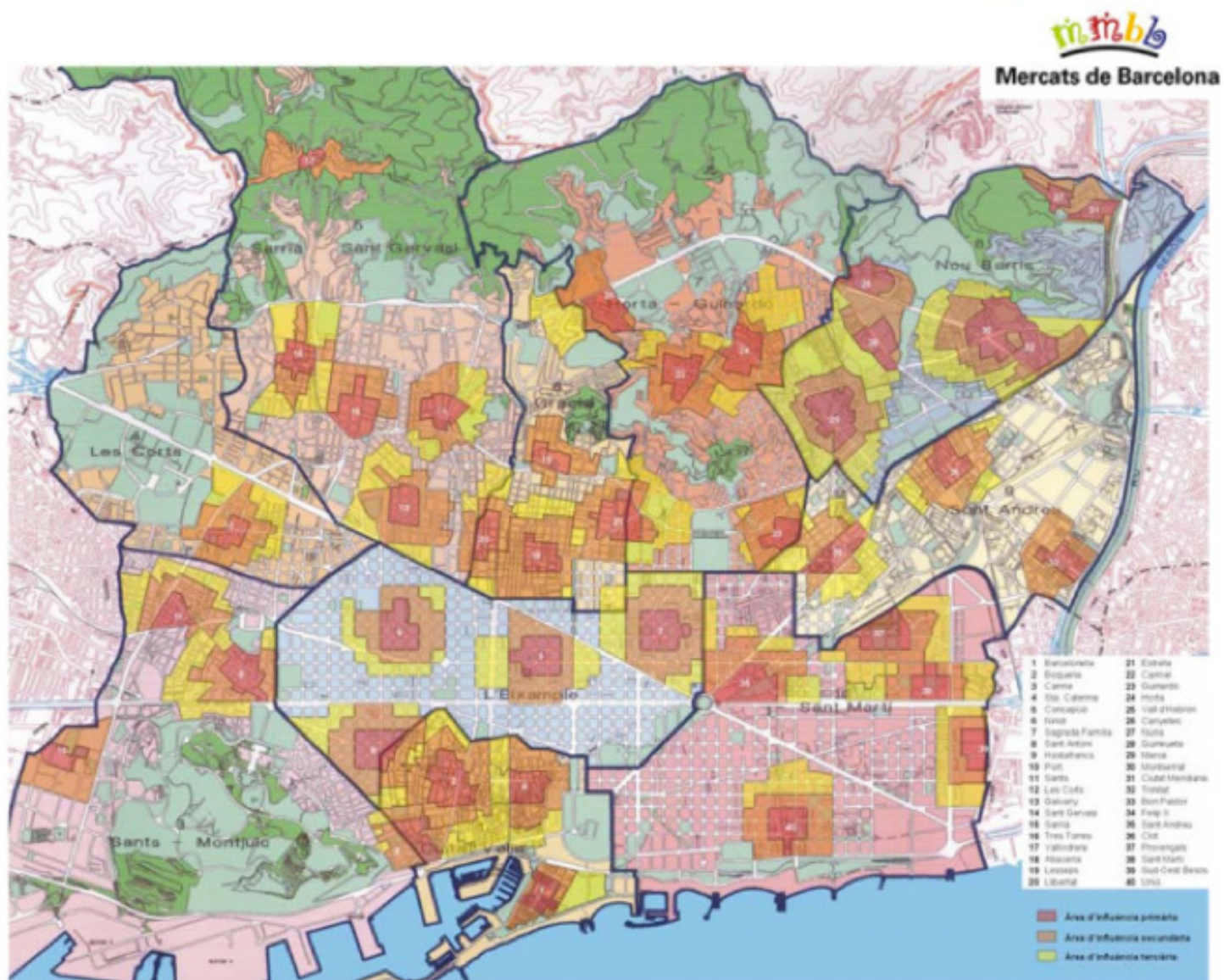


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Marc Piqué Gascón 2013

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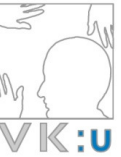
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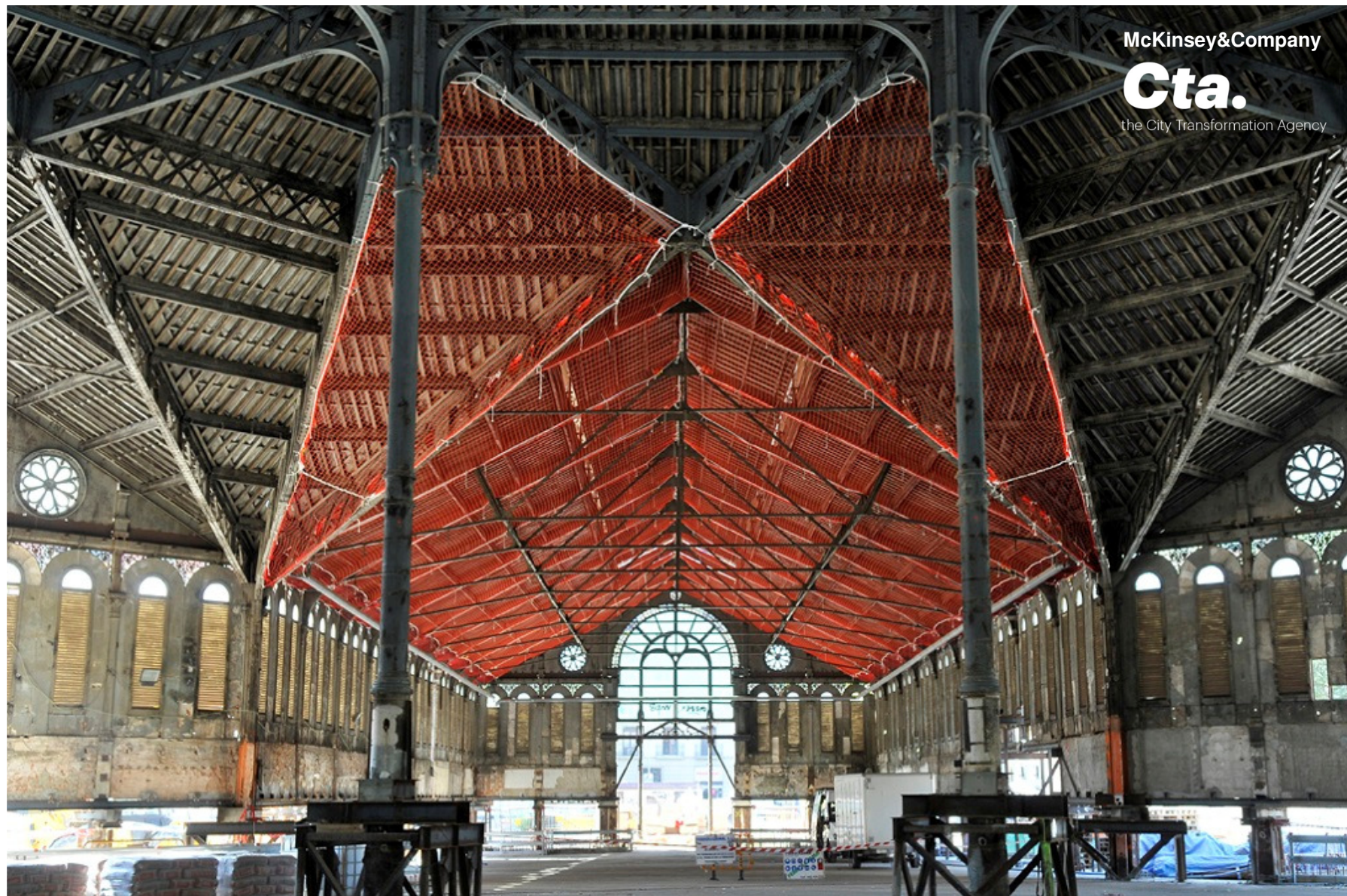
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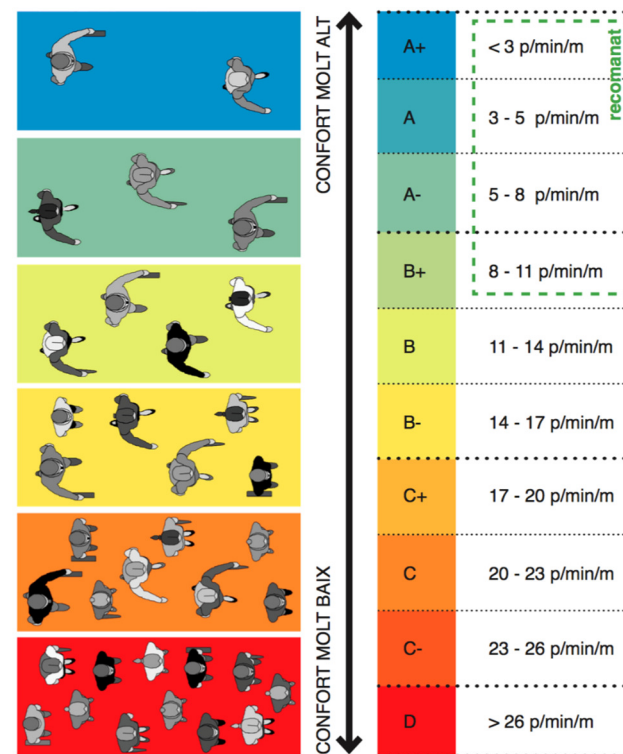
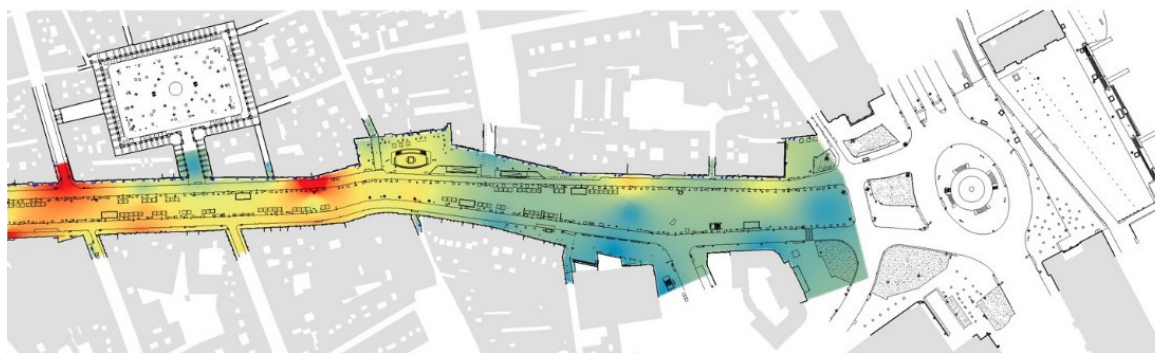
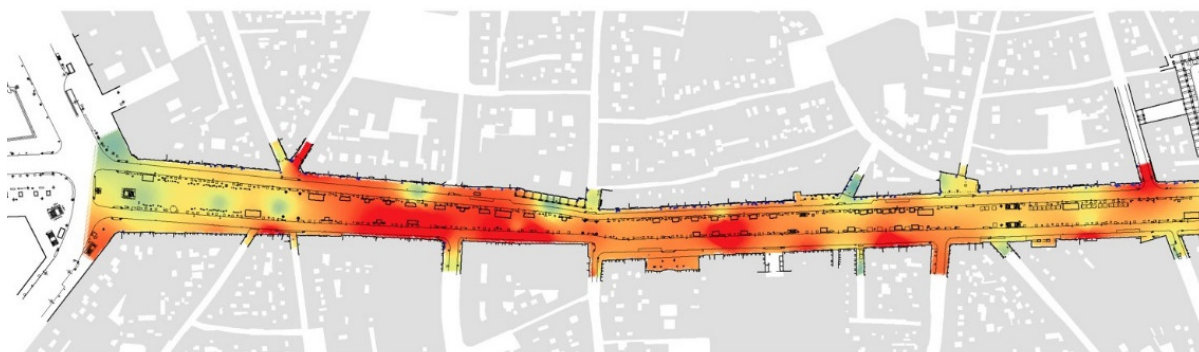
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Big Data to Smart Urban Design







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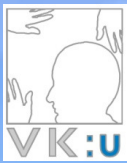




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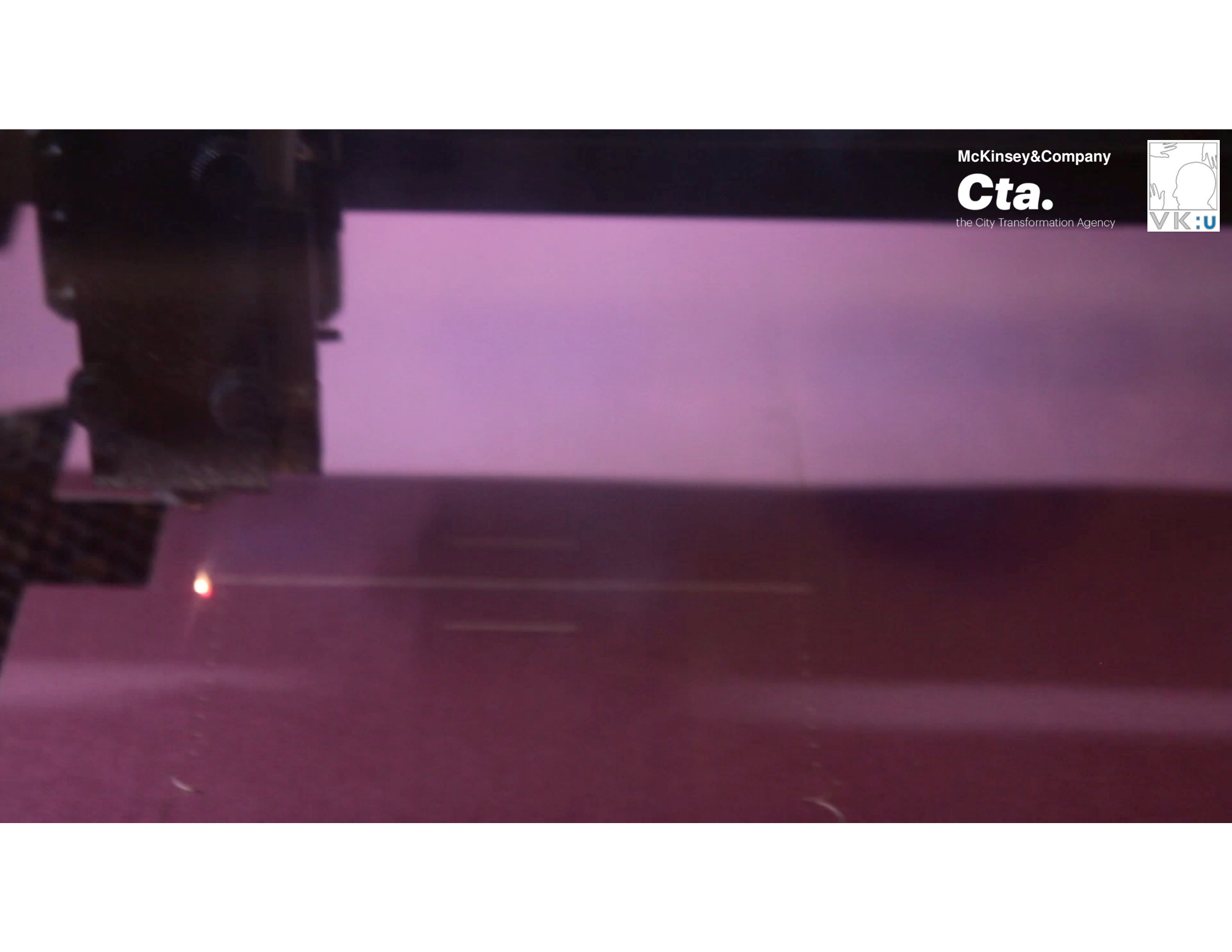
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**Smart is about who we are... and who
we want to become: a Productive and
Experiential Society**



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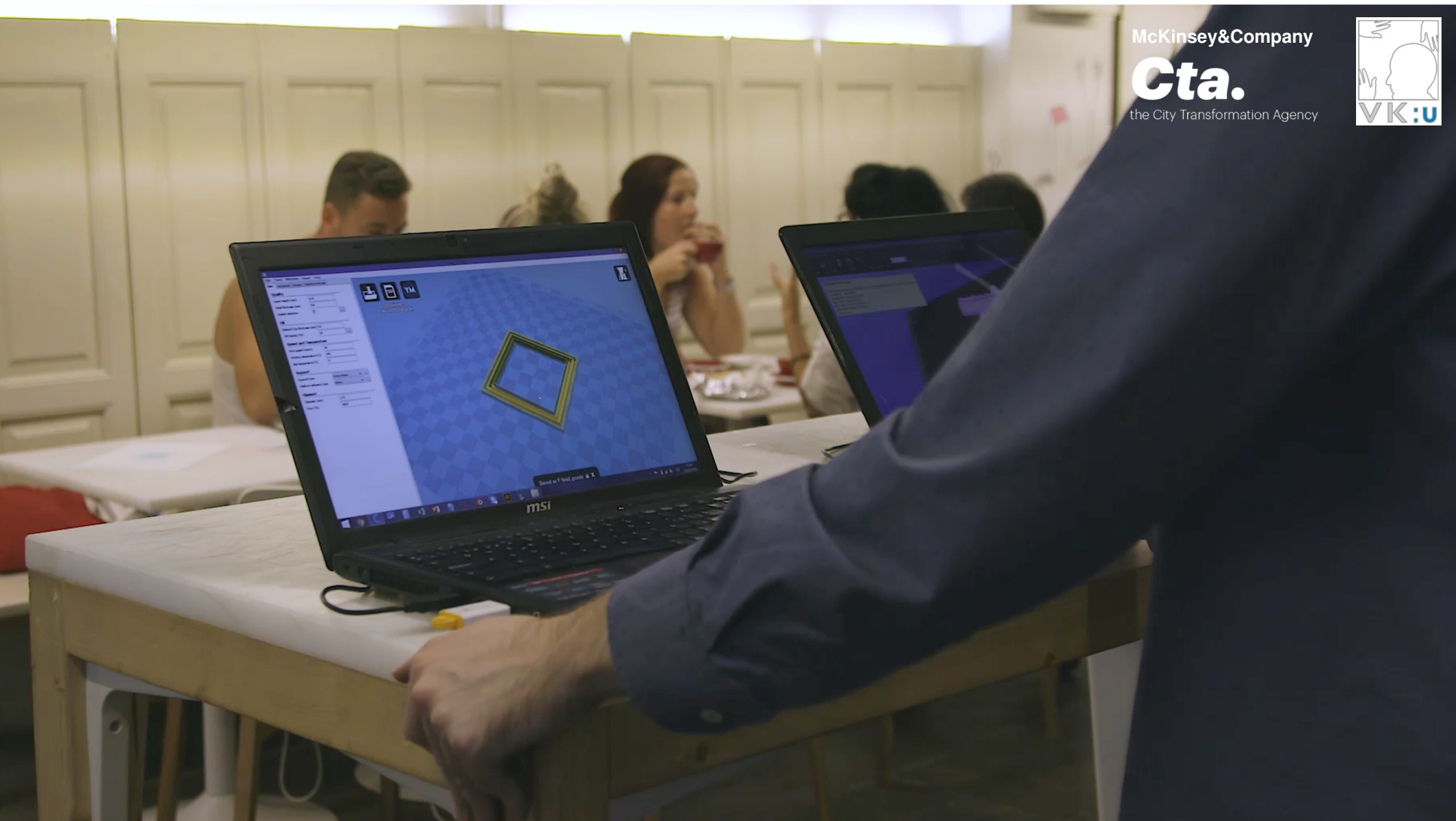
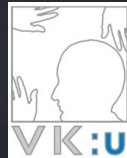
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**“Smart Edutainment”
for a gorgeous
heritage
Chase the visitors!**

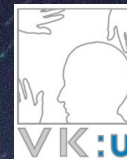




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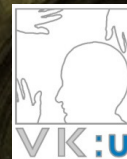




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**“Smart Experience
Center”
as a *Legitimizer* and
Tourist attraction**





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Thank you!!

Antoni Vives

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