

# TOURISM DESIGN

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Visione e Cultura per una nuova Ospitalità 4.0

TRENDS IN THE DIGITAL AGE

JUNE 20, 2019

CARLO  
RATTI  
ASSOCIATI®

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# CRA GLOBAL NETWORK



**3** CRA OFFICES  
Turin, Italy | London, UK | New York, USA

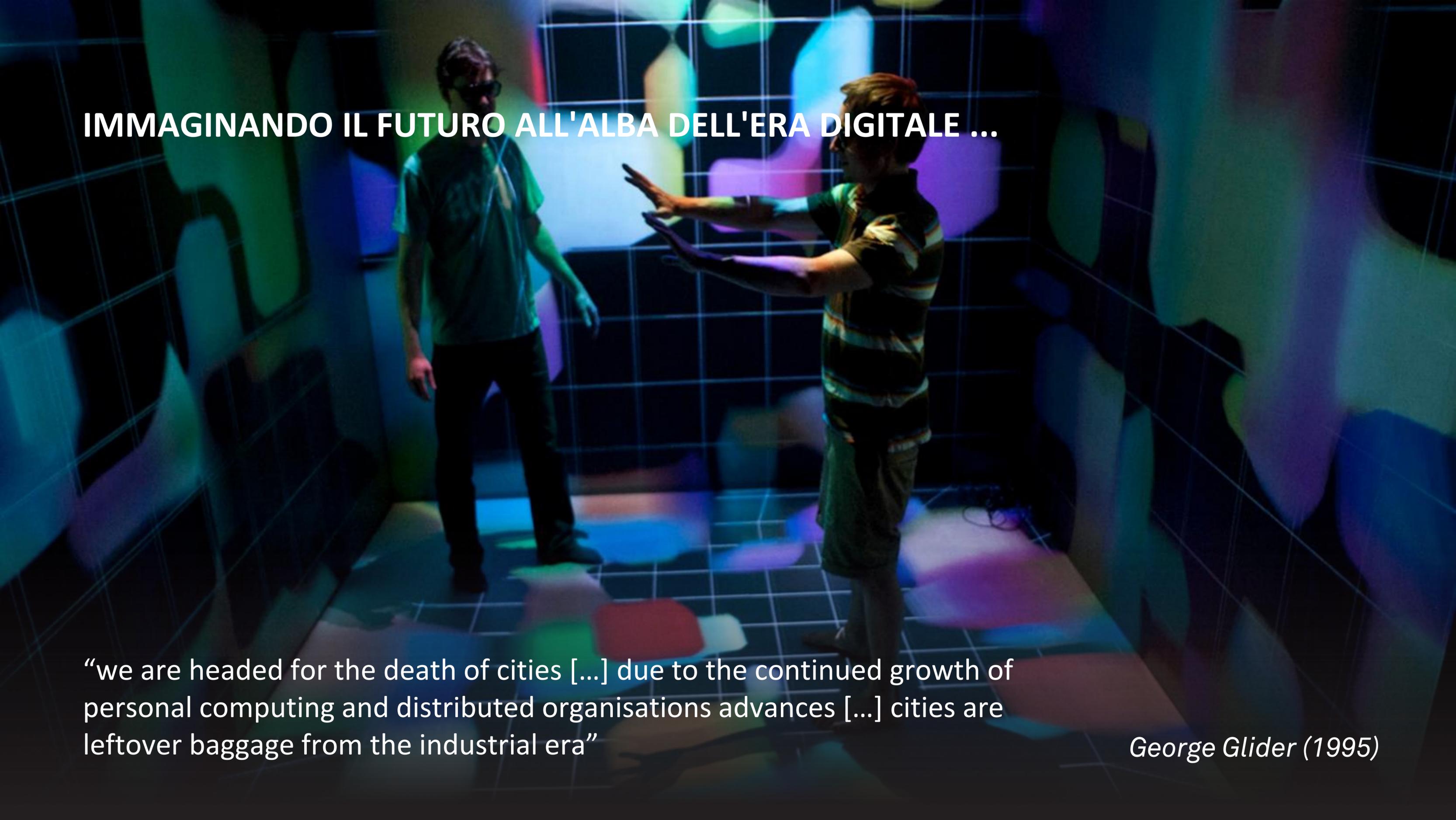
**3** SENSEABLE CITY LAB  
Cambridge, MA | Singapore | Amsterdam

**2** MAKR SHAKR & SCRIBIT  
HQ: Turin, Italy

**2** SUPER PEDESTRIAN & BIOBOT  
Cambridge, MA | San Francisco

# IL FUTURO DELLA CITTA'

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A photograph of two men in a virtual reality environment. The man on the left is wearing a light blue t-shirt and dark pants, looking towards the other man. The man on the right is wearing a dark t-shirt with horizontal stripes and dark shorts, gesturing with both hands as if interacting with a virtual object. The environment features a white grid floor and walls with large, colorful, abstract shapes in shades of blue, green, and purple. The lighting is dim, with the primary light sources being the colorful projections on the walls and floor.

**IMMAGINANDO IL FUTURO ALL'ALBA DELL'ERA DIGITALE ...**

“we are headed for the death of cities [...] due to the continued growth of personal computing and distributed organisations advances [...] cities are leftover baggage from the industrial era”

*George Glider (1995)*



... E COME E' STATO REALMENTE

"Nel 2008, il mondo raggiunge una pietra miliare invisibile ma importantissima: per la prima volta nella storia più della metà della popolazione umana, 3,3 miliardi di persone, vivrà nelle aree urbane. Entro il 2030, ci si aspetta che questo aumenti a quasi 5 miliardi "

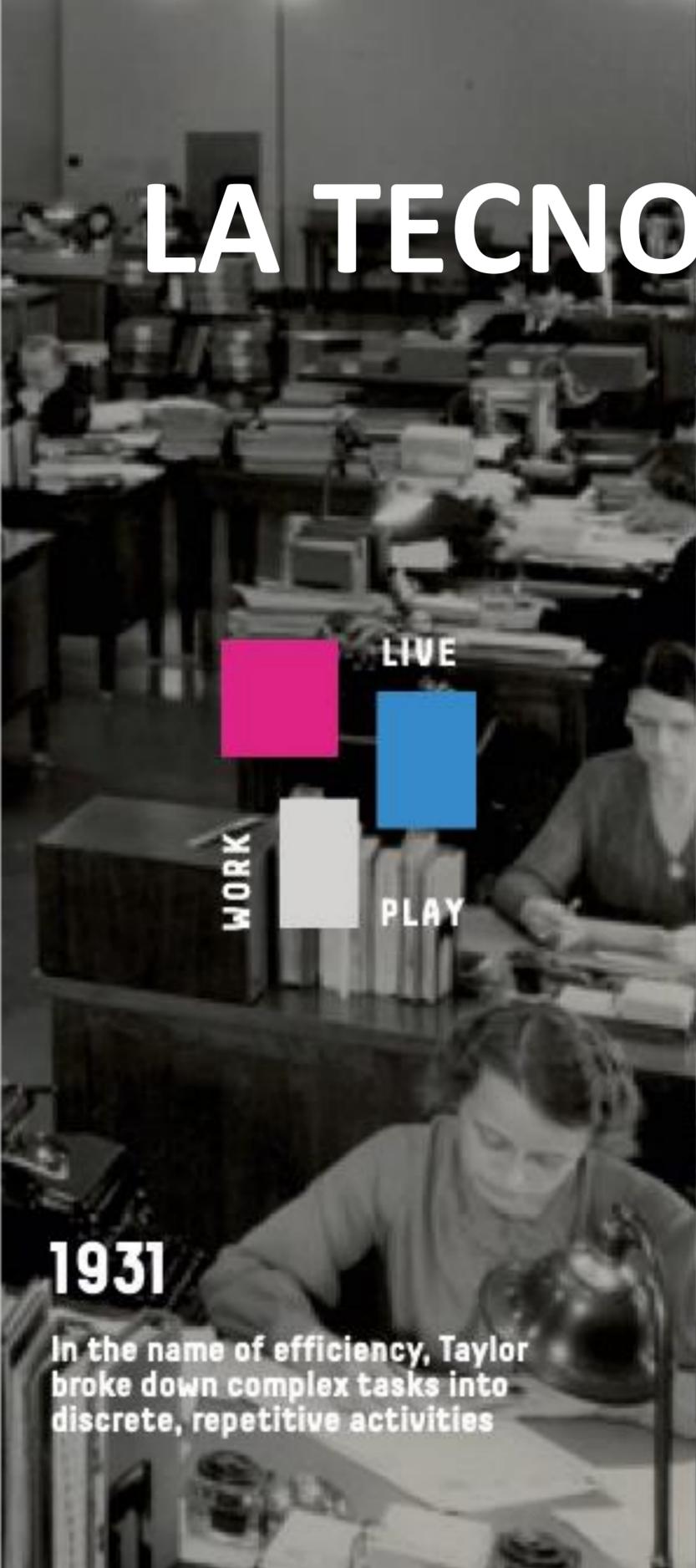
*United Nations  
Population Fund (2007)*



Le Corbusier , Charte d'Athene 1931, IV CIAM

"Le quattro chiavi della pianificazione urbana sono le quattro funzioni della città:  
abitazione, lavoro, ricreazione (uso del tempo libero), trasporti"

# LA TECNOLOGIA STA CAMBIANDO LA CITTÀ



**1931**

In the name of efficiency, Taylor broke down complex tasks into discrete, repetitive activities



**1960**

The physical office space and emerging ideas about new ways of working reflect the organisational structure.



**2000**

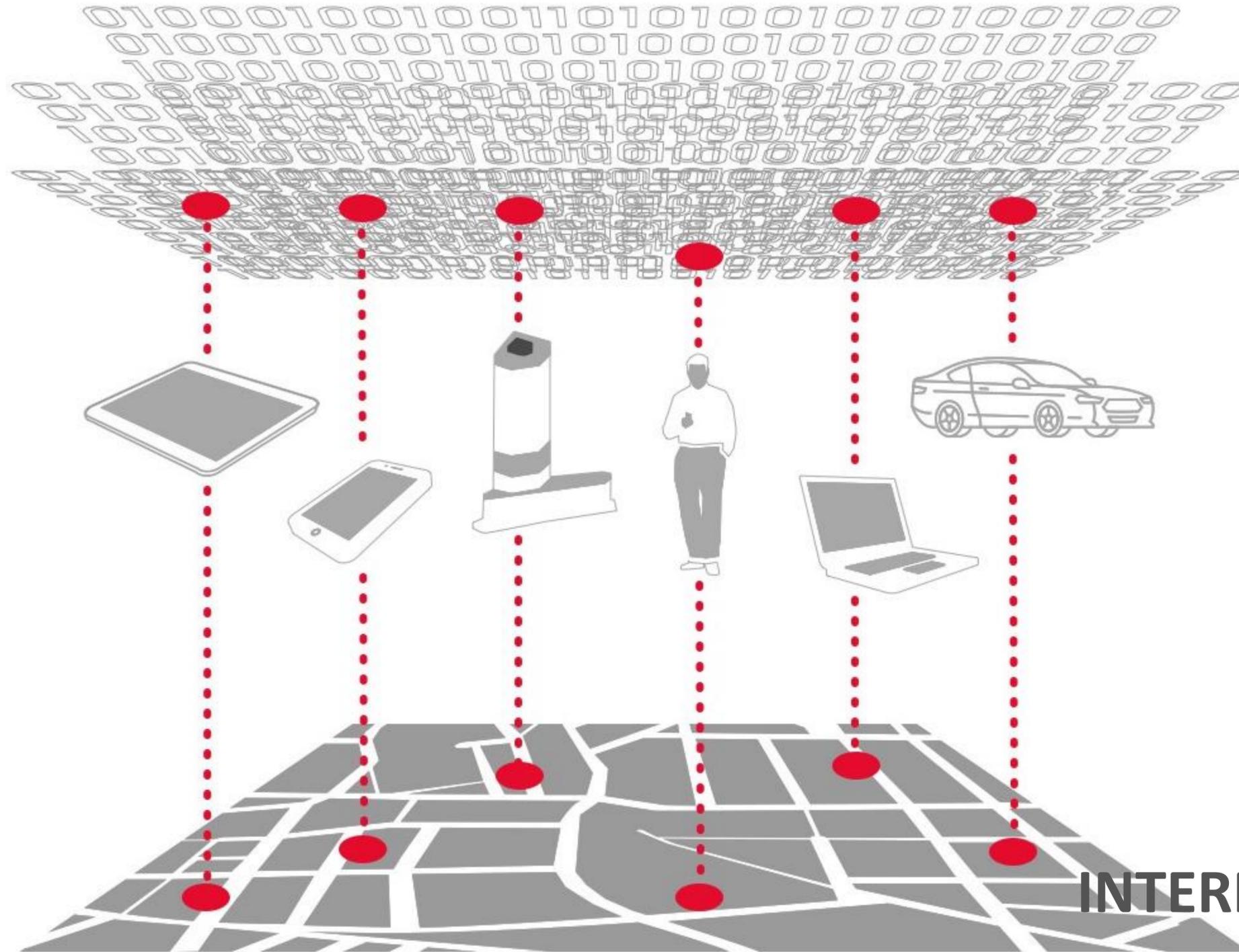
New technology has had a major impact on the contemporary office, both spatially and operationally.



**TODAY**

Connectivity has changed the way we use space, allowing us to work, live and create from anywhere.

# LIFE IN TODAY'S CITIES IS DIGITAL & PHYSICAL



**INTERNET OF THINGS**



A modern, open-plan office lounge with people working and socializing. The word "we work" is overlaid in large white text. The space features dark leather sofas, wooden tables, and orange chairs. There are several people sitting at tables, some working on laptops. The ceiling has exposed ductwork and several large, spherical pendant lights. A large potted plant is visible on the right side of the frame.

we work





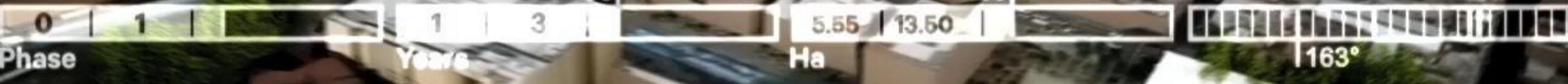
**airbnb**

An aerial photograph of a city grid, likely Guadalajara, Mexico. The grid is composed of numerous small, rectangular blocks. In the center of the image, there is a cluster of buildings that are highlighted with various colors: purple, orange, and yellow. These buildings appear to be part of a specific development or project. The background shows a hazy, mountainous landscape under a grey sky.

# CIUDAD CREATIVA DIGITAL

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2011 GUADALAJARA, MEXICO - MASTERPLAN

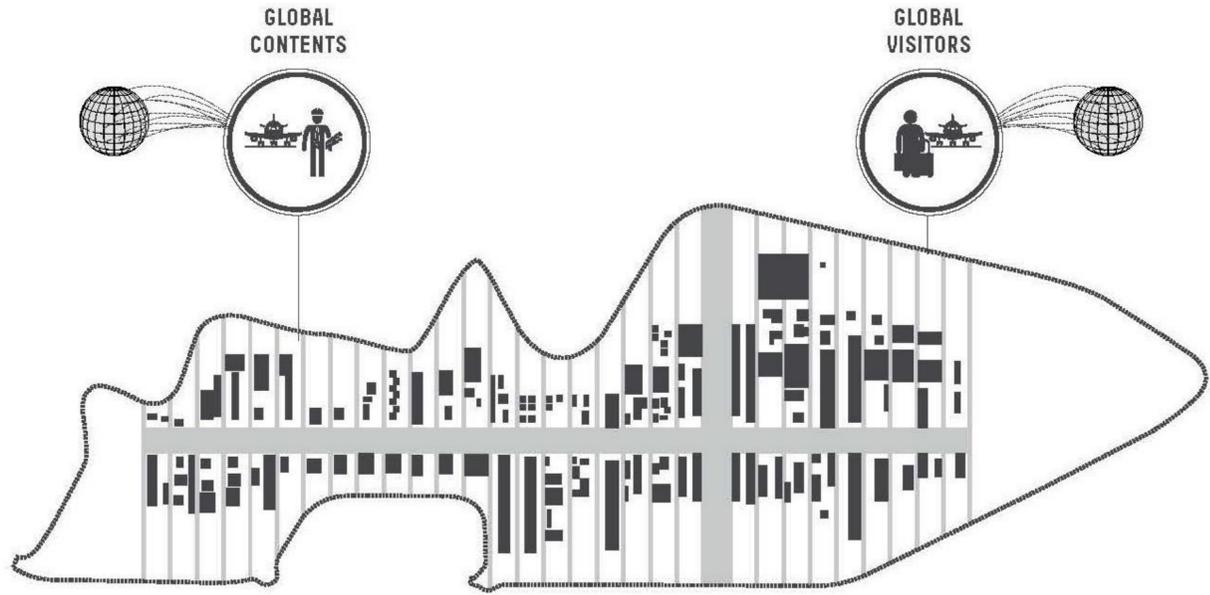




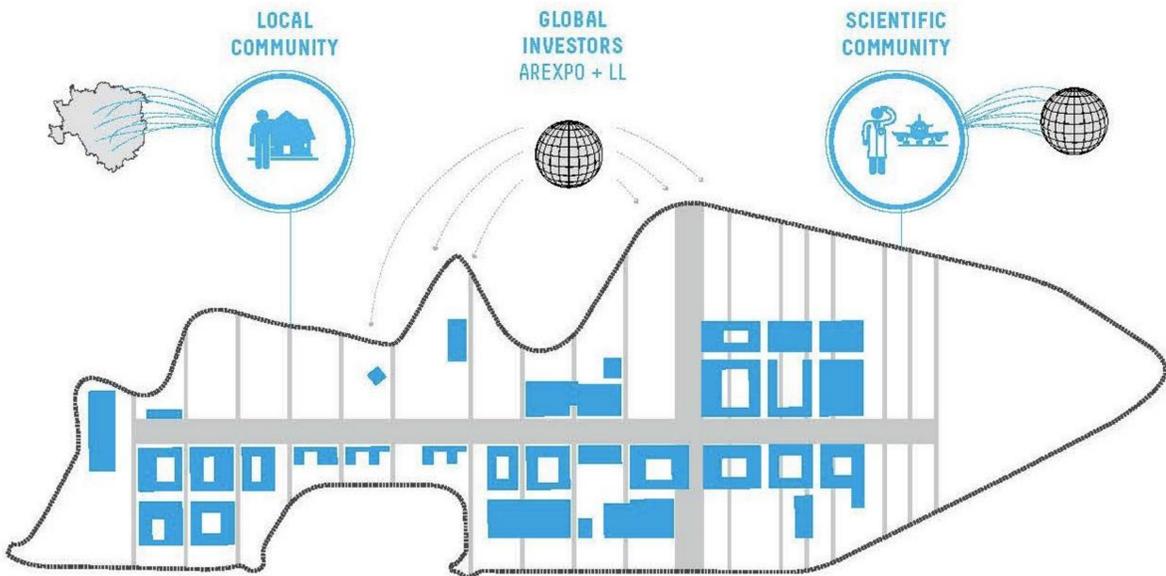
# MIND (AREXPO)

—  
2018 MILAN, ITALY - MASTERPLAN

VISIONE

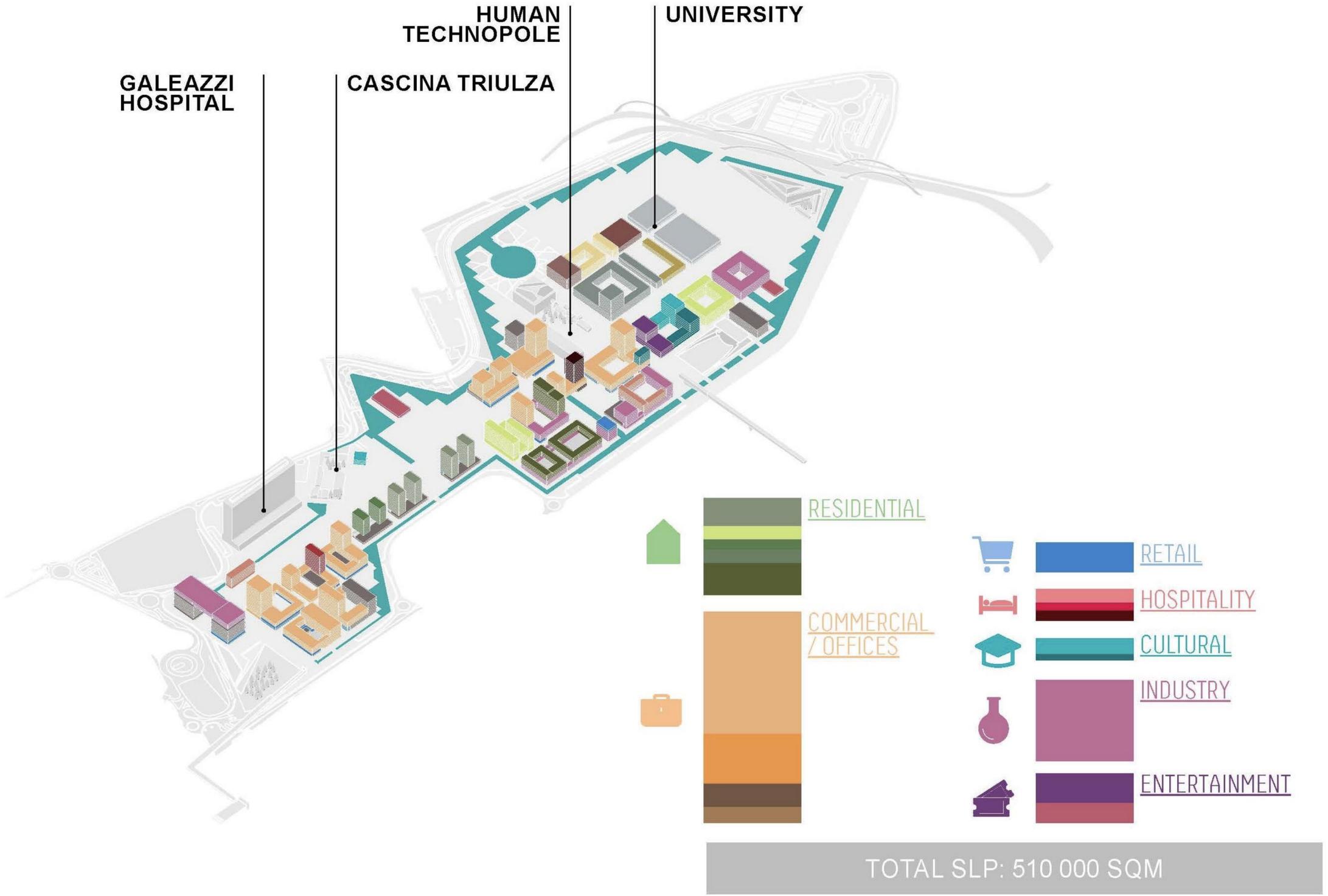


FROM A  
**'VISITOR ORIENTED'**  
DISTRICT



TO A  
**'COMMUNITY ORIENTED'**  
PROJECT

**FUNCTIONAL MIX MASTERPLAN**

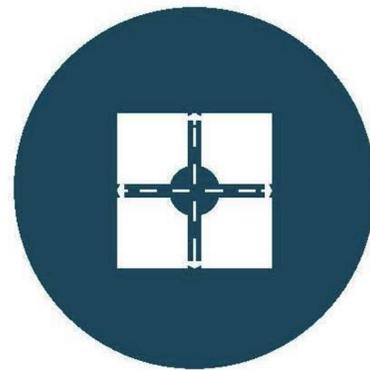


## PRINCIPI DEL PROGETTO URBANO



### 1. LINEAR PARK

The Decumano becomes the green core of the masterplan: from roads to the green park



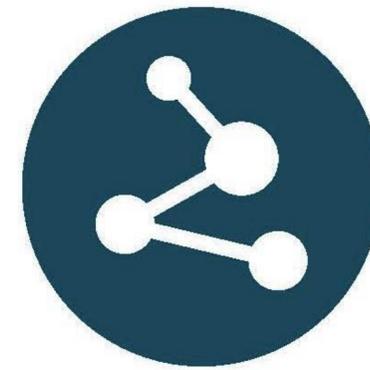
### 2. COMMON GROUND

The ground floor will host public interfacing functions and will be either physically or visual permeable



### 3. OPEN PLATFORM

A flexible masterplan allows stakeholders to shape their plots based on their actual needs



### 4. DNA OF MILAN

Different city grids of Milan have been studied, in order to define the best configuration.



### 5. INNOVATIVE MOBILITY

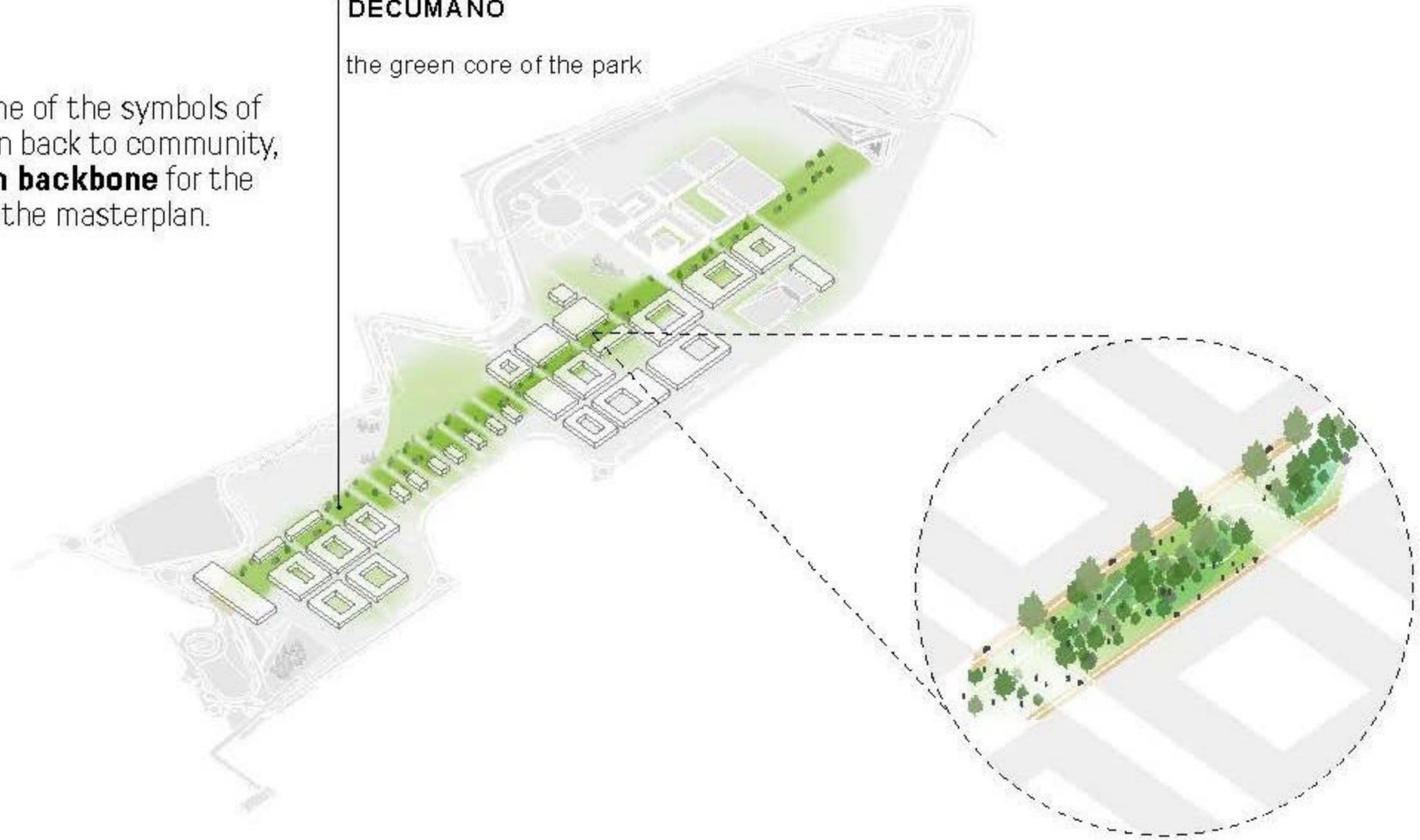
The design of the future city must take account of promising ways of transportation



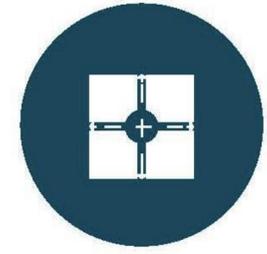
# 1 LINEAR PARK

The Decumano, one of the symbols of Expo 2015, is given back to community, becoming a **green backbone** for the park to expand in the masterplan.

**DECUMANO**  
the green core of the park

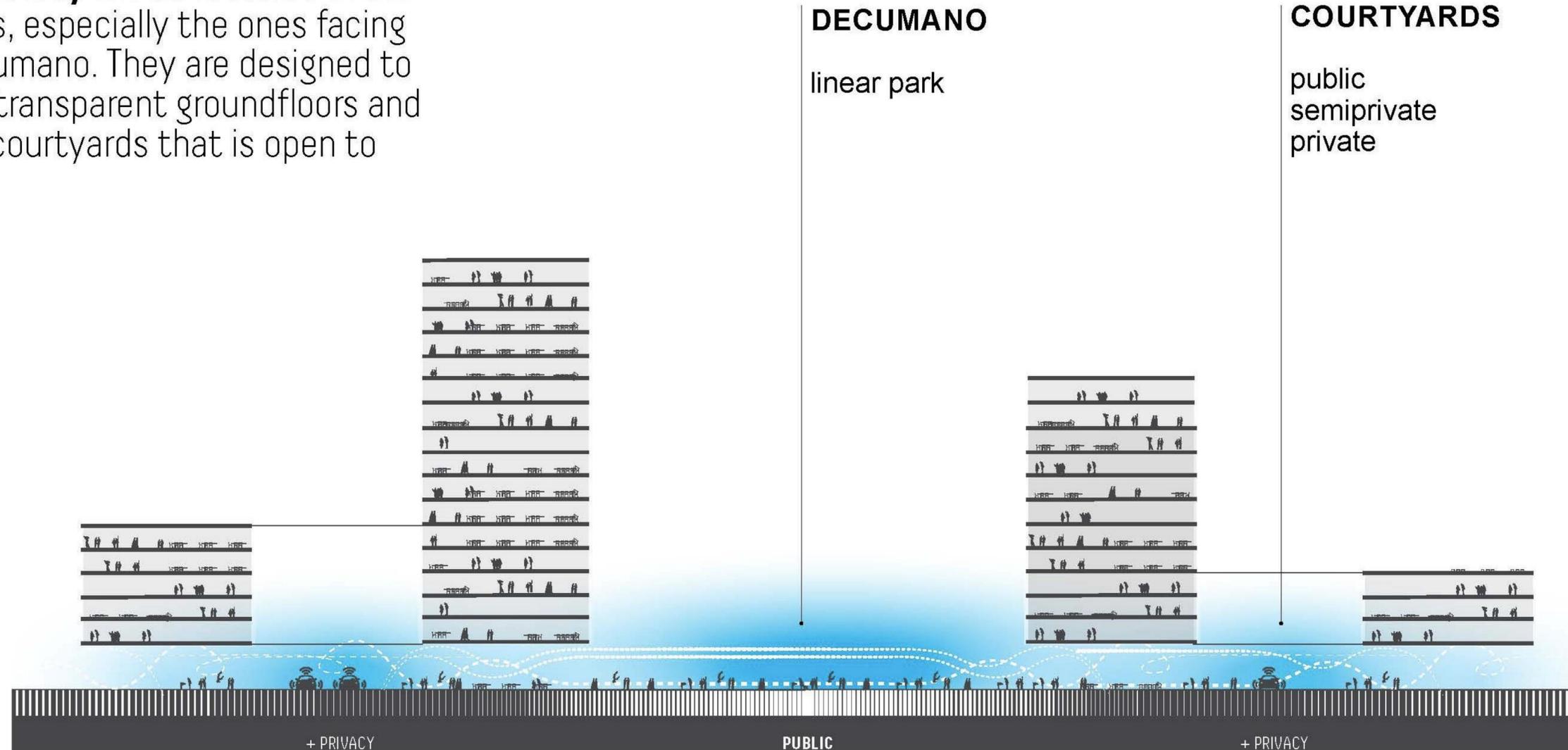






## 2 COMMON GROUND

In order to ensure a lively and attractive district, **physical or visual permeability** will be fostered in the buildings, especially the ones facing the Decumano. They are designed to be with transparent groundfloors and several courtyards that is open to public.



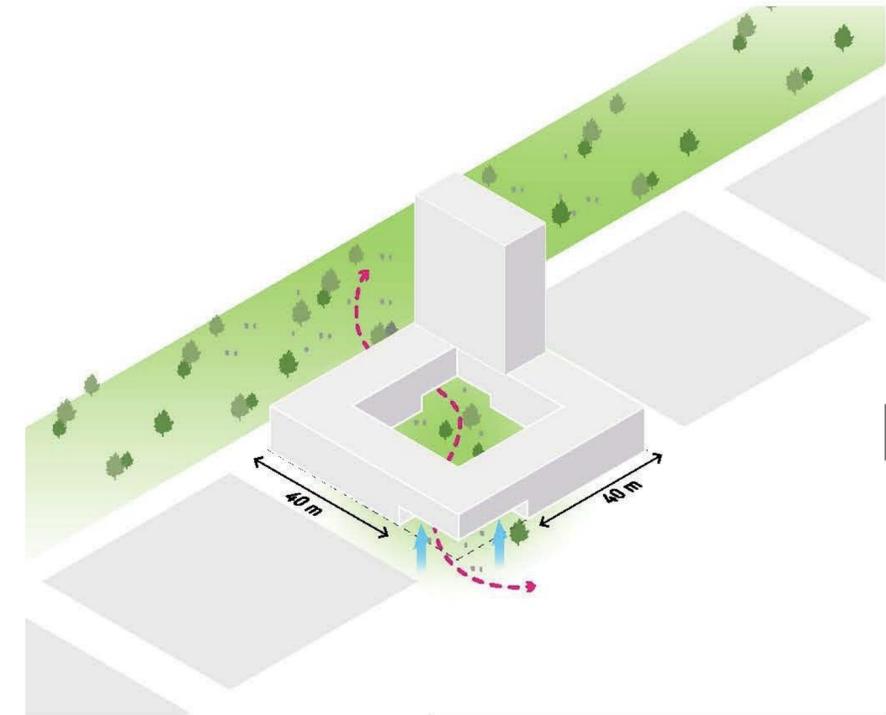
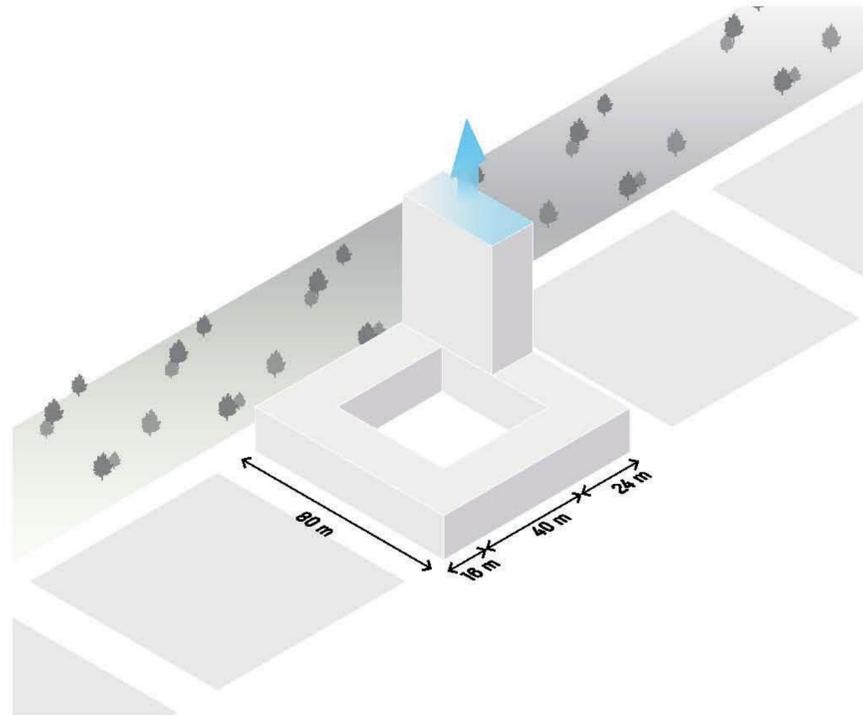
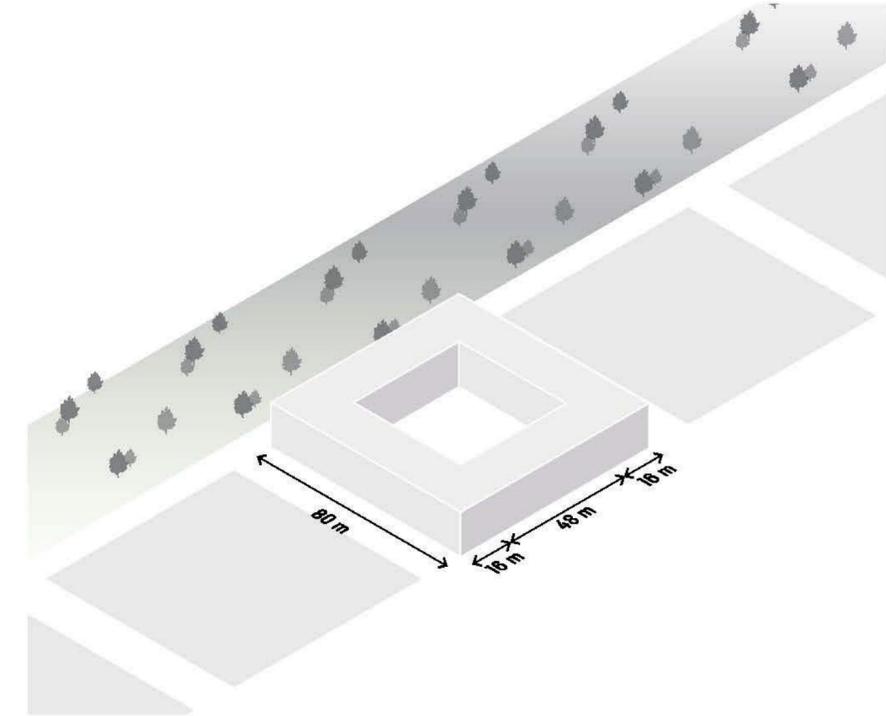
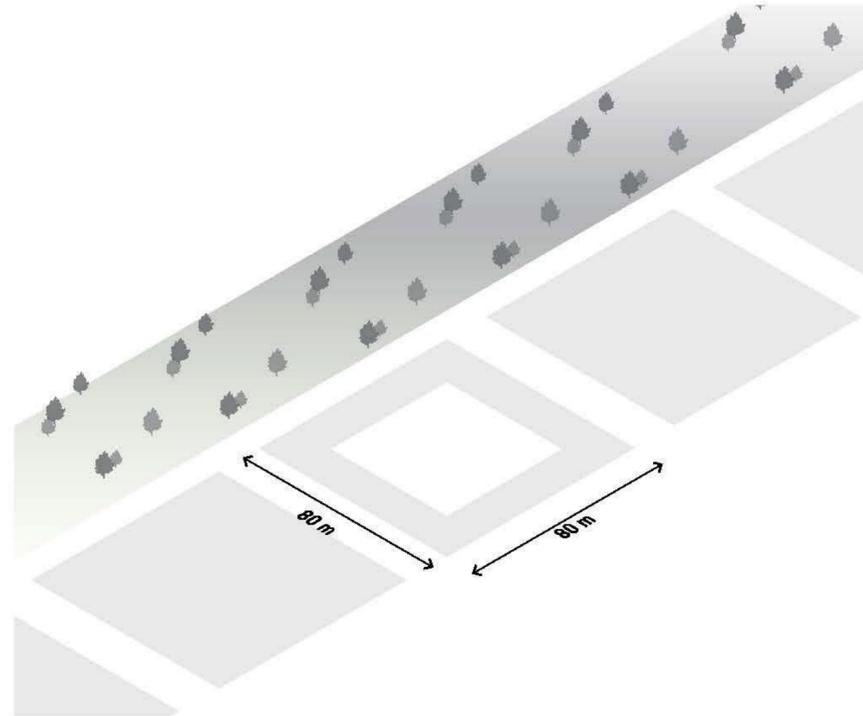


### 3

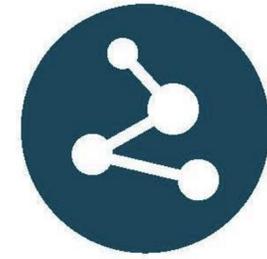
## OPEN PLATFORM

The aim of the open platform is to define a set of rules in order to ensure the **prospect of the key principles** in the masterplan, while maintaining a **strong flexibility**. Tenants will be able to shape their plots according to their actual needs, populating the masterplan with a heterogeneous yet coherent built ecosystem.

The rules will refer to e.g.: the occupation of the building on the area, the depth of the volumes, the number, height and position of towers, the level of permeability / transparency (according to the tenant's need), the green areas...

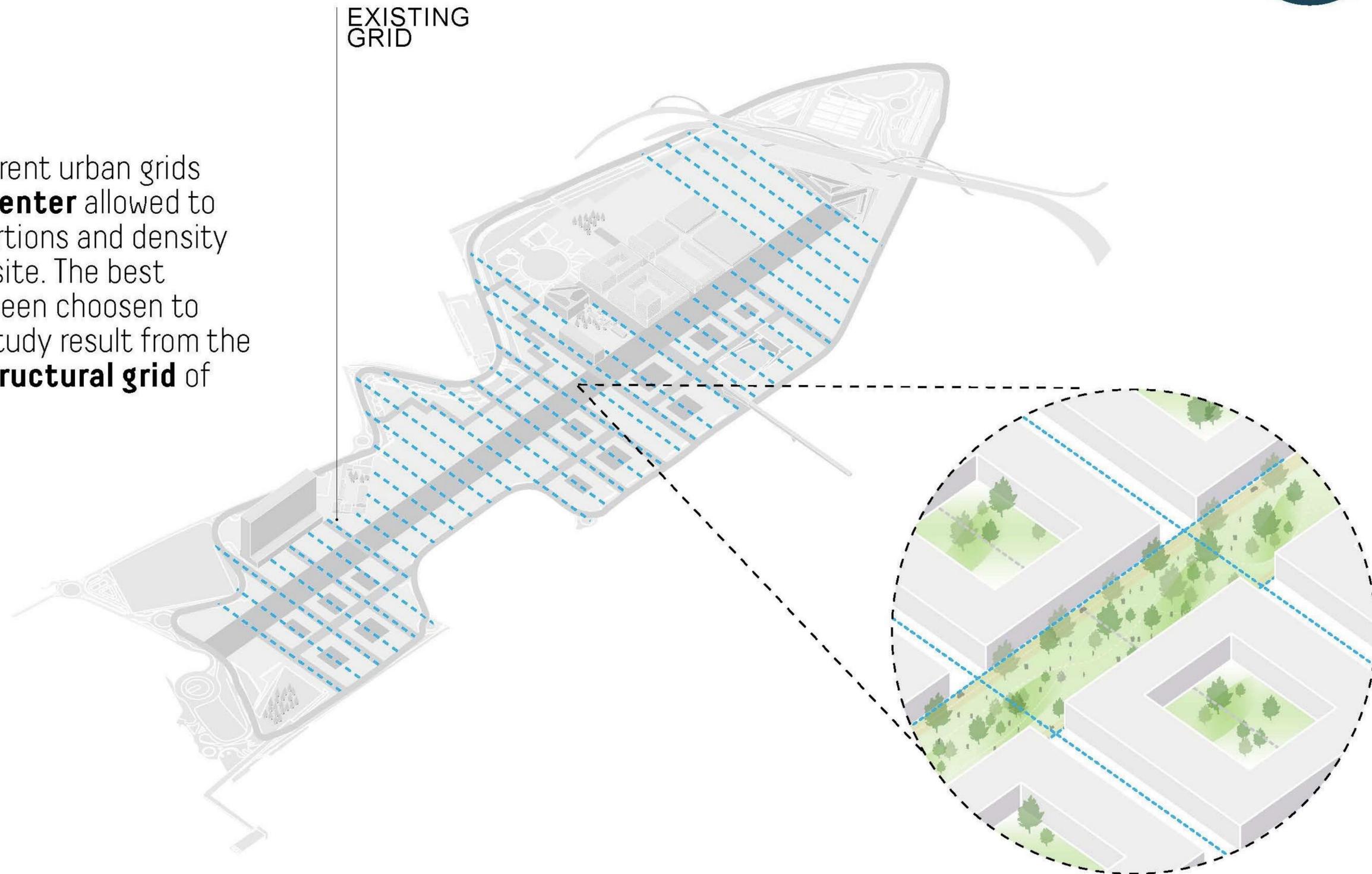






## 4 MILAN'S DNA

Researching different urban grids in **Milan's city center** allowed to compare proportions and density with the project site. The best proportions has been chosen to merge with the study result from the **existing infrastructural grid** of Expo 2015.

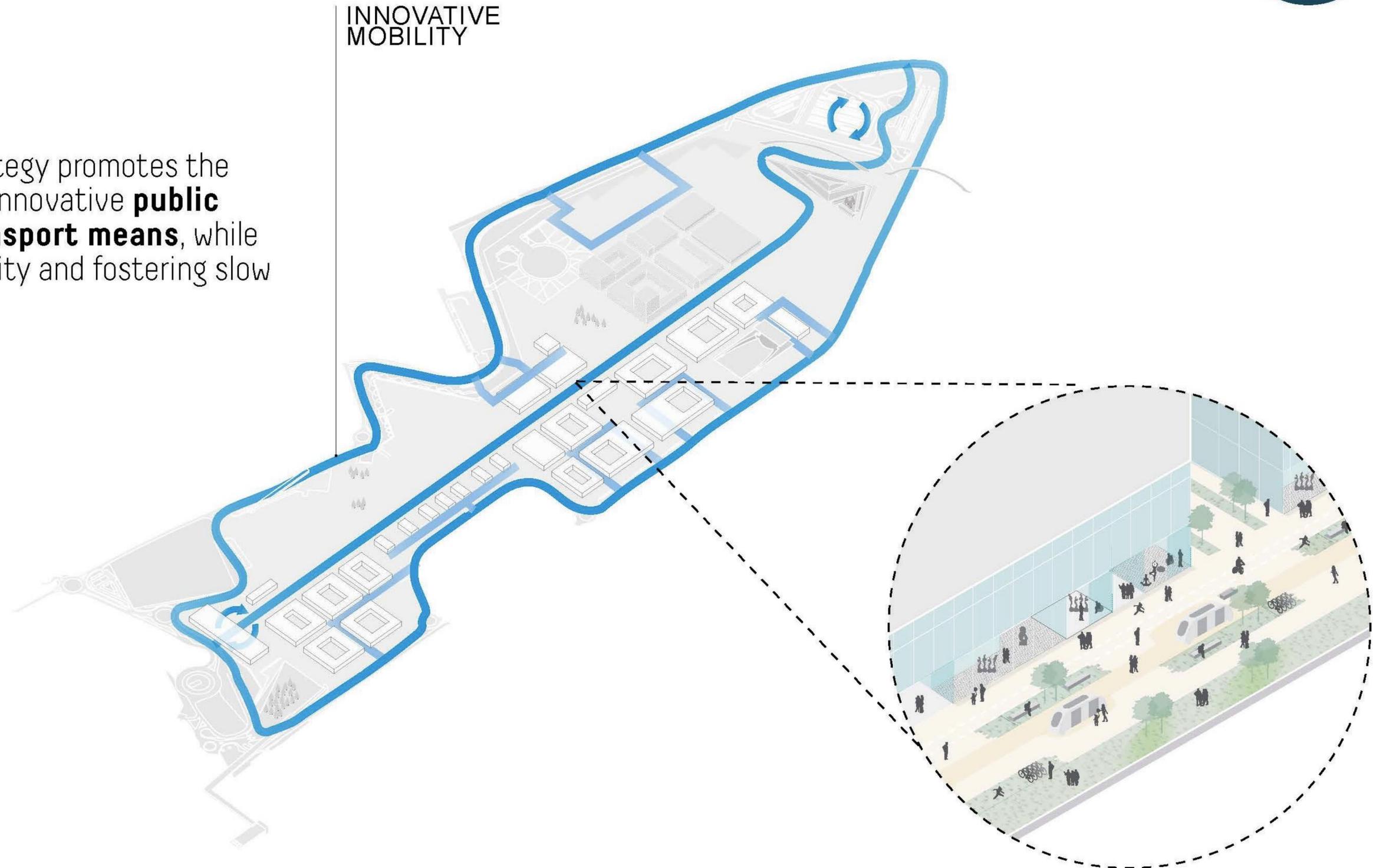






## 5 INNOVATIVE MOBILITY

The mobility strategy promotes the use of the most innovative **public and shared transport means**, while ensuring walkability and fostering slow mobility





# IL FUTURO DELLA MOBILITA'

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**Senseable City Lab**

@SenseableCity

Tweets  
**3,732**

Following  
**171**

Followers  
**18.2K**

Likes  
**2,227**

Following

latest issue exploring the #drivingforce of urban transportation.

Is the size of NY taxi fleet optimal for the number and nature of trips undertaken?

[nature.com/nature/volumes...](https://www.nature.com/nature/volumes...)



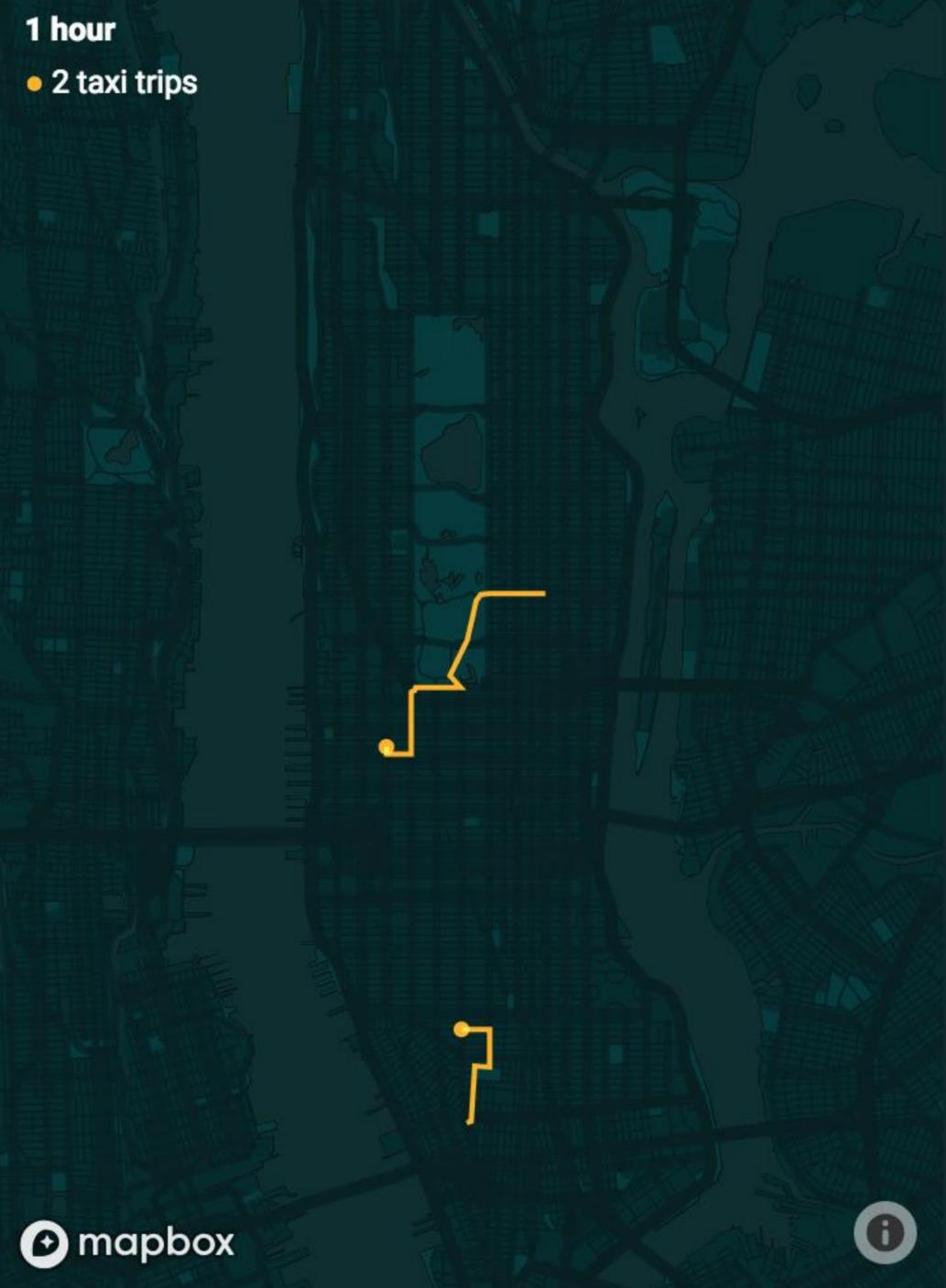
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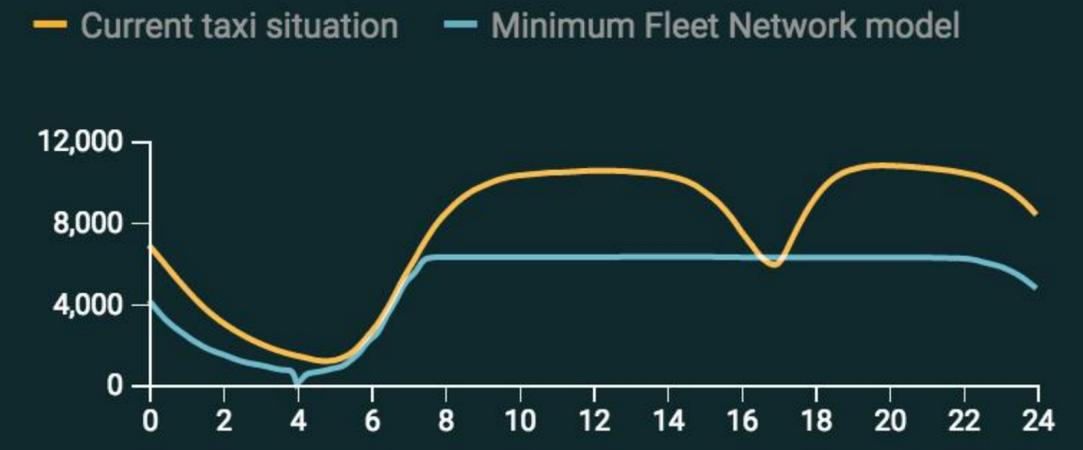
**Senseable City Lab** @SenseableCity · May 23

A stylized map of New York State is shown in a dark teal color. Overlaid on the map is a network of yellow lines, representing a transportation or vehicle routing system. The lines are most dense in the central and eastern parts of the state, particularly around the New York City area, and become sparser towards the western and northern parts of the state. The lines form a complex web, with many small loops and connections between different points.

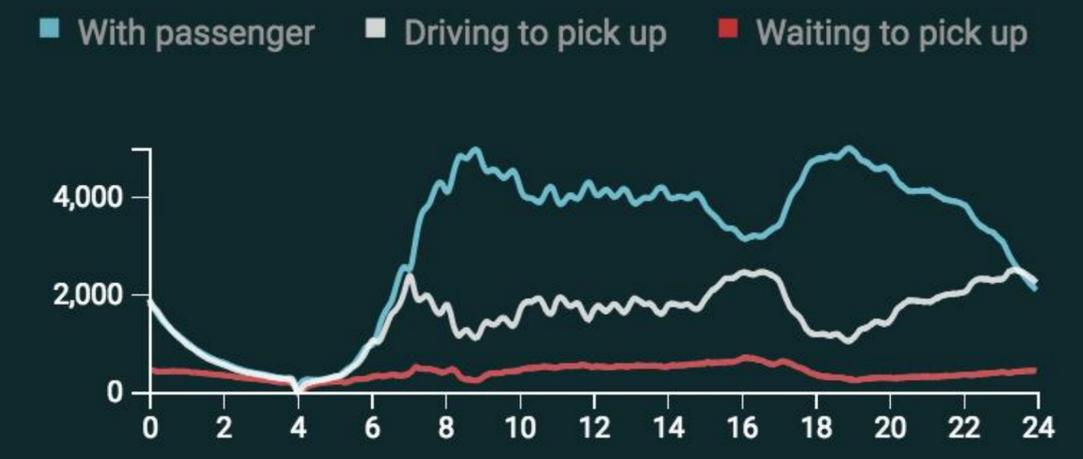
What is the minimum number of vehicles needed  
to keep New York on the move?



### Total fleet on the road



### Activity of the fleet in the model



An aerial, high-angle view of a futuristic city street at night. The street is paved with hexagonal tiles that glow with various colors (blue, red, green). Several white cars with a green 'W' logo are driving on the street. Pedestrians are walking on the sidewalks, and a person is riding a bicycle. The background shows a modern building with large glass windows reflecting the street lights. The overall atmosphere is vibrant and high-tech.

# DYNAMIC STREET

2018 TORONTO, CANADA – THE STREETScape OF THE FUTURE



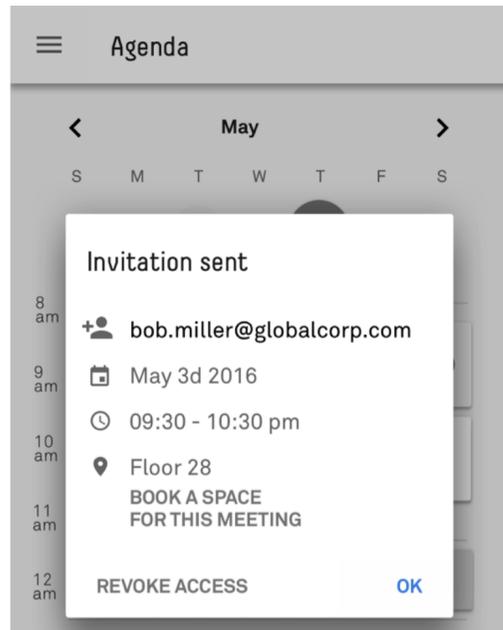




# IL FUTURO DELL'ESPERIENZA

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# ESPERIENZA UTENTE IN 6 PASSAGGI



STEP 1: PRENOTARE



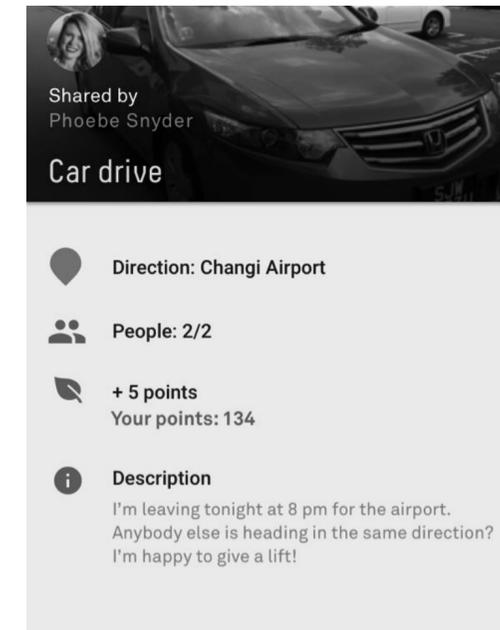
STEP 2: ACCEDERE



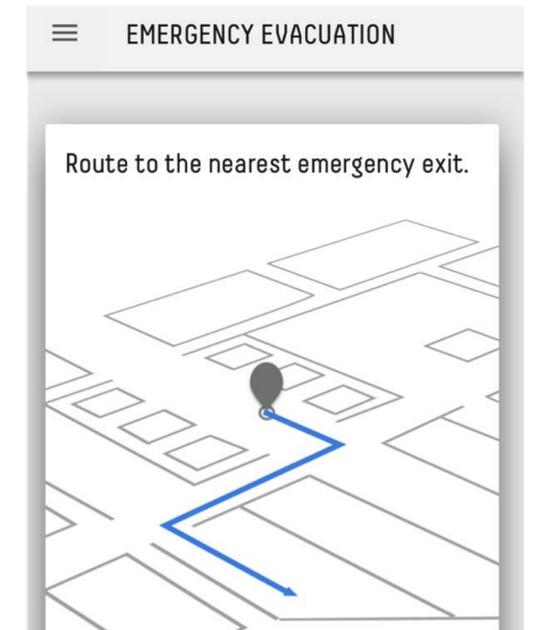
STEP 3: NAVIGARE



STEP 4: REGOLARE



STEP 5: SOCIAL



STEP 6: ASSISTENZA

# STEP 1: PRENOTARE IL POSTO GIUSTO AL MOMENTO GIUSTO

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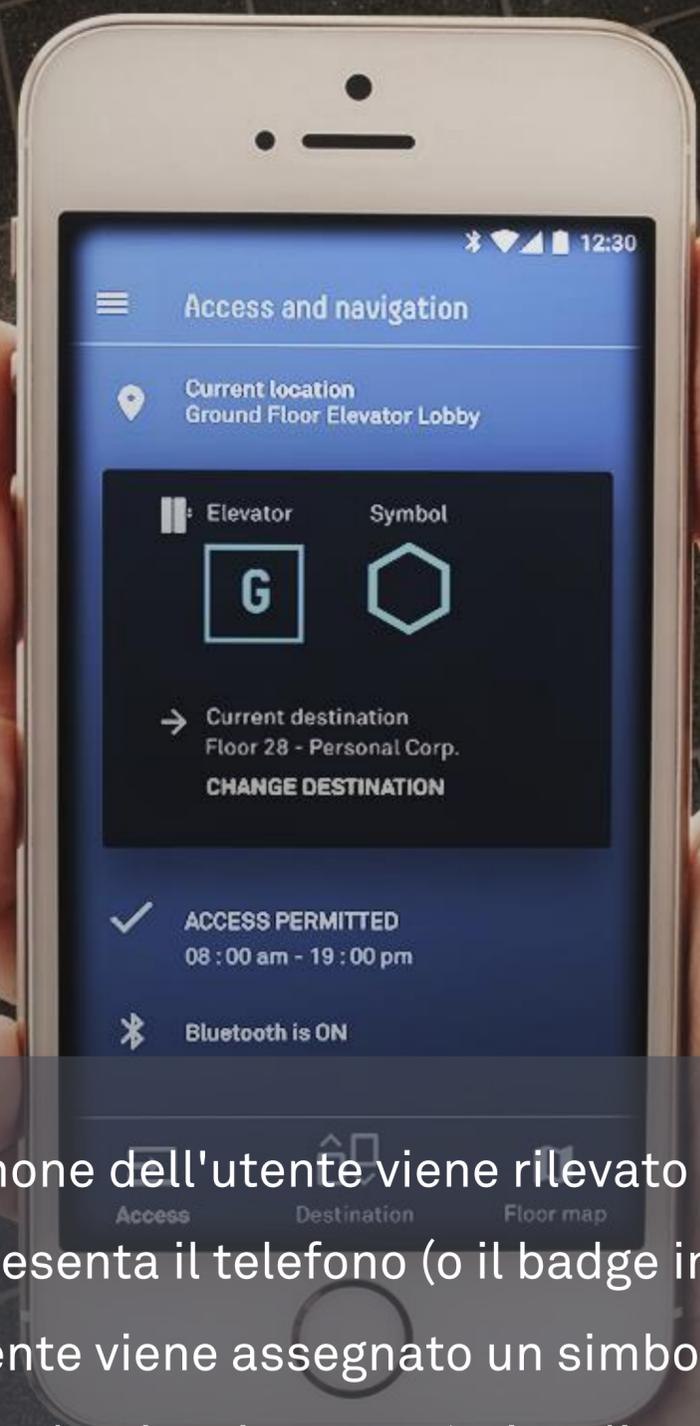
- / Occupazione in tempo reale
- / Prenota uno spazio, le preferenze della stanza preimpostate
- / Invita i visitatori
- / Ricevere i dettagli della riunione tramite e-mail
- / Integrazione con i calendari esistenti
- / Gestione automatica dei visitatori / degli accessi per il proprietario

# STEP 2: ACCEDERE

## INGRESSO AGEVOLATO, CALDO BENVENUTO

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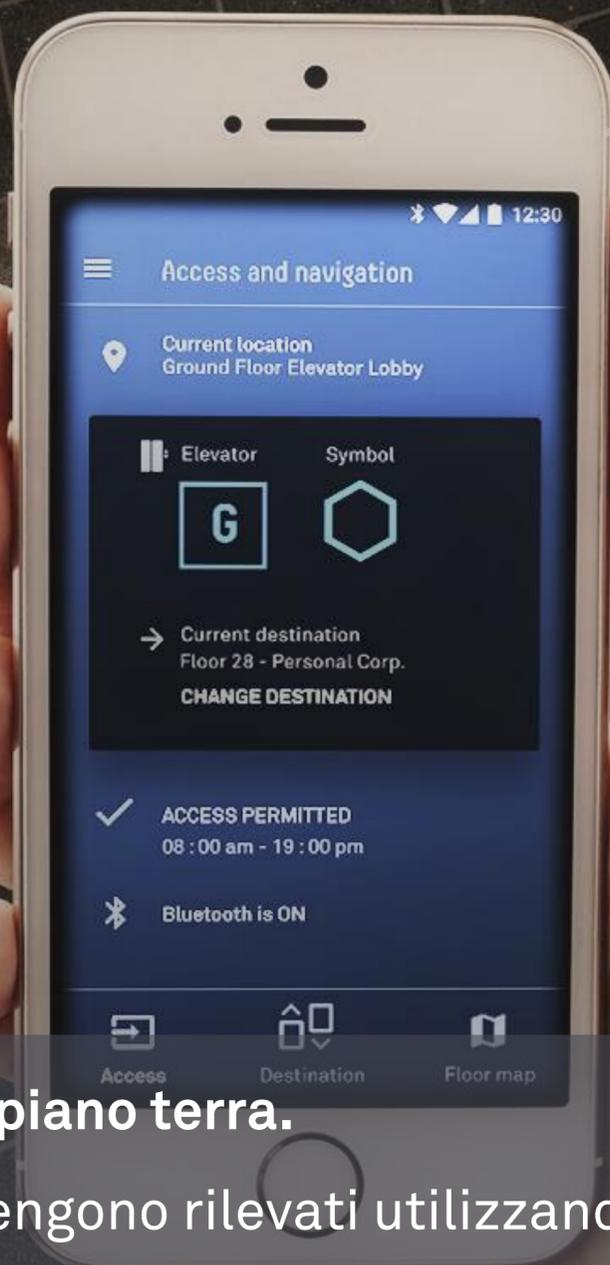
- / Ricevi i dettagli della prenotazione via email
- / Scarica l'app per un accesso senza interruzioni
- / Evita gli ostacoli attraverso una chiara navigazione e wayfinding
- / Flussi ottimizzati
- / Gestione e permessi di accesso centralizzati



- Lo smartphone dell'utente viene rilevato dal sistema una volta entrato nell'edificio.
- L'utente presenta il telefono (o il badge intelligente) all'ingresso per accedere.
- Ad ogni utente viene assegnato un simbolo colorato che guida alla destinazione finale.
- La via per la destinazione verrà visualizzata sia nelle schermate dell'edificio che sul cellulare dell'utente tramite l'app

# STEP 3: NAVIGARE PERCORSI INTELLIGENTI EVITANDO GLI OSTACOLI

- / Aiuta a trovare la tua strada in base al posizionamento al chiuso
- / Ottimizza i flussi
- / Evitare qualsiasi ostacolo per raggiungere la destinazione finale



## Accesso al piano terra.

Gli utenti vengono rilevati utilizzando il posizionamento interno e i lettori BlueTooth all'ingresso. Quando ci si avvicina all'ingresso, a ciascun utente viene assegnata una via attraverso un simbolo colorato.



## Vista della hall al piano terra.

Gli utenti seguono il loro simbolo fino alla destinazione finale. Lo sfondo a colori viene utilizzato negli schermi degli ascensori e degli edifici.

50  
49  
48  
47  
46  
45  
44  
43  
42  
41  
21

**EMERGENCY CALL**  
Press only in case of emergency

**CHANGE DESTINATION**

Current location  
Ground Floor Elevator Lobby

Elevator      Symbol  
G      [Symbol]

Current destination  
Floor 28 - Personal Corp.  
**CHANGE DESTINATION**

**Personal Corp.**

- Room 01 - Meeting Room
- Room 02 - Phone Booth
- Room 03 - Sprint Room

**Near Tech**

- Room 05 - Server Room

**APPROACH YOUR PHONE OR BADGE TO CHANGE YOUR DESTINATION**

Meeting room

q w e r t y u i o  
a s g h j k  
z b n



Schermo interattivo della lobby al piano terra. Gli utenti possono cambiare la loro destinazione predefinita su schermi interattivi mostrando il proprio telefono cellulare o la propria carta di accesso. I display interattivi si trovano in ogni lobby e forniscono anche indicazioni generali e la rubrica dell'edificio.

# STEP 4: REGOLARE SPAZI PIÙ SANI, PERSONALIZZATI, PIÙ EFFICIENTI

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- / Monitora lo stato dell'edificio in tempo reale
- / Porta il controllo a persone singole
- / Personalizza il tuo ambiente immediato (luce, riscaldamento)
- / Manutenzione crowdsourced
- / Ottimizza il consumo di edifici (energia)



20°

18°

20°

22°

24°



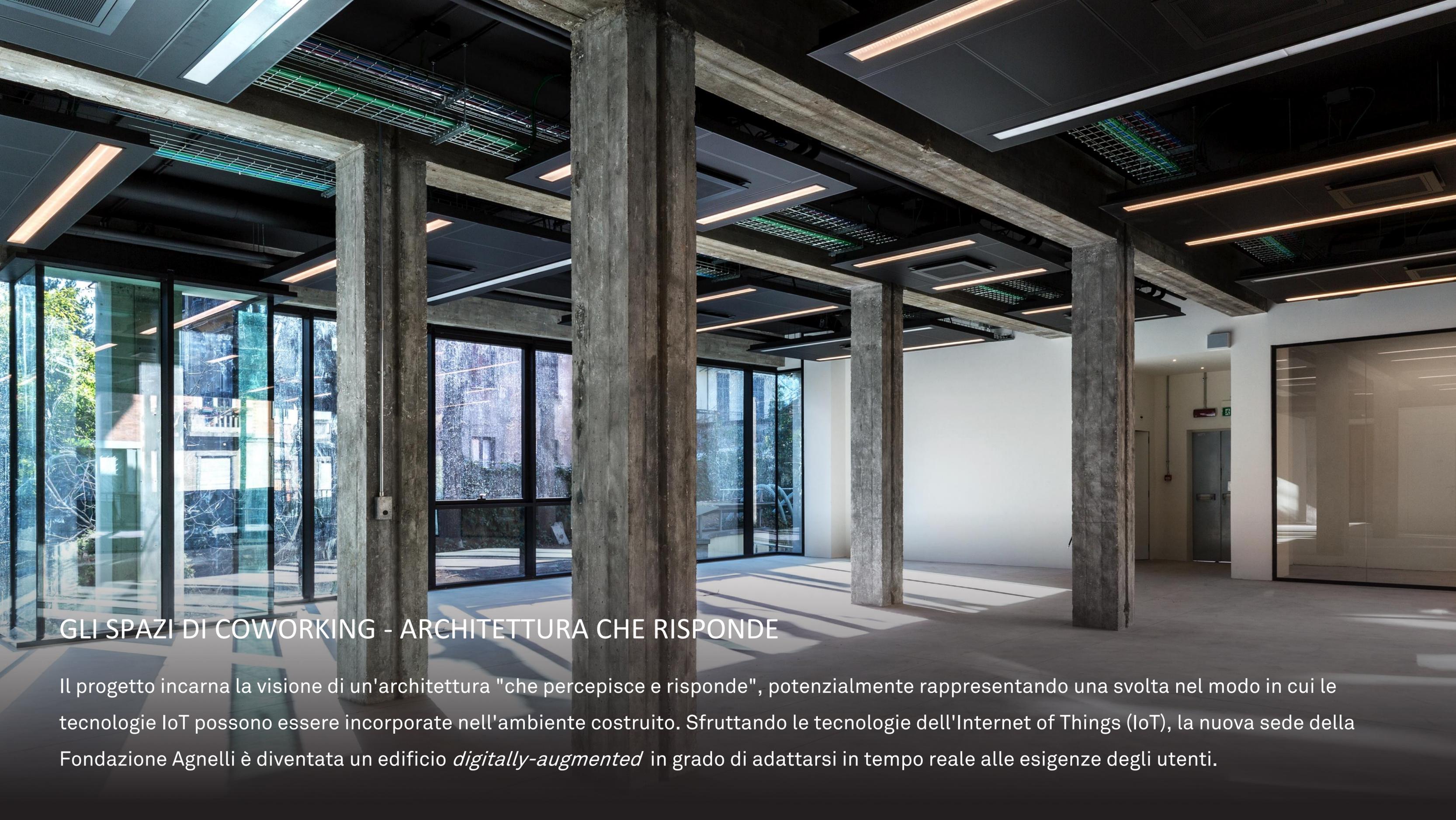


Fondazione  
Agelli

38







## GLI SPAZI DI COWORKING - ARCHITETTURA CHE RISPONDE

Il progetto incarna la visione di un'architettura "che percepisce e risponde", potenzialmente rappresentando una svolta nel modo in cui le tecnologie IoT possono essere incorporate nell'ambiente costruito. Sfruttando le tecnologie dell'Internet of Things (IoT), la nuova sede della Fondazione Agnelli è diventata un edificio *digitally-augmented* in grado di adattarsi in tempo reale alle esigenze degli utenti.



PHON  
booth

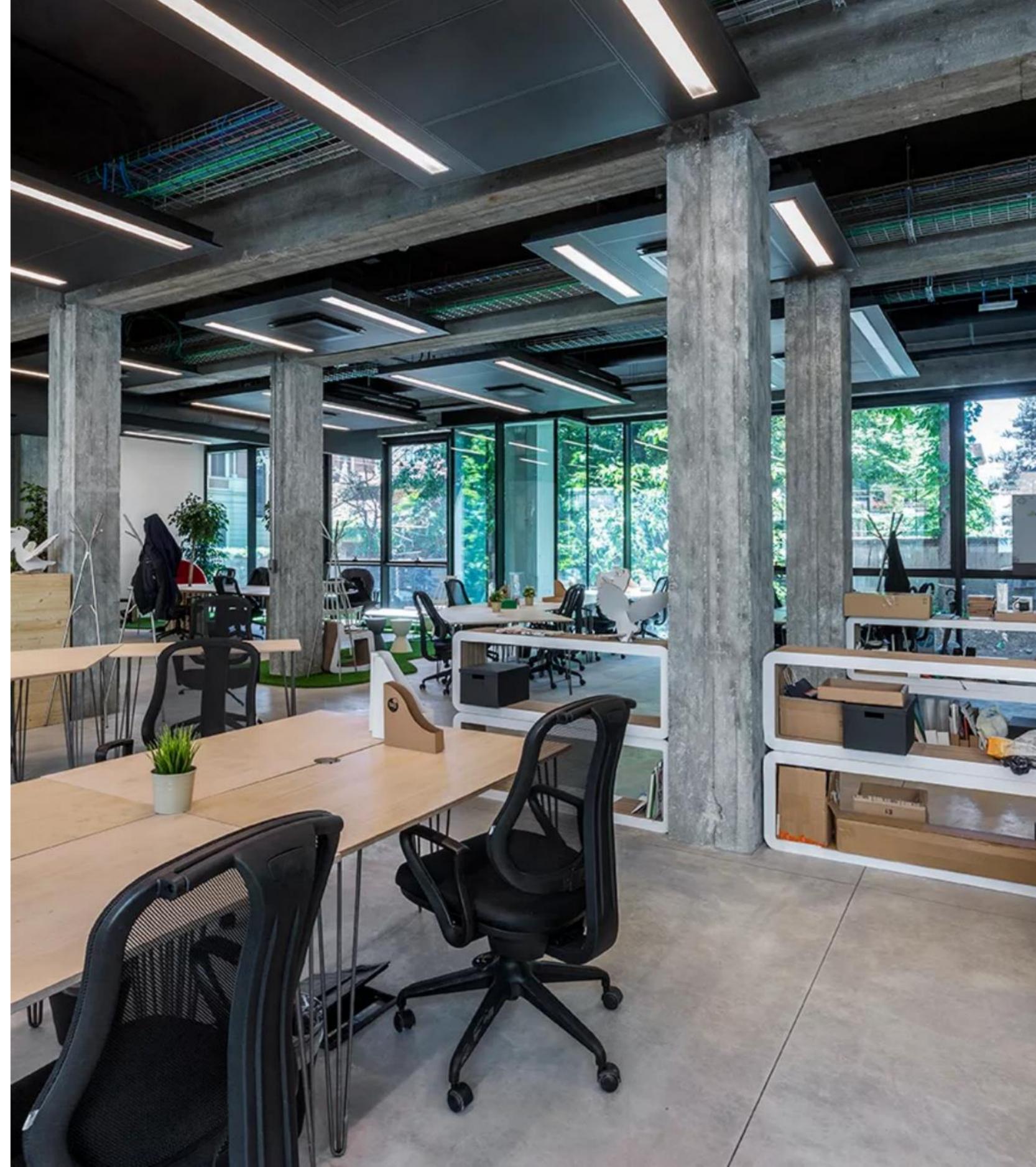
#matelcharden

got

len

TURN  
YOUR  
HEAD

DELL



# STEP 5: SOCIAL DINAMICA SOCIALE

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/ Ottimizza il consumo di edifici (energia)

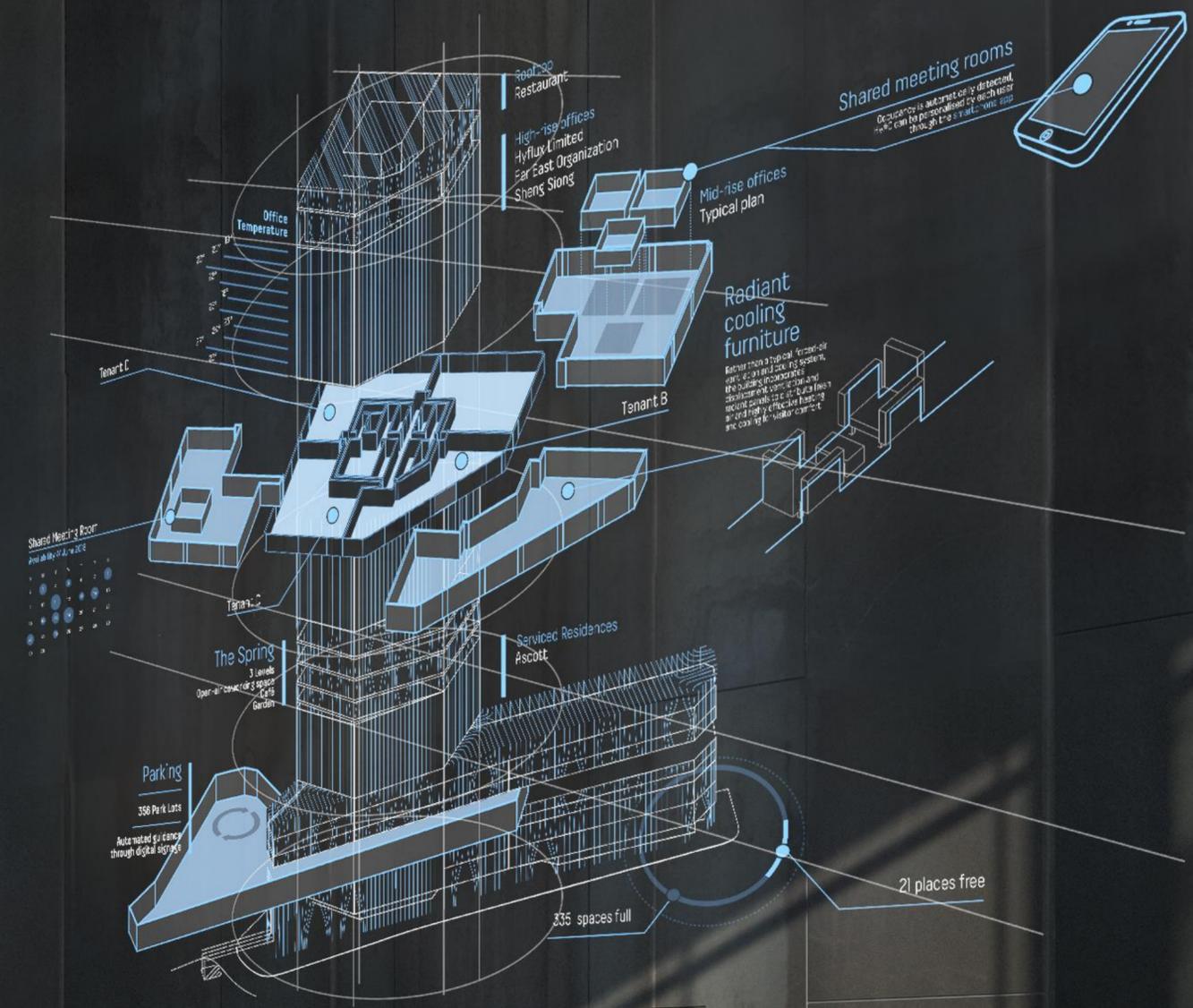
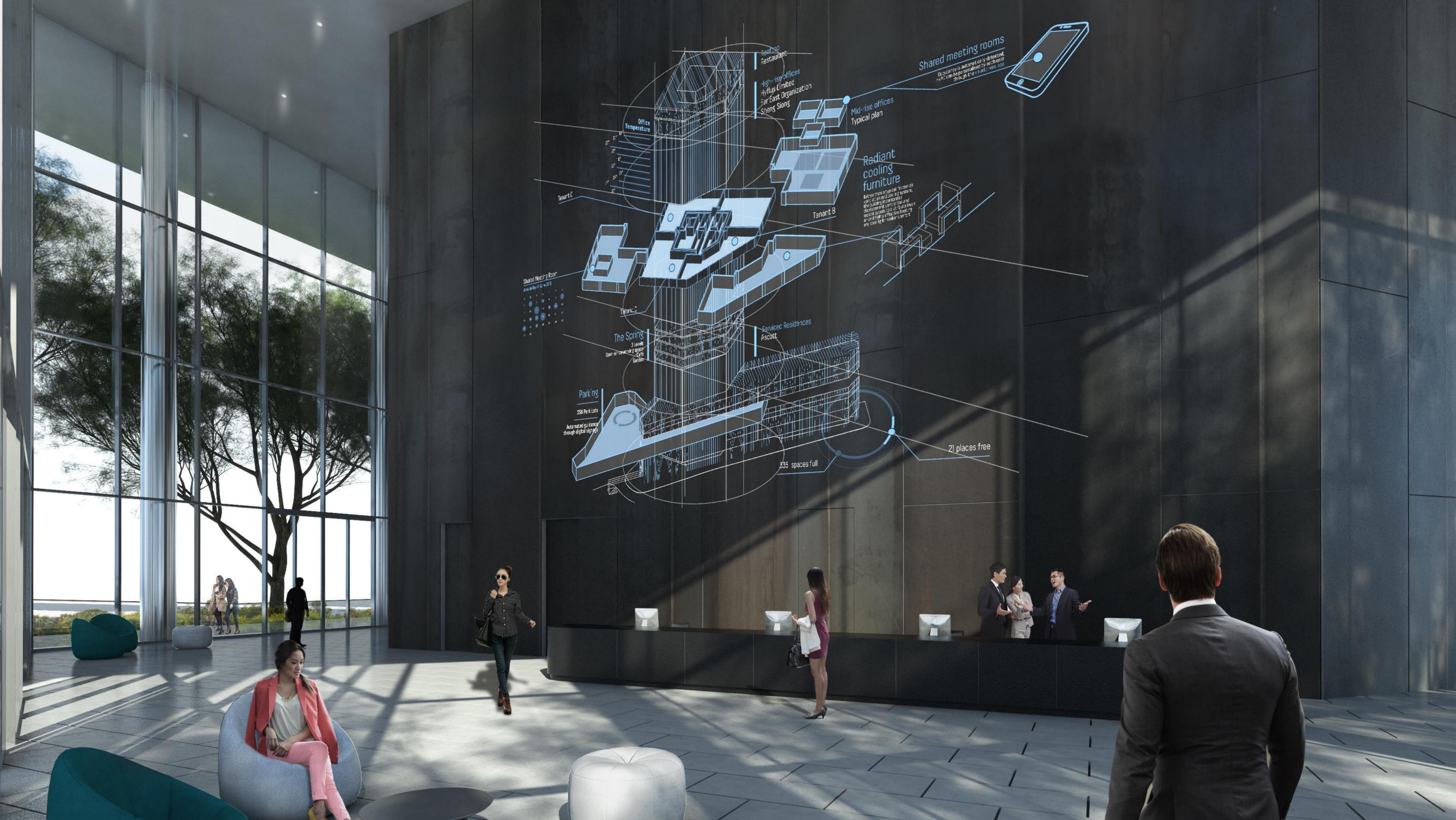
/ Stimolare gli utenti verso abitudini sostenibili attraverso *gamification*

/ Fornire e integrare con le reti di condivisione esistenti

# STEP 6: ASSISTENZA DASHBOARD IN TEMPO REALE PER BUILDING MANAGER

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- / Fornire assistenza attraverso il percorso accessibile
- / Aiuto per trovare la tua strada in base al posizionamento interno
- / Ottimizza i flussi in ogni momento
- / Segnala le emergenze



Woman sitting in a blue chair, wearing a red jacket and pink pants.

Man in a dark suit, seen from the back, standing in the foreground.

Woman walking, wearing sunglasses and a patterned jacket.

Woman in a purple dress standing near a reception desk.

Group of people in business attire talking near a reception desk.

**L'UNICO MODO PER PREVEDERE  
IL FUTURO E' INVENTARLO**

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**ALAN KAY**

# grazie

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