# **BIMaking Engineering**

**VEE - Virtual Environment Eye** 

# Digital Twins

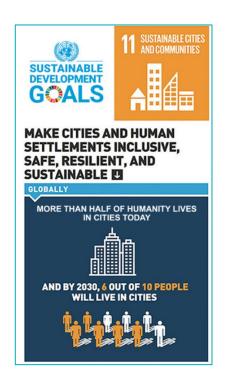
# Immersive Experience

# Urban Depopulation

# Infrastructure

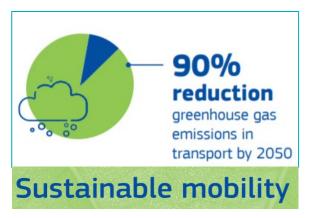


## **Actual Situation | Traction**





Aims to renovate 35 M inefficient buildings by 2030



#### The global Digital Twin market size (2020 – 2026)





The market in North America held the largest share of XX% of the overall digital twin market in 2019. It was valued at USD XX billion in 2019 and is projected to reach USD XX billion by 2026.

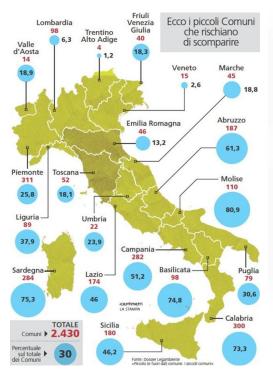
Compound Annual Growth Rate

The dense population, growing per capita income with largescale in dustrialization and urbanization, and increasing adoption of the IoT are the key factors driving the growth of the digital twin market in the region.

years.



## **Problem | Italy focus**

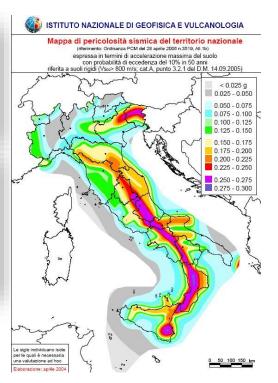






Zona 2: m-alta 2.345 comuni Zona 3: m-bassa1.560 comuni. Zona 4: bassa 3.488 comuni.

Zona 1: alta 708 comuni.







# Ghost Town | Depopulation # Natural disaster | Earthquake # Transport | Due Traffic

## **Solution**





### What is a Digital Twin?

Digital Twins bridge the digital and physical worlds. Digital Twins are virtual replicas of buildings, infrastructure and physical assets, fully interconnected with the data in and around them that optimize project performance, and help predict and visualize future outcomes.

# Data Analysis

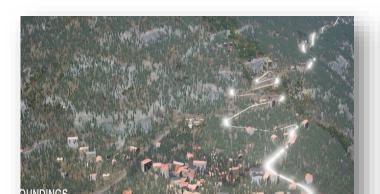
# Sustainability

# XRR (eXtended Reality Review)

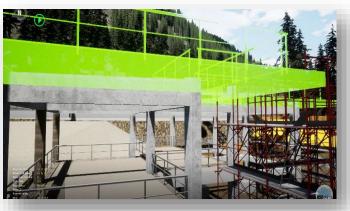


## **Digital Twin | VEE Experience**

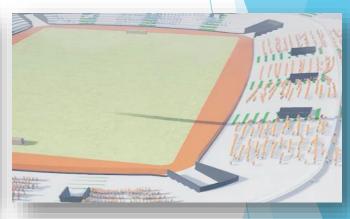
VEE + G: Digital Twin for City and Landscape



VEE + C : Digital Twin for Construction



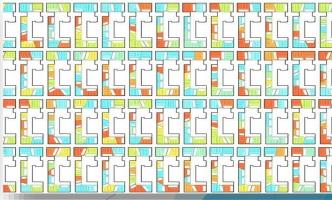
VEE + T : Digital Twin for Training



Tourism | Immersive Experience



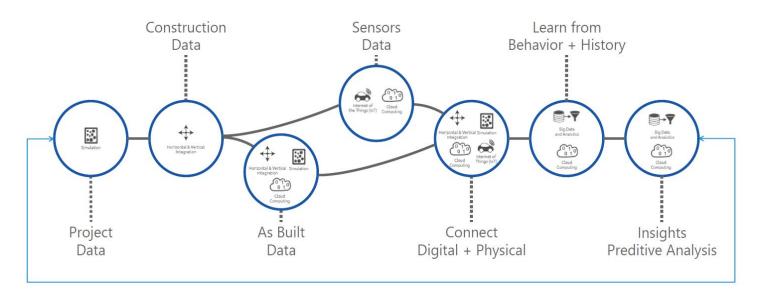
Buildings – O&M | Phygital Experience



H&S Simulation Experience



## **Technology | Final Users**



**How Digital Twin works?** 

## **Digital Twin is made for:**



Architect & GC within AEC industry



Developer and Real Estate Market



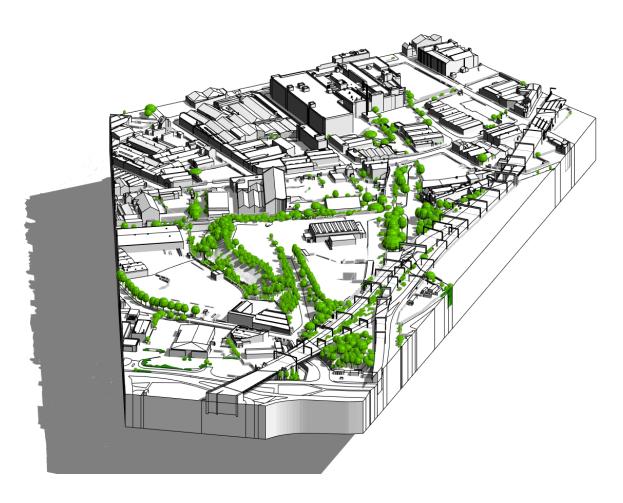
Public Sector and Private Infrastructure Investment



XR - Networking. Technicians able to work with Digital twins, ioT, AI



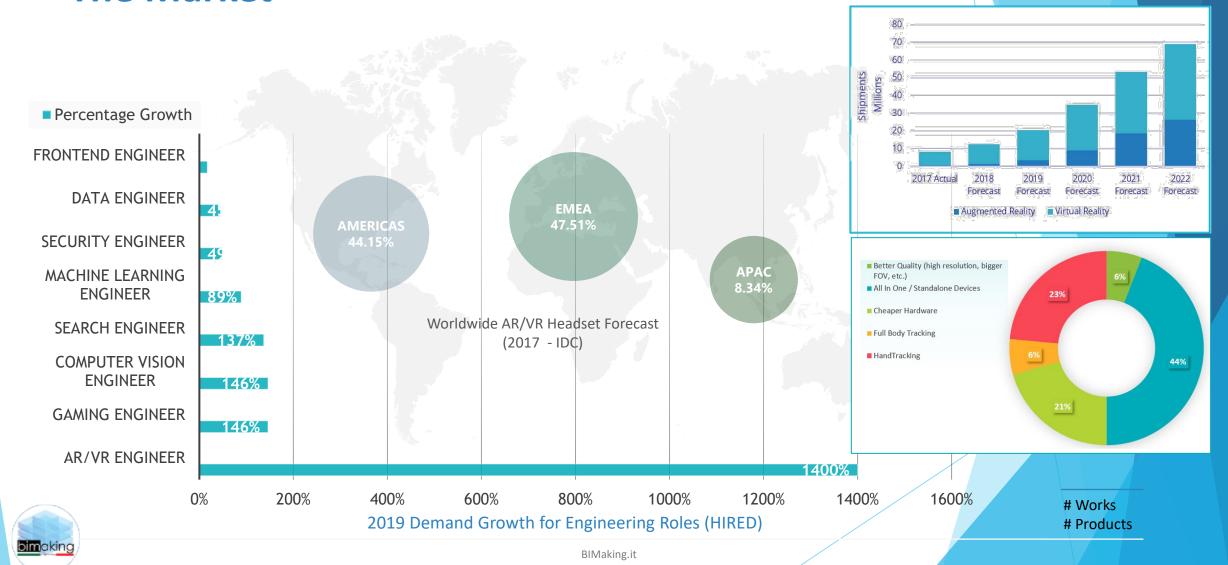
## **TRANSPORT | Practical Example**



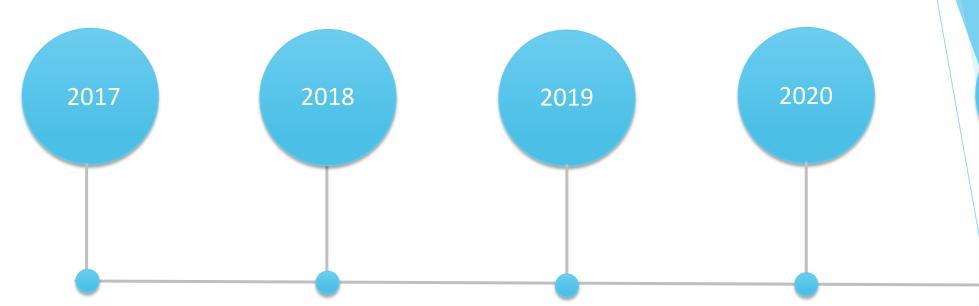
- GIS and Territory control
- Facility Management
  - ISO 19650 / UNI 11337
  - Infrastructure
  - 0&M
- Virtual Reality
  - Real time transport
  - Data Analysis
- Sustainability
  - Climate Impact



# The Market



## **Principal Milestones**



# Start of BIMaking

- Collaborative Design Team was set;
- Focusing on BIM Health & Safety and Training.

# Simulation & Sustainability

- Providing Realtime
   Simulations Experience
   focusing on Normative
   and AI integrated data;
- LCA and Sustainability Certification Paths are offered as a service.

## Networking Development

- Realtime Rendering using Gamification and VR Technology;
- Creating virtual Interactive Environments;
- EPIC Games first approach;
- Perugia is Unreal Meetup.

# Launch of VEE Experience

- Start-Up selected by EPIC Unreal Fest 2020;
- Start-Up selected by Hi-Hack 2020;
- Start-Up selected by Milano Digital week (NovartisHack);
- Start-Up selected by DigithON 2020.

## Market approach

2021

Q2 / Q4: Tier 1 SaaS
 Tailored Approach.
 (Conservative –
 Reserved)



### **Business Model**

## **SaaS Platform (Software as a Service)**

## **Tailored Package**

# 





## **Subscription**

Monthly

Annual

Tier 1 – Major Cities: e.g. Milano, Roma, Torino

€ 325

€ 3,000

Tier 2 – Big Cities: e.g. Bari, Firenze, Napoli

€ 275

€ 2,500

Tier 3 – Important Cities: e.g. Perugia, Pisa, Siena

€ 225

€ 2,000

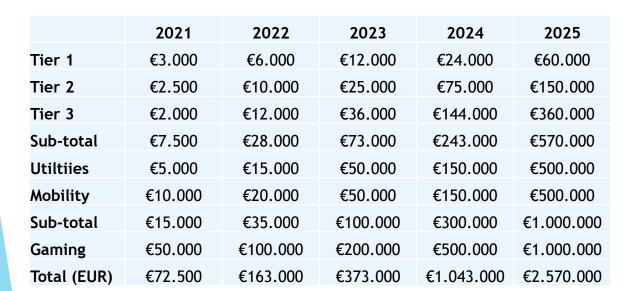


Tier 1 Europe 50+

Tier 2 Europe 100+

Tier 3 Europe 500+

USA, China, India, Africa, Middle East Significantly underserved.

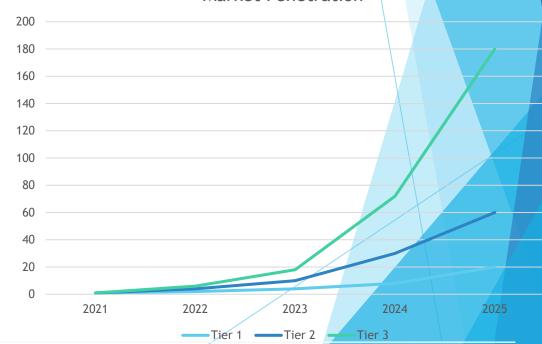


## Growth





#### Market Penetration





## **BIMaking | Team**



Francesco CAPPILLI

Founder and
Chief Executive Officer

Msc. Environmental Engineer

XR Director | HSE Manager



Lorenzo PIERINI
Chief Operating Officer
Head of Business Development

Mba. Senior Architect
Sustainability | Natural Disaster



Francesco MINIATI
Chief Technology Officer
Director of Architecture

March. Architect

Urban Designer | XR Specialist



Mohamed SAMEH
Chief Investment Officer
Head of Investor Relations

PhD. Industrial Engineering

City Advisor| Infrastructure Investment













A Digital Twin model of entire Italian territory could be easily developed by BIMaking. Our XR-Network is ready to bring your business to the next AI - IT era.