

**Digital Construction** and **Industry 4.0** refer to the leveraging of new technologies to improve the way construction and manufacturing cycles work. From **planning, to modeling, supply chain and distribution**, 3D printing, Virtual Reality (VR) big data and IoT have the potential to redefine how companies design, build and produce goods. The outcome is a **smarter, leaner and more efficient** processes and use of resources.

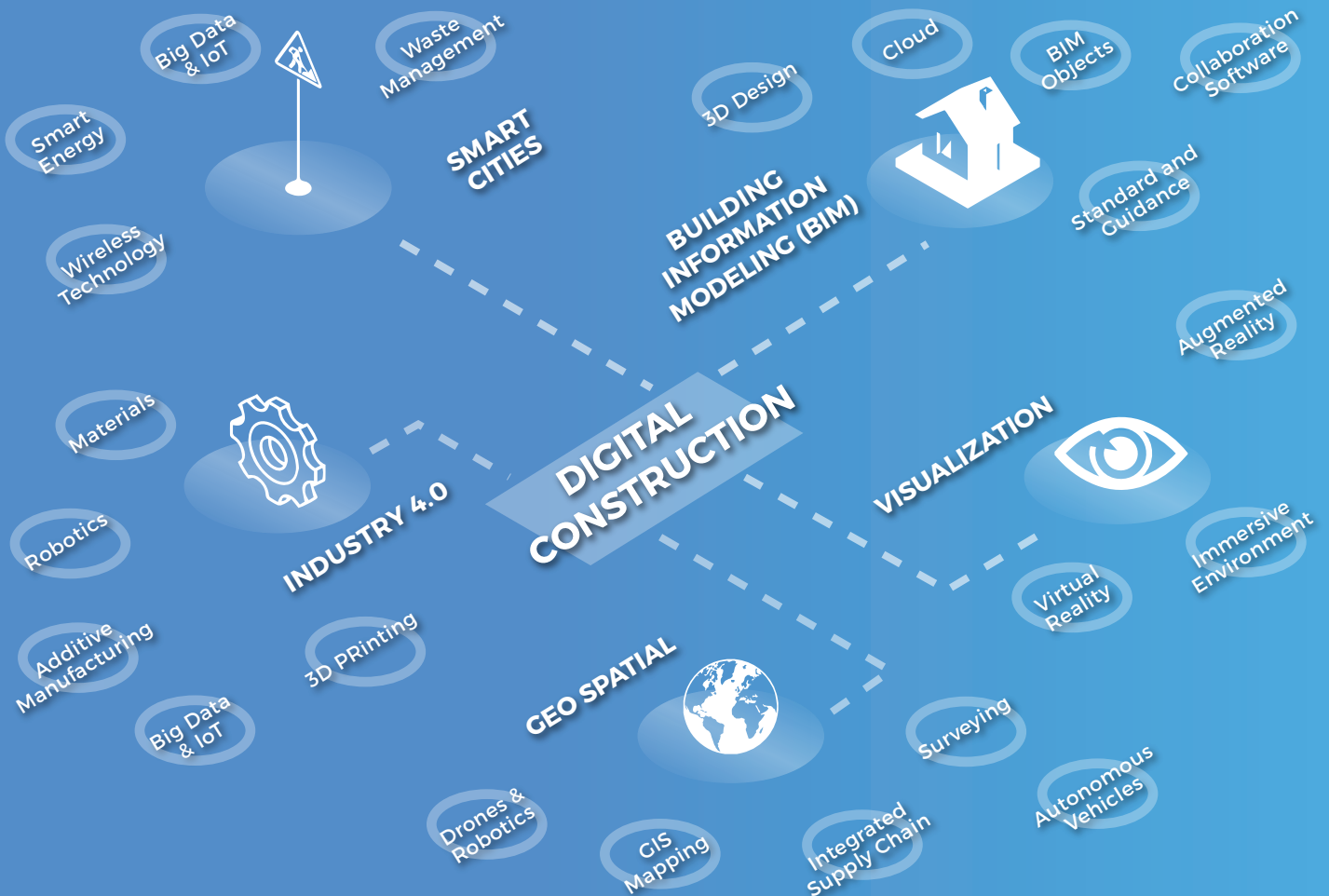


**444** Scaleups in Europe\*

**\$10.2B** Total Capital Raised\*

AMOUNT OF CAPITAL RAISED PER GEOGRAPHY\*

### MAP OF APPLIED DIGITAL CONSTRUCTION / INDUSTRY 4.0



\*Own elaboration based on public data by Crunchbase and other sources. Data updated at 12/31/2017



## INDUSTRY 4.0 KEY TRENDS



## NEW MATERIALS

**Sustainability:** More of a requirement than a choice, sustainability will drive the development of new materials and decrease the waste produced by the industry.

**3D printing:** New and more resistant materials will improve and diversify the use of 3D printing in construction, lowering costs.



## MIXED REALITIES

**Virtual Reality:** The use of VR during planning and modeling processes will decrease both costs and the overall time to realise the project. Furthermore, VR will enhance industry collaboration with more data exchange and benchmarking.

**Augmented Reality:** AR will allow builders to use AR lens' on the construction site in real time to plan and visualize the finished product.



## INTERNET OF THINGS

**Sensors:** Companies will begin to use more sensors to monitor and measure all resources and phases in the supply chain.

**Drones & Robotics:** Precision mapping and imagery are improving through drone use and the development of robotics allows construction sites to become less dependent on human labor.

**Data:** IoT will increase the amount of data available and provide real-time feedback to organizations. The largest potential benefit is a more efficient uses of resources.

## SEP SCALEUPS ON WATCH



**Founded:** 2011

**Key-words:** IoT

**Description**

Alleantia provides the first plug & play offering that transforms any electronic device into a smart and connected device, 'Internet Ready', in seconds.



**Founded:** 2014

**Key-words:** UAV, Drones

**Description**

Archon is specialized in providing automated operations with UAVs. Its technology utilizes drones and recharging stations to reduce costs, decrease risks, and increase the quality of surveillance.



**Founded:** 2012

**Key-words:** Augmented Reality, Eyegals

**Description**

GlassUp develops augmented reality (AR) eyeglasses that display incoming messages by connecting to a smartphone via bluetooth.



**Founded:** 2014

**Key-words:** Indoor positioning

**Description**

GiPS tech develops solutions for indoor positioning, localization and navigation based on geomagnetic fields.



**Founded:** 2011

**Key-words:** IoT

**Description**

Illocator provides smart solutions to collect, monitor and maintain infrastructure assets.



**Founded:** 2013

**Key-words:** IoT

**Description**

Stream Technologies is an advanced connectivity management platform that empowers the IoT deployments of global enterprises.



**Founded:** 2009

**Key-words:** Cleantech/Energy Storage

**Description**

Sunamp designs, produces and sells modular Heat Batteries that store heat energy for a wide range of applications including energy efficiency, grid balancing and renewable energy.



**Founded:** 2014

**Key-words:** Lightning

**Description**

CoeLux is an optical system based on nano technology that artificially reproduces the natural light and visual appearance of the sun and sky.



**Founded:** 2014

**Key-words:** UAV, Drones

**Description**

Flyability builds safe drones for inaccessible places. Drones can be used safely inside cities, buildings, and in contact with people, enabling interactions and services with UAVs, solving the issue of collision and injury risks.



**Founded:** 2012

**Key-words:** UAV, Drones

**Description**

Hemav develops, innovates, and commercializes UAV technology in order to offer integral solutions for civil UAV applications.



**Founded:** 2011

**Key-words:** Smart Cities

**Description**

Triamant is an innovative living concept that focuses on cross-generational living, quality of life and tailored care. Triamant creates and manages lively neighborhoods that add life to the years and years of life.



**Founded:** 2010

**Key-words:** IoT

**Description**

Villoc provides automated tool management to keep your equipment under control. Villoc also offers a plug-and-play LoRa certified tracker for wireless, low-power, low-cost asset management.

