

An abstract graphic on the left side of the slide consists of a grey, wavy, vertical line. Along this line are several colored circles: a purple circle at the top, followed by a red circle, then a green circle, another red circle, and a blue circle at the bottom. Each circle is surrounded by a thin white ring.

Digital Transformation for the Built Environment

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Co-Founder & CEO

CCI CONFERENCE 2017: CONSTRUCTION ON THE PRECIPICE OF MASSIVE CHANGE

November, 2017

ADITAZZ

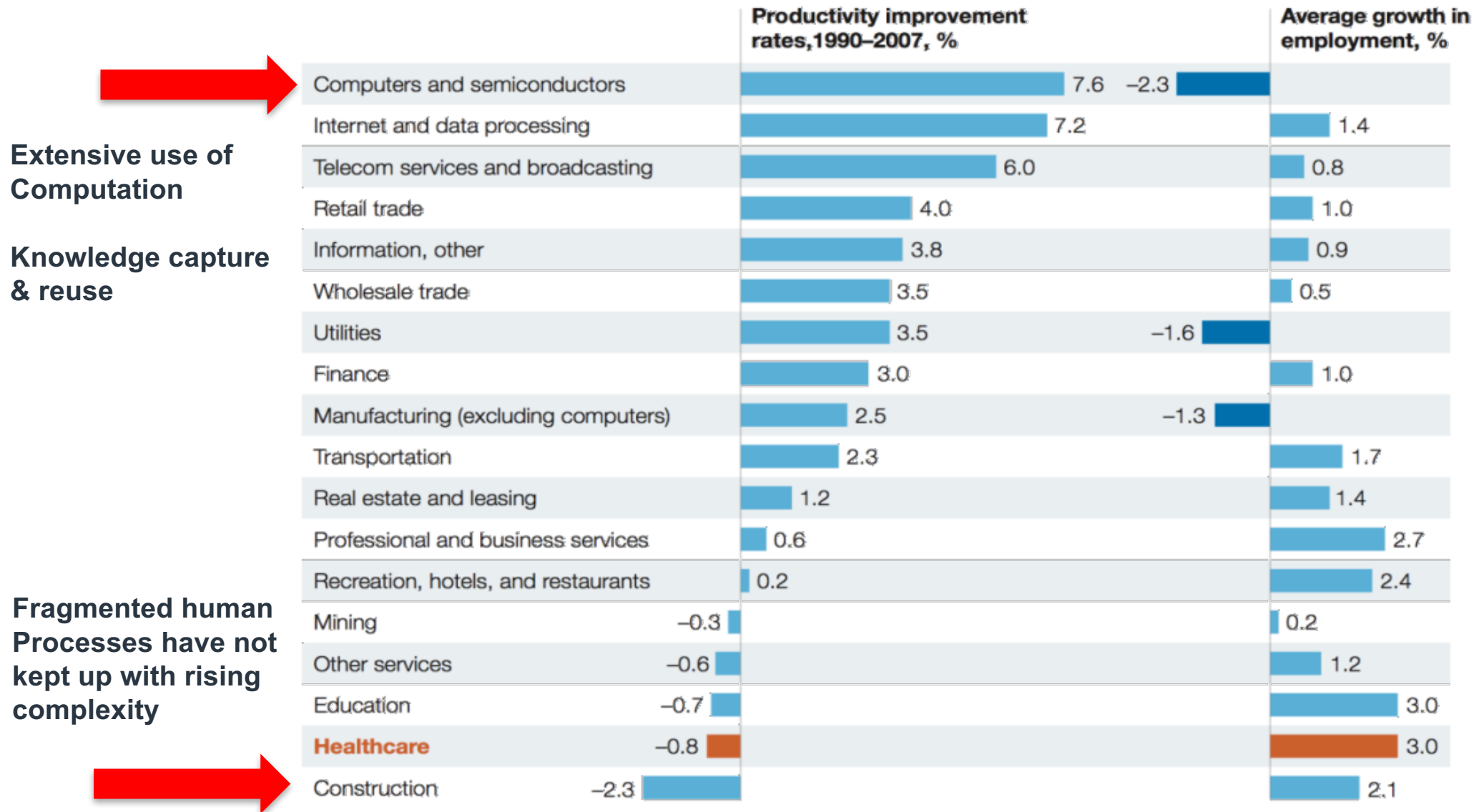
What intersects the \$10 **Trillion**
Construction Industry and Computation?

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Construction Industry and Computation?

Line Drawings, Occasionally in 3D

Now, can you name the industry at the bottom of the productivity Chart?

Comparing Productivity: US Industries



Source: Bureau of Economic Analysis; Centers for Medicare and Medicaid Services; Haver Analytics; McKinsey analysis

Do you observe the disparity?



Is this what we aspire for?





There are

194

Cities with more than 1 million people in Asia

and

56

In Americas,

43

In Europe,


37

In Africa,

6


In Oceania

Illustration: teamcity, Head of Sustainable Design, 10 DESIGN
Source: UN Habitat, State of the World's Cities 2010/2011; McKinsey Global Institute.
Credit: Wolfgang Kessling, Transsolar.



2010 – 2030,

84 billion m²



of new and rebuilt buildings will be constructed in cities worldwide.

Illustration: [Sean Quinn](#), Head of Sustainable Design, 10 DESIGN

Source: Adapted from Architecture 2030. UN Habitat, State of the World's Cities 2010/2011; McKinsey Global Institute.

Credit: Wolfgang Kessling. Transsolar

WEF: Global attention

Sustainable Development Goals

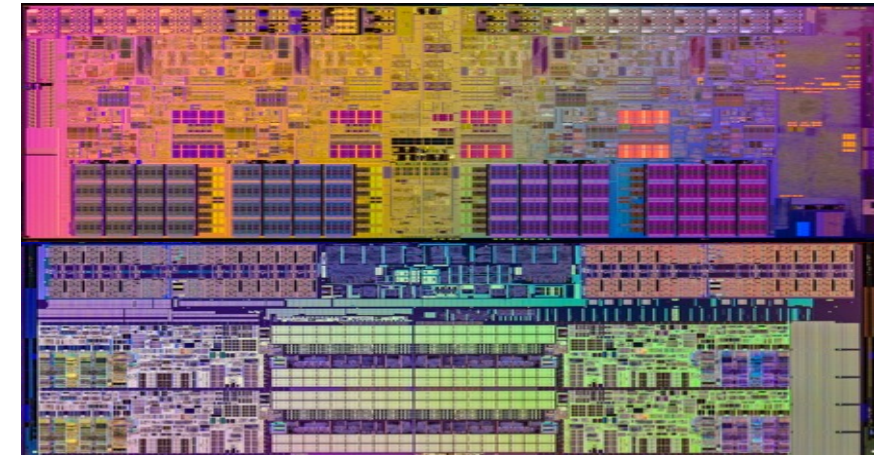


Source: UN <https://sustainabledevelopment.un.org/sdgs>

Digital Transformation: we've seen it before



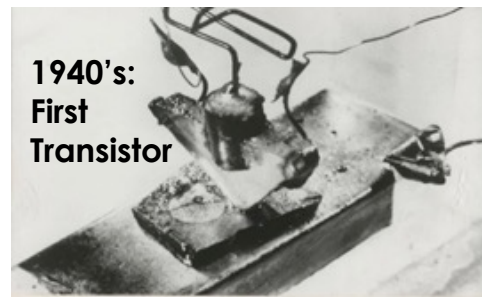
2015: 5.6BN transistors



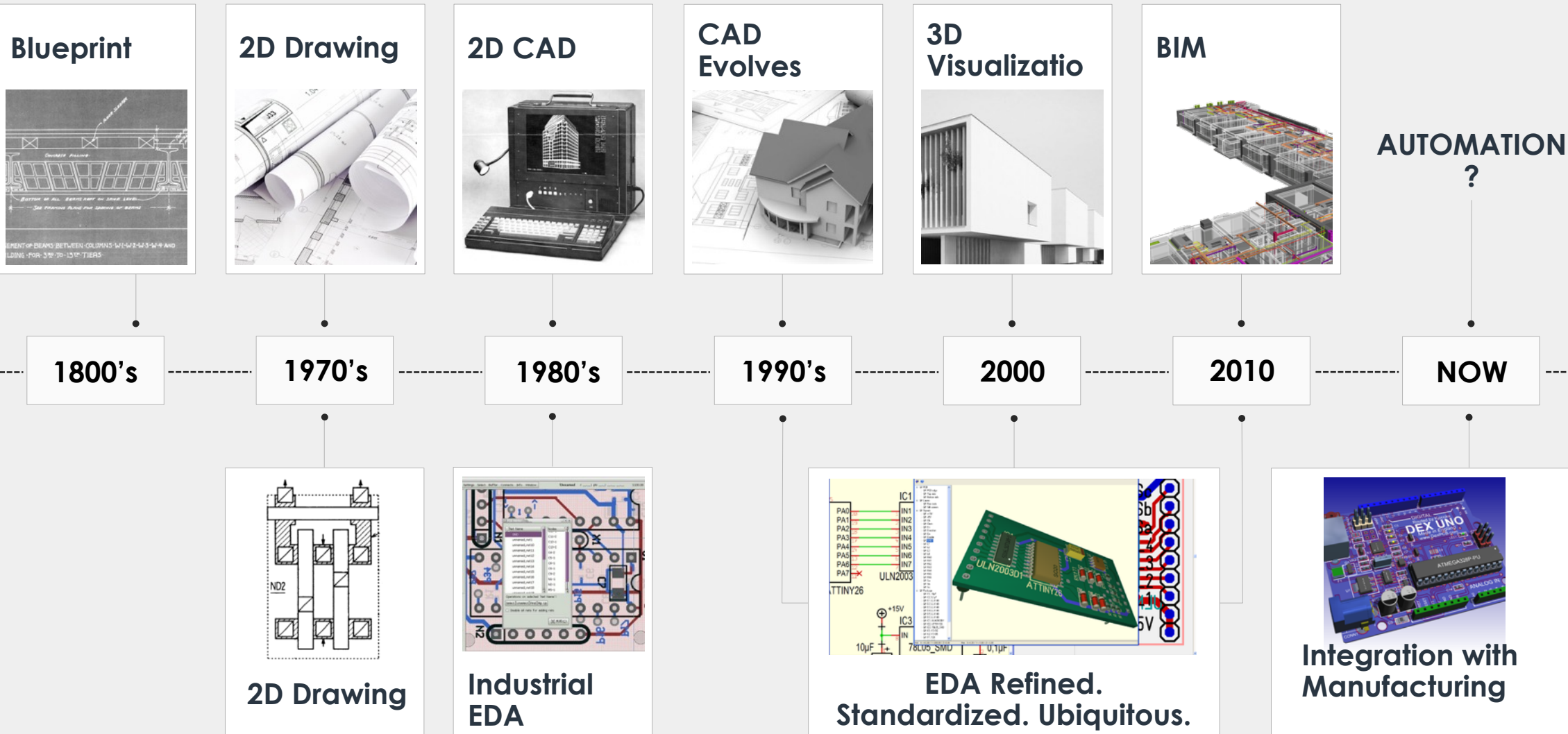
Electronic Design Automation (EDA)



- Simulation & Optimization
- Rule based Design Synthesis
- Analysis & Verification
- Design linked directly to Manufacturing & Supply Chain

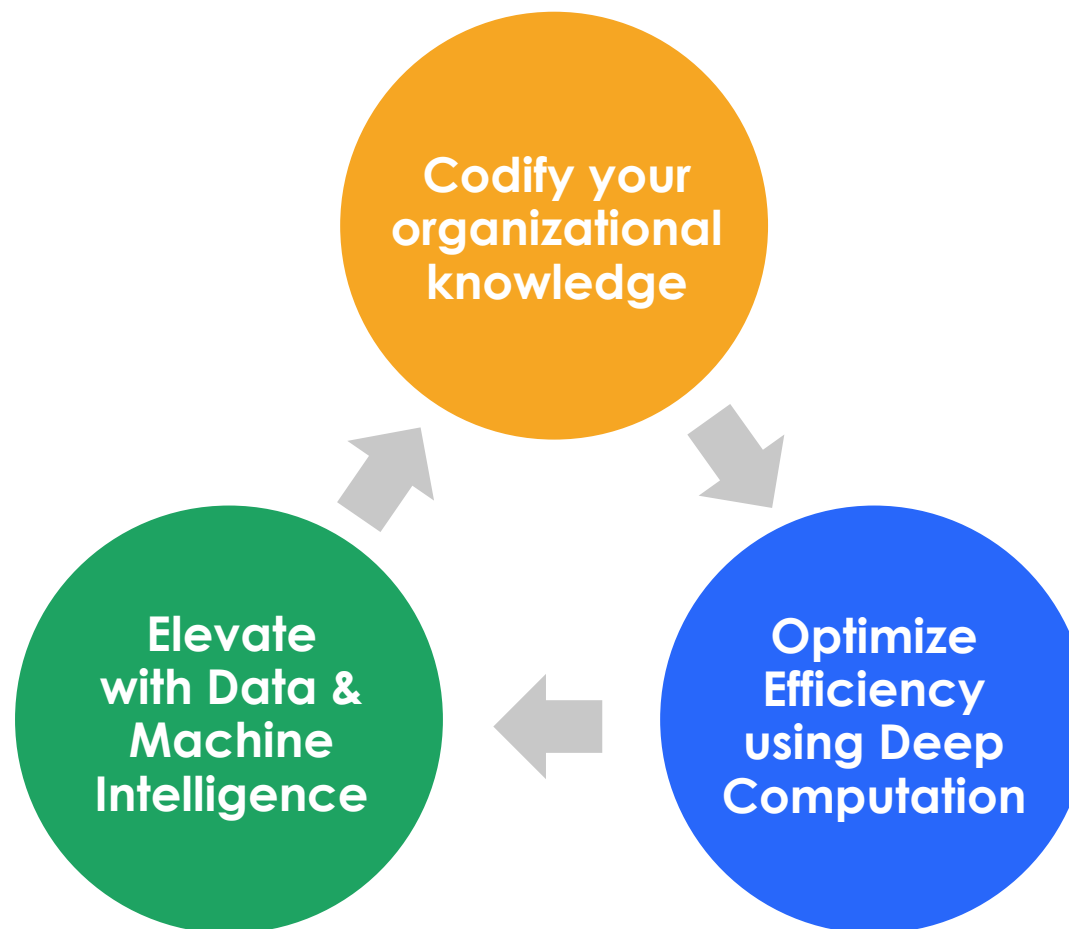


Architecture, Engineering, Construction



SEMI-CONDUCTORS

The Digital Transformation



What is at the core of our digitization?

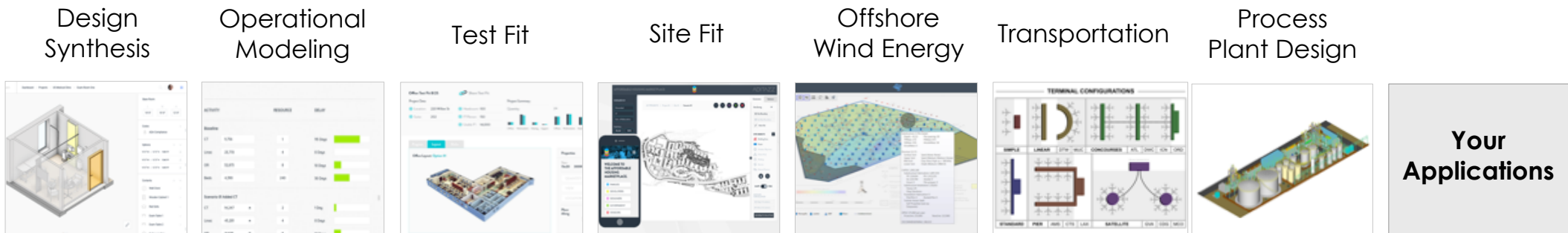
**3D Objects arranged by Spatial
Rules using Computation**

Reusable Libraries

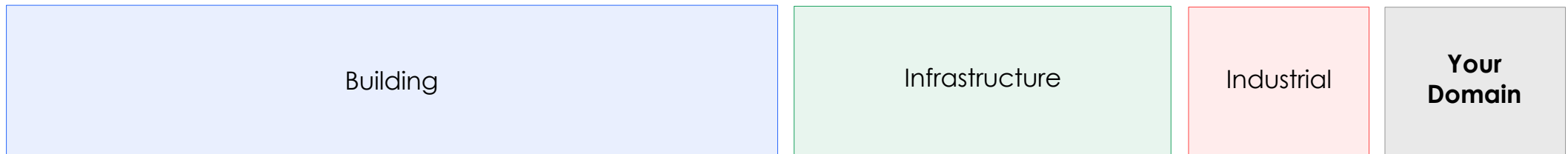
**Design directly integrated with
Supply Chain & Fabrication**

The Product: (Objects + Rules) Applied

Applications



Aditazz Middleware (Objects, Rules, Configuration)



Aditazz Core Software (Simulation, Optimization, Spatial Arrangement etc.)

The Aditazz Design Synthesis Application

Planning

Design

Construction

Operations

Digitized Knowledge

Domain Specific

Object

Rules

Config

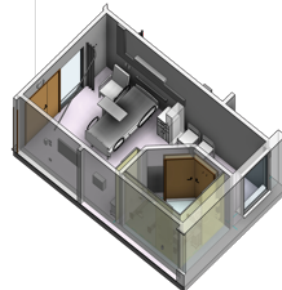
Project Specific

Design Synthesis

Project 01

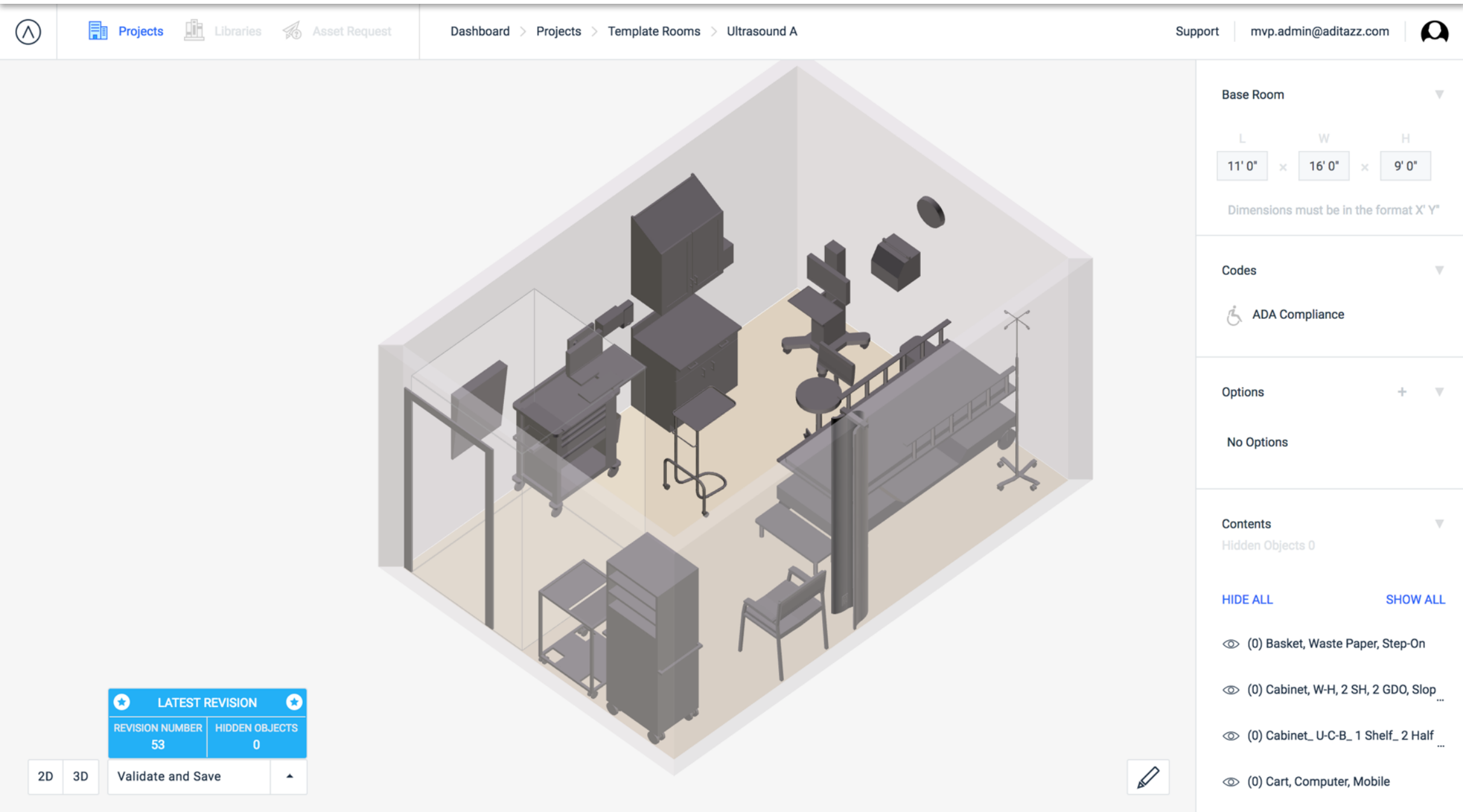
Project 02

Project n

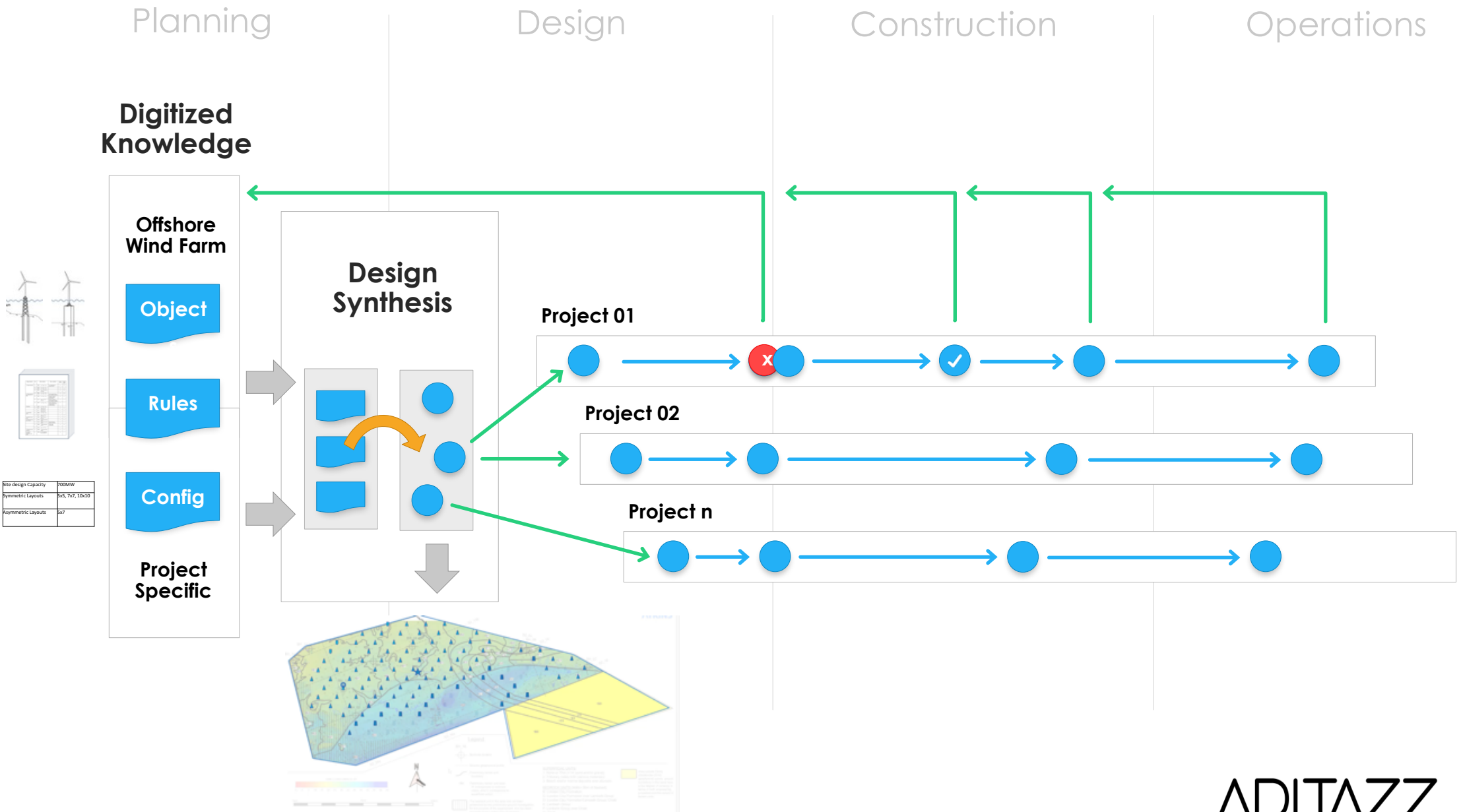


ADITAZZ
P R O P R I E T A R Y

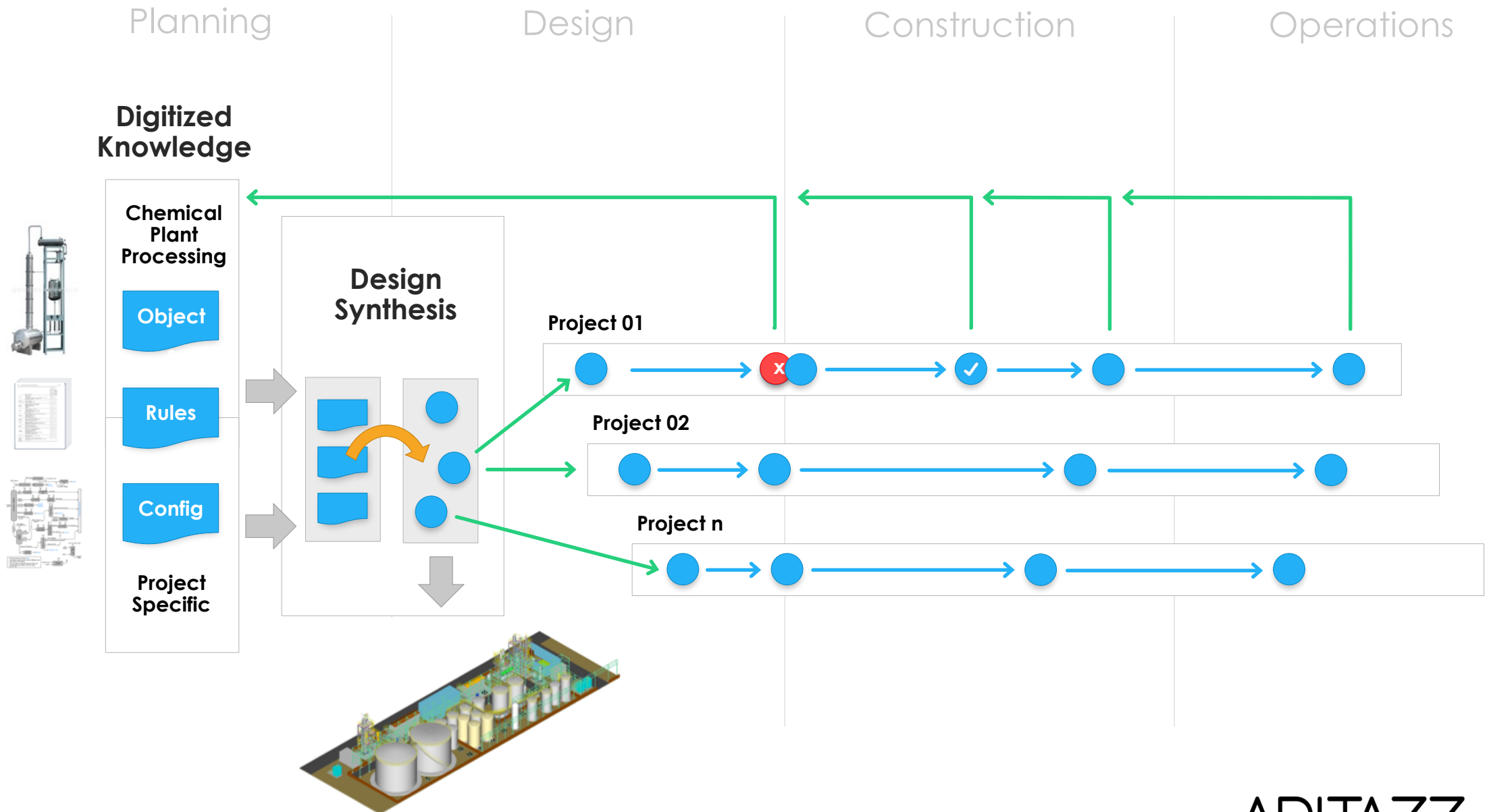
Objects & Rules: Healthcare Room



The Aditazz Design Synthesis Application

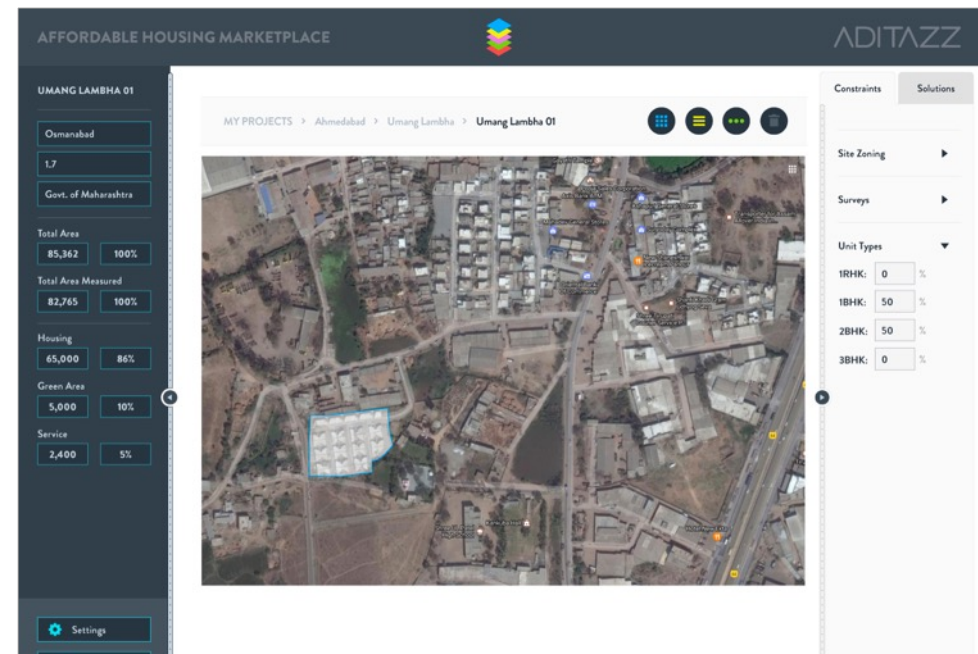
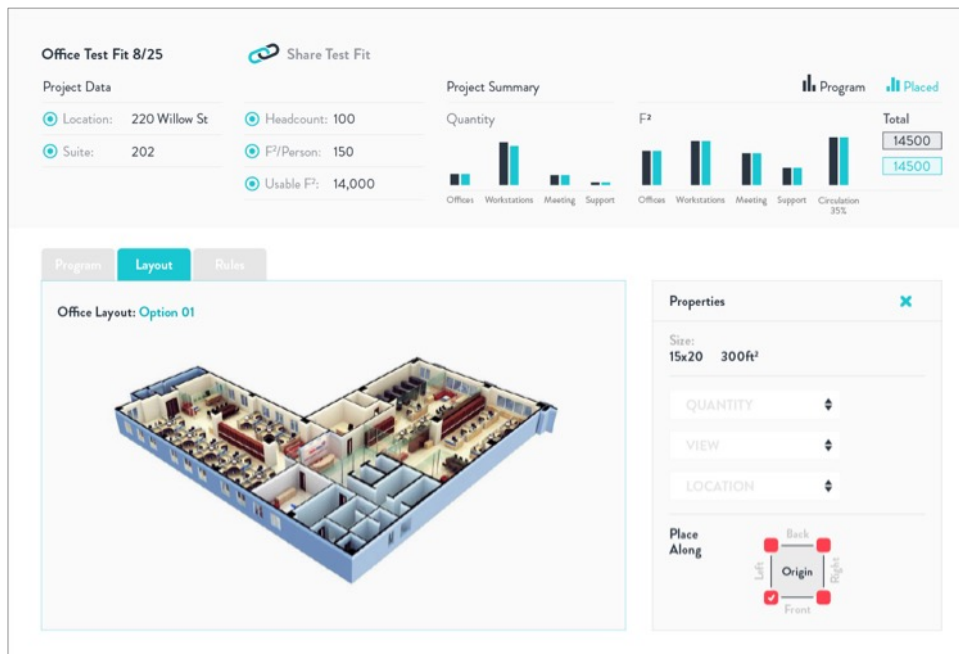


The Aditazz Design Synthesis Application



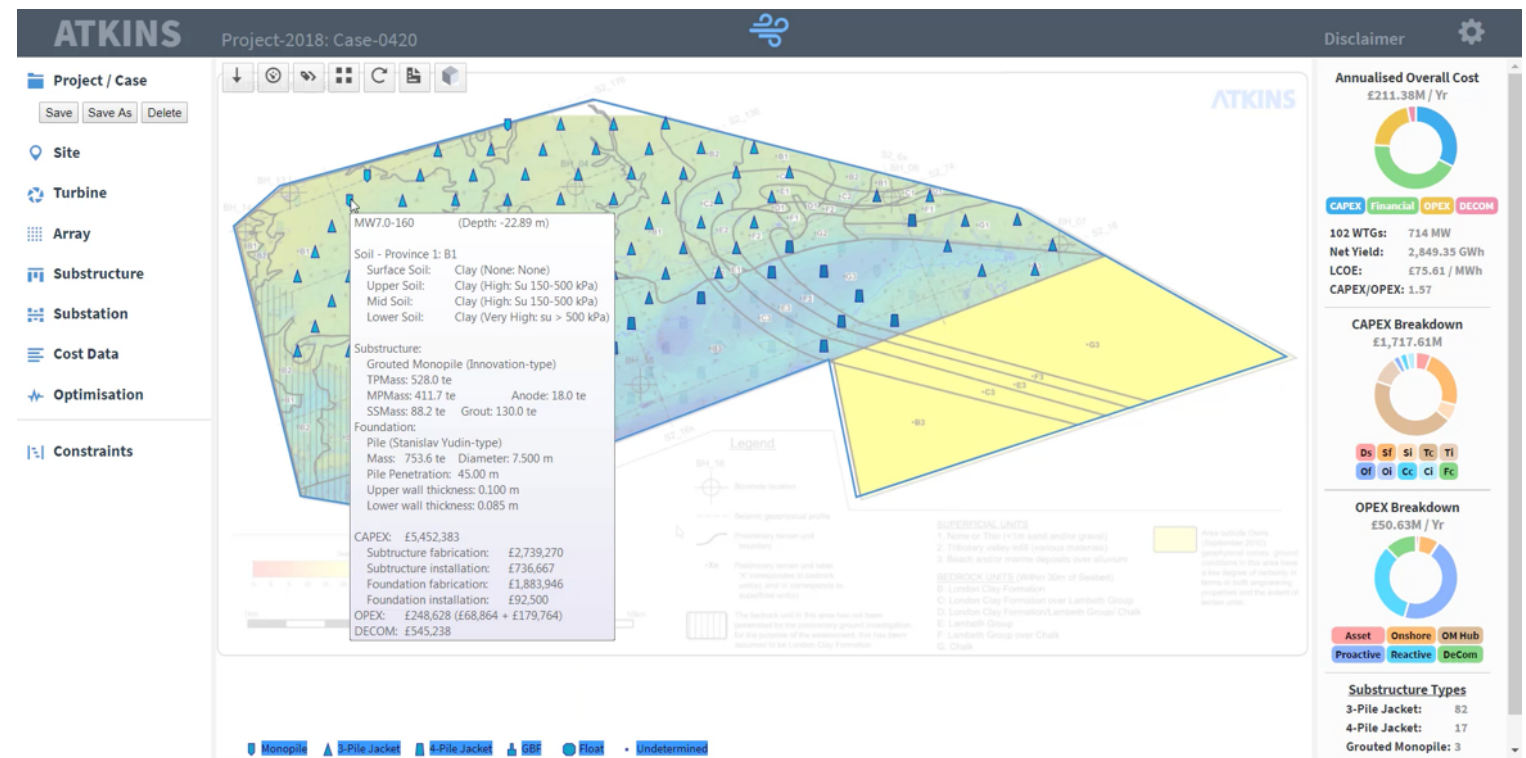
Test Fit and Site Fit Application

Plan, design & deliver your requirements quicker & at lower cost



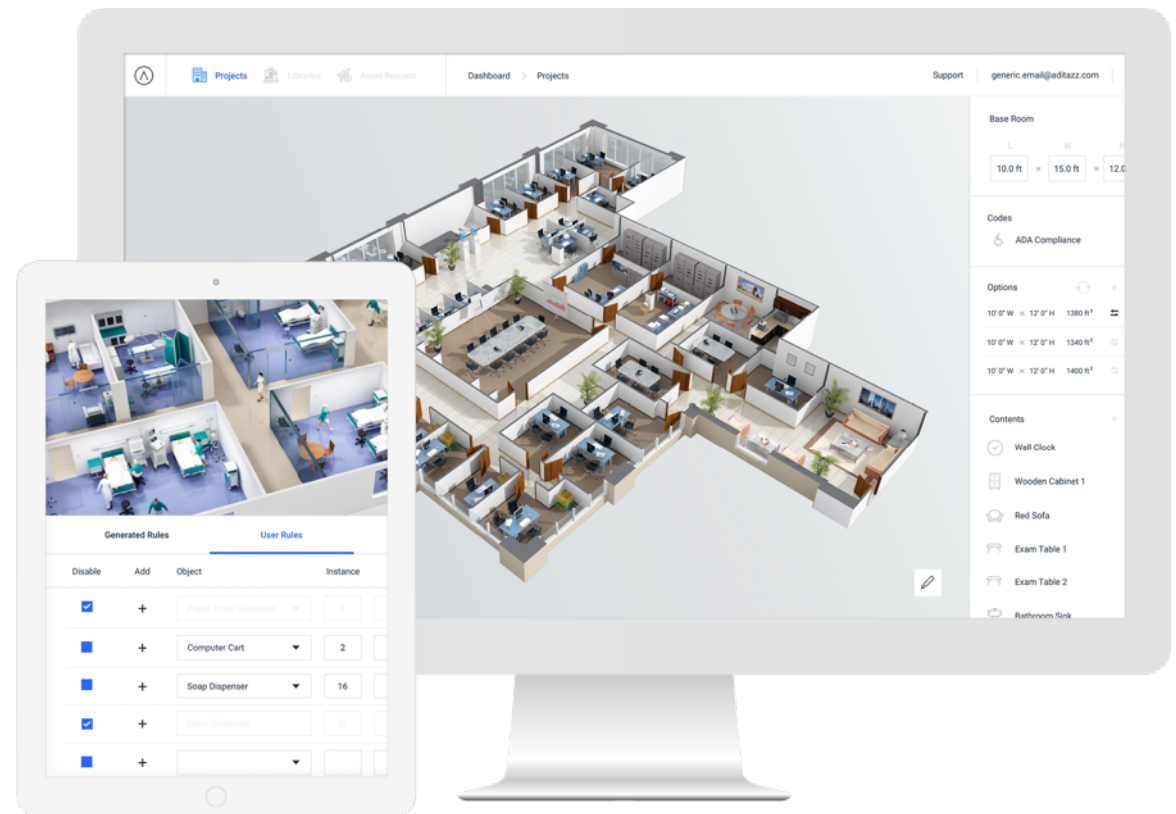
Offshore Wind Energy Application

An innovative new tool developed by Aditazz with Atkins



Your Application on our Platform

Create transformative software applications to meet unique customer needs leveraging the Aditazz platform



Aditazz Software Enables

Capture and Reuse Knowledge

Capture, improve and reuse institutional knowledge: across projects and throughout the organization.

Improved Margins for Service Providers

Use deep computational power to optimize designs and eliminate human error which improves efficiency, quality and reduces cost.

Faster, Cheaper and with higher quality for Owners

This allows for new business models by offering strategic client services.

Summary

- Aditazz has developed a technology platform to digitally transform the built environment
- No line drawings, Objects & Rules instead
- Demonstrated on projects worldwide
- Libraries & rules codify organizational knowledge; Optimize its application; and Elevates services for clients
- Agile development is fundamental to working with us

THANK YOU!

Deepak Aatresh
<http://www.aditazz.com>

