



BIM in the Area of Connection

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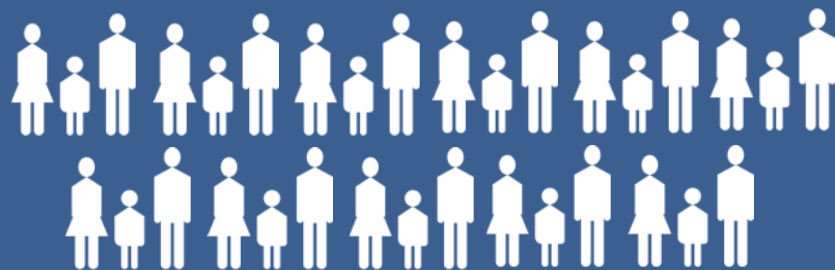


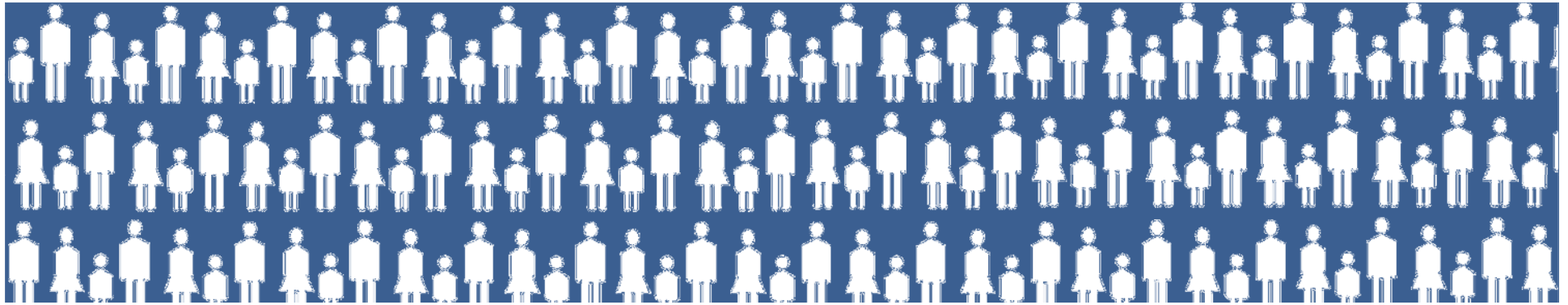




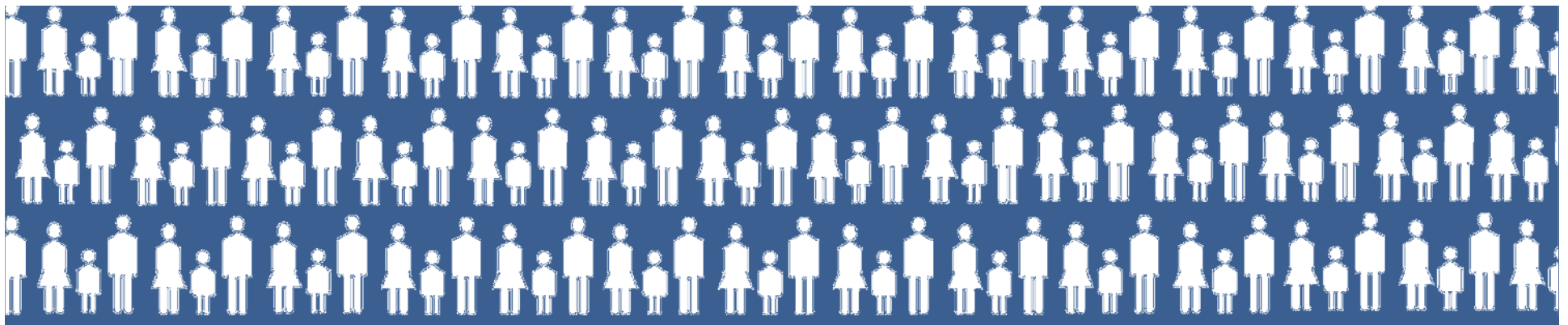


GLOBAL TRENDS



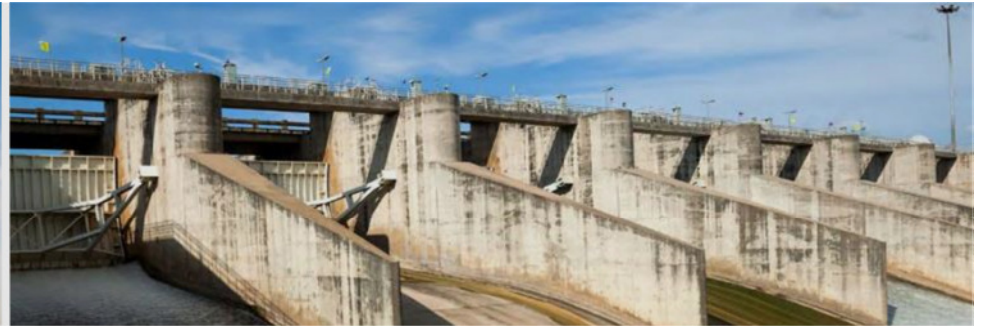


9 BILLION IN 2050

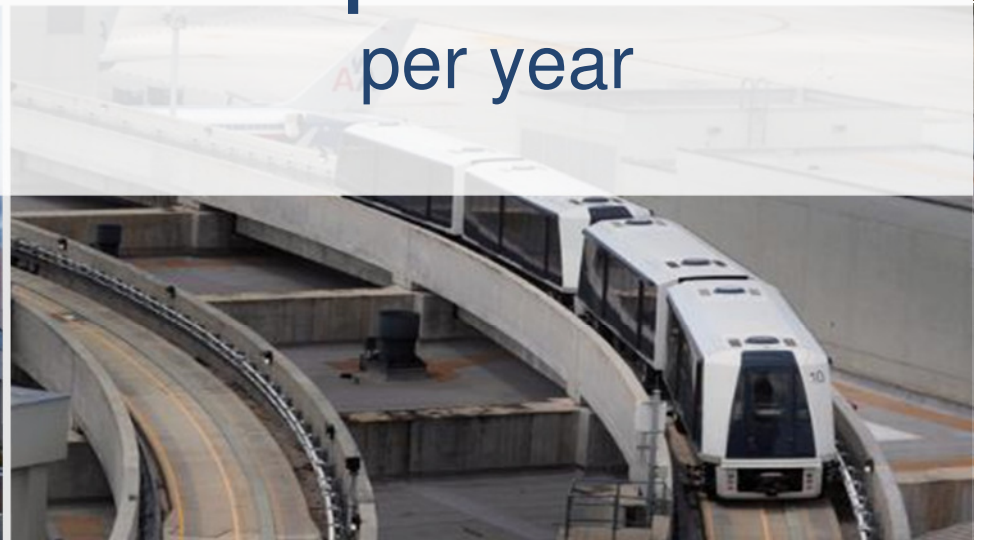




1,000
per day



\$3.3T
per year





**Low
Margin**

**High
Risk**

Fragmented



\$1.2 Trillion

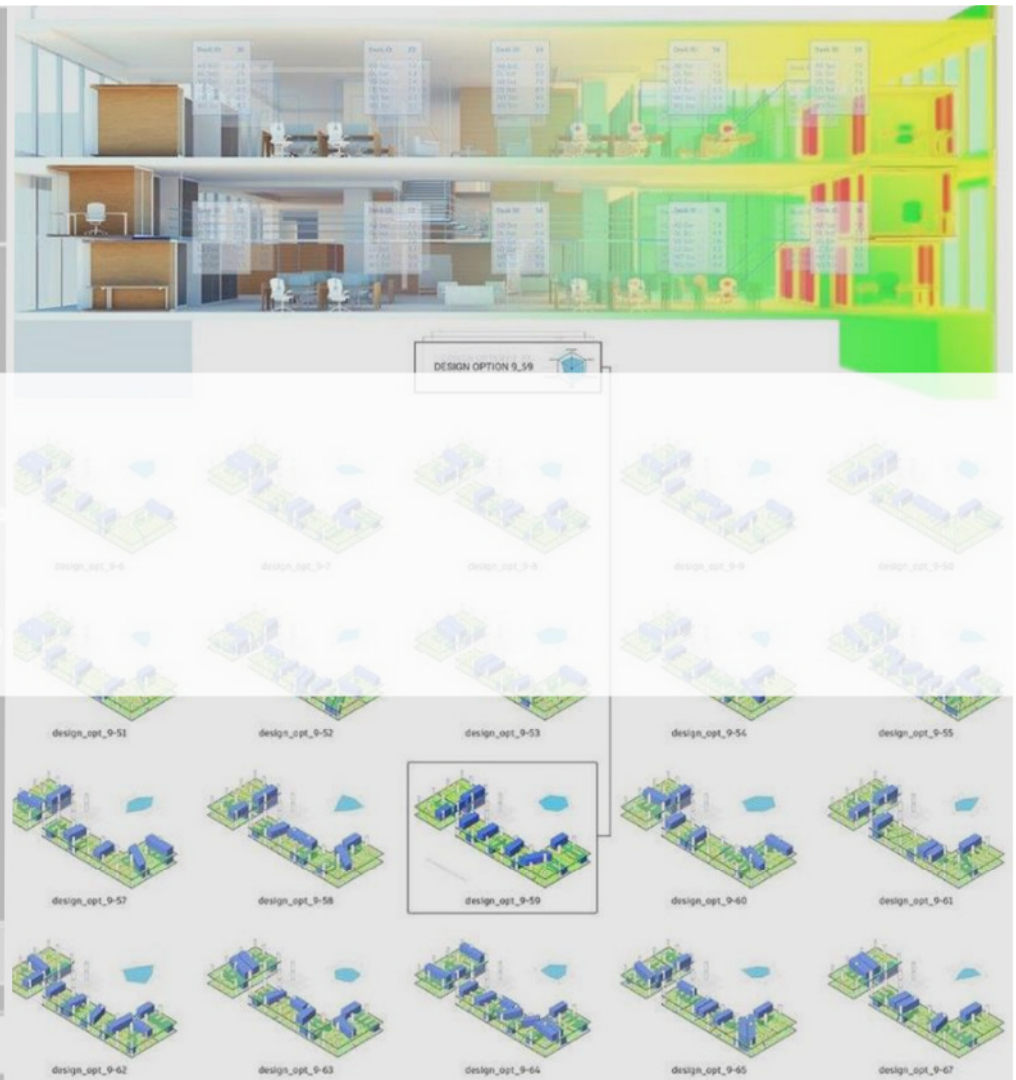




TECHNOLOGY TRENDS

Machine Learning

2F: Views to outside maximizes exterior views from paths



GENERATIVE DESIGN
FOR ARCHITECTURE

1. GENERATE

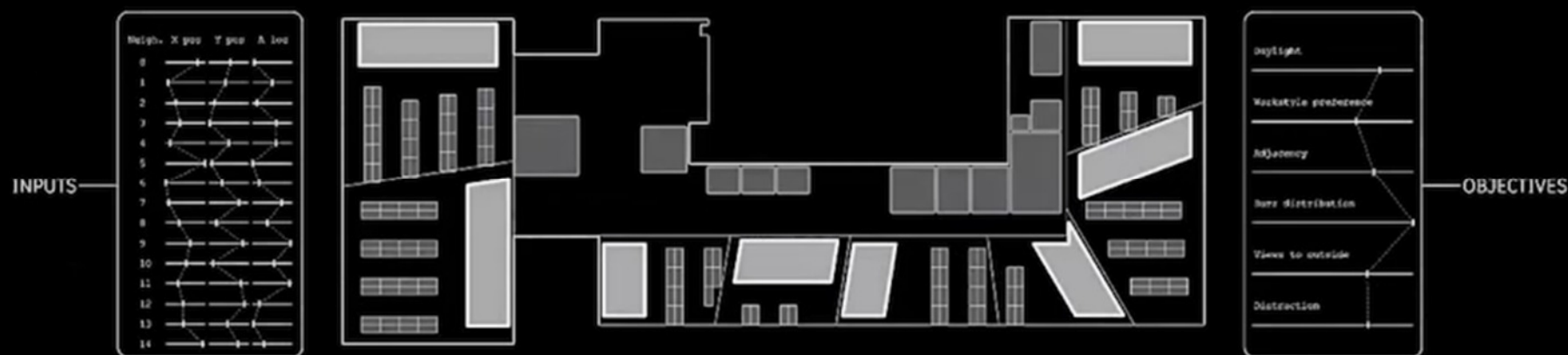
2. EVALUATE

3. EVOLVE

4. EXPLORE

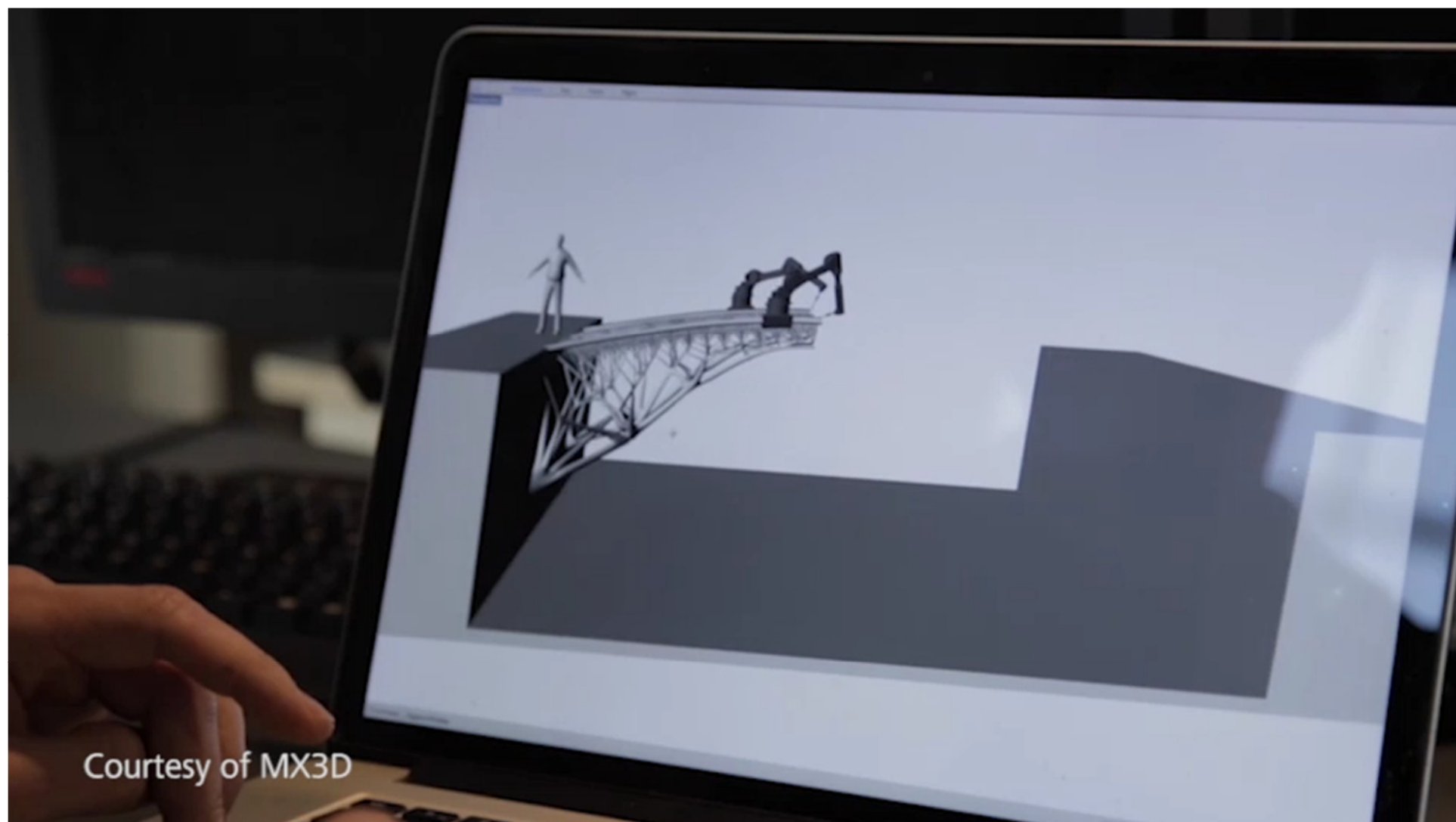


1E: This geometric system can **generate thousands of design options** by varying a few input parameters.



The image is a composite of two photographs. The top photograph shows a close-up of a white robotic arm with the 'Atec' logo, equipped with a large, flexible, metallic welding torch. It is positioned in an industrial setting with various pipes and cables visible in the background. The bottom photograph shows a wider view of a factory floor with multiple robotic arms. In the foreground, a computer monitor displays a presentation slide titled 'ANALOGUE → DIGITAL FABRICATION → DIGITAL CONSTRUCTION'. The slide features two images: a 3D printer on the left and a 3D printed house model on the right. A person is partially visible behind the monitor, and another robotic arm is visible in the background to the right.

Industrialization of Construction



Courtesy of MX3D

Digital Collaboration





[illegible]

ERA OF DOCUMENTATION

Introduction of AutoCAD



ERA OF OPTIMIZATION

Building Information Modeling (BIM)



ERA OF CONNECTION

Connected BIM workflows
across the project lifecycle





Connected BIM



Pre-construction



Construction



Commissioning / Handover

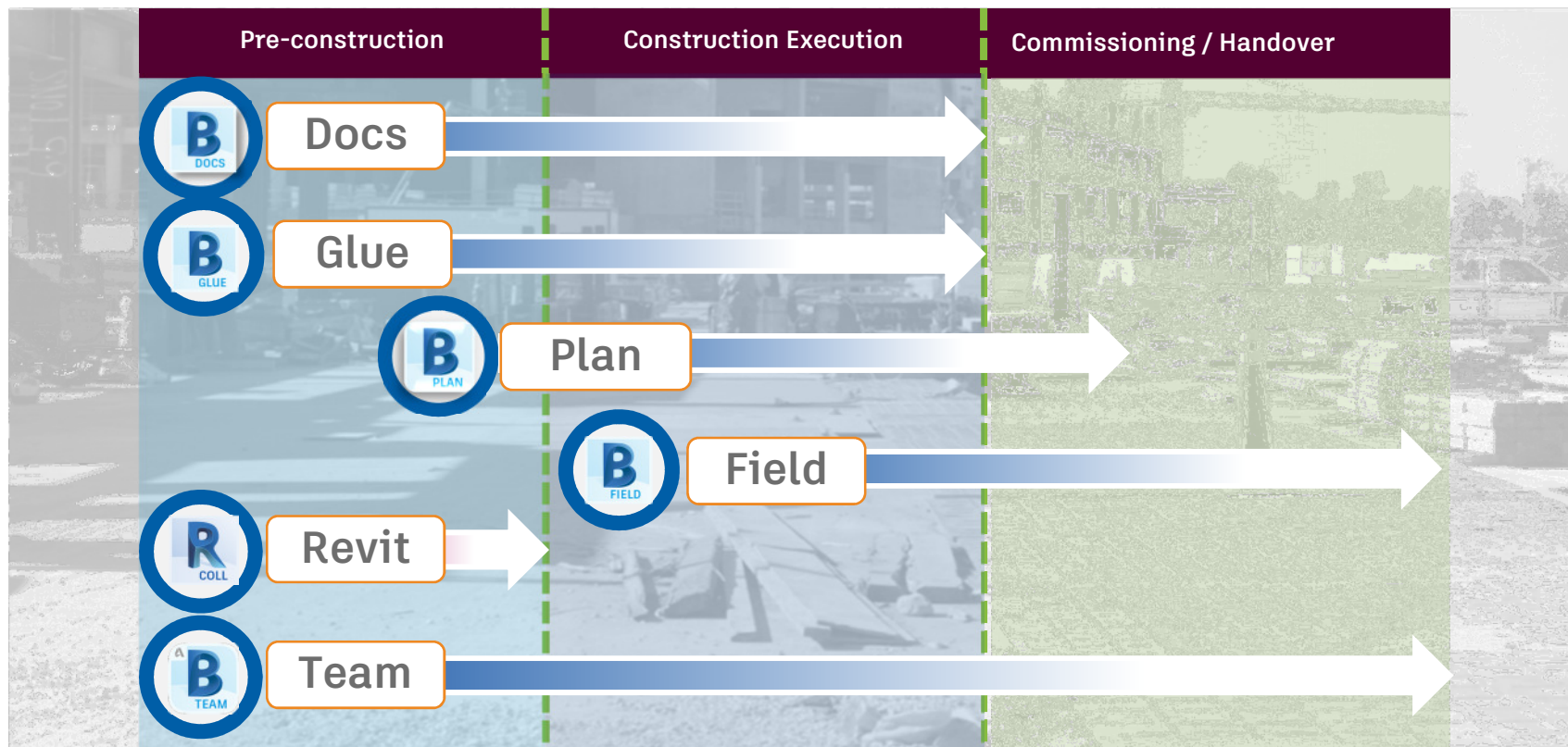


AUTODESK® **BIM 360™**

Autodesk BIM 360



BIM Onderwijsdag
10 OKTOBER 2017 | JAARBEURS UTRECHT



Collaboration for Revit

Get centralized access to BIM data in the cloud for the whole team.



Architect



Structural Eng

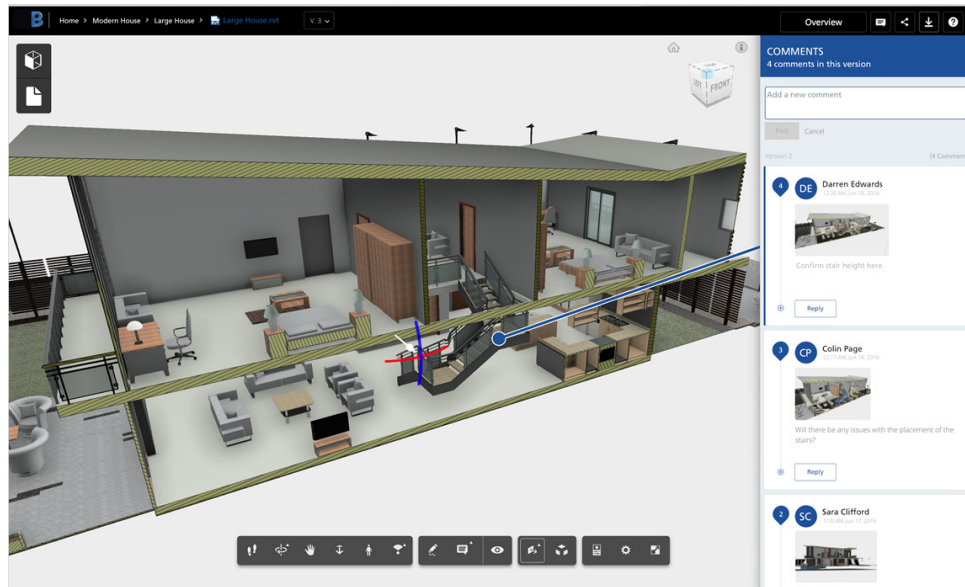


M / E / P Eng

Collaboration for Revit Benefits

- Multidisciplinary collaboration in Revit
- Real-time communication in the model
- No IT hardware required
- Sync to BIM 360 Team

BIM 360 Team



Owner



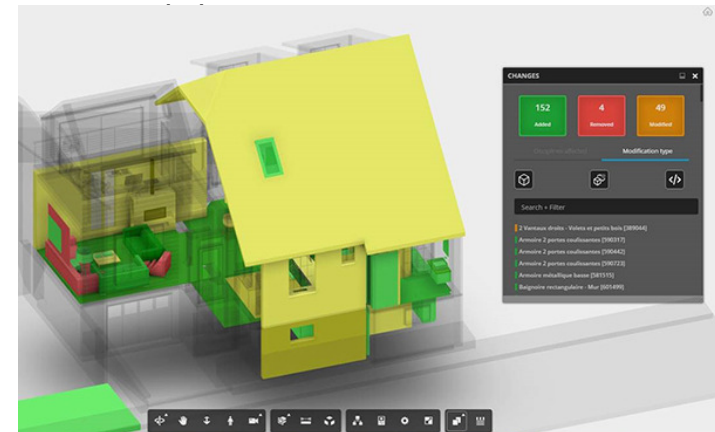
Design team



Construction team

BIM 360 Team Benefits

- View, comment, and markup
- Keep track of version history
- Model version comparison
- Web and Mobile access to BIM





Learning Resources



Engaging with Autodesk



Autodesk Education Community

Free* access to software for students and educators
autodesk.com/education

Educational licenses for

- individual use at home or school
- institutional use inside classrooms or computer labs

Autodesk Design Academy

Free access to content and learning tools
academy.autodesk.com

Unlock student creativity with free projects and courses to introduce students to new technologies and practices in 3D design

Autodesk ConTech Academy

Construction technology learning for construction professionals

contechacademy.bim360.autodesk.com/

Bolster your existing construction project programs with the latest technology trends.

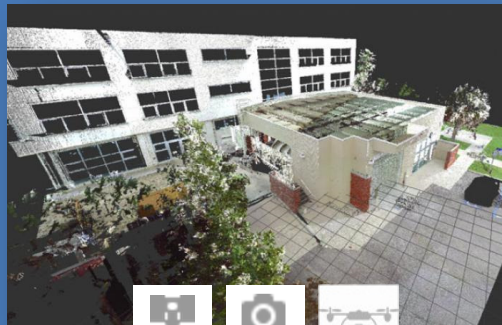
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<http://usa.autodesk.com/legal-notices-trademarks/>

Featured curriculum for construction

Capture. Design. Collaborate.

Reality Computing for Design and Construction



ReCAP 360 Pro, Revit

Introduction to BIM



Revit

BIM for Construction Mgt and Planning



Revit, NavisWorks, BIM 360 Glue



Career prep opportunities for students

Opportunities for students to stand out

Autodesk Student Experts

- Active fans of Autodesk technology
- Deepen software skills
- Network with industry professionals
- Improve career opportunities



"The Student Experts Community in Graz gave me the chance to develop many skills. Besides teaching and lecturing, I gained a lot of social skills and made amazing friends. The knowledge in Autodesk Revit gave me the opportunity to work very early during my studies."

[Angelika Hinterbrandner](#)

Graz University of Technology, Austria



"With Autodesk Expert Program I have better chances to show myself and my works to the world as well as gain more knowledge from other experts. Autodesk software and programs always enrich my design skills and broaden my perspective."

[Chi-Hung Lin](#)

National Taipei University of Technology, Taiwan

www.autodesk.com/studentexpert

Certification

Industry-recognized credentials

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- Accelerate their professional development
- Validate their industry-recognized credentials
- Get them noticed



Product certification exams:

- Revit
- AutoCAD





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