

3DEXPERIENCE®

**Shape the World in
Harmony with the Natural Environment**

Our Purpose

“

Dassault Systèmes provides business & people with **3DEXPERIENCE** universes to imagine sustainable innovations capable of **harmonizing product, nature and life.** ”



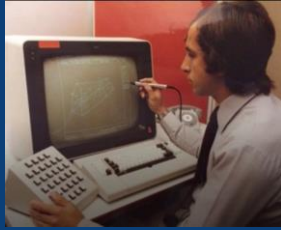
Our History

1981

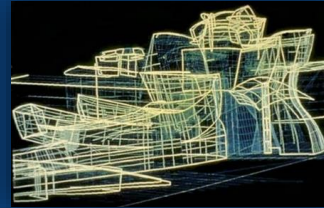


Manual Drafting
→ 3D

1989



Virtual Bilbao
CATIA V3.



3D DMU
Digital Mock-Up
In 1991, Rick SMITH **leaves** IBM
& **joins** Frank GEHRY.

1999

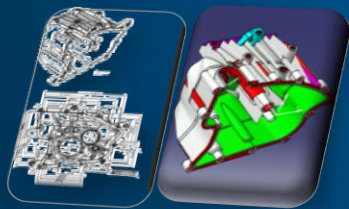


AUTOMATED
Virtual Design/Construction
In 2009, SHoP begins the Barclays
Center Redesign

2012



3DEXPERIENCE



3D Design



3D DMU
Digital Mock-Up



3D PLM
Product Lifecycle
Management

3DEXPERIENCE open innovation platform

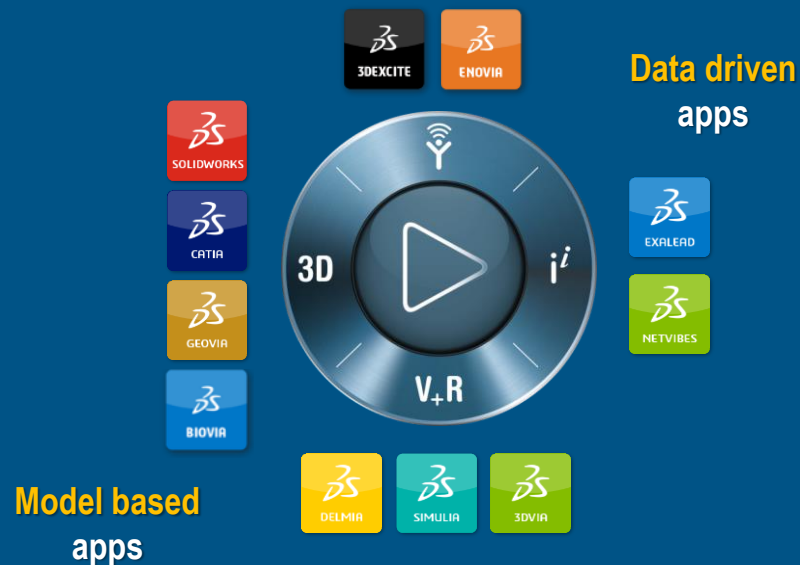
INDUSTRY SOLUTION EXPERIENCES



Model Connectors

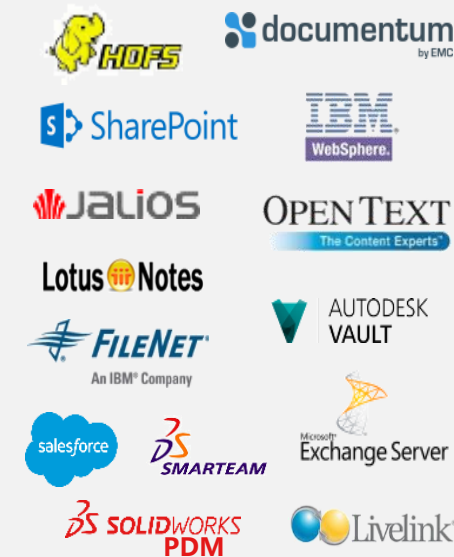


Develop model connectors



Specialize apps, develop new apps and services

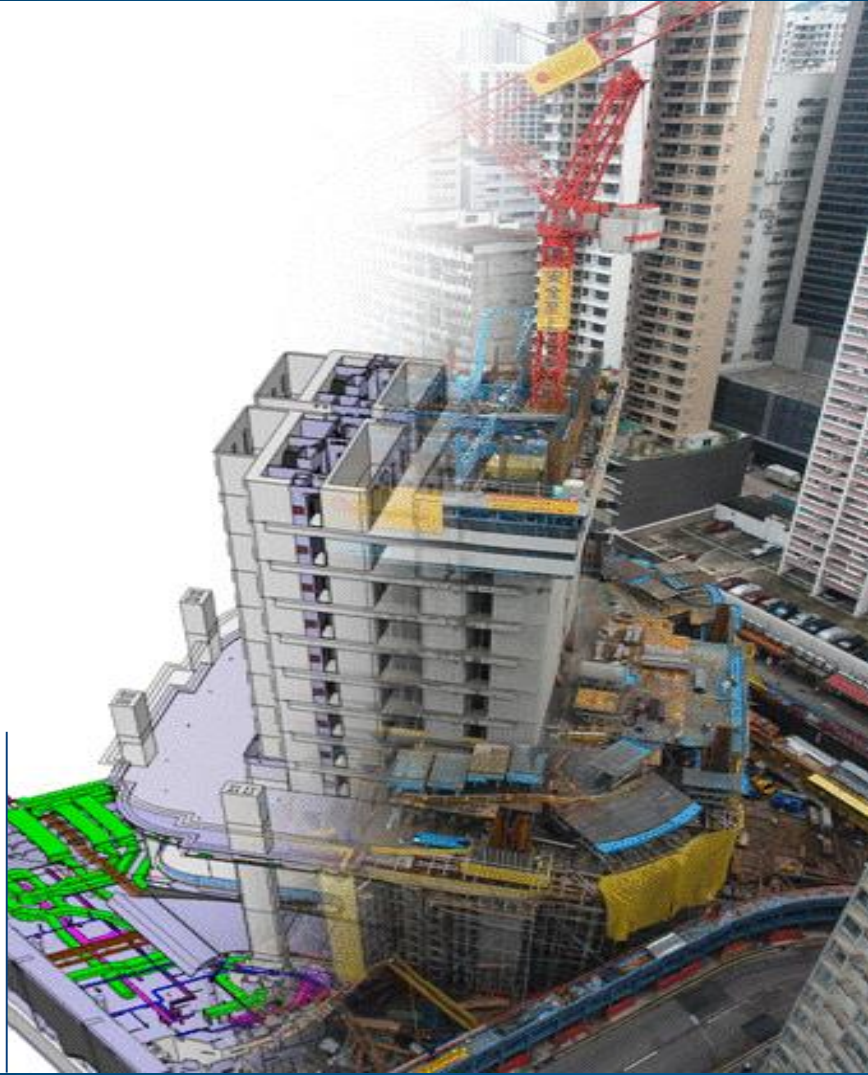
Data Connectors



Develop data connectors

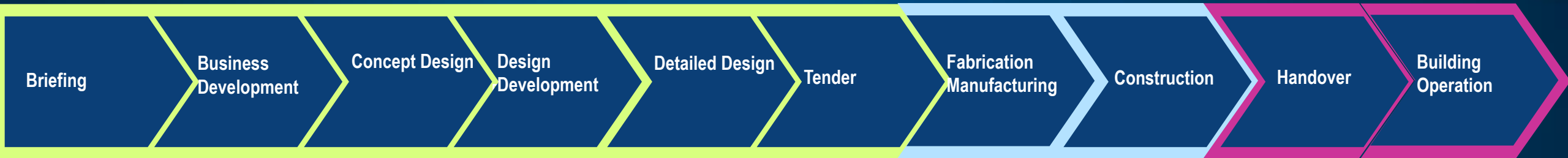
From BIM to BEM | Building Experience Modeling

BIM is
'Product Centric'



Planning, Architecture,
Engineering, Construction is
'Experience Centric'
within a large context.

3DEXPERIENCE 'Twins' - BEM

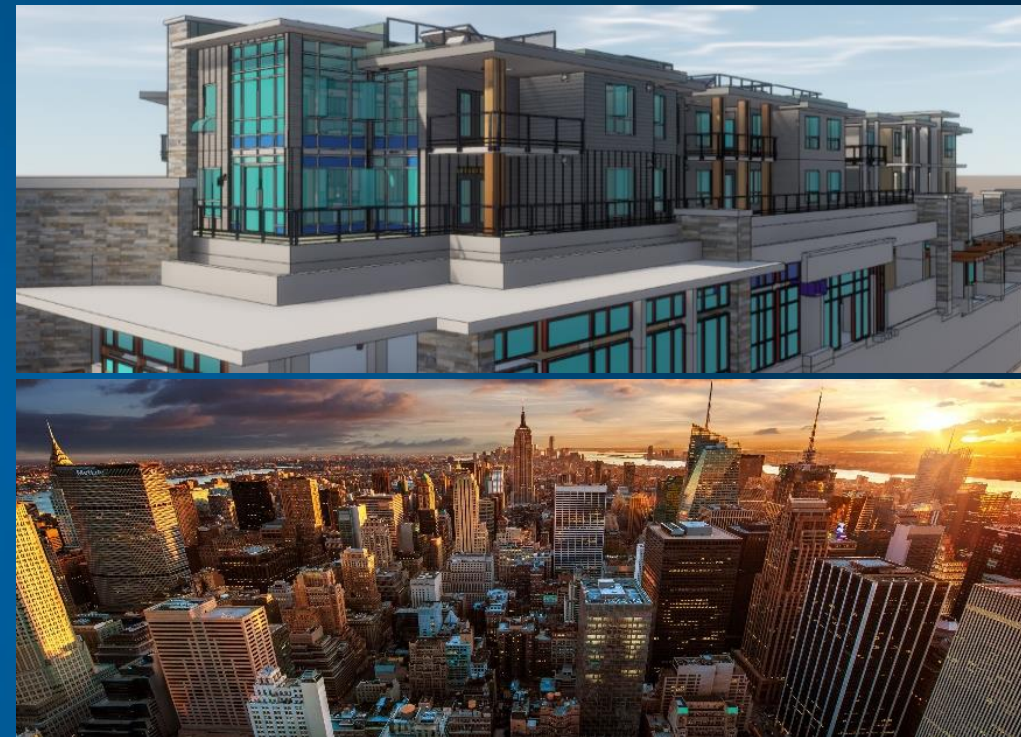


Digital Continuity

Transformation | WHAT do we stand for?

On Quality, On Time, On Budget

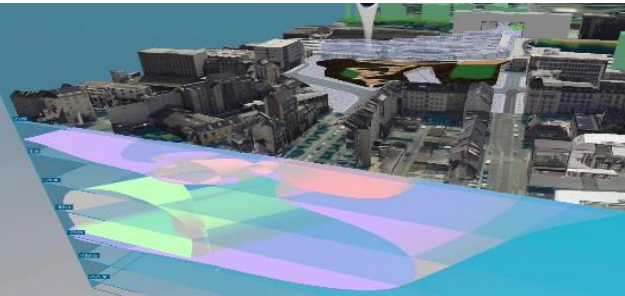
BIM - AS IS	BEM - TO BE
Fragmented	Continuous & Systemic with common semantics
Files & Documents	Model Based and Data Driven Experiences
Manual reporting	Live dashboarding
2D planning	Scope-Time-Issue-Cost Planning
Isolated	Connected with the unified context : Natural + Built
One Off	Parametrical knowledge & Know-how Reuse



GEOVIA's ambition | Geoscience for BEM

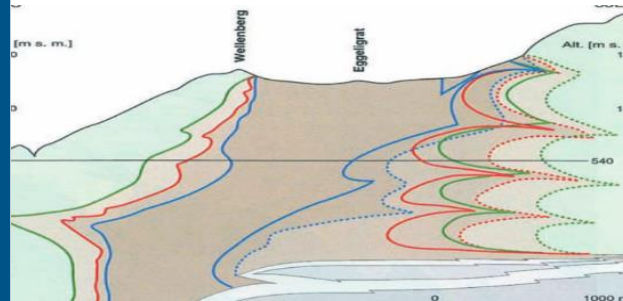
Evolving Context

- ▶ Dependent on socio-eco-political stakes
- ▶ Iterative investigation – interpretation process
- ▶ Strong interaction with upper structure design



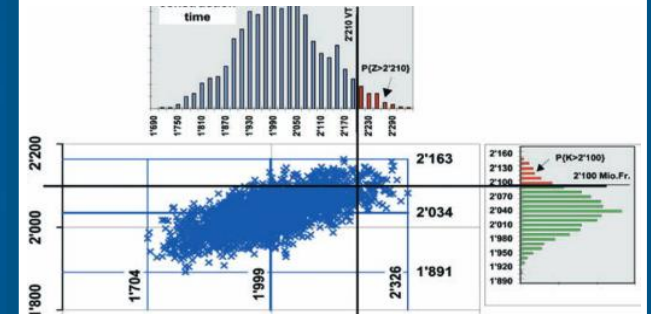
Intrinsic Uncertainty

- ▶ Scarce and onerous reliable data
- ▶ State-of-the-art understanding of soil/rock behavior
- ▶ Complex and long cycle from Experience to Knowledge



High Stakes, High Risks

- ▶ Construction critical path
- ▶ High cost impact
- ▶ Leads to construction claims
- ▶ Intimate contact with natural environment



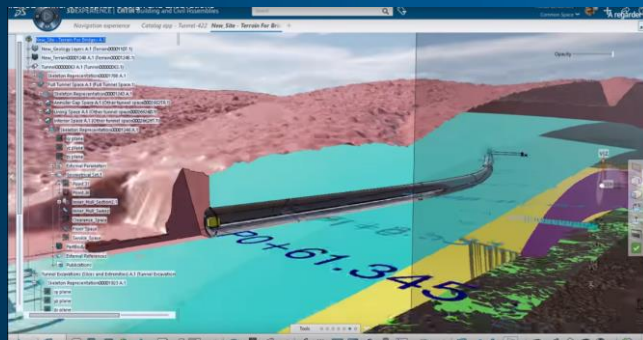
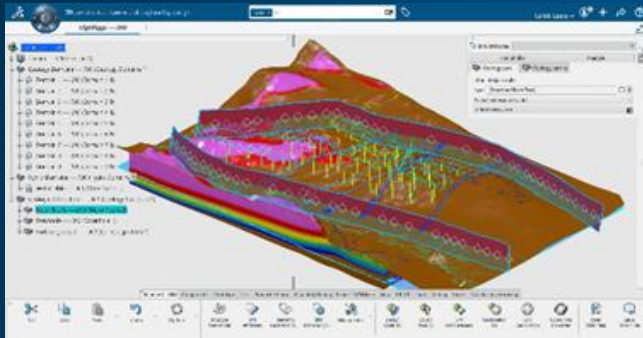
3DEXPERIENCE

Multi-disciplinary Parametric design informed by Sub-surface Structured Information

Uncertainty Characterization combined with Mutli-physics & Multi-scale Simulation

Standard format & IoT empowering field/office real-time interaction & Knowledge Capture

A Single Unified Data Model for User-level Planning Architecture Engineering Construction Experience



Data

Index

UI

P&O

Modeler

I/O

