Bentley Cloud Computing Strategy Present and Future

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Bentley
Sustaining Infrastructure

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Agenda

- Cloud Computing
- Bentley present
- Bentley future

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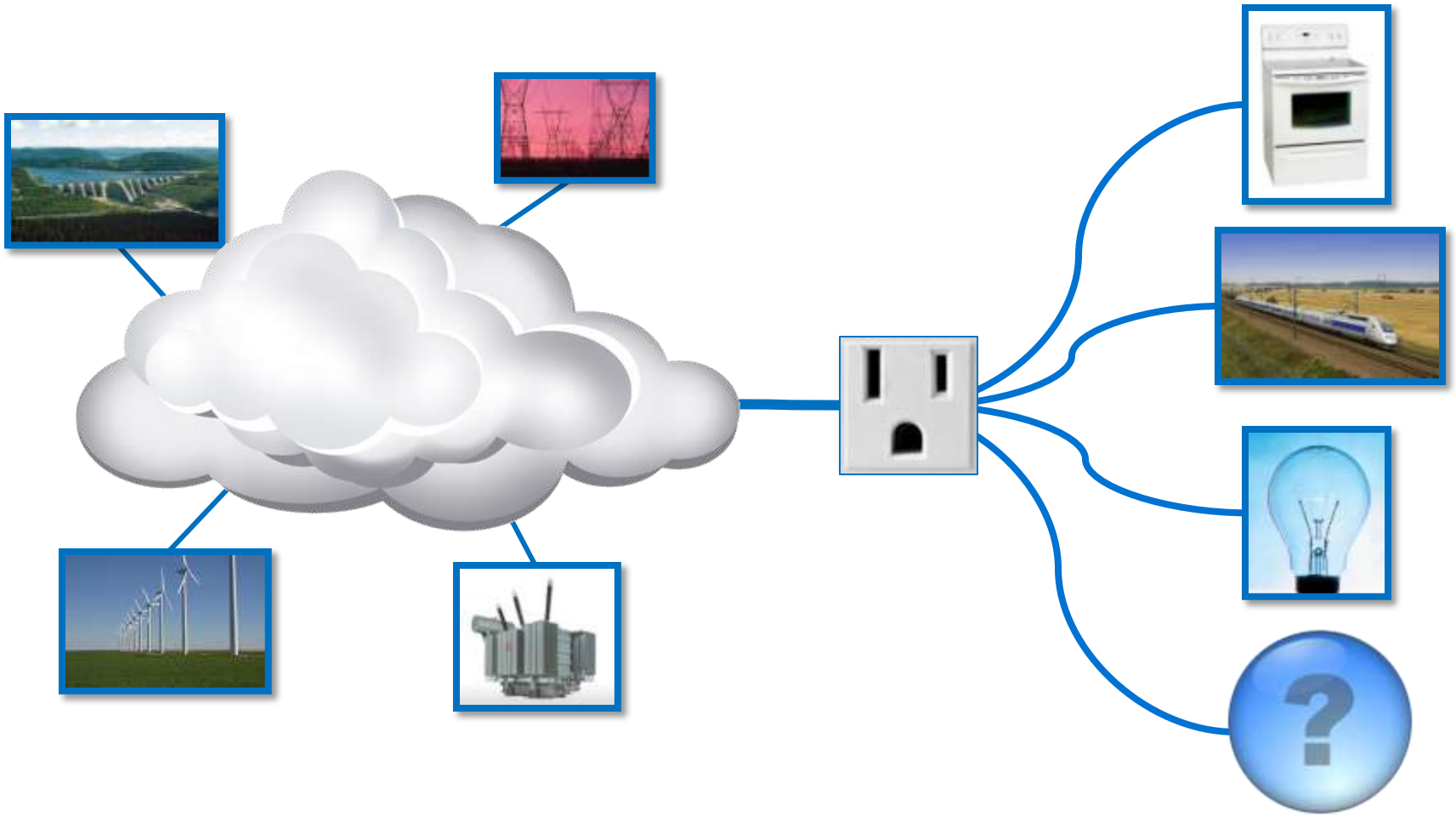
An analogy to the Cloud Computing

Demystify the Cloud



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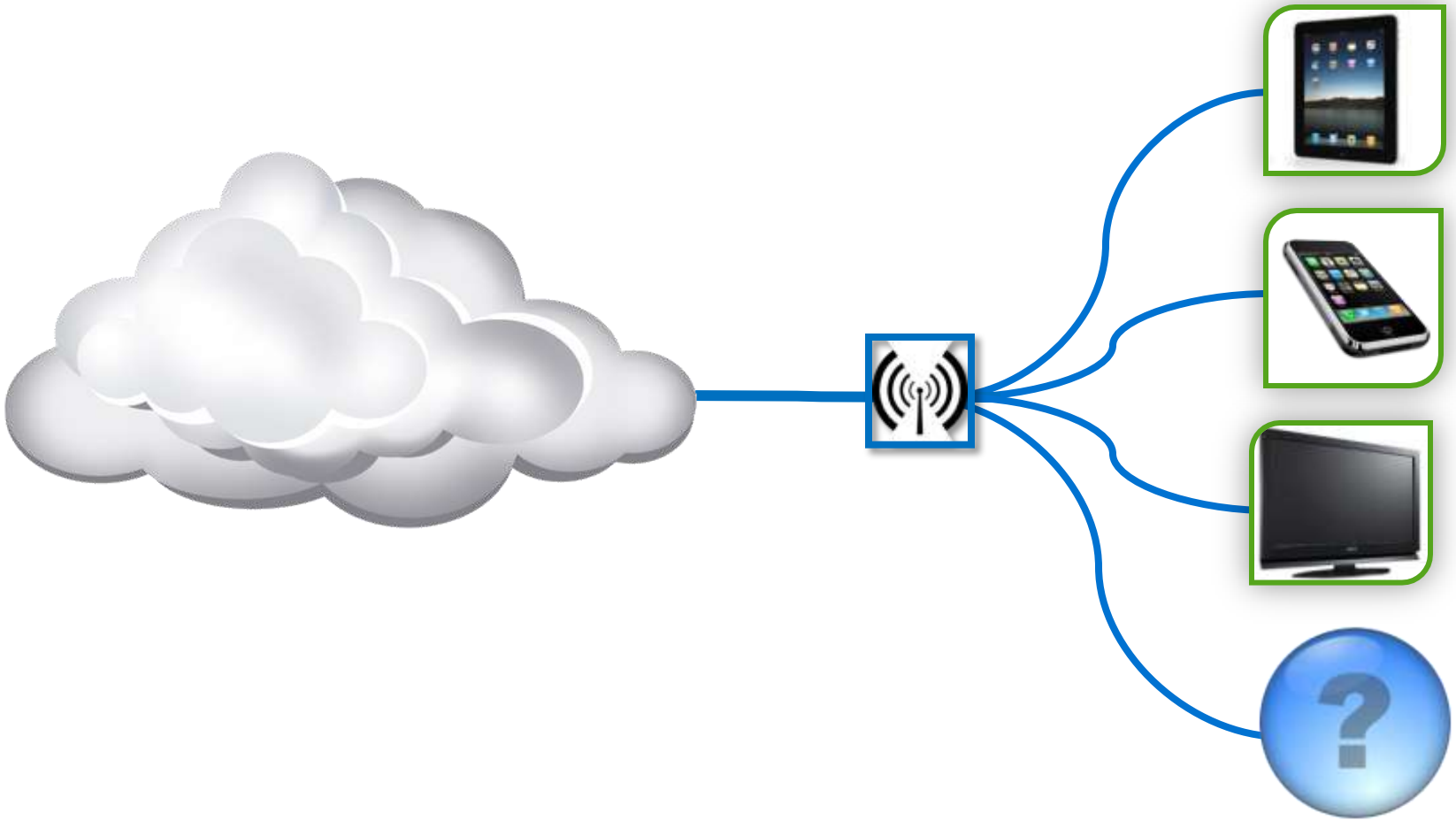
Computing as a service

Demystify the Cloud



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Categories in the Cloud

Demystify the Cloud

Software as a Service
(SaaS)

*For end users

Platform as a Service
(PaaS)

*For developers/End users

Infrastructure as a Service
(IaaS)

*For developers
/End users

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The present

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Bentley Certified Products for Amazon (IaaS)

- Bentley Geo Web Publisher can be run on the cloud
  - Self-deployment on Amazon infrastructure
- ProjectWise/Geospatial Server can be run in the cloud
  - Self-deployment on Amazon infrastructure
- ProjectWise Online Runs on Amazon
  - Hosted version of ProjectWise

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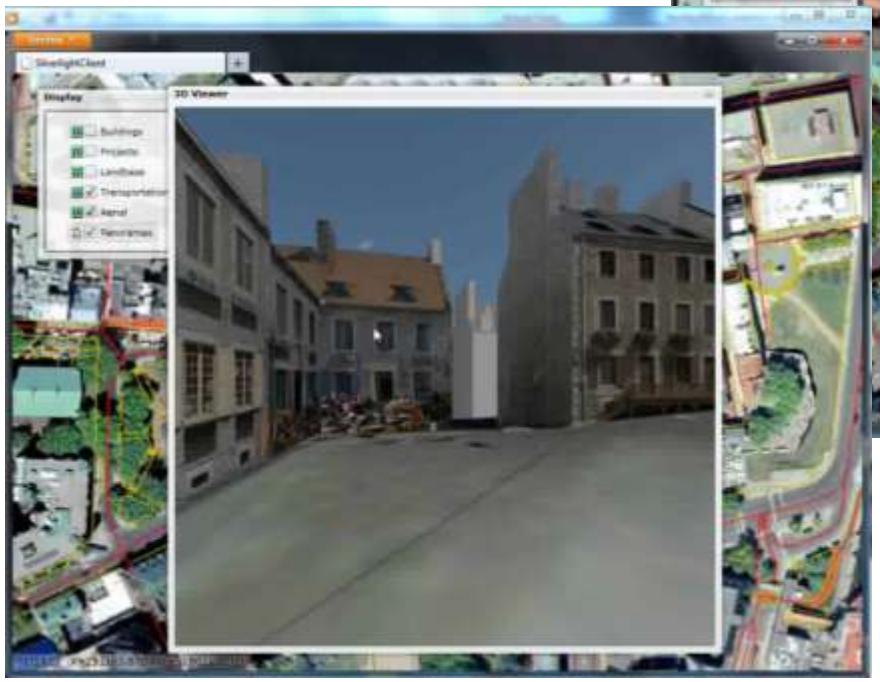
Demo- Bentley Geo Web Publisher

- Light Web client 3D panoramas viewing



Demonstration

Data courtesy of Quebec City

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Virtualization of Bentley Products in Amazon (IaaS)

- Benefits for our users:
  - Quick launch
  - Only for the duration of the project
  - Cost effective.
  - Some scalability
  - Low network latency
  - Distributed around the world

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Bentley Announces Relationship With Microsoft for Azure-cloud-based Transmittal Services Offering

"Bentley Systems is one of our preferred partners in the delivery of software and services through the Windows Azure platform to the AECO community. Together, Microsoft and Bentley are serving the needs of our joint customers by offering a cloud strategy that encompasses private and public clouds and on-premise deployments. We have seen how this highly effective approach is driving greater efficiencies for these organizations and helping their businesses become even more successful."

Scott Guthrie, Corporate Vice President, Microsoft

Azure

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Bentley Transmittal Services For Microsoft Azure

- *Bentley Transmittal Services* for the Microsoft Azure platform will be available *online* in 2013
- It allows:
  - Transmittal creation and publishing
  - Transmittal delivery and response
  - Transmittal response tracking and status
- *Bentley Transmittal Services online* can (and often will) be configured with ProjectWise and/or AssetWise *onsite*.

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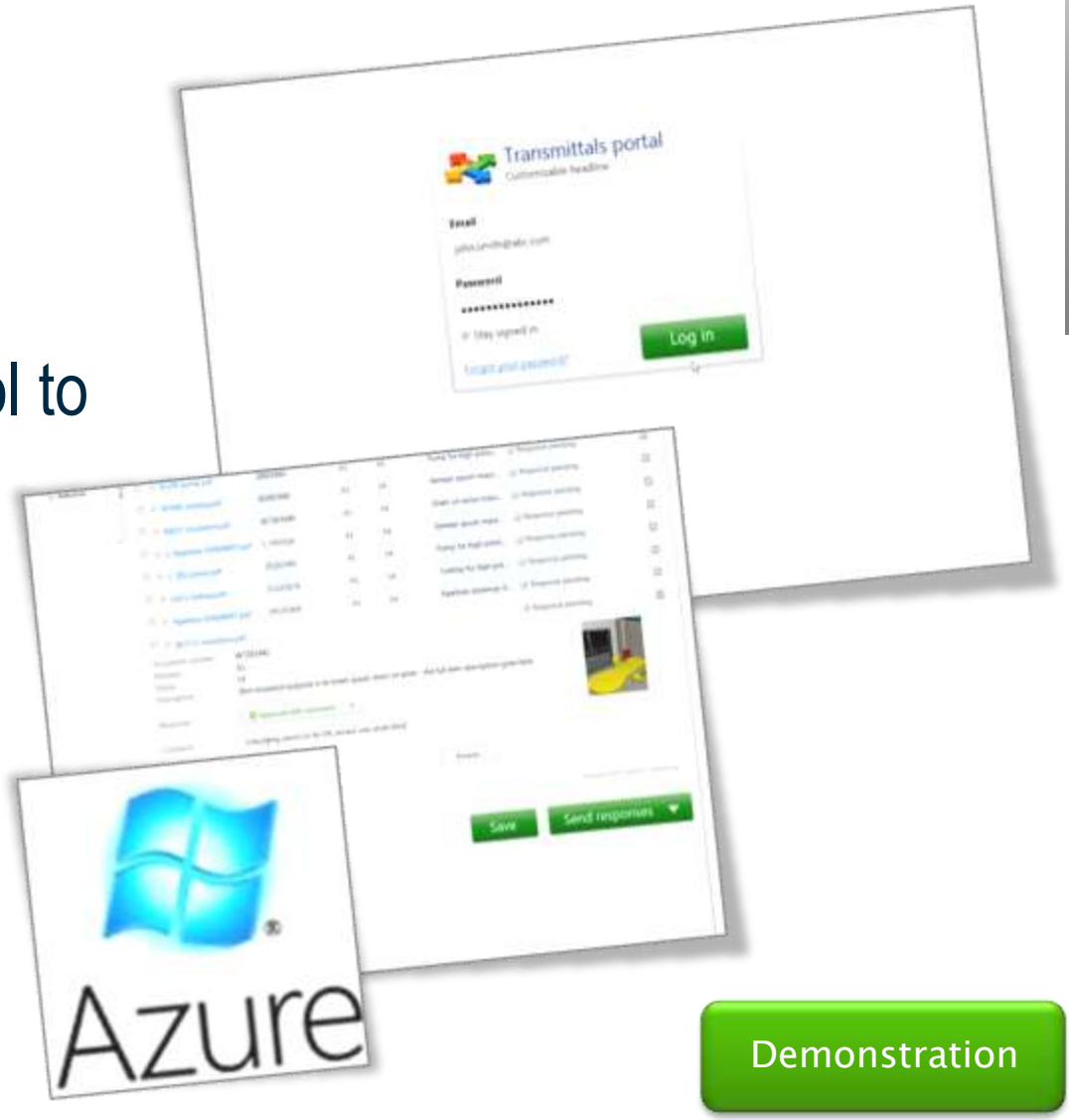
Demo- Bentley Transmittal Services For Microsoft Azure

- Easy web access to all transmitted documents
- Allows document control to be done in the cloud



Demonstration

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The future

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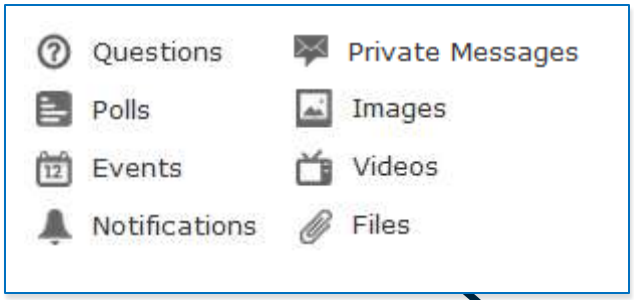
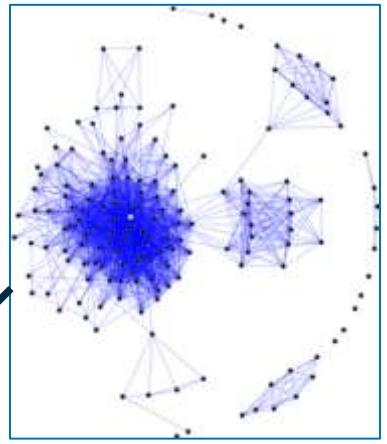
A Cloud Collaborative Platform



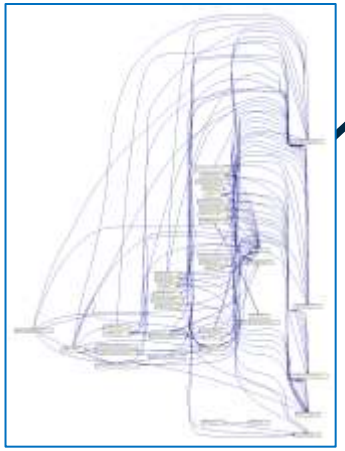
Communication

Data flow

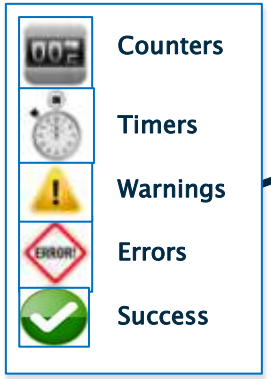


Human relations

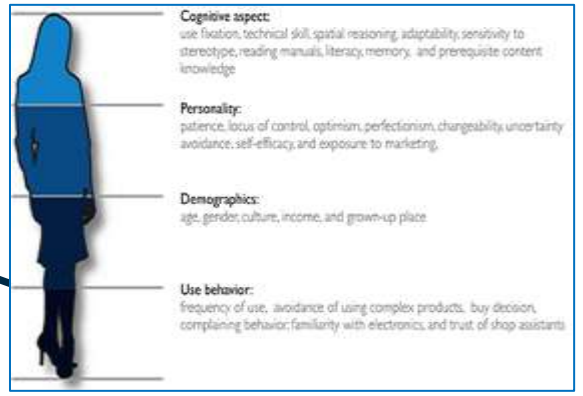
Bentley Cloud Framework



Data/files Dependencies



Tools and services



User profiles

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A Cloud Collaborative Platform

Data access

Information access

Smart Relationship

Mobility access

Services/Application access

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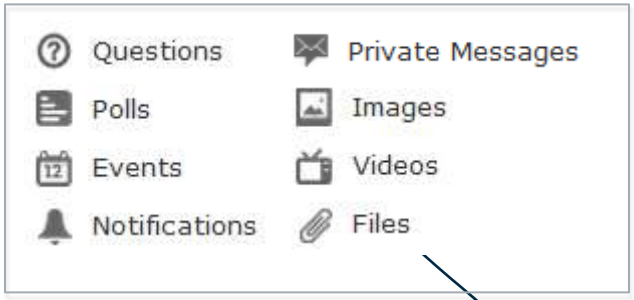
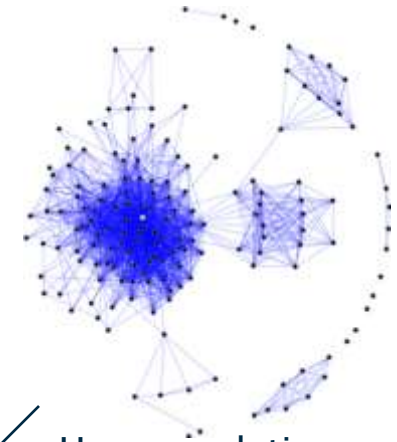
What is a SMART platform ?

A platform that is built around an AI heart



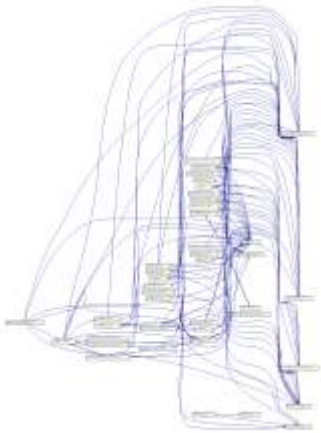
Communication

Data flow



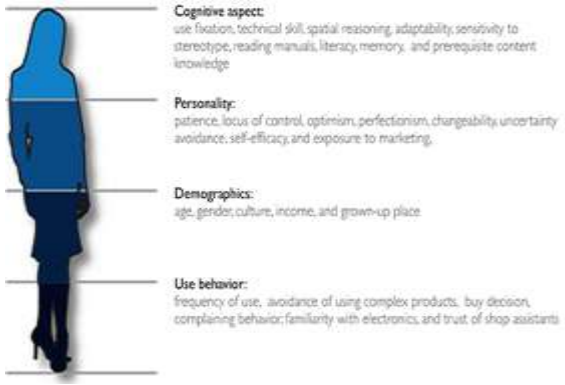
Human relations

AI System
(learning machine, expert system, …)



Data/files Dependencies

Tools and services



User profiles

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SMART platform, which benefits ?

AI System

"Intelligence is the ability to solve new problems" – Edouard Claparède

Assistant

- Coordinate repetitive tasks/patterns
- Execute repetitive tasks/patterns
- Remind important points/info

Problem finder

- Identify blocking issue and slow-down
- Propose alternatives (tools, workflow)

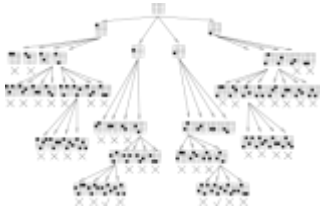
Smart Workbench

- Find & expose related data
- Filter unnecessary data
- Data navigation helper

People Finder

- Suggest experts/solvers
- Identify person in need of help

Scenario simulation



- Project dashboard (cost, energy, …)
- Scenarios explorer

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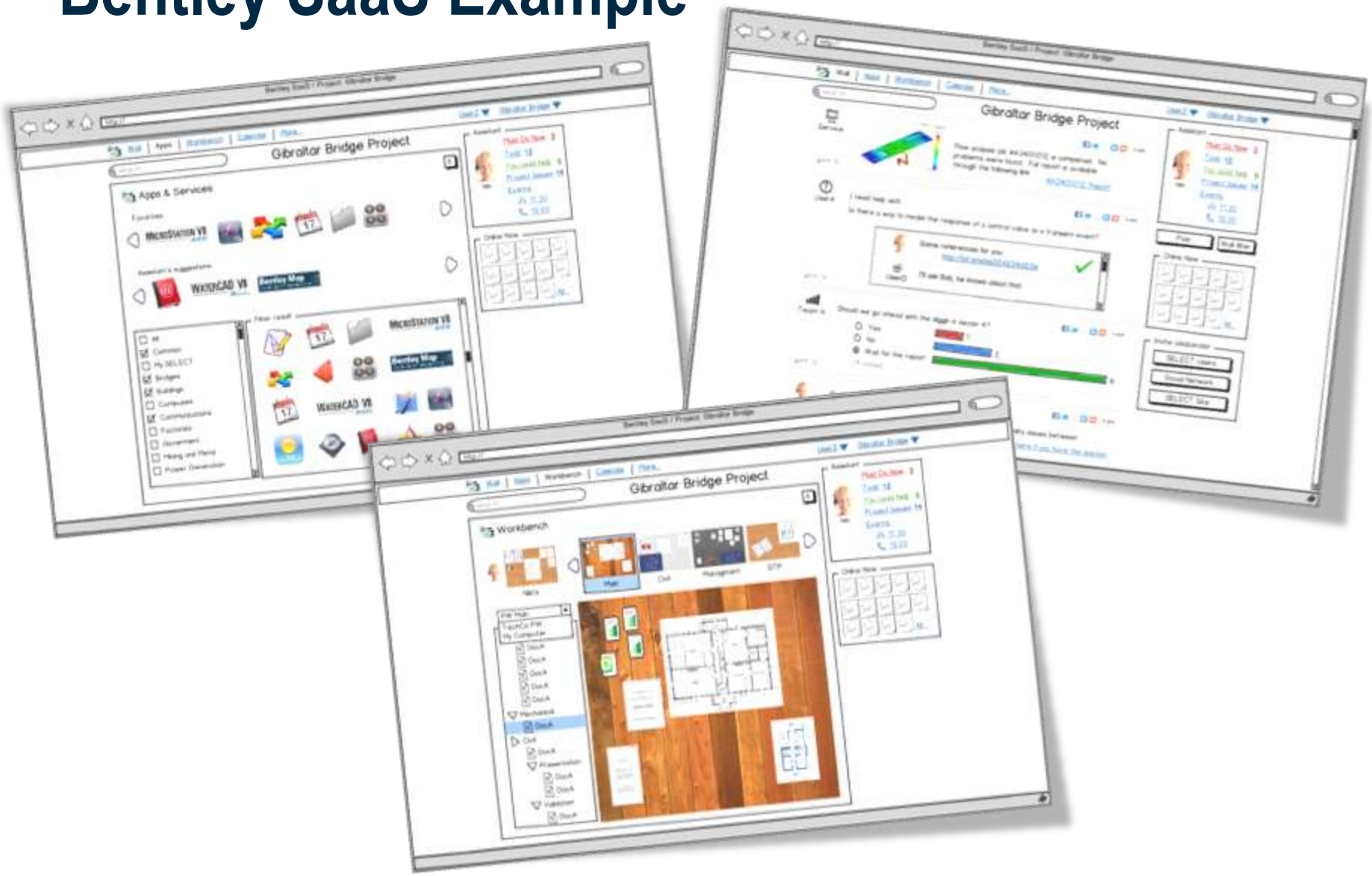
Bentley SaaS Example



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Bentley SaaS

- **Benefits for our users:**
  - **More cost effective:**
    - Really pay for just what you use, at the transactions level.
  - **Density**
    - Benefit from the fact that the density help bringing the cost down.
  - **Scalability**
    - Scalability at its best, can be on-the-fly.
  - **Specialized services**
    - Can have access to very specialized services instead of deploying big servers and using only a small percentage.

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amazon web services™

Questions?

Azure

Bentley Announces Relationship With Microsoft on Azure

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