

# 21Q1 Operating Results...

Greg Bentley, CEO

May 11, 2021

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*Press Release*

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1-610-458-3170

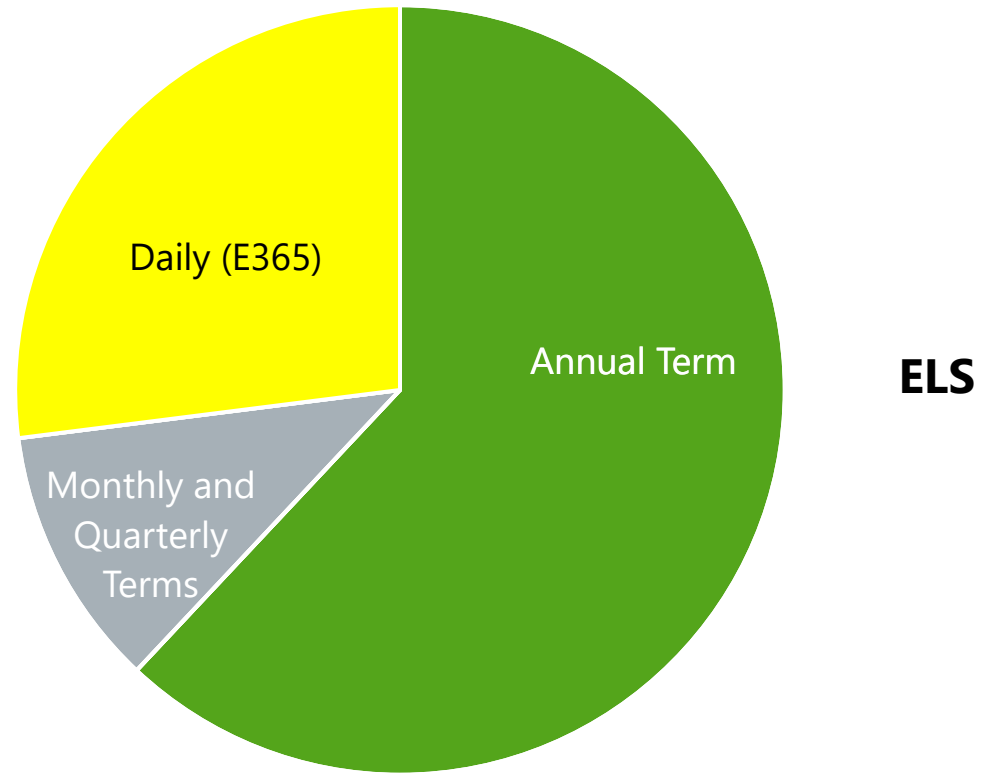
## Bentley Systems Announces First Quarter 2021 Operating Results

EXTON, Pa. (May 11, 2021) Bentley Systems, Incorporated (Nasdaq: BSY) (“Bentley Systems” or the “Company”), the *infrastructure engineering software* company, today announced operating results for its quarter ended March 31, 2021.

### First Quarter 2021 Financial Results:

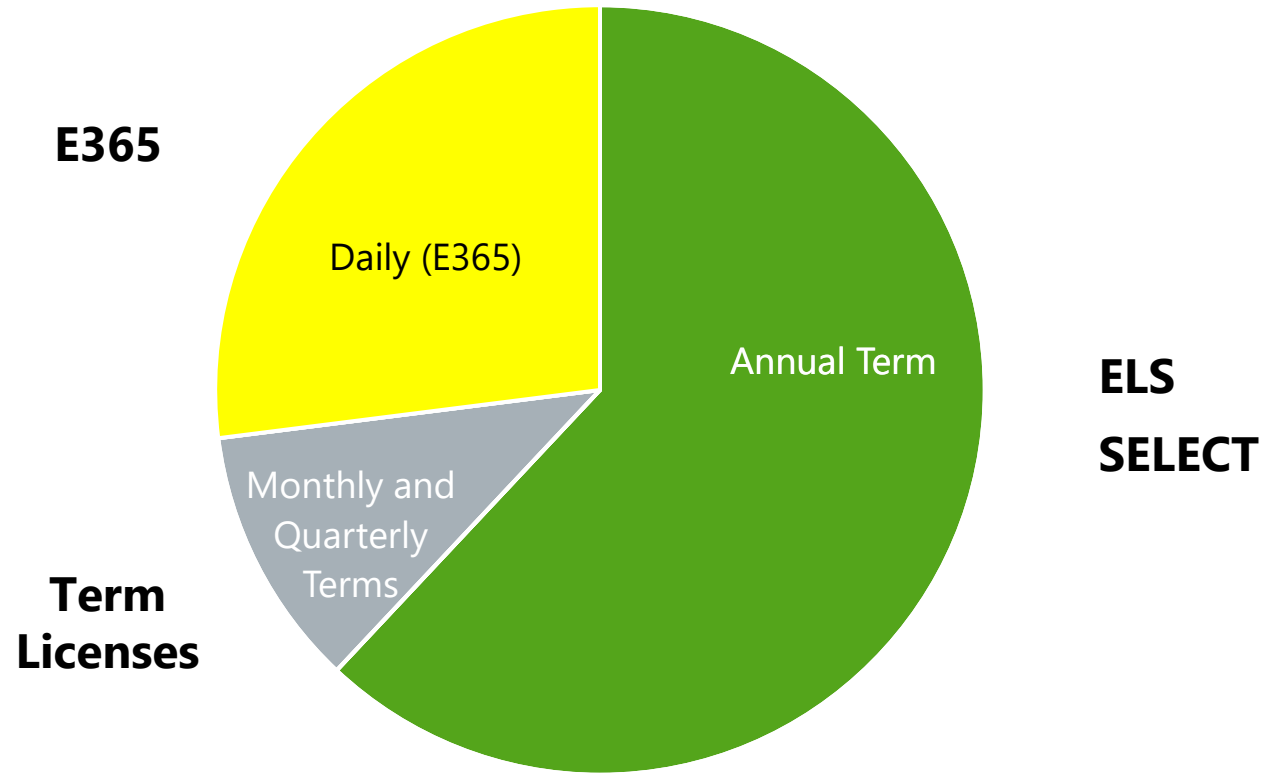
- *Total revenues* were \$222.0 million, up 14.0% year-over-year;
- *Subscriptions revenues* were \$188.1 million, up 10.5% year-over-year;
- *Last twelve-month recurring revenues* were \$716.9 million, up 10.7% year-over-year;
- *Last twelve-month recurring revenues dollar-based net retention rate* was 107% (calculated under Topic 606), compared to 109% (calculated under Topic 605) for the same period last year;
- *Last twelve-month account retention rate* was 98% (calculated under Topic 606), compared to 98% (calculated under Topic 605) for the same period last year;
- *Annualized Recurring Revenue (“ARR”)* was \$760.2 million as of March 31, 2021, representing a *constant currency ARR growth rate of 10% from March 31, 2020*;

## ARR by Consumption Model



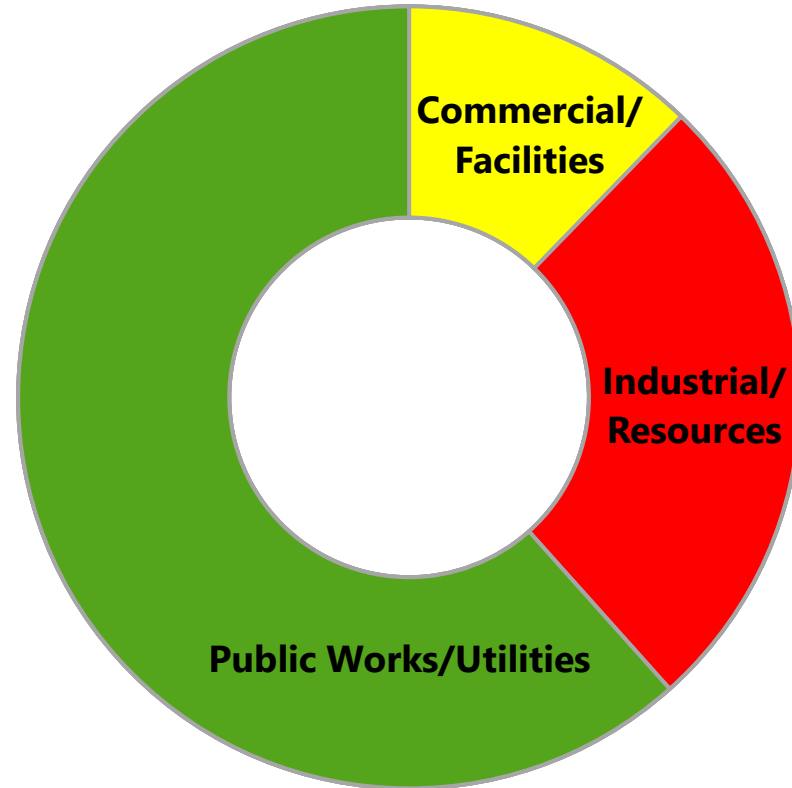
As of March 31, 2021

# ARR by Consumption Model

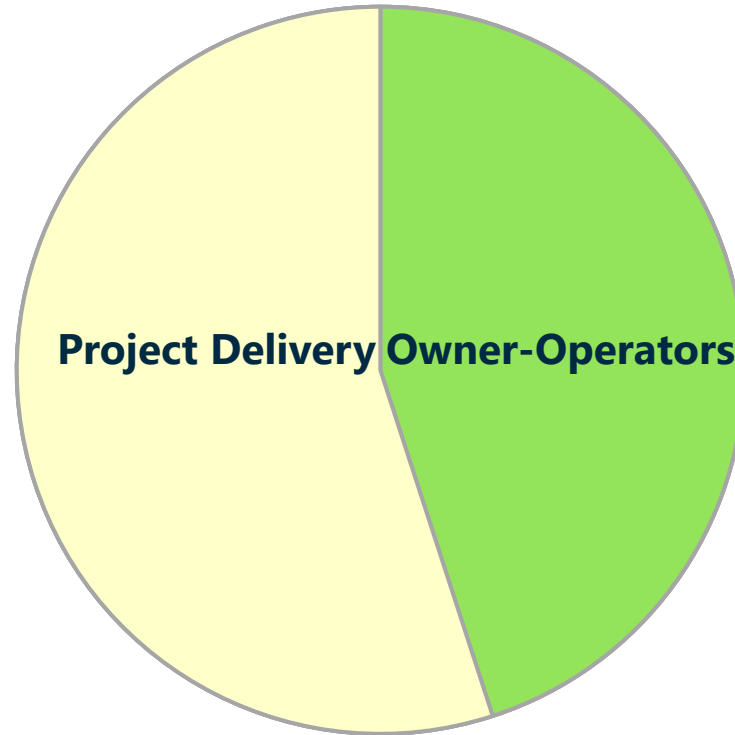


As of March 31, 2021

# 2021 to Date...

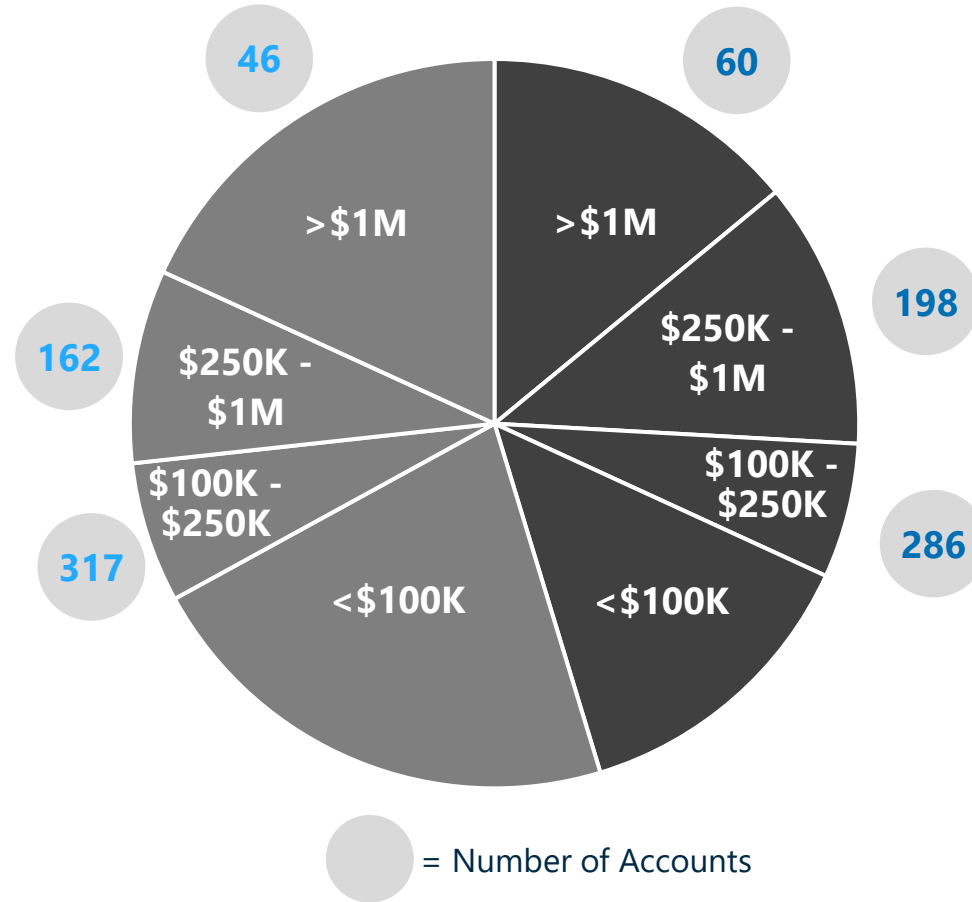


## Revenues by *Account Type*



# Comprehensiveness Wins! Revenues by Account Type and Size

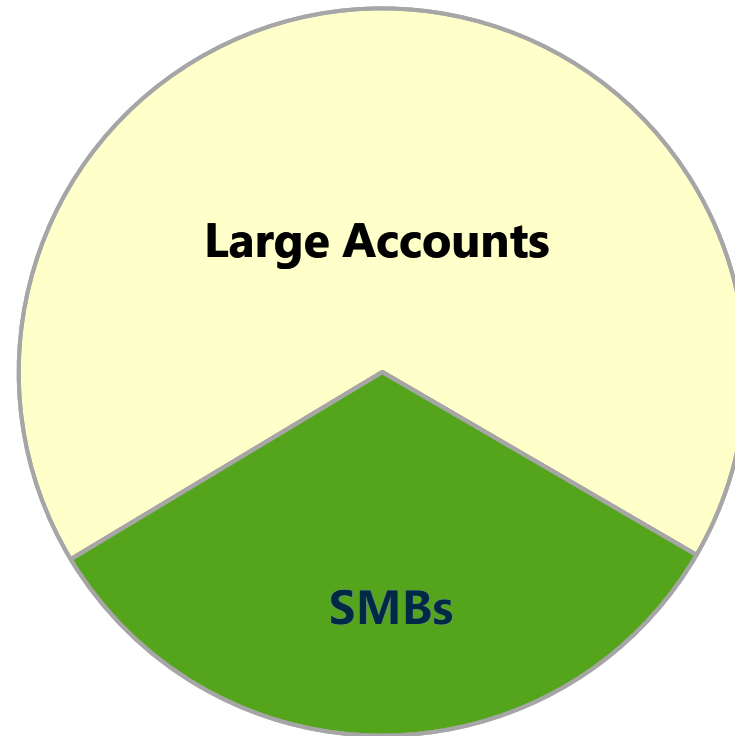
No account > 2.5%



Note: All figures as of Dec 31, 2020. All figures calculated using ASC 606. Chart segment sizing corresponds to underlying % of 2020 Revenue.

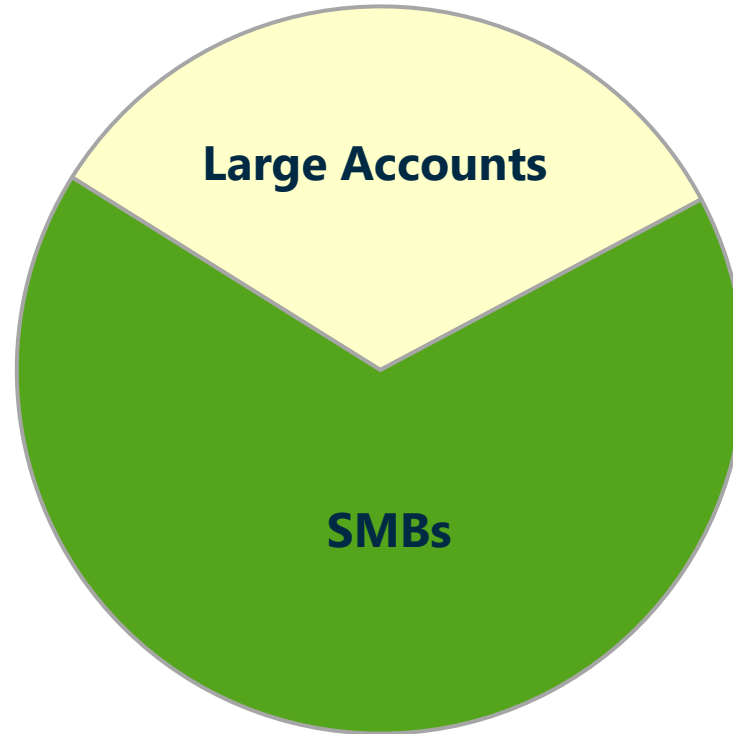


## Revenues by *Account Size*



*Note: All revenue and account figures as of Dec. 31, 2020. All figures calculated using ASC 606. Chart segment sizing corresponds to underlying % of 2020 Revenue.*


## 21Q1 New Business Growth by *Account Size*





# Welcome to Virtuosity: Bentley's **eStore** for Small Businesses

*Affordable Bentley software bundled with customizable training and support*





Browse by Project 

Show all products



## RAM

Structural analysis building software

-  Design and analyze concrete and steel buildings
-  Comply with international standards
-  Perform design checks
-  Interoperate with other applications







[More about RAM](#) →



## STAAD

Structural analysis and design software



-  Design using any material
-  Save time with automation
-  Automatically convert your model into an analytical model
-  Improve collaboration

[More about STAAD](#) →





## OpenBridge

Bridge design and analysis software

-  Model, design, and analyze steel and concrete bridges
-  Generate project deliverables
-  Integrate roadway geometry and topography
-  Perform construction sequence investigation



[More about OpenBridge](#) →

Hi, Looking for the right solution for your project?





*Press Release*

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## **Bentley Systems Announces New *Bentley Education* Program, Putting Students on the Path to Infrastructure Careers**

*Students and Educators Entitled to Learning Licenses at No Cost!*

EXTON, Pa. – May 3, 2021 – Bentley Systems, Incorporated, (Nasdaq: BSY), the *infrastructure engineering software* company, today announced the Bentley Education program, which encourages the development of future infrastructure professionals for careers in engineering, design, and architecture. The Bentley Education program is initially available in the United Kingdom, Australia, Singapore, Ireland, and Lithuania, with plans to expand to the United States, Canada, Mexico, Latin America, and India by mid-summer. The program's student and educator entitlements allow no-cost learning licenses for Bentley infrastructure engineering applications and proven learnings through the new Bentley Education portal. Students and educators from around the globe can register on the Education portal and connect to infrastructure organizations and resources to prepare for and to recruit for infrastructure engineering careers. Bentley also announced the *Future Infrastructure Star Challenge 2021*.

The Bentley Education portal provides a single source for an on-demand, frictionless, and fun experience for students as they build and enhance their digital design skills. Students and educators have access to comprehensive resources, including:

- insights from leading AEC professionals, sharing what the industry has to offer students and what skills are in high demand;
- the latest news and emerging trends in architecture, engineering, and construction; and

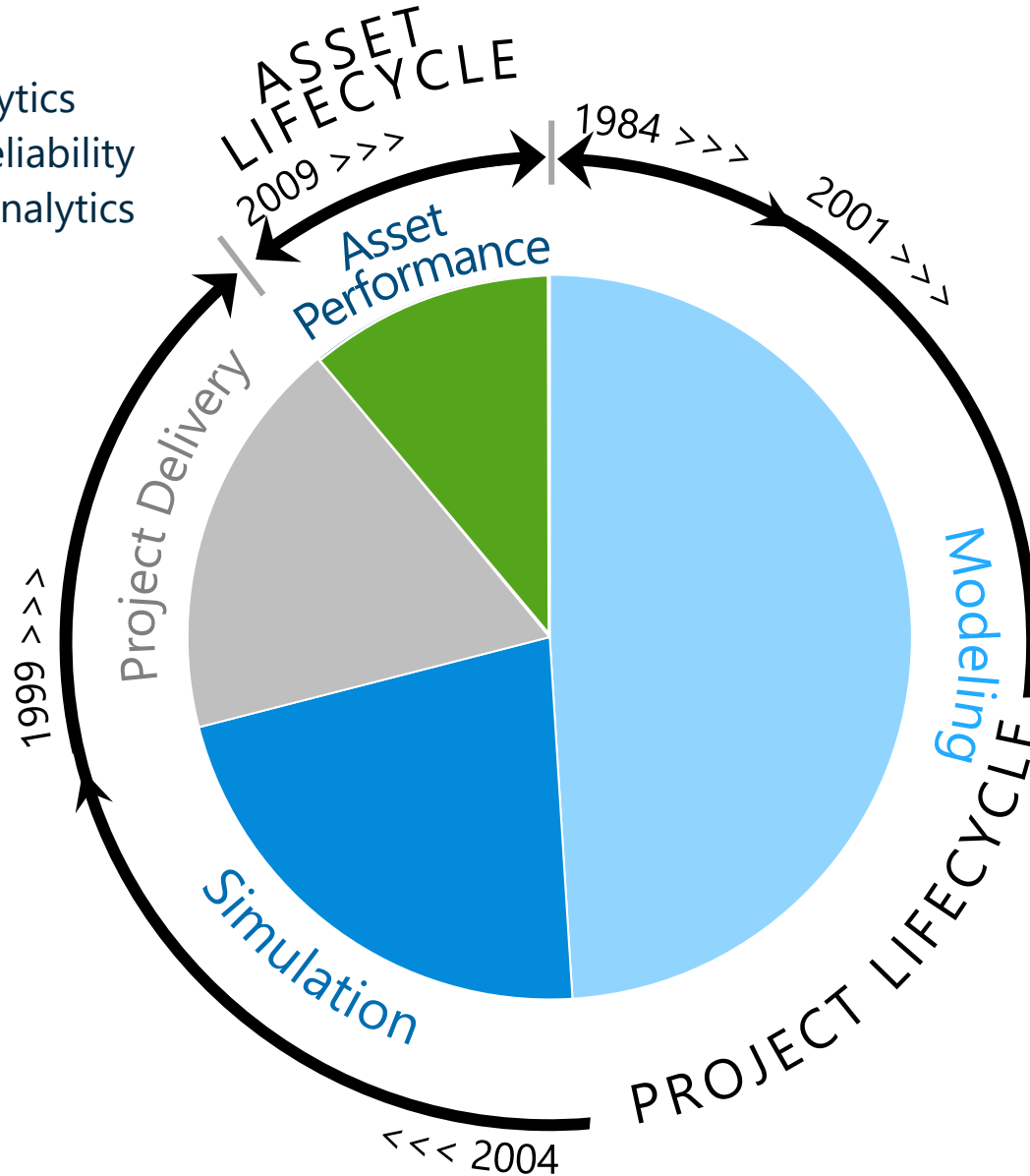


# Bentley Education



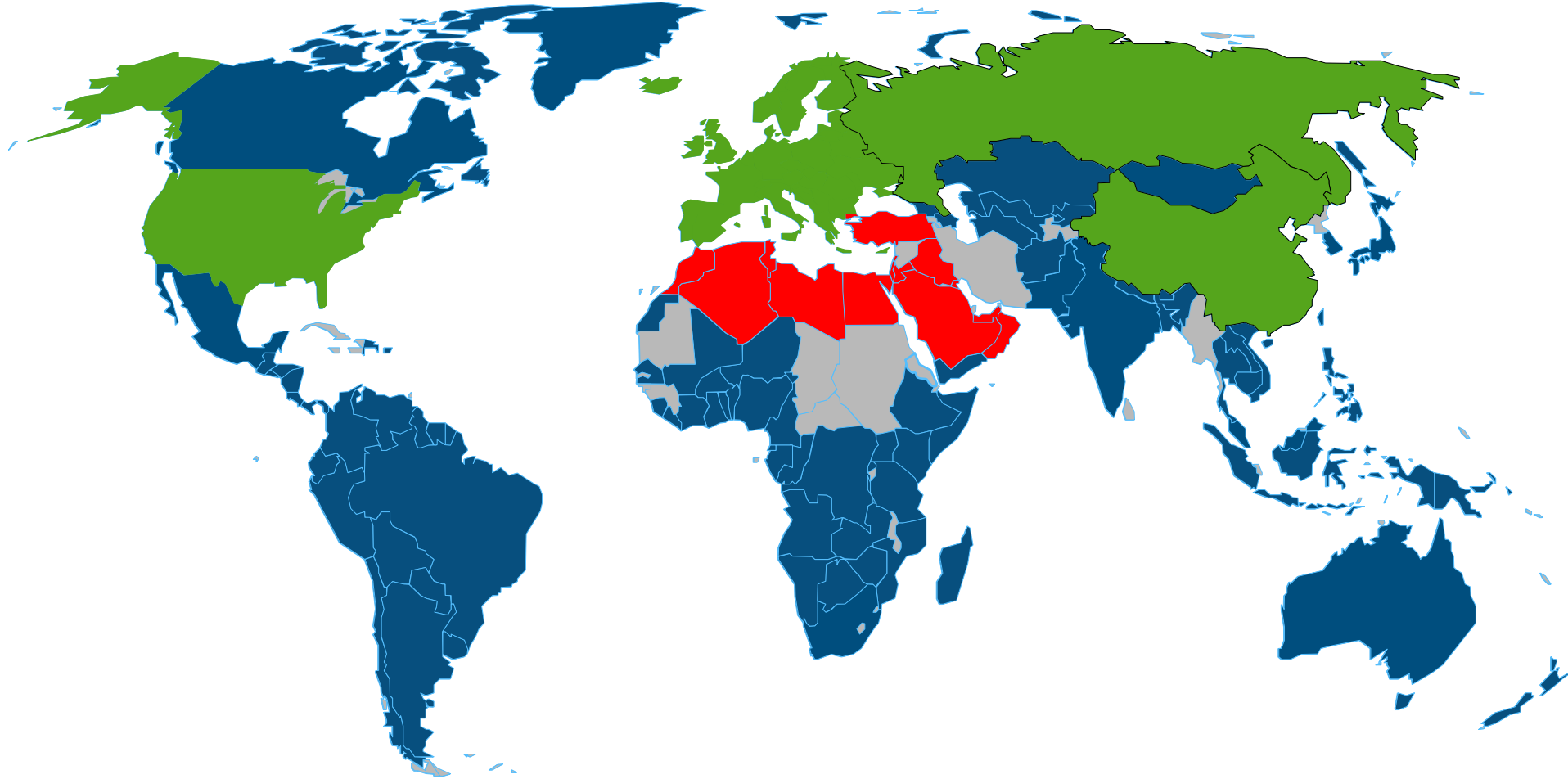
# Revenues by Infrastructure Lifecycle: 21Q1 Subscription Revenue Growth

- AssetWise ALIM
- AssetWise 4D Analytics
- AssetWise Asset Reliability
- AssetWise Linear Analytics
- SUPERLOAD
- **ProjectWise**
- **ProjectWise 365**
- SYNCHRO
- STAAD
- RAM
- **PLAXIS**
- LEAP
- LEGION
- CUBE
- SITEOPS
- SACS
- MOSES
- AUTOPIPE



- MicroStation
- OpenPlant
- OpenBuildings
- **OpenRoads**
- **OpenRail**
- **OpenSite**
- **OpenBridge**
- OpenFlows
- OpenUtilities
- OpenCities
- OpenTower
- OpenWindPower

## Comprehensiveness Across Geographies: 21Q1 Subscription Revenue Growth



*Note: \$ Amounts are revenues in millions, based on 2019 ASC 606.*

# 21Q1 Operating Results...

# Corporate Developments





News Release

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## The Cohesive Companies Announce the Acquisition of Ontracks Consulting, Leading North American Implementer of IBM Maximo

*Combination Creates a Maximo Implementation Center of Excellence and Leading Digital  
Integrator of Infrastructure Digital Twins*

EXTON, Pa. – **March 30, 2021** – The Cohesive Companies, a wholly owned but independently operated digital integrator business unit of Bentley Systems, Incorporated (Nasdaq: BSY), the *infrastructure engineering software* company, today announced the acquisition of Ontracks Consulting, a leading implementer of IBM Maximo headquartered in Edmonton, Alberta, Canada. Ontracks specializes in strategic asset management and operational performance improvement for asset-intensive organizations in energy, utilities, transportation, mining, manufacturing, and government.

The Cohesive Companies address growing demand for enterprise asset management (EAM) and asset lifecycle information (ALIM) environments, leading the way to performance digital twins for public works and industrial/resources infrastructure. The acquisition of IBM Platinum Business Partner Ontracks, joining Cohesive Solutions and SRO Solutions, adds strength and depth to The Cohesive Companies' already significant Maximo business.

Asset-intensive organizations need new ways to ramp up their traditional requirements for safety and reliability while improving agility and keeping their costs low. Emerging technologies, leveraging digital twins and the Internet of Things (IoT), are helping to identify and manage asset reliability risks, minimize unplanned downtime, maximize equipment lifespan, and optimize productivity. Ontracks is a leader in providing infrastructure owner-operators enterprise asset management expertise to address these opportunities.

Ontracks offers extensive experience integrating data from varied sources, such as IoT sensors, operational technology (OT) systems, and enterprise resource planning (ERP) systems. Client organizations depend on Ontracks to help deploy Maximo, which leverages industry best practices and decreases overall cost of



## ONTRACKS

An IBM Maximo Platinum Business Partner

We strive to understand your business and processes. A solution may look perfect on paper, yet during the implementation of Maximo, you may face problems with adoption, integration, and scalability.

By gaining a thorough understanding of your organization, Ontracks will design and implement a Maximo configuration that fits with your culture and that delivers the greatest value and return.

News Release

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## Bentley Acceleration Initiatives Acquires Indian Project Controls Specialist Nadhi Information Technologies

*To Help Infrastructure Projects in Asia Manage Risks and Avoid Delays, Meet Demand for New Construction*

EXTON, Pa. – April 27, 2021 – Bentley Acceleration Initiatives today announced the acquisition of Chennai, India-based Nadhi Information Technologies Pvt. Ltd., a specialist in project controls, analytics, and decision support for construction supply chains. Nadhi serves some of India's leading construction sector participants, including contractors Larsen & Toubro and Kalpataru Power Transmission Ltd., real estate developers Mahindra Lifespaces and RMZ, and owner-operators DMRC (Delhi Metro) and Welspun Enterprises. Founded in 2008, Nadhi was incubated in the IIT Madras Research Park with advisors from the IIT Madras Building Technology and Construction Management faculty and the Lean Construction Institute.

Bentley Acceleration Initiatives is the internal incubator for strategic investments of Bentley Systems (Nasdaq: BSY), the infrastructure engineering software company. Its objective is to bring together ecosystem partners in digital co-ventures. Nadhi brings to Bentley a critical mass of field-experienced professionals in construction automation, attuned to their region's specific challenges and project dynamics. The acquisition strengthens Bentley's focus on Asia, which is experiencing huge demand for new construction of infrastructure and has a keen appetite for digital workflows to help address this need. According to Fitch Solutions Country Risk and Industry Research, while China and the U.S. will remain the two highest-value construction markets globally, India and Indonesia will rise to the third and fourth highest-value markets by 2029.

Currently, project teams in Asia are often held back by conventional construction methodologies and obstacles to public cloud deployments, experiencing delays and cost overruns because of poorly coordinated schedules and the lack of visibility into project status. Project managers are looking for a solution that helps them interconnect their data silos—spanning documents, schedules, budgets, issues and risks, resources, and materials—all in one environment.

# Bentley<sup>®</sup> Acceleration Initiatives



## nPulse Modules

nPulse offers configurable and personalizable dashboards for every role that provides each stakeholder with project and portfolio metrics based on their role and responsibility. Furthermore, nPulse automates the generation of all project-related reports. These reports can be auto-distributed to all stakeholders based on their requirement for information.

- ✓ Document Management
- ✓ Schedule Management
- ✓ Budget Management
- ✓ BOQ Management
- ✓ Material Management
- ✓ Meeting Management
- ✓ Quality Management
- ✓ Safety Management
- ✓ Sub-contractor Management
- ✓ Issue Management

# UN Sustainable Development Goals: **SDG**

## Environment, Social, and Governance: **ESG**



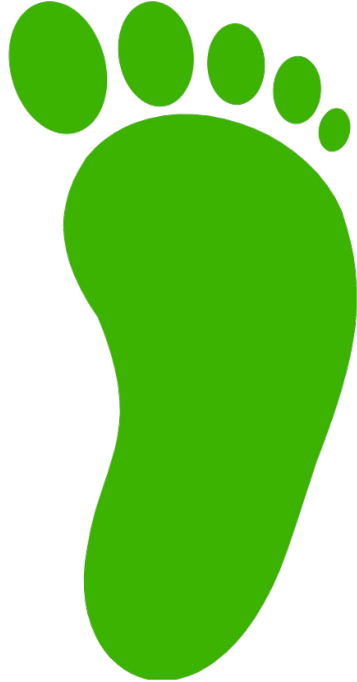


# Empowering Sustainable Development Goals: *ES(D)G*

**Bentley**<sup>®</sup>

*The Infrastructure Engineering Software Company*

## BSY's Footprint



The sustainability of  
our operations

## BSY's Handprint



The sustainability  
impact of engineers  
using our products

## BSY's Footprint



The sustainability of  
our operations

## BSY's Handprint



The sustainability  
impact of engineers  
using our products

**1** NO POVERTY



**2** ZERO HUNGER



**3** GOOD HEALTH AND WELL-BEING



**4** QUALITY EDUCATION



**5** GENDER EQUALITY




**6** CLEAN WATER AND SANITATION



**7** AFFORDABLE AND CLEAN ENERGY



**8** DECENT WORK AND ECONOMIC GROWTH



**9** INDUSTRY, INNOVATION AND INFRASTRUCTURE



**10** REDUCED INEQUALITIES



**11** SUSTAINABLE CITIES AND COMMUNITIES



**12** RESPONSIBLE CONSUMPTION AND PRODUCTION



**13** CLIMATE ACTION




**14** LIFE BELOW WATER



**15** LIFE ON LAND



**16** PEACE, JUSTICE AND STRONG INSTITUTIONS



**17** PARTNERSHIPS FOR THE GOALS



**SUSTAINABLE DEVELOPMENT GOALS**

# ES(D)G





May 4, 2021



05-04-21 | WORLD CHANGING IDEAS

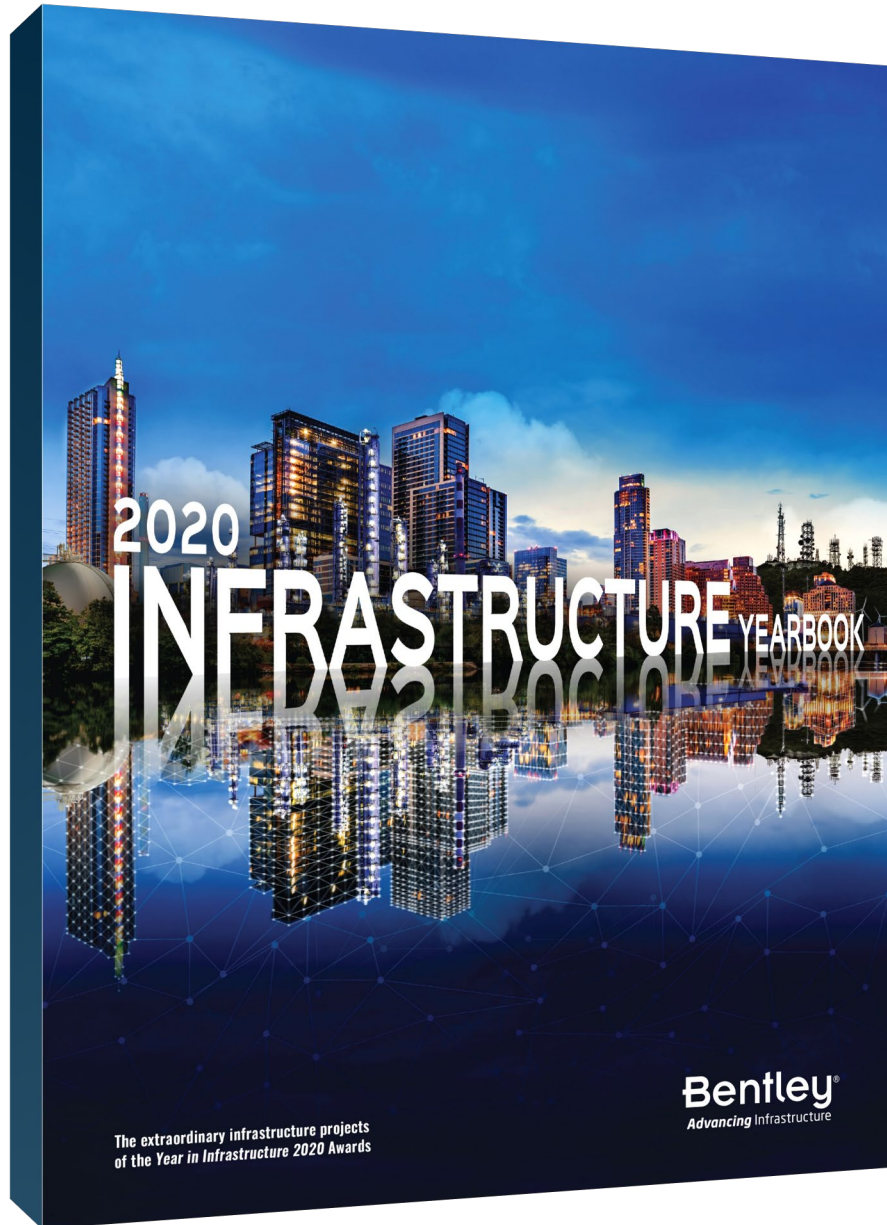
## World Changing Ideas Awards 2021: Spaces, Places, and Cities Finalists and Honorable Mentions

See the full list of honorees.



### FINALISTS

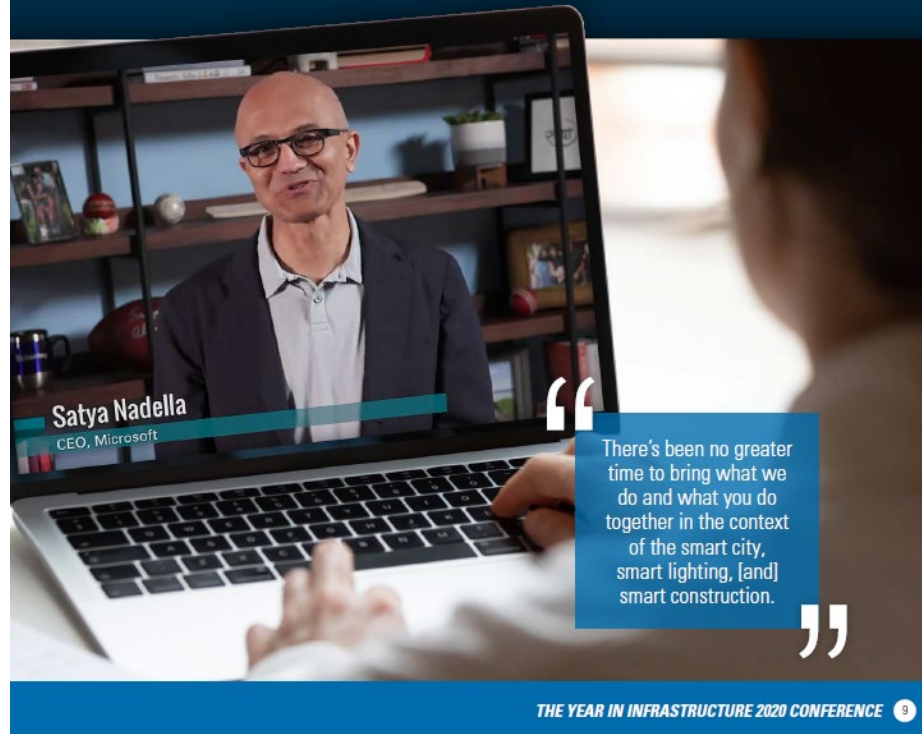
- ARCspace, [ARCspace](#)
- BuildUp2030, [Institute for Market Transformation](#)
- CoUrbanize, [CoUrbanize](#)
- **Dublin Digital Twin Project**, Bentley Systems, Microsoft, and the City of Dublin
- Epic CleanTec, [Epic CleanTec](#)
- River Ring Master Plan, [James Corner Field Operations and Bjarke Ingels Group](#)
- San Jose Emergency Housing Project, [Veeva](#)
- Tactile Mobility, [Tactile Mobility](#)
- Woodlawn Pointe, [Greenlining Realty USA](#)
- Wuhan Yangtze Riverfront Park, [Wuhan Land Resources and Planning Bureau](#)



[www.bentley.com/en/infrastructure-yearbook](http://www.bentley.com/en/infrastructure-yearbook)

## Satya Nadella Joins Greg to Discuss Ongoing Microsoft Partnership

During a brief discussion with Greg and Microsoft's CEO Satya Nadella, they talked about how they will grow their partnership, with Satya commenting, "There's been no greater time to bring what we do and what you do together in the context of the smart city, smart lighting, [and] smart construction." Greg added, "What we can do together is bring the engineering technologies (ET), what's been dark data so far, together with the IT and then the OT with Azure digital twins." Greg added that the challenge for 2020 is creating fit-for-purpose infrastructure, with digital twins providing the resilience that allows us to be prepared for potential flooding events, fires, earthquakes, and other natural disasters.



Satya Nadella  
CEO, Microsoft

“There's been no greater time to bring what we do and what you do together in the context of the smart city, smart lighting, [and] smart construction.”

THE YEAR IN INFRASTRUCTURE 2020 CONFERENCE 9

# Microsoft Ignite Developer Conference, March 2, 2021



Featured in the launch of Microsoft Mesh at Microsoft Ignite Conference March 2, 2021

Watch on YouTube:

<https://youtu.be/fobTaQx8wIQ>



#Microsoft

Reimagine bridge inspection with Azure Remote Rendering and HoloLens

Discover how Bentley Systems enables remote bridge inspection with Azure Remote Rendering and #Microsoft HoloLens. (with MNDOT and Collins Engineers)

Watch on YouTube:

<https://youtu.be/Ayz9BSAGO1k>



News Release  
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## Bentley Systems Brings Infrastructure Digital Twins to NVIDIA Omniverse

*Bentley iTwin First to Harness Real-time Rendering, AI,  
 and Simulation Capabilities of NVIDIA Omniverse*

EXTON, Pa. – GTC21 – 12 April 2021 – Bentley Systems, Incorporated (Nasdaq: BSY), the infrastructure engineering software company, today announced that it is developing applications using the NVIDIA Omniverse platform for photorealistic, real-time visualization and simulation of digital twins of massive-scale industrial and civil infrastructure projects.

Bentley Systems has extended the Bentley [iTwin platform](#) to integrate with [NVIDIA Omniverse](#) to provide a graphics pipeline for AI-enhanced, real-time visualization, and simulation of infrastructure digital twins. This integration allows engineering-grade, millimeter-accurate digital content to be visualized with photorealistic lighting and environmental effects on multiple devices including web browsers, workstations, tablets, and virtual reality and augmented reality headsets from anywhere in the world.

Bentley iTwin is an open, scalable cloud platform that enables engineering firms and owner-operators to create, visualize, and analyze digital twins of infrastructure assets. Digital information managers use it to incorporate engineering data created by diverse design tools into a living digital twin and align it with reality data, IoT data, and other associated data without disrupting their current tools or processes.

“

*We are super excited to partner with Bentley to create infrastructure digital twins in Omniverse. Bentley is the first third-party company to be developing a suite of applications on the Omniverse platform. This is just an awesome use of Omniverse, a great example of digital twins, and Bentley is the perfect partner.*”

-Jensen Huang, CEO, NVIDIA  
 GTC 2021 Conference April 12, 2021

### COLLABORATING AND SIMULATING IN OMNIVERSE



This is just an awesome use of Omniverse, a great example of digital twins and Bentley is the perfect partner.

10M DESIGNERS | 20M CREATORS | 1M SCIENTISTS | 2M DEVELOPERS | 40M ENGINEERS

News Release

Press Contact:

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### Bentley Acceleration Initiatives Launches *OpenTower iQ*, a Digital Co-venture with Visual Intelligence and Aeroprotechnik for 5G Towers

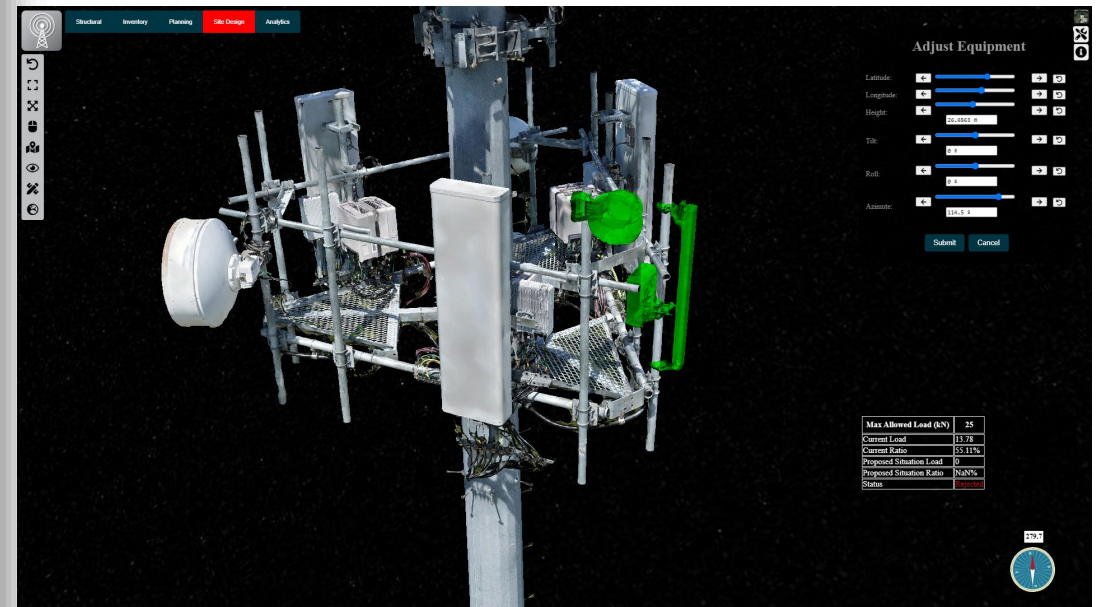
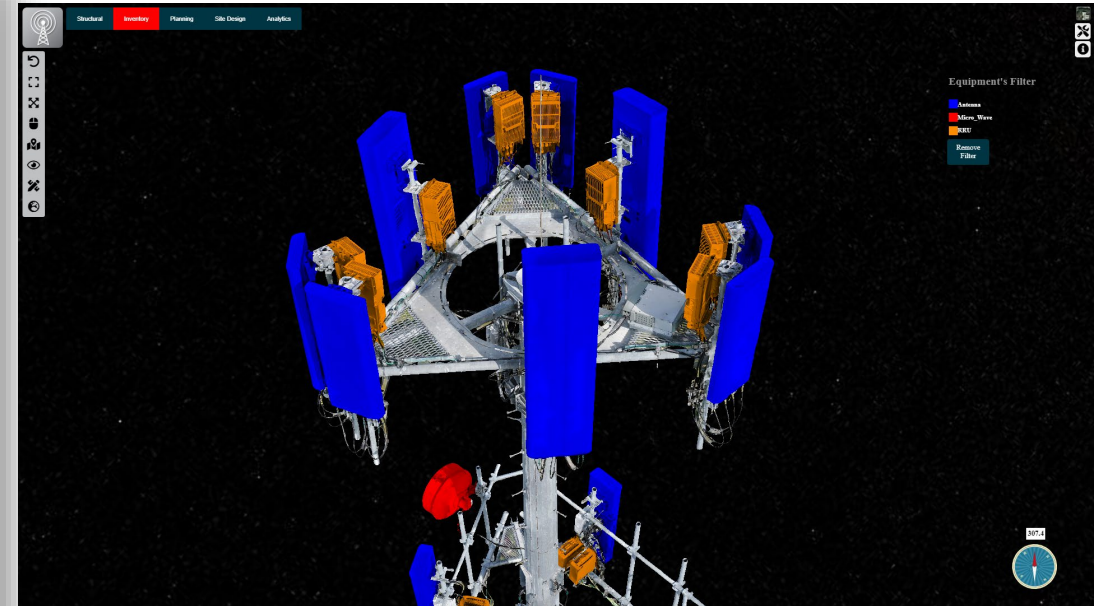
*Millimeter-accurate Digital Twin Solution Combines Patented Dual-sensor Drone Technologies and Artificial Intelligence to Help Tower Companies Accelerate Rollouts and Enhance Decision-making*

EXTON, Pa. – March 23, 2021 – Bentley Acceleration Initiatives today announced the availability of *OpenTower iQ*, a digital twin solution “powered by iTwin” for telecom towers that provides 3D visualization, real-time decision support, and predictive design from the ground up. *OpenTower iQ* is the result of a digital co-venture between Bentley and Visual Intelligence, a Houston, Texas-based sensor technology company, and Aeroprotechnik, an aerial inspection engineering company based in Viseu, Portugal.

Bentley Acceleration Initiatives is Bentley Systems’ (Nasdaq: BSY) strategic investment fund and incubator initiative. Its objective is to bring together ecosystem partners in a digital co-ventures to accelerate the go-to-market of creative cloud solutions based on the Bentley iTwin platform. *OpenTower iQ*, “powered by iTwin,” is a textbook example of co-venturing that combines innovative digital technologies from entrepreneurial companies to address a market need in double-quick time.

As the demand for data continues to grow, tower companies and engineering firms are looking for all-inclusive, engineering-grade solutions to co-locate, modify, and maintain telecom infrastructure for the 5G rollout. *OpenTower iQ* makes it easy to modify existing towers and maintain accurate models, automating the repetitive work of producing as-built models and using artificial intelligence to detect critical components.

Tower companies can use *OpenTower iQ* to monitor the health of their towers and gain access to shared, secured data through an easy-to-understand portal. Data analytics provide cost benefit analysis to boost operational efficiency and revenue assurance. Improved accuracy of tower inspections and smart inventory management saves time, cost, and improves safety. *OpenTower iQ* is designed to handle the large asset portfolios of operators, easily processing and analyzing tens of thousands of towers.



# Communications Towers' *Digital Context*

Courtesy of Visual Intelligence



# The *Digital Twins* Opportunity: Requirements and Benefits

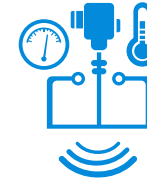
## ✓ **Digital Context** (for reality)

Continuously 4D surveyed  
to keep the Digital Twin  
"live" and evergreen

From  
Photogrammetry  
and Scans



From IoT  
Sensors



## **Bentley's Offerings**

- ✓ ContextCapture
- ✓ AssetWise Analytics
- ✓ iTwin Services

# The *Digital Twins* Opportunity: Requirements and Benefits

## ✓ Digital Context (for reality)

Continuously 4D surveyed to keep the Digital Twin "live" and evergreen

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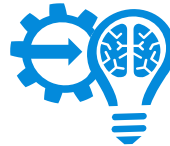
## Bentley's Offerings

- ✓ ContextCapture
- ✓ AssetWise Analytics
- ✓ iTwin Services

## ✓ Digital Components (for veracity)

Make the Digital Twin semantically rich for actionable simulation

From Machine Learning



From Engineering Models



- ✓ Open Modeling Applications
- ✓ ContextCapture Insights
- ✓ ComponentsCenter
- ✓ iModel Synchronization



# The *Digital Twins* Opportunity: Requirements and Benefits

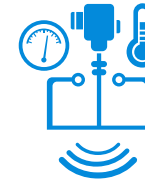
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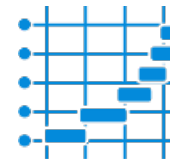


- ✓ Open Modeling Applications
- ✓ ContextCapture Insights
- ✓ ComponentsCenter
- ✓ iModel Synchronization

## ✓ Digital Chronology (for fidelity)

Use the Digital Twin to visualize change and predict future performance

From Schedules



From Observed Changes



- ✓ SYNCHRO 4D
- ✓ ContextCapture
- ✓ AssetWise APM
- ✓ iTwin Services

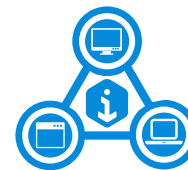
## Benefits



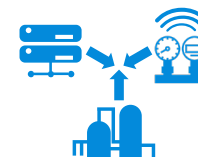
Advanced Insights



Predictive Analytics



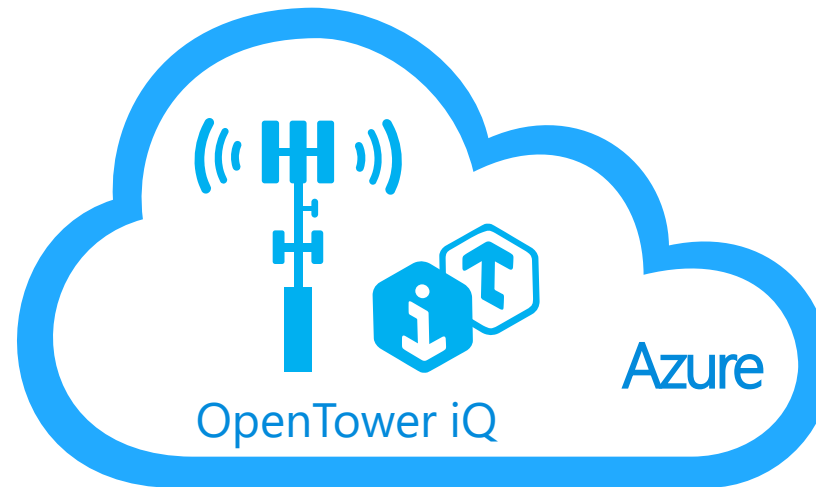
Comprehensive Design Review



ET / IT / OT Convergence

- ✓ iTwin Design Review
- ✓ iTwin Services
- ✓ iModel.js Open Source

# Infrastructure Digital Twins: *Communications Towers*

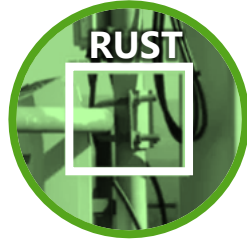


**IT: Information Technology**  
*Digital Chronology*

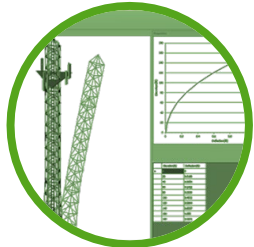
# Infrastructure Digital Twins: *Communications Towers*



Machine Learning  
Classification of  
Equipment



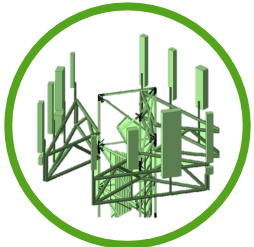
Machine Learning  
Inspection/Detection  
of Defects



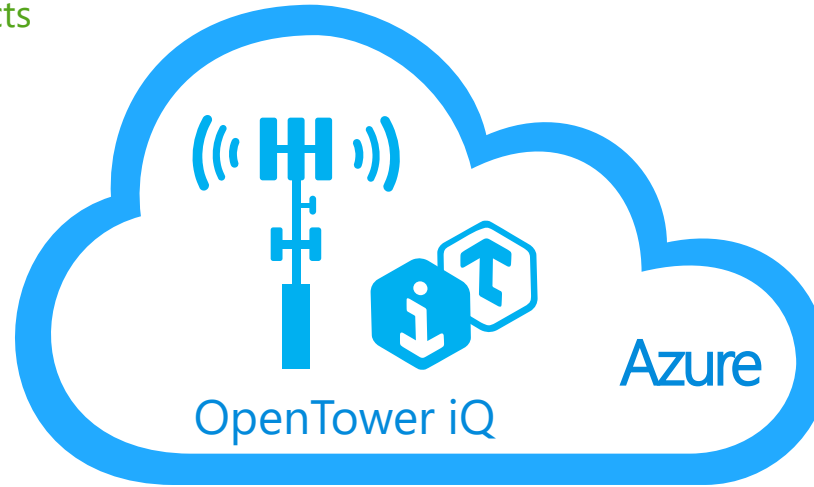
Structural  
Engineering Model



OpenTower  
Designer



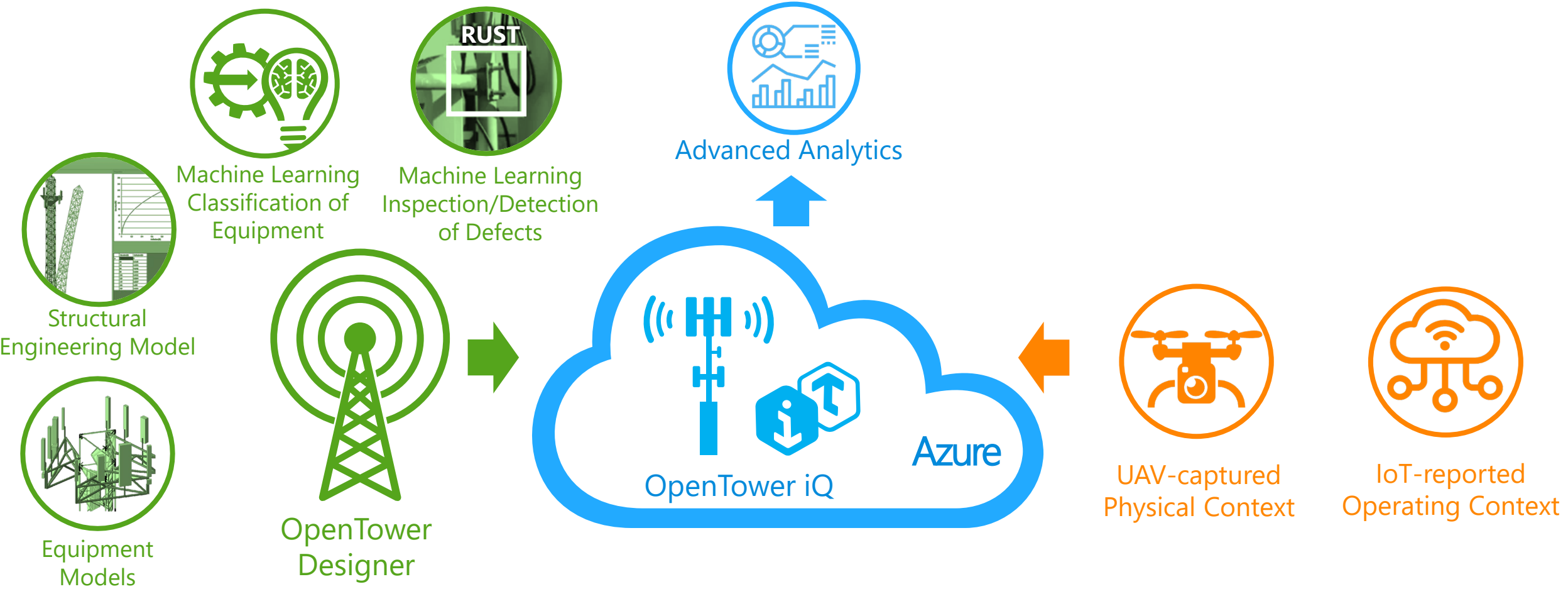
Equipment  
Models



**ET: Engineering Technology**  
*Digital Components*

**IT: Information Technology**  
*Digital Chronology*

# Infrastructure Digital Twins: *Communications Towers*

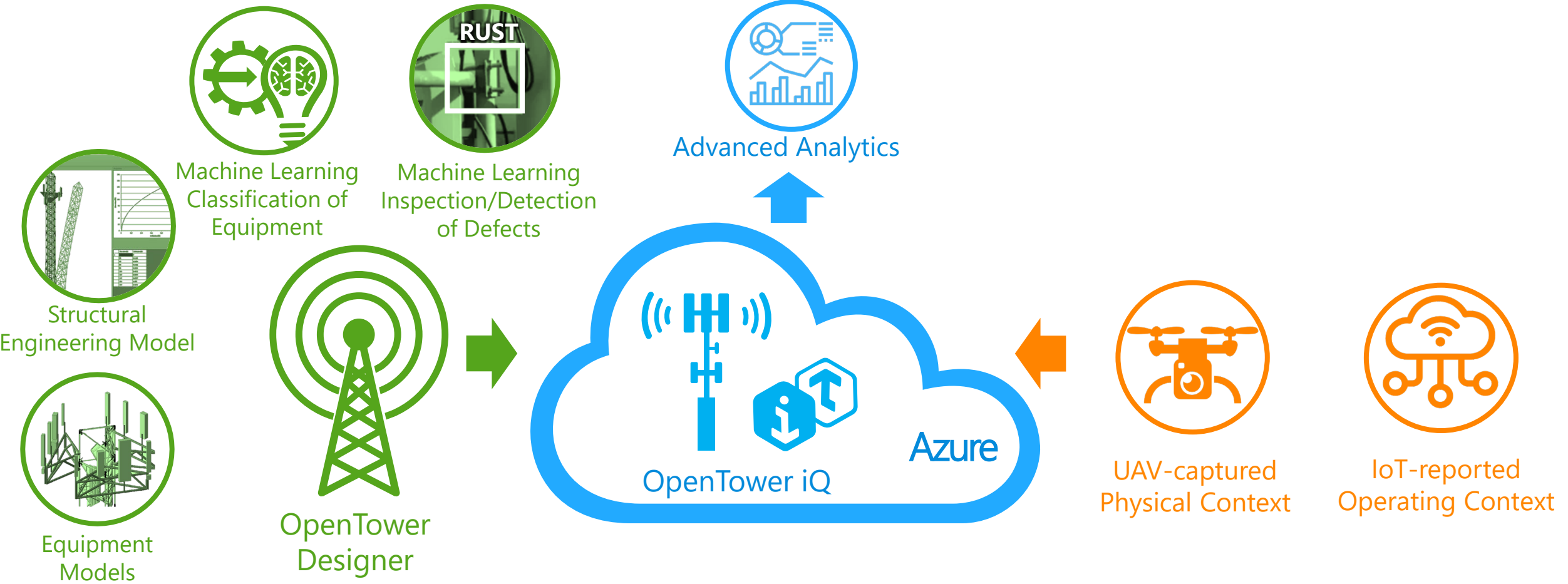


**ET: Engineering Technology**  
*Digital Components*

**IT: Information Technology**  
*Digital Chronology*

**OT: Operational Technology**  
*Digital Context*

# IIoT



**ET: Engineering Technology**  
*Digital Components*

**IT: Information Technology**  
*Digital Chronology*

**OT: Operational Technology**  
*Digital Context*

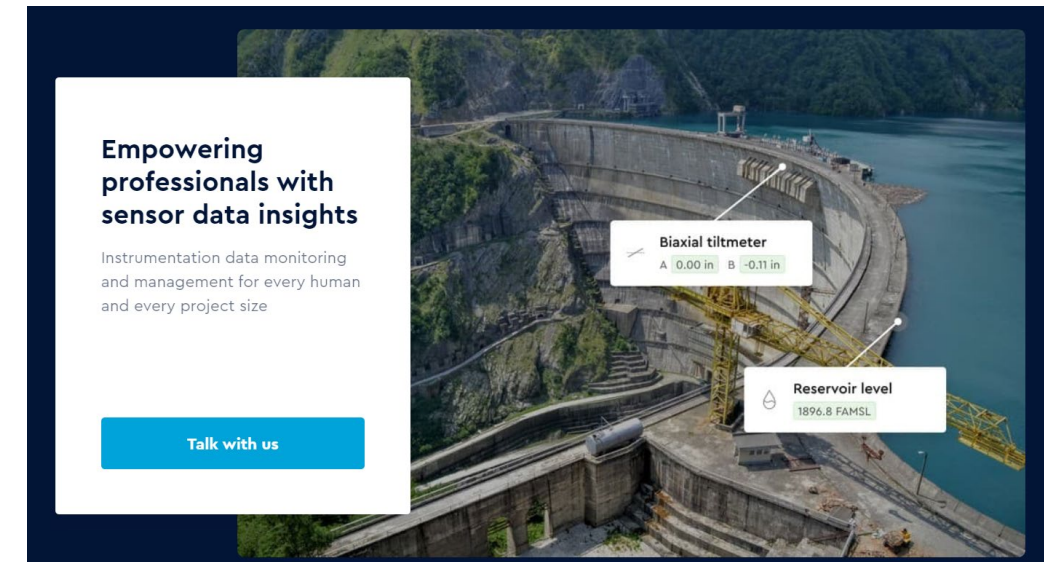
News Release  
Press Contact:  
Christine Byrne  
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Follow us on Twitter:  
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**Bentley Systems Announces Acquisitions of *sensometrics* and *Vista Data Vision*, Leaders Respectively in Software for Infrastructure Instrumentation and Sensor Management**

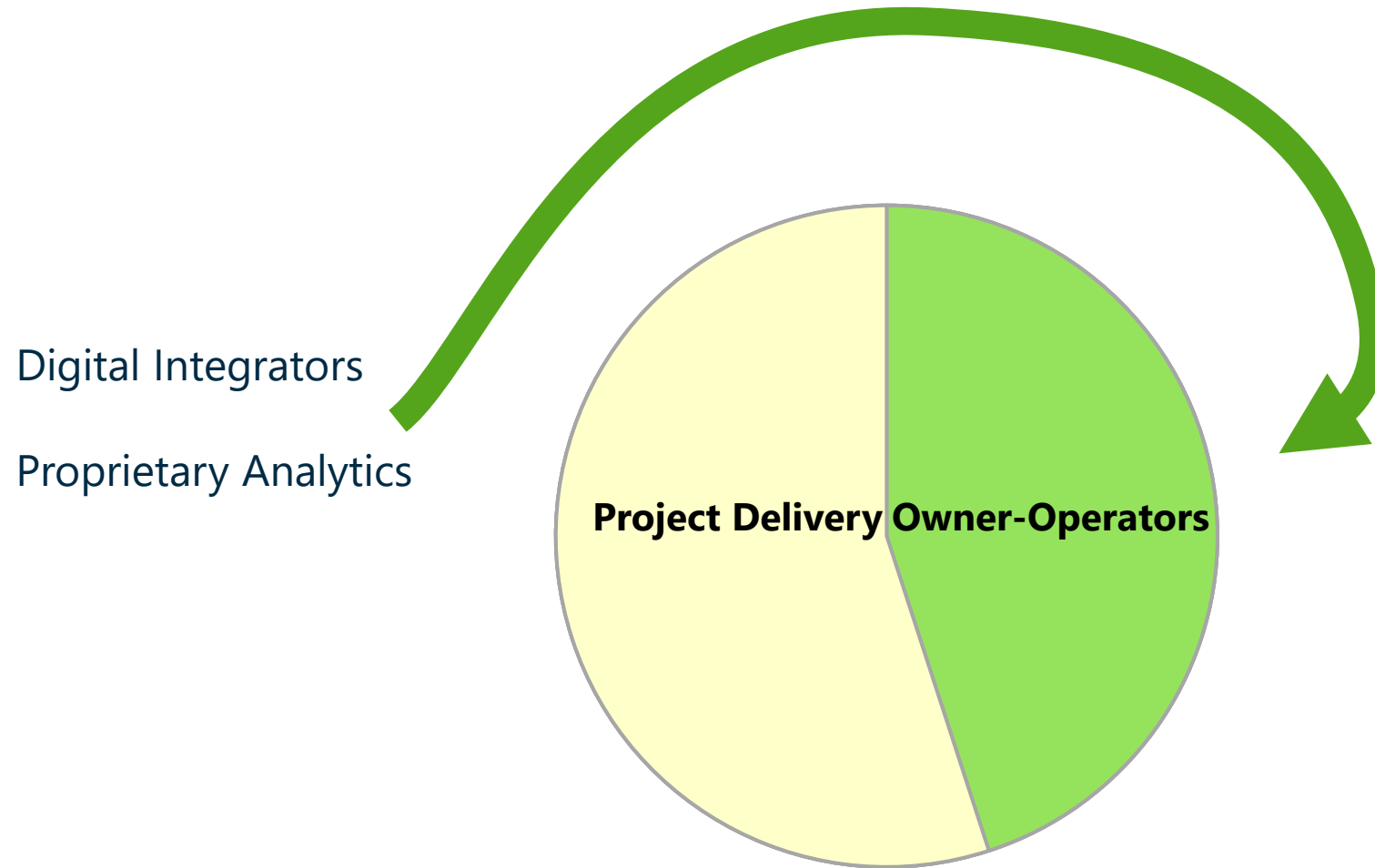
To Accelerate the “Infrastructure IoT” Opportunity, for Living Digital Twins!

EXTON, Pa. - April 29, 2021 - Bentley Systems, Incorporated (Nasdaq: BSY), the infrastructure engineering software company, today announced its acquisitions of sensometrics (agreement executed) and Vista Data Vision (closed), leading providers of software for Internet of Things (IoT) applications used extensively in infrastructure. sensometrics and Vista Data Vision will expand the scope of the Bentley iTwin platform to add intrinsic IoT capabilities for infrastructure digital twins to incorporate real-time sensor data. By virtue of the resulting “infrastructure IoT” standardization, the full IoT ecosystem will finally be seamlessly accessible for IT/OT/ET integration, through infrastructure digital twins, to advance asset performance and to mitigate environmental risks.

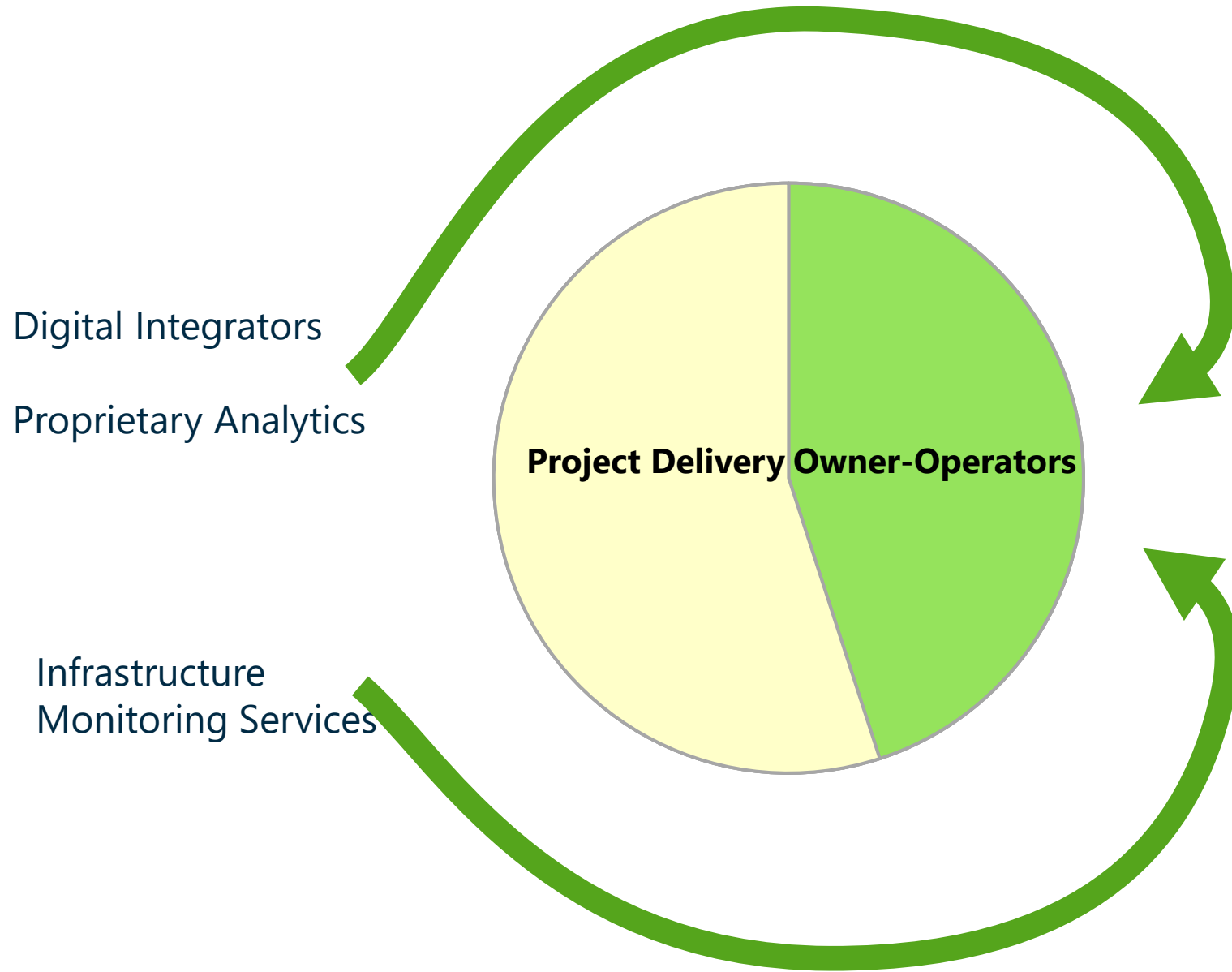
Geotechnical engineering firms, land surveyors, and civil and structural engineering firms, and asset owner-operators in mining, transportation, and utilities apply sensometrics and Vista Data Vision offerings for geological, geotechnical, structural, and environmental monitoring including in heavy civil construction, mines, tunnels, dams, and for water resources. sensometrics and Vista Data Vision support interfaces to hundreds of different sensor devices and related data types, including robotic total stations, inclinometers, piezometers, strain gauges, crack meters, tilt meters, extensometers, anemometers, and for vibration data, pressure cells, temperature, solar insolation, precipitation, water quality, and air quality.



## Revenues by Account Type: *Digital Twin Opportunities*



# Revenues by Account Type: *Digital Twin Opportunities*



Digital Integrators

Proprietary Analytics

**Project Delivery Owner-Operators**

Infrastructure  
Monitoring Services





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Markets

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# Build Better. Together.

## SOLVE CHALLENGES

presented by the earth, water and the environment, through technical expertise in:

- Geotechnical
- Dams
- Tunnels
- Geostructural
- Geoscience
- Construction
- Environmental
- Risk

[LEARN MORE](#)

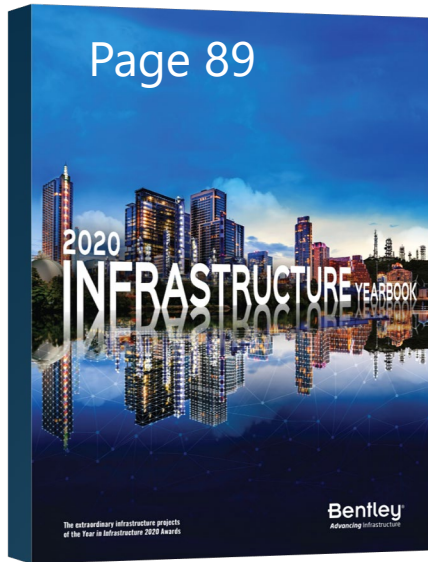
## ADVANCE YOUR CAREER

through teamwork, problem solving and the benefits of an employee-owned company.

- Career Opportunities
- Employee Benefits

[JOIN OUR TEAM](#)

# Infrastructure Digital Twins: *Earthen Dams*



## 2020 Finalist: Geotechnical Engineering

Oroville Dam, Tallest Earthen Embankment Dam in the United States, 3D Seepage and Stability Analysis

HDR Engineering

[www.bentley.com/en/infrastructure-yearbook](http://www.bentley.com/en/infrastructure-yearbook)



### FINALIST

#### Oroville Dam, Tallest Earthen Embankment Dam in the United States, 3D Seepage and Stability Analysis

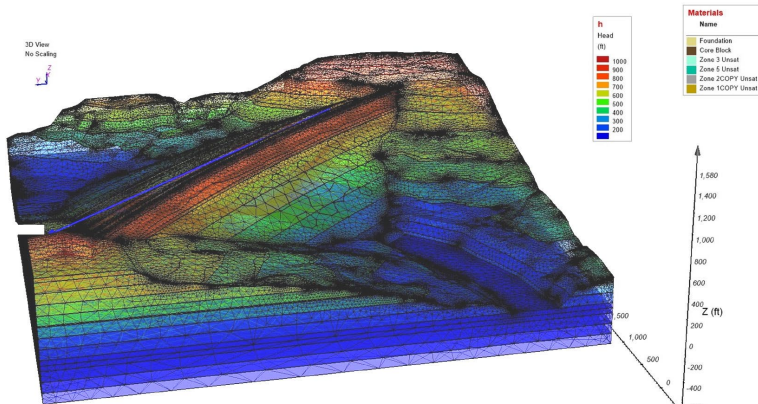
HDR Engineering | Oroville, California, United States

Oroville Dam is the tallest earth dam in the United States, rising up to 770 feet, and is the key element in California's State Water Project. The dam is almost 40 years old, however, and the last two five-year inspections resulted in recommendations for an improved seepage monitoring program. HDR Engineering was tasked with developing that program and, due to the dam's height and steep embankment, they realized traditional design methods would not be the most comprehensive options available.

HDR Engineering chose SOILVISION (now PLAXIS Designer and PLAXIS LE) to help develop a detailed 3D model to conduct thorough seepage and stability analysis of the dam. Using a "layered cake" approach, they converted the model and developed surface meshes. With SOILVISION, they incorporated foundation topography and valley effects into the seepage analysis for more accurate calculations. HDR Engineering developed a mesh that contained 407,561 nodes and 222,930 elements, which is an extremely large mesh for a complicated internal zoned dam. With this scalable 3D model, they are now able to monitor the dam's seepage level with advanced analysis to comply with regulations. **Project Playbook:** ProjectWise, SOILVISION

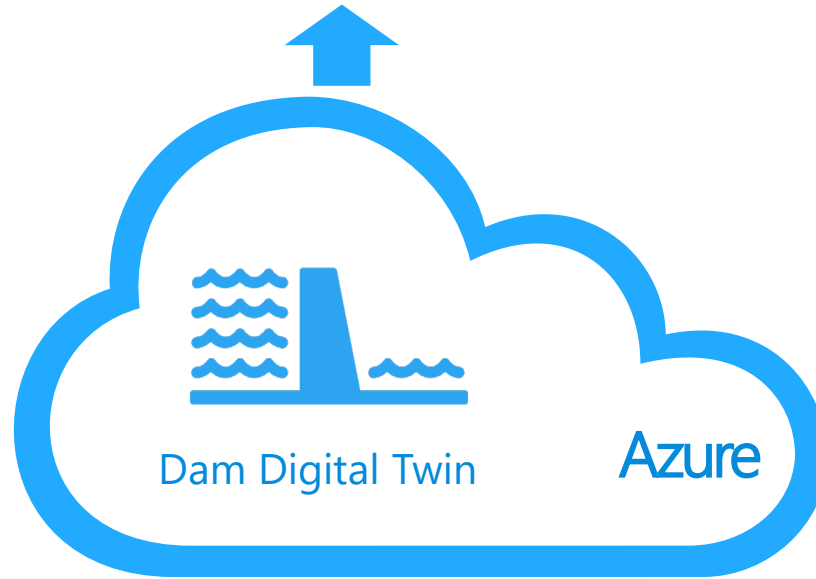
# Infrastructure Digital Twins: *Earthen Dams*

Image Courtesy of HDR (Oroville Dam)



PLAXIS

**ET: Engineering Technology**  
*Digital Components*



**IT: Information Technology**  
*Digital Chronology*

Image Courtesy of HDR (Oroville Dam)

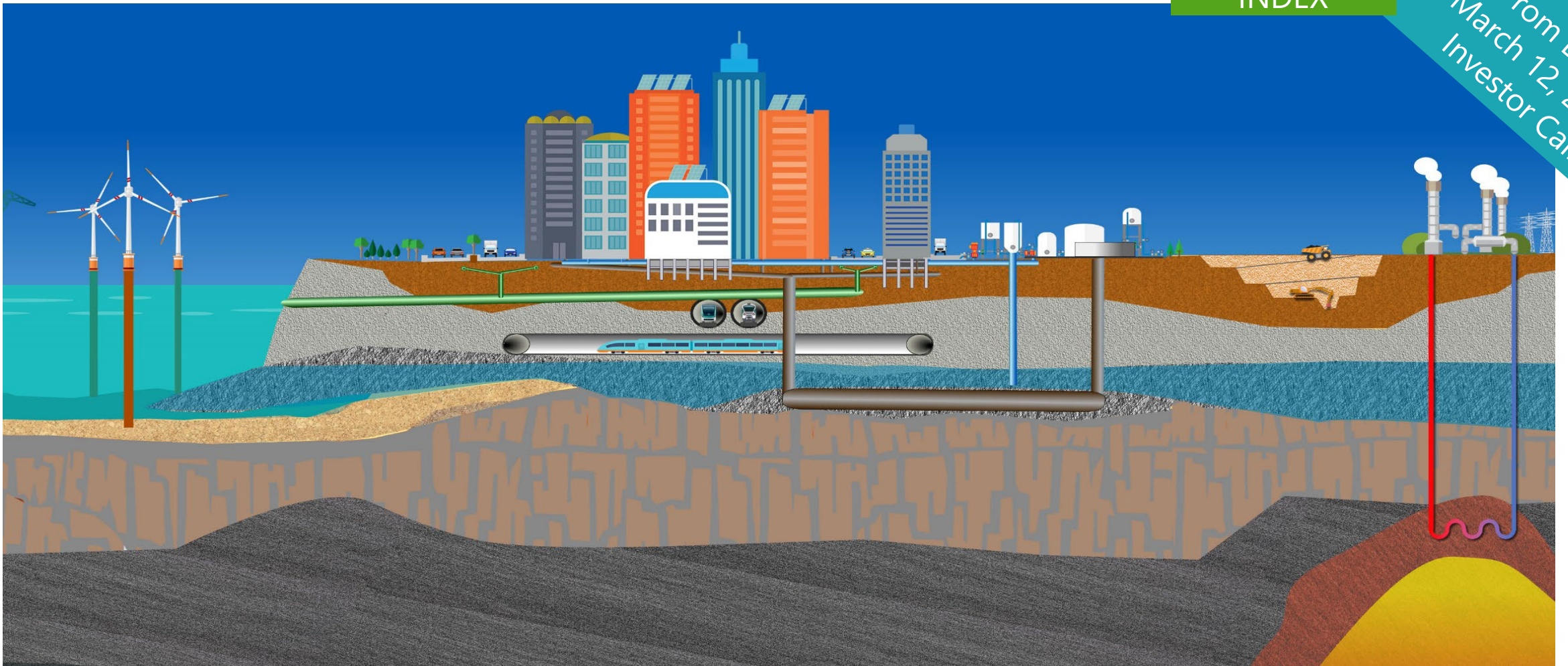


UAV-captured  
Physical Context



IoT-reported  
Condition Context

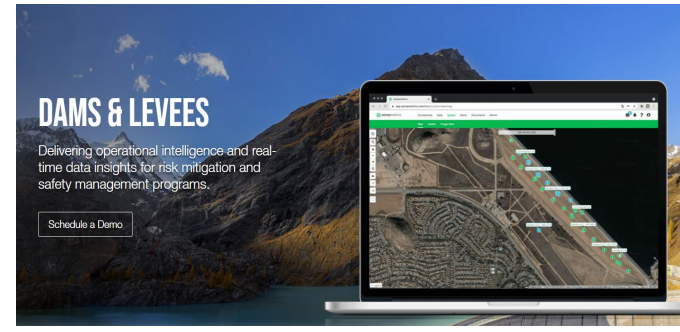
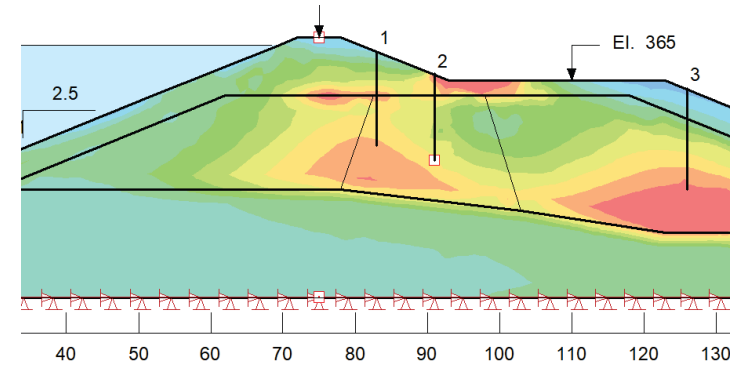
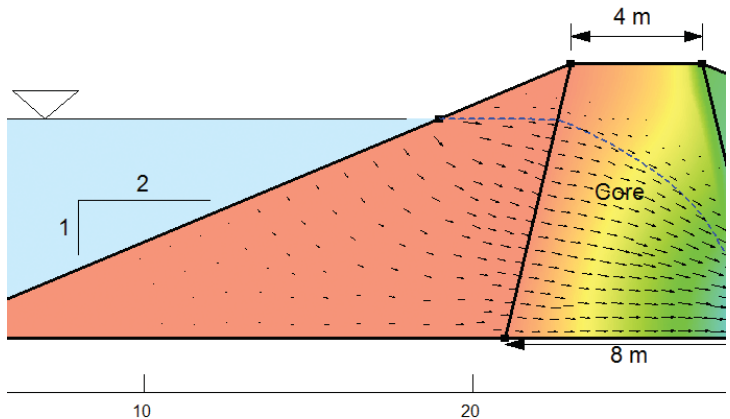
**OT: Operational Technology**  
*Digital Context*



# Acquisition of Seequent Deepening the Potential of *Subsurface Digital Twins*

Greg Bentley, CEO, and David Hollister, CFO

March 12, 2021



IoT-reported  
Condition Context

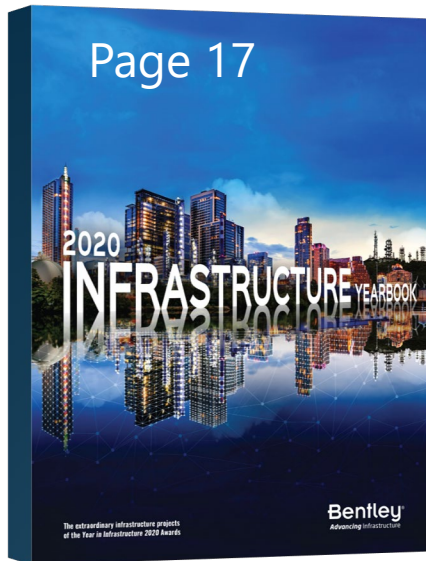
**ET: Engineering Technology**  
*Digital Components*

**OT: Operational Technology**  
*Digital Context*

# Mexico City: May 4, 2021



# Infrastructure Digital Twins: *Roadway Bridges*



## 2020 Special Recognition Winner: Advancing Bridge Asset Performance Modeling

A Smartwatch on the Bridge

Ulsan National Institute of Science and  
Technology (UNIST)

[www.bentley.com/en/infrastructure-yearbook](http://www.bentley.com/en/infrastructure-yearbook)

### Advancing Bridge Asset Performance Modeling

Figure 2. Measurement System Layout of the Test-bed Bridge

Dual camera (300X500X450(mm))

Strain gauge & accelerometer (60X60X1(mm))

Main-target (190X290X200(mm))

Thermometers (2X2X0.8(mm))

Power Supply Cable

PC (800X800X800(mm))

#### A Smartwatch on the Bridge

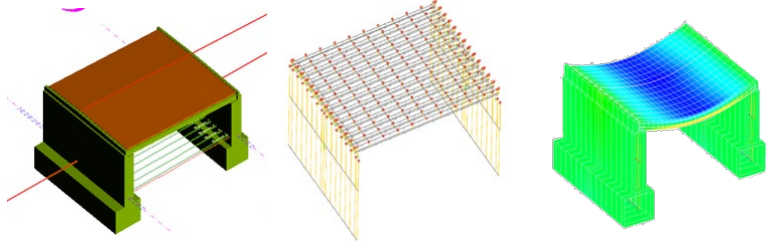
Ulsan National Institute of Science and Technology (UNIST) | Ulsan, Ulsu-gun, South Korea

Inspired by smartwatch sensors that monitor and collect health data, Ulsan National Institute of Science and Technology (UNIST) set out to develop a platform to improve bridge safety management. They wanted to automatically identify unusual patterns based on previously recorded properties and ensure access to corresponding feedback. However, they needed to find software that would help them overcome the high cost of sensors, the difficulty of producing reliable anomaly detection, and the ambiguous link to bridge safety.

With OpenBridge Designer, UNIST constructed a finite element model. The applications allowed them design accurate 3D models of bridges at a low cost while combining them with finite element analysis. With this model, UNIST can provide real-time condition monitoring and bridge performance assessment for improved safety management and decision-making. They applied the platform to a 25-meter bridge for USD 10,000, a fraction of the cost compared to other, more complex modeling systems. **Project Playbook:** OpenBridge Modeler, RM Bridge

# Infrastructure Digital Twins: *Roadway Bridges*

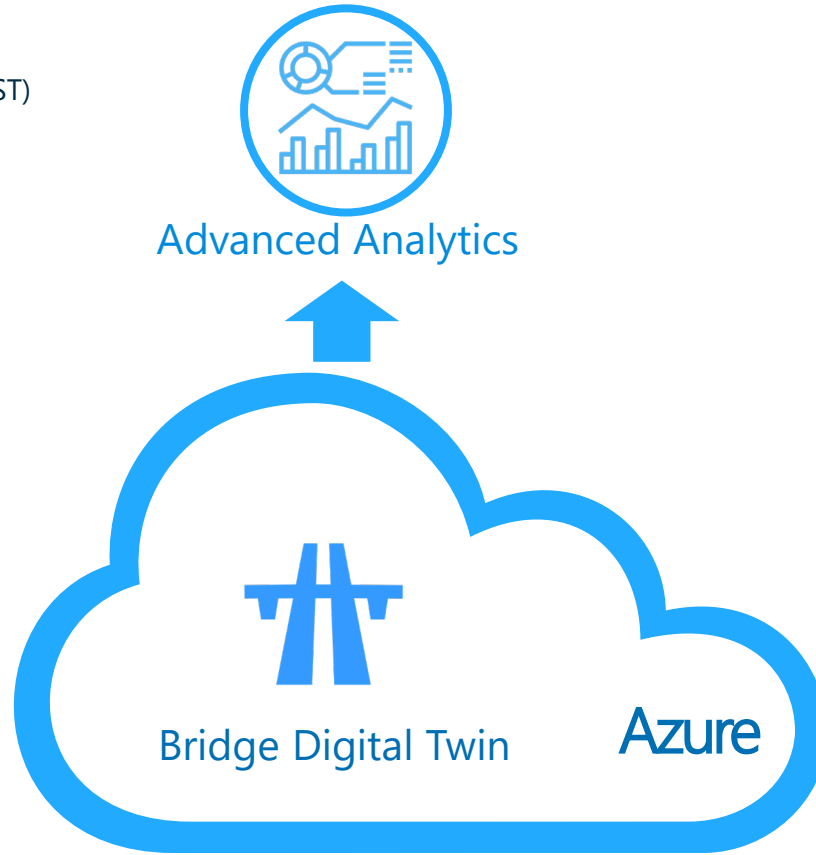
Image courtesy of:  
Ulsan National Institute of Science and Technology (UNIST)



OpenBridge Modeler



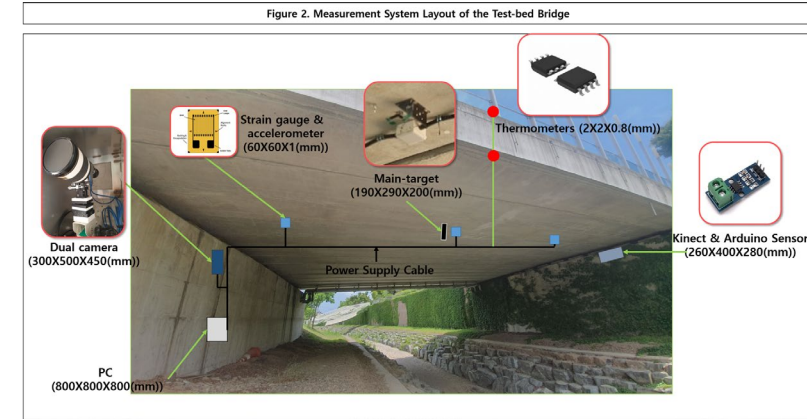
RM Bridge



**ET: Engineering Technology**  
*Digital Components*

**IT: Information Technology**  
*Digital Chronology*

Image courtesy of:  
Ulsan National Institute of Science and Technology (UNIST)



Camera-captured Physical Context



IoT-reported Condition Context

**OT: Operational Technology**  
*Digital Context*





*News Release*  
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[@BentleySystems](https://twitter.com/BentleySystems)

## Bentley Systems Announces Acquisition of Mobility Simulation Leader INRO

*To Extend Mobility Digital Twins for Dynamic Multimodal Simulation*

EXTON, Pa. **April 14, 2021** - Bentley Systems, Incorporated (Nasdaq: BSY), the *infrastructure engineering software* company, today announced the acquisition of INRO Software, a global leader in multimodal transportation planning, traffic simulation, and mobility visualization software. The acquisition expands Bentley's capabilities in the important growth area of mobility digital twins, just as countries including the U.S. are poised to make a generational investment in infrastructure, and as transportation systems must evolve faster to accommodate both urbanization and carbon reduction goals, and the transition to electric and autonomous vehicles.

INRO, based in Montreal, Quebec, Canada, has for more than 40 years contributed to the advancement of mobility simulation and modeling for metropolitan, regional, and national transport and transit operators and planning agencies. Users of its multimodal simulation offerings include some of the world's busiest transit systems and metros, such as Transport for London, Transport for New South Wales, the Washington State Department of Transportation, the Swedish Transport Administration Trafikverket, and the public transport system of São Paulo SPTrans.

INRO's products include *Emme*, a multimodal transportation planning system for urban, regional, and national transportation forecasting; *Dynameq*, a vehicle-based traffic simulation platform for city-wide traffic planning; and *CityPhi*, a mobility visualization solution providing data visualization and visual analytics of large-scale mobility and geospatial datasets.



# Infrastructure Digital Twins: *Mobility*



DynaMeq: Vehicle-based Traffic Simulation for Cities



Emme: Multi-modal Regional Transportation Planning



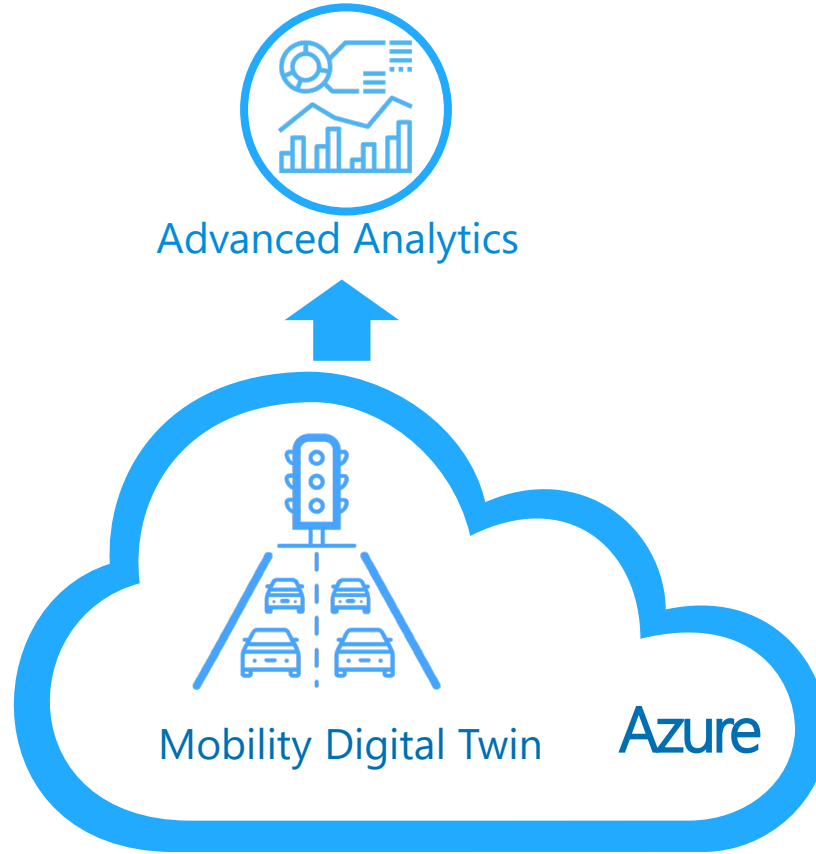
Cube: Transportation and Land-use Modeling



LEGION



OpenRoads



Camera-captured Roadway Context



IoT-reported Traffic Context

**ET: Engineering Technology**  
*Digital Components*

**IT: Information Technology**  
*Digital Chronology*

**OT: Operational Technology**  
*Digital Context*

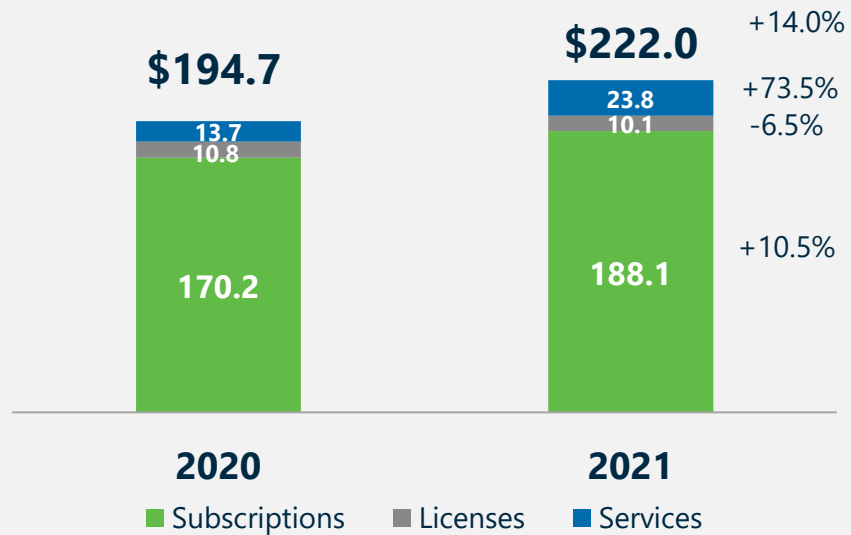
# First Quarter 2021...

David Hollister, CFO

# Revenue Performance

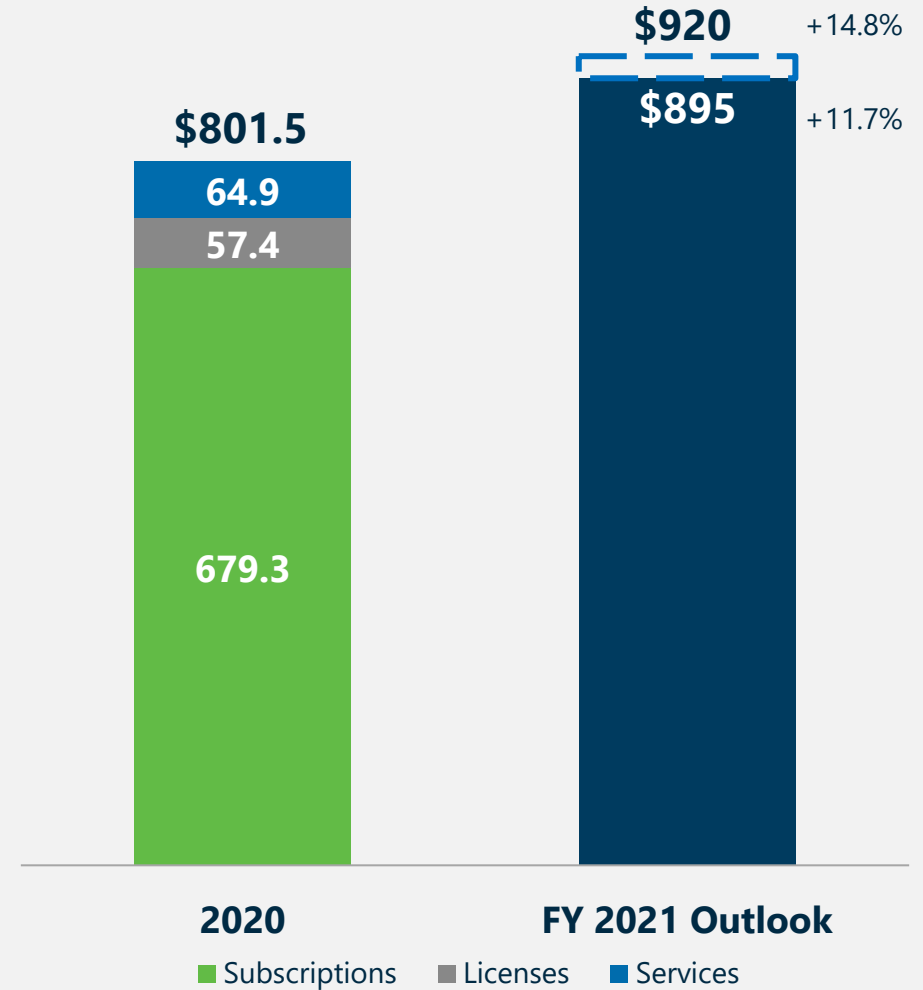
## First Quarter

\$ in millions



## Full Year

\$ in millions

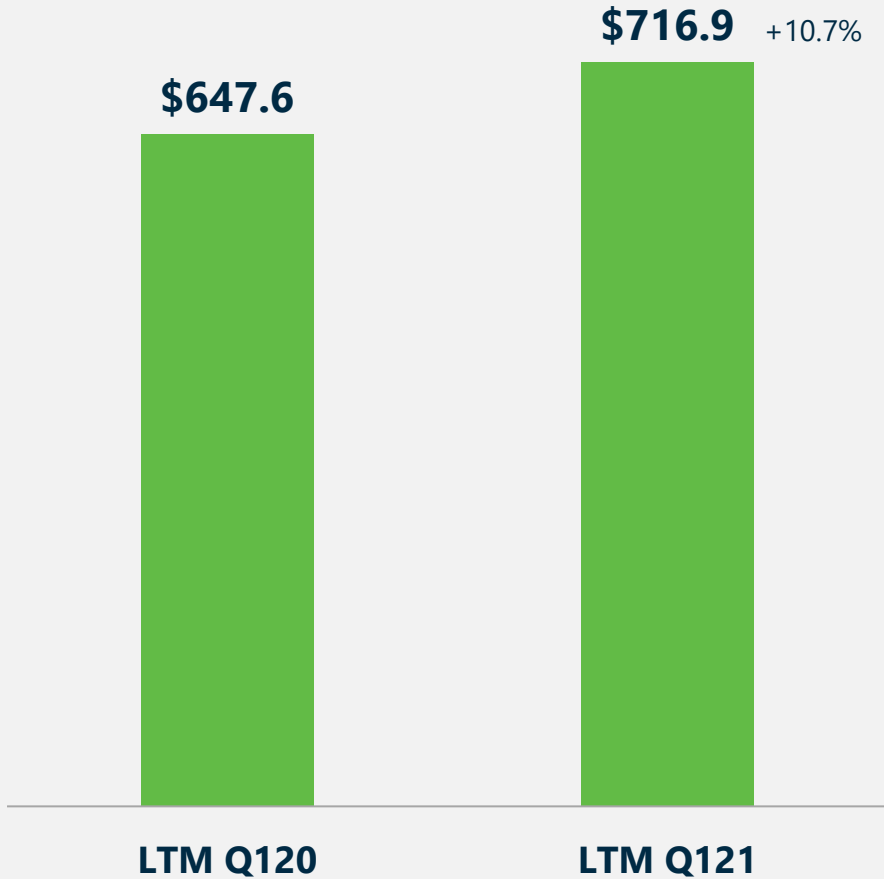


# Recurring Revenue Performance

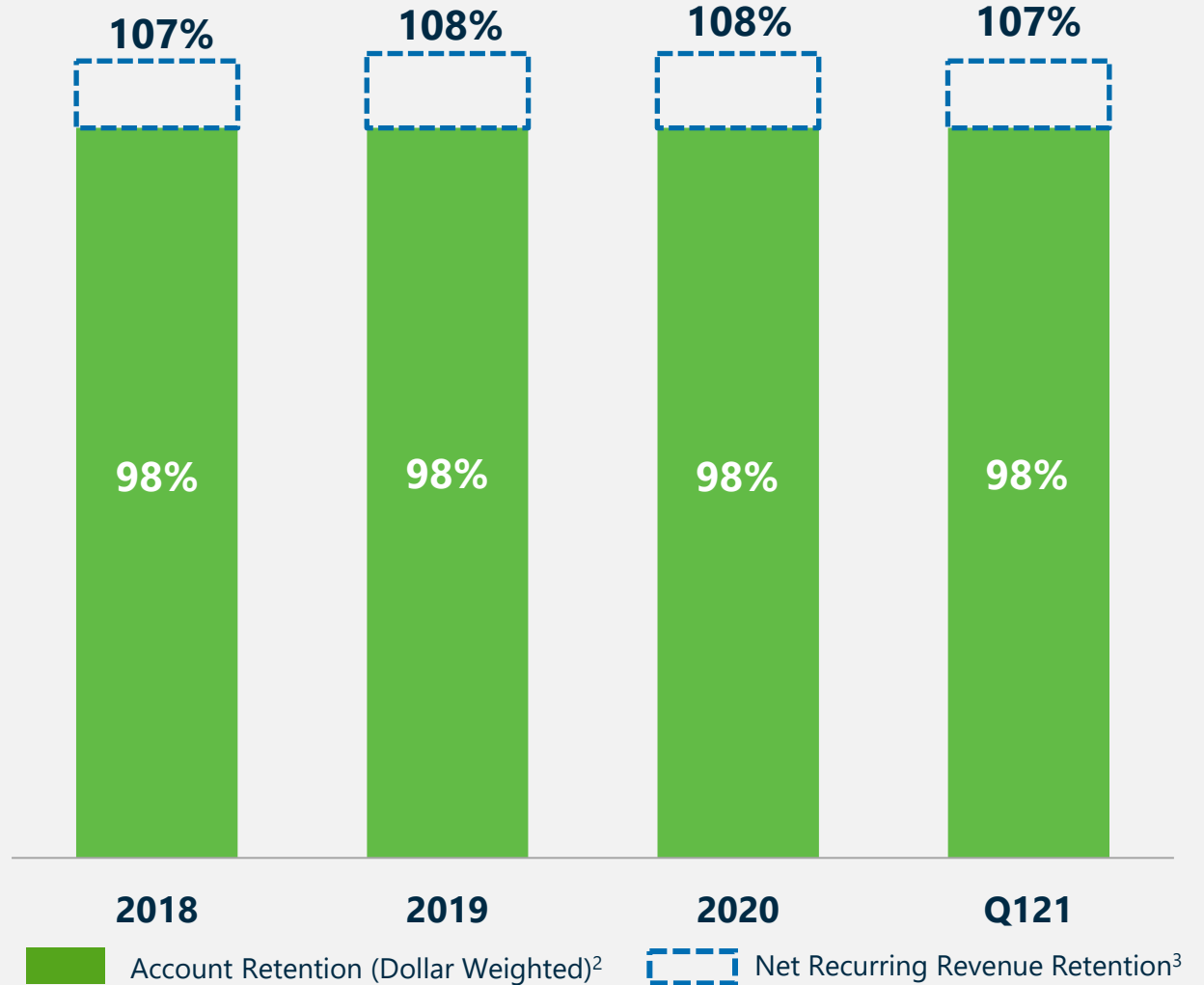
ARR: 10% Y-o-Y constant currency growth  
 \$760.2 million at 3/31/2021 spot

## Recurring Revenues<sup>1</sup>

\$ in millions



## Recurring Revenue Retention



Footnotes: 1, 2, 3 – See appendix for KPI and non-GAAP definitions and reconciliations

# Profitability Performance

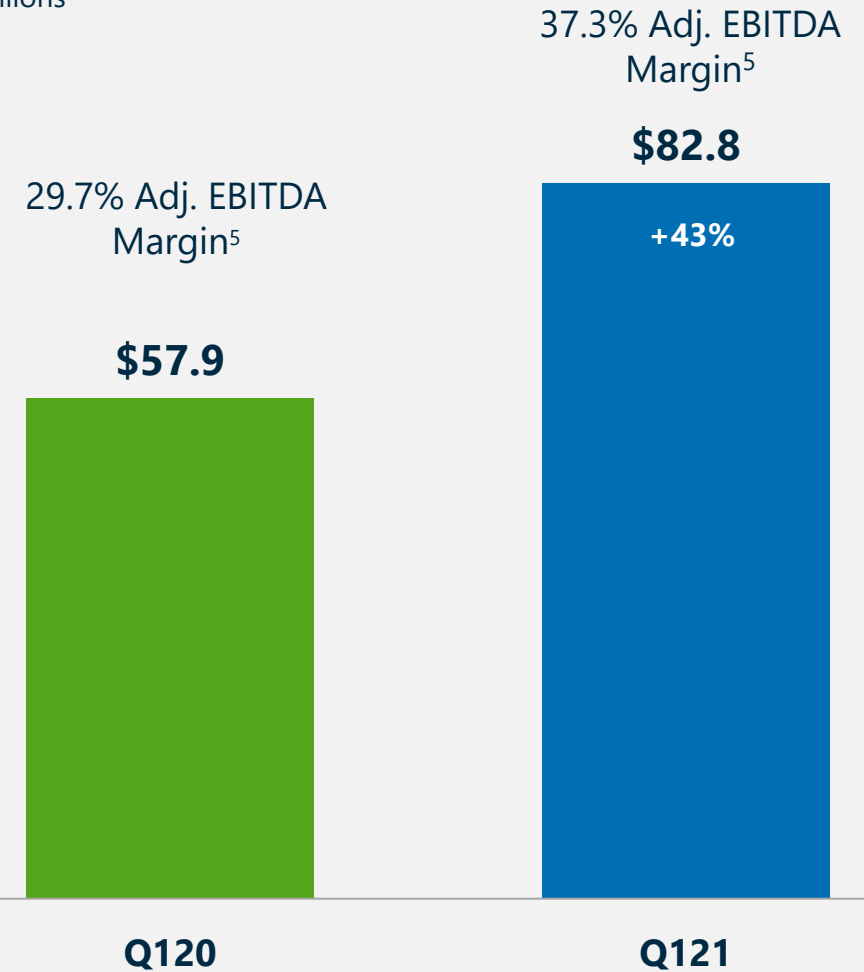
## GAAP Operating Income

\$ in millions



## Adjusted EBITDA<sup>4</sup>

\$ in millions



Footnotes: 4, 5 – See appendix for KPI and non-GAAP definitions and reconciliations

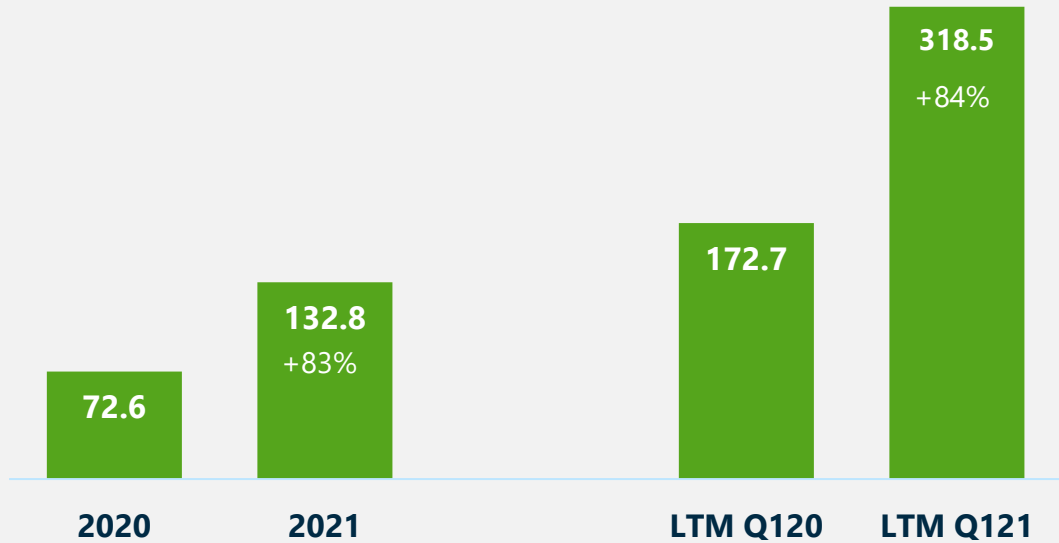
# Liquidity and Capital Structure

## GAAP Operating Cash Flows

\$ in millions

First Quarter

Last Twelve Months



## January 2021 Financing Transactions

- \$850 million Senior Secured Revolver due 2025
  - Refinanced existing revolver; \$3.6 million fees
  - Retained \$200 million swap paying fixed .73%
- \$690 million Convertible Notes due 2026; 1/8% coupon
  - Proceeds net of \$18 million fees and expenses
  - Proceeds net of \$25.5 million capped call purchase
  - Conversion up 65% with capped call (\$72.98)

## 3/31/21 Credit Metrics

\$ in millions

|                                    |         |
|------------------------------------|---------|
| Cash                               | \$569.5 |
| Debt                               | \$672.6 |
| Net Debt                           | \$103.1 |
| Net Debt Total Leverage            | 0.4x    |
| Net Debt Senior Leverage           | 0.0x    |
| Available Revolver Credit Capacity | \$850.0 |
| LTM Adj. EBITDA                    | \$291.1 |

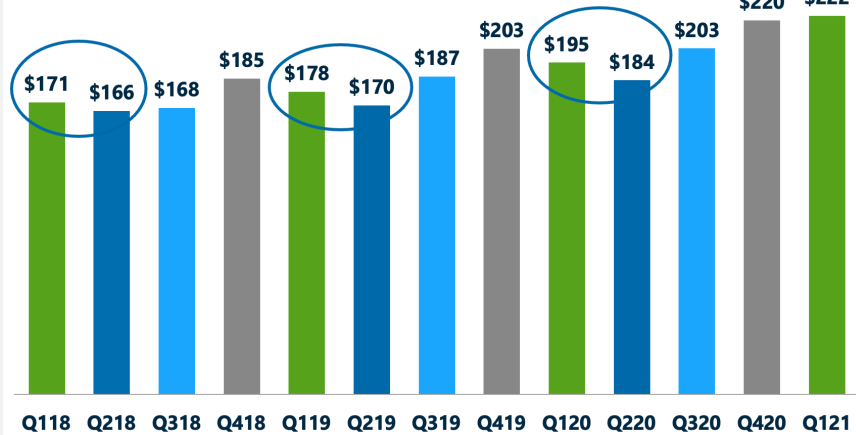
# BSY Seasonality Commentary

## On Revenues

- ✓ Perpetual license sales historically are highest in Q4 of each year
- ✓ Annually renewed and billed ELS subscriptions (>80% up-front rev rec at start of contract term) create intra-year subscription revenue volatility under 606. Up-front impact is most prominent in BSY first and fourth quarters.

Quarterly Revenue (ASC 606)

\$ in millions



- ✓ Conversion of annually billed ELS subscriptions into E365 subscriptions (rev rec aligned to ongoing usage and relatively smoothed throughout the year) introduces year-over year comparison disconnect (no adverse impact to cash flow patterns only timing of rev rec over the contact period)

## On ARR

- ✓ A significant proportion of ARR growth occurs upon renewal of contracts
- ✓ Historically, the approximate average pattern of ARR growth in a year presents as 10%, 25%, 25%, 40% during Q1, Q2, Q3 and Q4, respectively. This seasonality is likely to temper gradually to the extent that annual ELS contracts convert to E365 consumption-based contracts.

## On Operating Expenses

- ✓ BSY annual raises historically are concentrated to occur April 1 each year (abated for 2020, and returning on April 1, 2021)
- ✓ Incentives are generally aligned to ARR and revenue performance (historically highest for both in LH of year)
- ✓ Expenses for promotional and event costs are aligned to the occurrence of the event (historically highest in LH of year)
- ✓ We are growing....current cost savings are being reinvested into growth initiatives: people, promotion, acquisitions.....



# Full Year 2021 Financial Outlook

As presented in our 20Q4 Earnings Call

| Financial Metrics              | Guidance  |
|--------------------------------|---|
| Total Revenues                 | \$895 million to \$920 million<br>increase of 11.7% to 14.8%            |
| ARR Growth (constant currency) | 8% to 10%   |
| Adjusted EBITDA <sup>4</sup>   | \$285 million to \$295 million<br>approximately 32% Margin <sup>5</sup> |

## Additional expectations to support financial modeling

- Full year interest expense of approximately \$7.5 million (approximately \$3.0 million of which is cash interest)
- Full year effective tax rate of approximately 20%
- Full year capital expenditures, including investments in capitalized software <2.5% of revenues
- Fully diluted weighted average shares outstanding between 327 and 329 million inclusive of 13.6 million shares applying an if-converted methodology to our January 2021 \$690 million convertible notes and assuming today's average share price
- Dividends of \$0.12 per share

Footnotes: 4, 5 – See appendix for KPI and non-GAAP definitions and reconciliations

# Seequent Transaction Summary

As presented in our Seequent Announcement Call

## Terms & Valuation

- Consideration of ~\$1,050 million, including 3,141,361 shares of BSY Class B Common Stock, for 100% of the outstanding shares of Seequent
- Valuation in line with industry peers

## Financing & Balance Sheet

- Cash consideration to be paid with a combination of cash on hand and availability on \$850 million undrawn revolver
- Total net leverage post-closing estimated to be less than 4.0x
- Targeting < 2.5x total net leverage by end of FY 2022
- Any subsequent follow-on equity offering would further accelerate deleveraging

## Timing & Closing Conditions

- Transaction expected to close by end of 2Q 2021
- Subject to customary closing conditions and regulatory approvals

## Financial Impact

- For FY 2021, BSY expects Seequent to contribute > \$80 million to ARR
- Seequent revenues are growing faster than BSY revenues, and its EBITDA margins approximate BSY EBITDA margins
- Transaction is expected to be accretive to adjusted EBITDA, adjusted net income and EPS
- No impact to BSY current quarterly dividend of \$0.03 per share
- BSY FY 2021 financial outlook will be updated upon closing of the transaction

# Long term financial model targets

As presented in our 20Q4 Earnings Call

| Financial Metrics                   | Targets                    | Comments  |
|-------------------------------------|----------------------------|---|
| Total Revenues                      | ~10% per year              | Historical growth trends inflected for growth initiatives and subject to pace and scale of acquisitions |
| Adjusted EBITDA Margin <sup>5</sup> | ~100BPS accretion per year | Subject to modest dilution from Digital Integrators and Acceleration incubation investments             |

## Additional expectations to support financial modeling

- Effective tax rate of approximately 20%
- Capital expenditures, including investments in capitalized software <2.5% of revenues
- Over time target a dividend yield between 0.5% and 1%
- Potential periodic stock repurchases to attenuate dilution from stock-based compensation
- Targeted normal net leverage comfort level in the range of 2X to 3X



# Q & A

# KPI and non-GAAP definitions and reconciliations

- 1. *Recurring revenues.*** Last twelve-months recurring revenues is calculated as recurring revenues recognized over the preceding twelve-month period. We define recurring revenues as subscriptions revenues that recur monthly, quarterly, or annually with specific or automatic renewal clauses and professional services revenues in which the underlying contract is based on a fixed fee and contains automatic annual renewal provisions.
- 2. *Account retention rate.*** Our account retention rate for any given twelve-month period is calculated using the average currency exchange rates for the prior period, as follows: the prior period recurring revenues from all accounts with recurring revenues in the current and prior period, divided by total recurring revenues from all accounts during the prior period.
- 3. *Recurring revenues dollar-based net retention rate.*** Our recurring revenues dollar-based net retention rate is calculated using the average exchange rates for the prior period, as follows: the recurring revenues for the current period, including any growth or reductions from existing accounts, but excluding recurring revenues from any new accounts added during the current period, divided by the total recurring revenues from all accounts during the prior period. A period is defined as any trailing twelve months.
- 4. *Adjusted EBITDA.*** Our Adjusted EBITDA is defined as net income adjusted for interest expense, net, provision for income taxes, depreciation and amortization, equity-based compensation, acquisition expenses, realignment expenses, expenses associated with IPO, other non-operating income and expense (primarily foreign exchange gain (loss)), net, and (income) loss from investments accounted for using the equity method, net of tax
- 5. *Adjusted EBITDA margin.*** Our Adjusted EBITDA divided by revenue.
- 6. *Stock Based v Cash Executive Compensation.*** Effective as of the beginning of the fourth quarter of 2020, participants in our Executive Bonus Plan may elect to receive any portion, or all, of such participants non-deferred incentive bonus in the form of fully vested Class B Common Stock, instead of cash payments, and subject to a combined quarterly limit of \$7.5 million. To facilitate comparability, the analysis normalizes the historical 2019 and 2020 periods to recharacterize as stock based compensation, at a rate of \$7.5 million per quarter, that element of cash compensation that prospectively will be in the form of stock based compensation.

# Non-GAAP Reconciliation: Adjusted EBITDA

|   | Three Months Ended<br>March 31, |                  |
|---|---------------------------------|------------------|
|   | 2021                            | 2020             |
| <b>Net Income</b>   | <b>\$ 57,006</b>                | <b>\$ 29,669</b> |
| Interest expense, net   | 2,319                           | 1,388            |
| Provision for income taxes  | 10,358                          | 7,176            |
| Depreciation and amortization   | 8,993                           | 8,050            |
| Stock-based compensation  | 8,913                           | 1,653            |
| Acquisition expenses  | 9,256                           | 2,275            |
| Realignment expenses  | -                               | (8)              |
| Other (income) expense, net   | (14,482)                        | 7,390            |
| Loss from investments accounted for using the equity method, net of tax | 446                             | 338              |
| <b>Adjusted EBITDA</b>  | <b>\$ 82,809</b>                | <b>\$ 57,931</b> |

Note: See further commentary on adjustments in MD&A section of the March 31, 2021 10-Q



Thank You