



*Quality Companies
Compounding Cashflow*

Bentley Systems

Ticker: BSY

August 2024

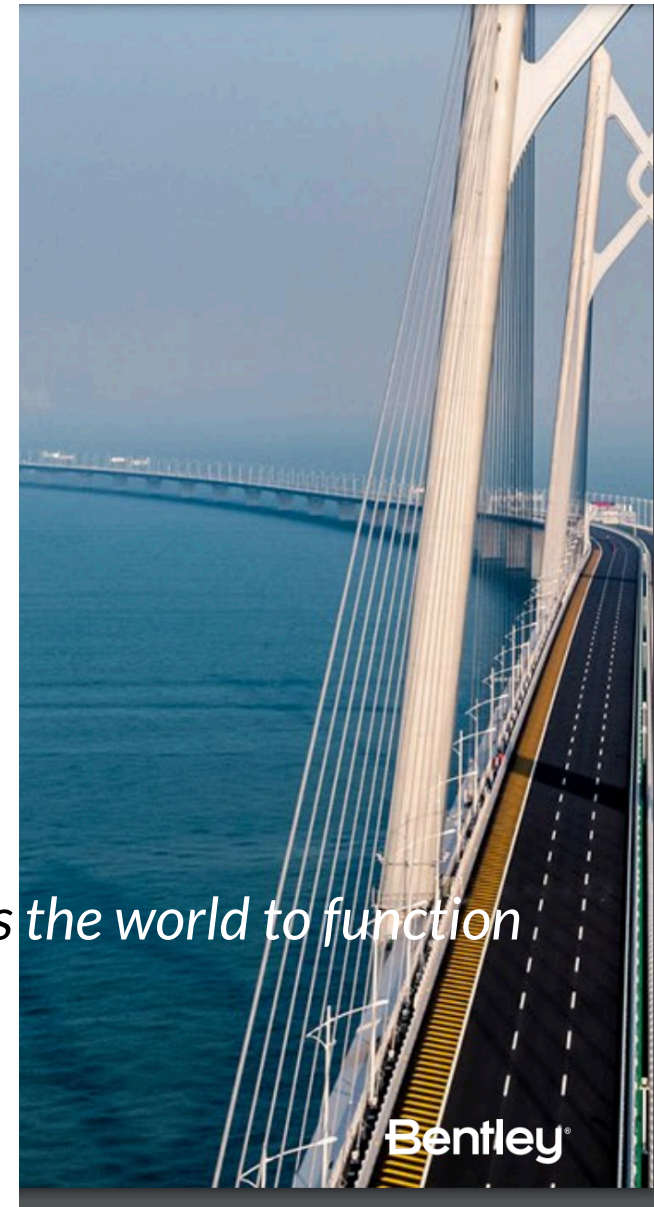
Matthew Ankrum, CFA



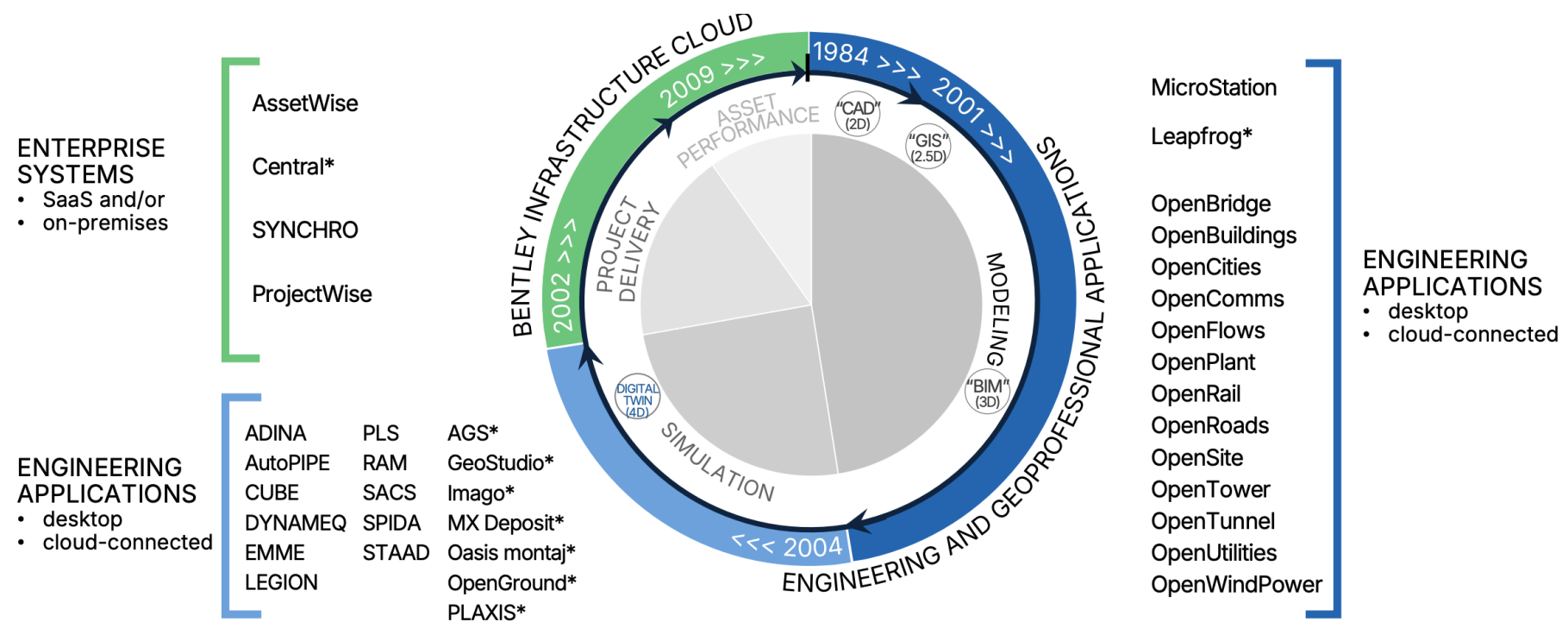
Bentley®

“a band of brothers changing the world”

a compounding machine, designing the essential infrastructure that enables the world to function



Bentley Systems is THE Infrastructure Engineering company



Founded in 1984, Bentley Systems offers the most comprehensive suite of software that infrastructure engineers and asset owners utilize to design, build and operate infrastructure. BSY's solutions enable its users to digitally model, simulate and manage assets and projects. BSY empowers its users to engage at the level they choose with opportunities to continue to progress with more complete solutions. First developed by Bentley, the digital twin is revolutionizing the industry by enabling users to digitally emulate the entire project and manage the asset forward. BSY's solutions are essential to the process and they create tremendous efficiencies, allowing its users to save time, cost and bridge the declining engineering "brain-drain" chasm.

Bentley has been a family-run, mission-driven business that has delivered remarkable success for 40 years

Bentley mission: to provide innovative software and services for the enterprises and professionals who design, build, and operate the world’s infrastructure – advancing both the global economy and the environment for improved quality of life

Bentley values:

- Connected - We are connected and able to collaborate with each other throughout our global footprint.
- Responsible - We take pride in our work and hold ourselves accountable for delivering our promises.
- Innovative - We are teams of innovators who apply technology to deliver creative solutions.
- Motivated to make an impact - We are committed to improve the quality of life through our contributions to the world’s infrastructure.
- Passionate- We are passionate about the amazing things that our users do with our software and we are committed to their success.

	<u>% of ARR by Industry</u>		<u>% ARR by End-User</u>		<u>% of ARR by Customer Segment</u>
Public Works/Utilities	58.0%	Public Owners	50.0%	E365	42.0%
Resources	26.0%	Project Delivery Firms	50.0%	E365 Prospects	29.0%
Industrial	10.0%			SMB	29.0%
Commercial/Facilities	6.0%				

Key competitive advantages/power:

- switching costs driven by engineers’ and users’ familiarity with the software and the training required
- emerging network economies, with ProjectWise and AssetWise, coupled with DigitalTwins, the connectivity/collaboration between users and across a firm and its ecosystem will continue to grow



Recommendation: BUY

as of 8/30/2024

Price: \$51.47

Market Cap \$17.1B

Enterprise Value \$18.2B

F-D Shares O/S 333MM

Avg Volume 830K

Investment Highlights:

- absolutely essential product with demand rising with declining infrastructure engineers
- long-tailed, sustainable competitive advantage(s) due to plans, software fluency and collaboration
- enduring double-digit growth through organic and inorganic top-line with improving margins
- management team/culture impressive and powerful
- stock is not cheap, but the quality of the company, its future and the sustainability of its growth justifies ownership

2029 Price Target Range: \$40 to \$110 (5 year target; probability-weighted \$82.50, ~ 10.4% CAGR incl 0.5% dividend yield)

Upside/Downside Ratio: 6.0:1

Over the next 5+ years, Bentley (BSY) should be able to out-perform as the market realizes our variant perspective

What the market will come to realize:

- Bentley's competitive position/competitive advantages are extremely strong and sustainable
- growth is more resilient and longer-lasting - infrastructure needs are compounding and bi-partisan issue with on-going requirement to move digitally with declining infrastructure engineers
- optionality for upside with China demand eventually picking back up, Digital Twin acceptance and asset analytics options for asset owners
- operating fundamentals will drive out-performance and economics getting more attractive with time (margins and cashflow)
- culture/Bentley brothers' philosophical tenets are embedded even through a leadership transition

Key Numbers to Understand Bentley's Business

9/10

108%

\$1.41

Bentley understands and delivers on the power of compounding

BSY Investment Virtues...

A "Classic Compounder"

The entrenched leading provider of *infrastructure engineering* software globally

Founder-led company with a strong management bench and well-choreographed succession

Large direct recurring revenue base, low revenue concentration, and long-term account relationships provide strong visibility and consistency

Large (ecosystem) pipeline and track record of programmatic acquisitions to round out business performance growth

Operating leverage affords a long runway for ~100bps of annual margin expansion (Adjusted operating income inclusive of stock-based compensation expense⁹)

Strong cash flow conversion generates capital for reinvestment, acquisitions, and return of capital (dividends and buybacks to offset SBC dilution)

Sustainable double-digit ARR⁶ growth driven by company-specific growth initiatives AND strongly favorable secular end market conditions

A Bentley investment offers some very compelling characteristics

Compounding Predictability

Predictable governance

Farsighted founding family control
(dual-class corresponds to majority economic ownership, sunseting otherwise)

Predictable performance

Operating management incentives based on ARR Growth⁷
(but conditioned on annual operating margin improvement)

Predictable resilience

Mainstay public works / utilities end market is effectively counter-cyclical

Impregnable "moat" due to comprehensive portfolio

THE infrastructure engineering software company
(continuously reinforced by platform-enabled programmatic acquisitions)

Sustainable investment thesis:

Intersection of global priorities: going digital and infrastructure
Environmental resilience and adaptation
(decarbonization, urbanization, resource imperatives)
Energy transition and security (grid integration, renewables, nuclear, ...)
ES(D)G (Empowering Sustainable Development Goals) "handprint"

Financial Drivers

Resilient ARR Growth⁷

~92% Subscription Revenues

Commitment to robust R&D investment

>22% of revenue

Commitment to annual margin improvement

Global, direct sales investments complete
~100 bps in Adjusted OI w/SBC margin¹⁰

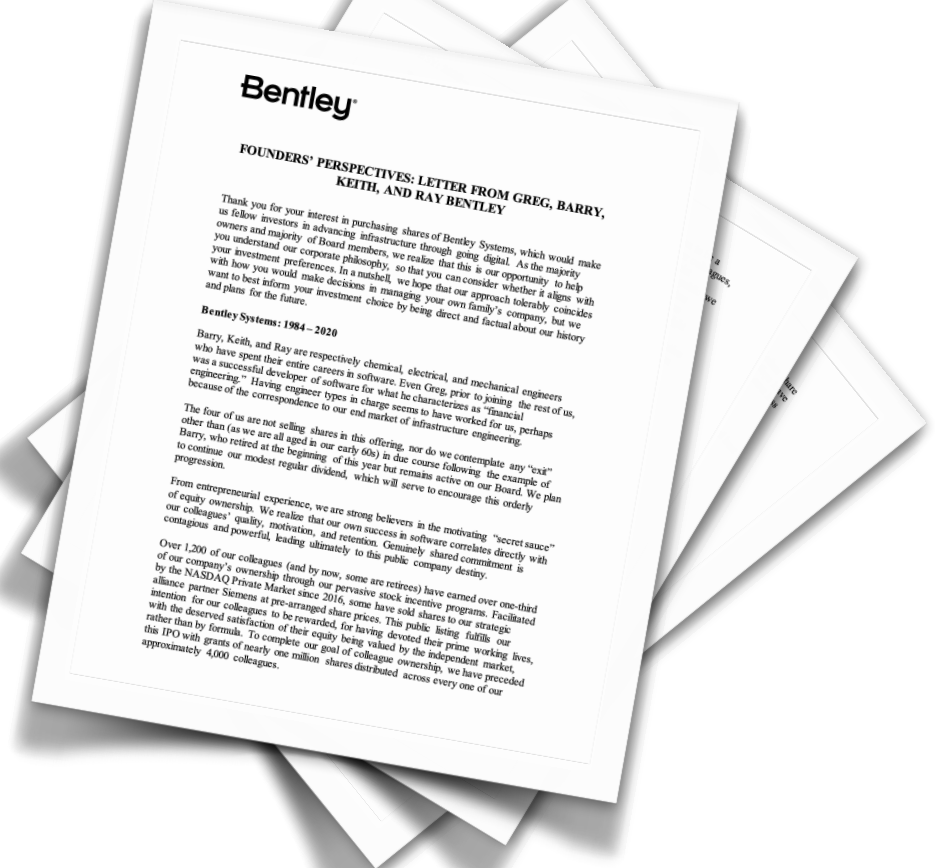
Cashflow efficiency

~70% of revenue paid annually in advance
~20% effective tax rate
~80% Adjusted EBITDA¹¹ conversion

The Bentley founders provided their perspective on the company, its values and how they manage the business in a letter to shareholders

key takeaways from the letter

- “secret sauce” of equity ownership
- “no drama” continuity assured by family stewardship
- will not concentrate on quarterly performance metrics
- self-evident virtues: free markets, free trade & globalization, and (private as well as public) infrastructure investment
- a software company needs people “in software” to make decisions
- transparency in financials, succession and fairness in voting matters



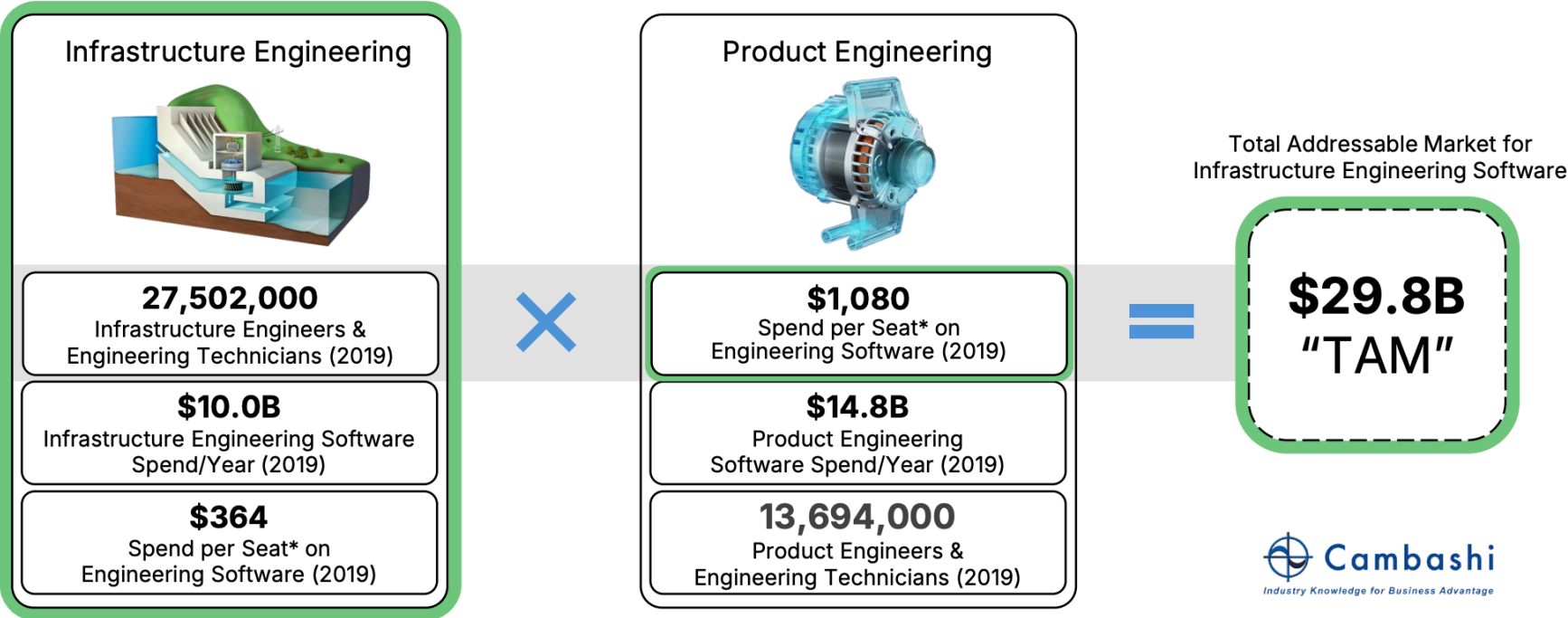
our takeaway...this is a management team that we can trust

Bentley's Market Opportunity

The market opportunity for infrastructure engineering is massive

Total Addressable Market ("TAM")

What if infrastructure engineers/technicians would each spend on engineering software the same amount that product engineers/technicians (on average) already spend?



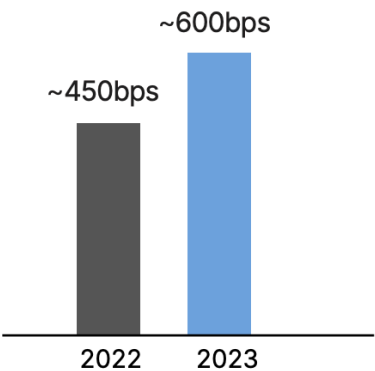
In addition, as Bentley leads the transition to digital, the market will continue to expand

Application Mix Accretion Opportunity

BSY as Established Leader, Long Runway for Upside from Going Digital

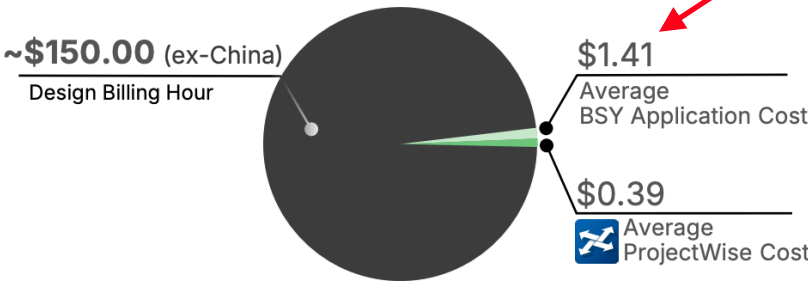
1% substitution of technology for labor

ARR Growth⁷ from application mix accretion (Upsell)

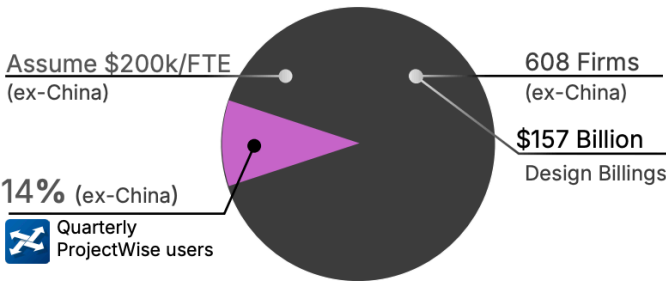


User Success Program driving increased consumption and mix accretion

Ample opportunity for application mix accretion (Upsell)



Ample opportunity for further standardization on ProjectWise for data-centric AI



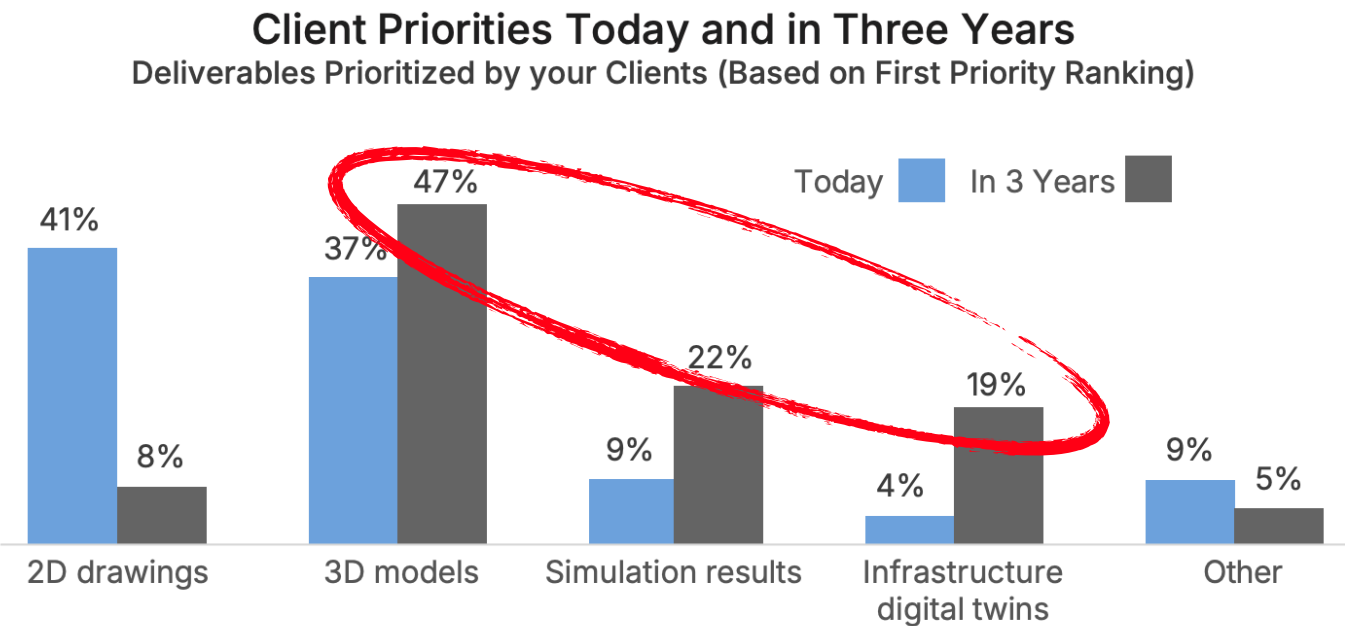
Source: ENR Top 500 Design Firms / Top 225 International Design Firms / Top 150 Global Design Firms 2022
<https://www.enr.com/toplists>

product engineers spend 3x amount on software as infrastructure engineers, but charge out their time to clients at same rate

With customers' priorities moving toward BSY's offerings

Infrastructure Engineering Priorities

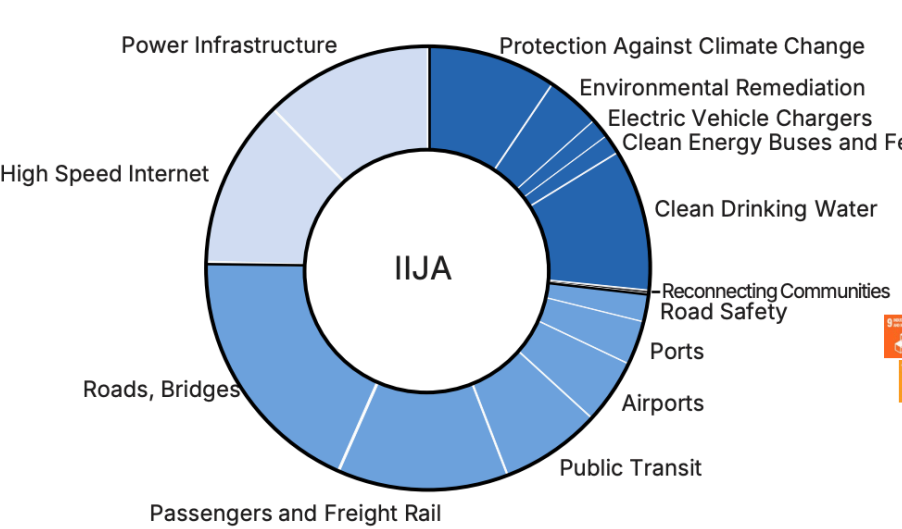
Going Digital



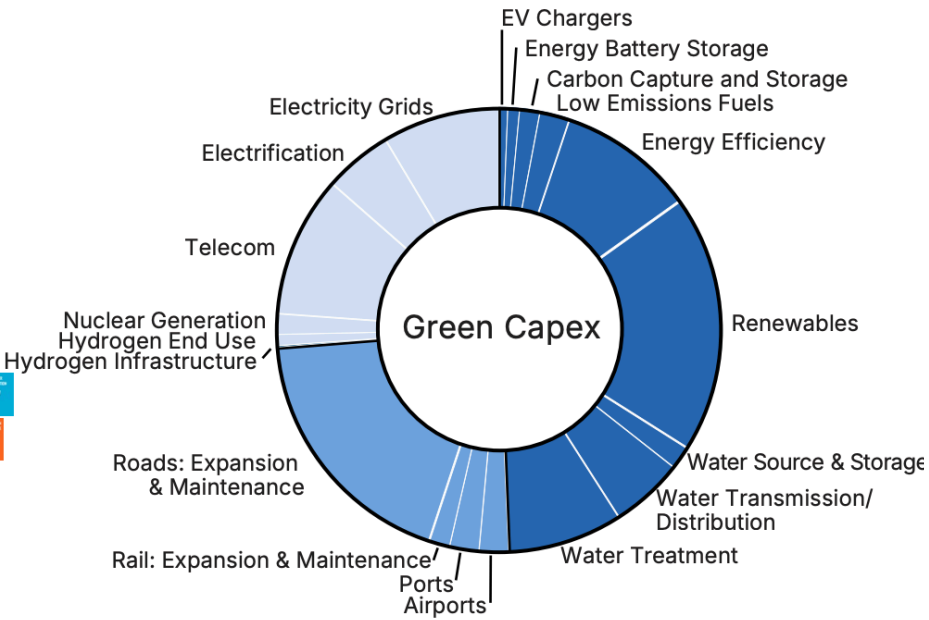
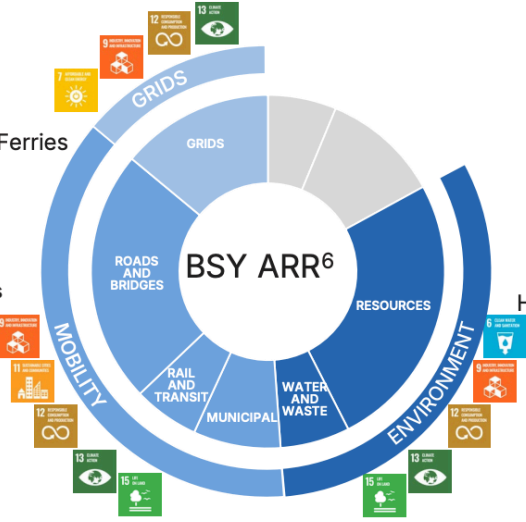
And, bi-partisan legislative support is driving increased investment that touches all parts of the economy (where BSY is well-positioned)

Global (Infrastructure) Investment Priorities

Well-positioned for ES(D)G-Enabling Energy Transition Spending Across Mobility, Grids, Environment



U.S. Infrastructure Investment and Jobs Act (IIJA)



Green Capex: Capturing the Opportunities

Lastly, although China is a drag on current performance, long-term China represents a huge market for Bentley

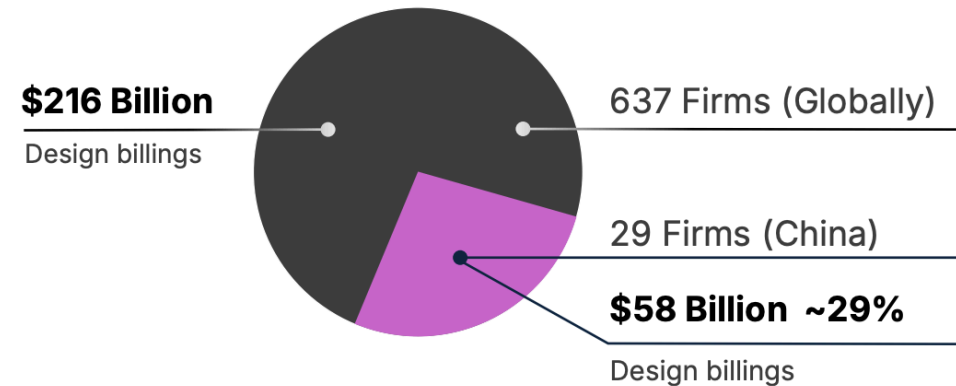
Longer Term China Opportunity

Near Term – Diminishing ARR⁶ Headwind

Pivoting to “localization” model in China (~2.5% of BSY total ARR⁶) to surmount geopolitical obstacles

- Joint venture for development and distribution of on-premises adaptation of ProjectWise platform (iLink)
- Joint venture to assume hydropower accounts and to develop specialized Chinese (MicroStation-based) applications (East Wise)
- Expect regression to local preference for license sales at the expense of ARR⁶

Longer Term Opportunity – Largest Design Billings Market in the World

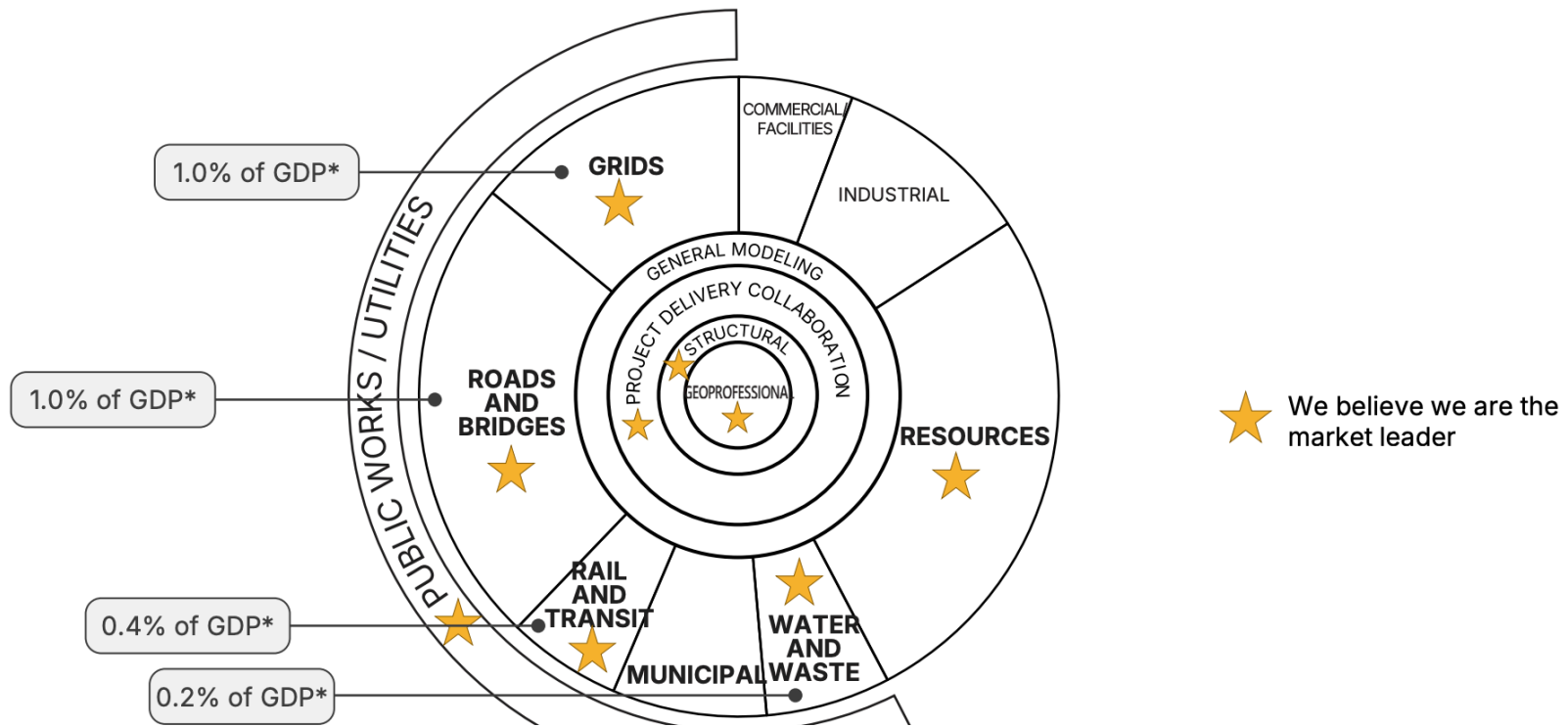


Insights into Bentley

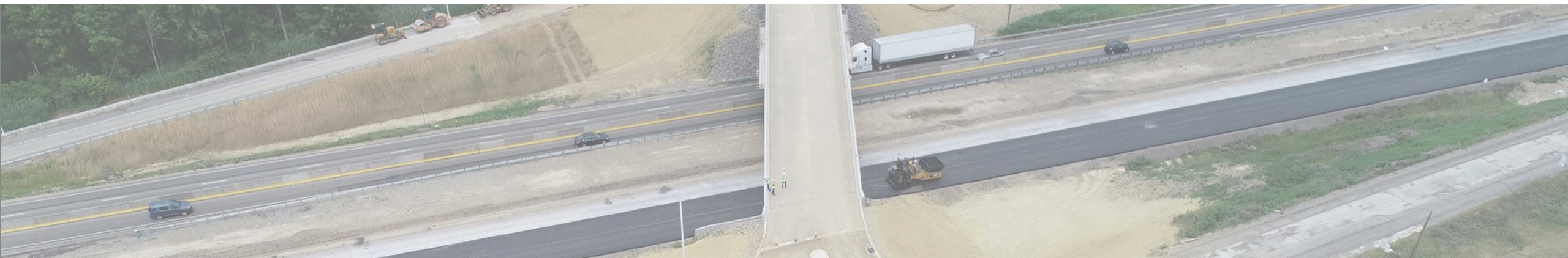
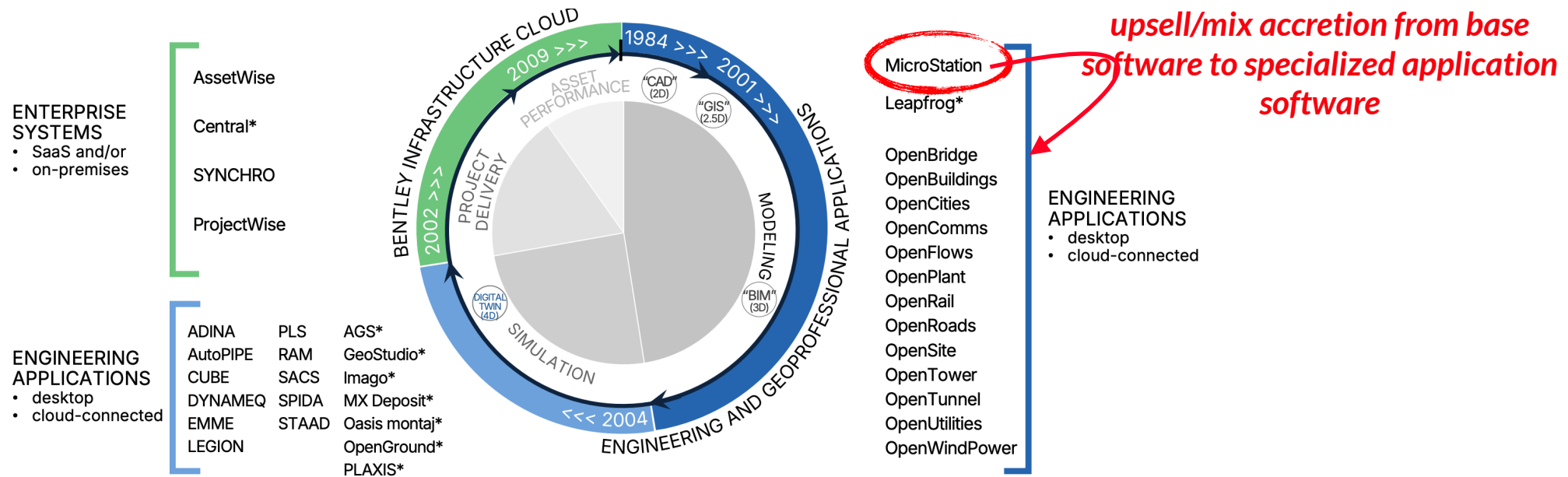
Bentley is the leader in “horizontal” infrastructure, with more than 9 out of 10 projects designed using Bentley software, that represent critical parts of our world

ARR⁶ by End Markets (Infrastructure Sectors)

THE Infrastructure Engineering Software Company



Bentley offers the most comprehensive suite of solutions for its customers, which allows for the right product for the right project (and product upsell)



Bentley's products help increase efficiency, accuracy and collaboration, leading to tremendous cost savings to complete projects

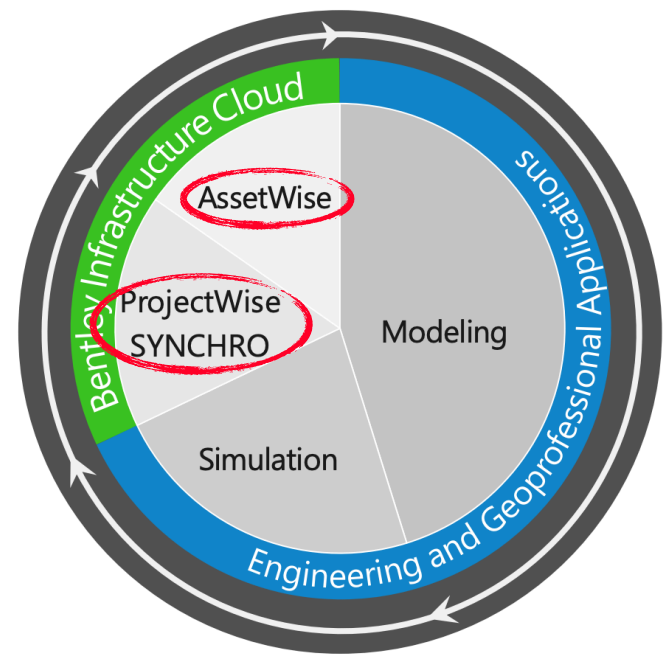
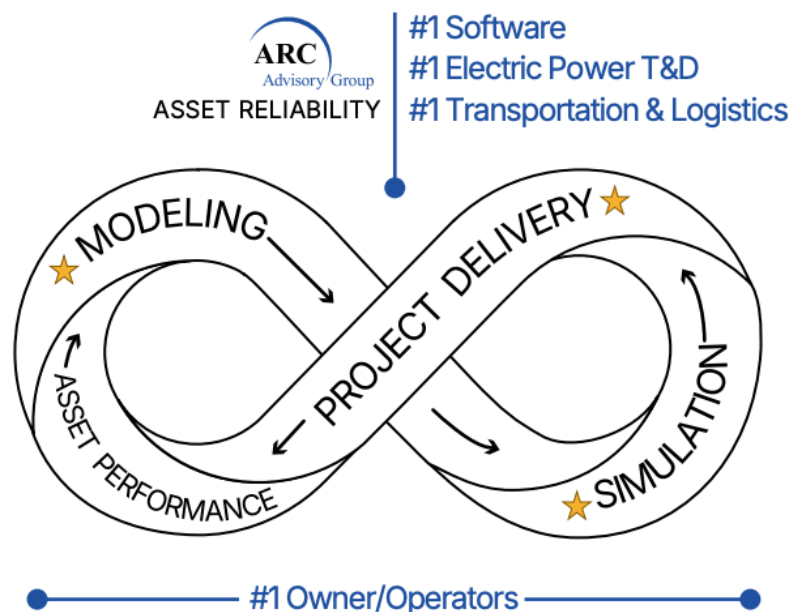
Percentage of (Engineering) Hours Saved by Finalists Reporting

Project Name	Organization	Saved Hours		
N4 Montrose Interchange	SMEC South Africa	42%	42%	South Africa
RSAS – Carstairs	Arcadis	35%	35%	India
Digital Twins and Artificial Intelligence for Historic Robert Street Bridge Rehabilitation	Collins Engineers, Inc.	33%	33%	United States of America
Automated Design of Civil and Architectural Structures with STAAD API	Hyundai Engineering	30%	30%	Republic of Korea,
SEPA Surrey Hills Level Crossing Removal Project	Laing O'Rourke	25%	25%	Australia
Value Engineering Stage for Detailed Design and Supervision of the Rail Baltica Project	IDOM	25%	25%	Spain
Achieving Drink from Tap 24x7 Water Supply System for Emerging Economies	Geoinfo Services	22%	22%	India
Digital Twin Application Project of Electrolytic Aluminum Engineering of Chinalco China Resources	Shenyang Aluminum & Magnesium Engineering & Research Institute Co., Ltd.	18%	18%	18% (median)
Southern Program Alliance	WSP Australia Pty Ltd.	15%	15%	Australia
Provision of Services on the Generation of CityGML Models of Kowloon East for the LandsD	Avineon India P Ltd.	15%	15%	India
South Dock Bridge	Arcadis	13%	13%	United Kingdom
New High Speed Line Salerno – Reggio Calabria	Italferr S.p.A.	10%	10%	Italy
The Digital Twin for structural monitoring of St. Peter's Basilica	Italferr S.p.A.	10%	10%	Italy
Rajghat Multi Village Rural Water Supply Scheme	L&T Construction	10%	10%	India
Green and Digital plant Construction Project of Linyi 2.7 Million Tons of High-Quality Special Steel Base	MCC Capital Engineering & Research Incorporation Limited	6%	6%	China

ascto
in Singa

Bentley is expanding its market opportunity by helping its owner-operators manage its assets and projects

Infrastructure Lifecycle



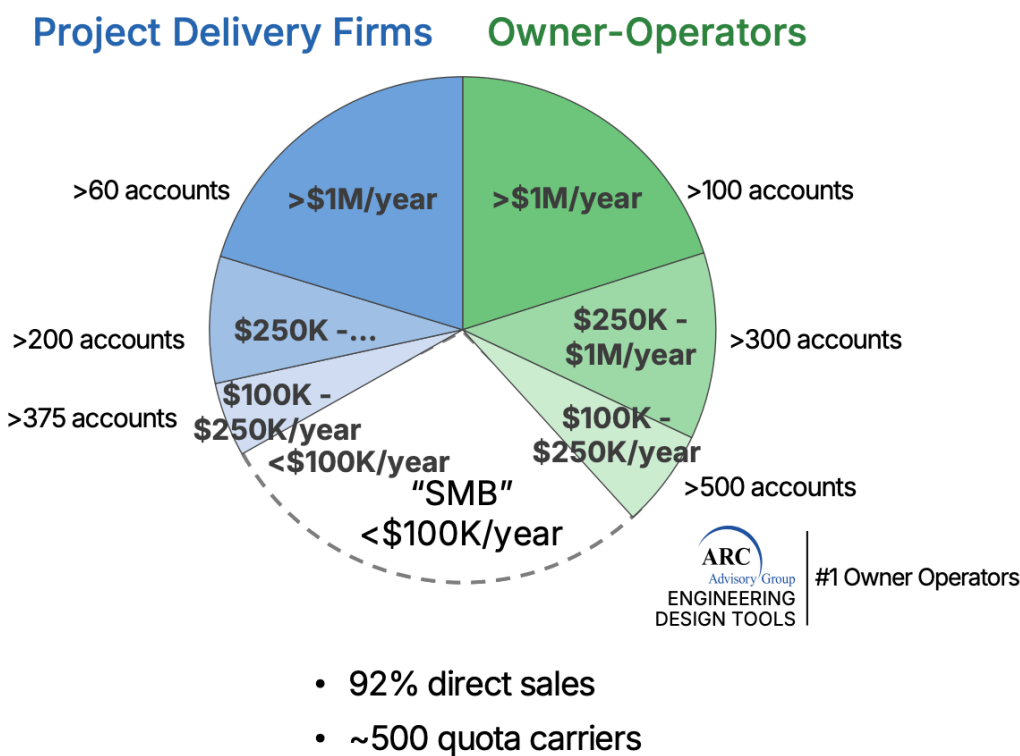
powerful use of existing data/design to easily re-simulate and evaluate the tower every time a new product added (@\$300/tower/yr; 3MM towers worldwide outside of China)



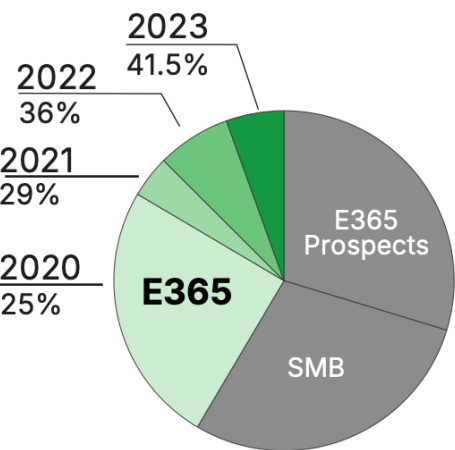
Bentley has specific initiatives to drive growth in near/mid-term

Growth Initiative #1 - E365 | Enterprise Accounts

Accretion in Enterprise Accounts



E365 as % total ARR⁶



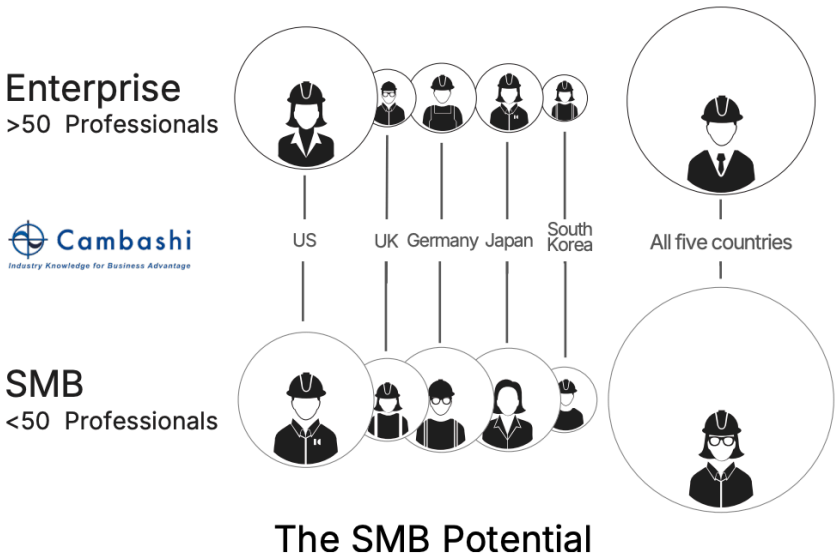
- E365 success force:
>600 infrastructure engineer experts
- E365 includes quarterly menu of Success Blueprints (for new digital workflows)

Targeting SMBs with an attractive solution is powering strong growth

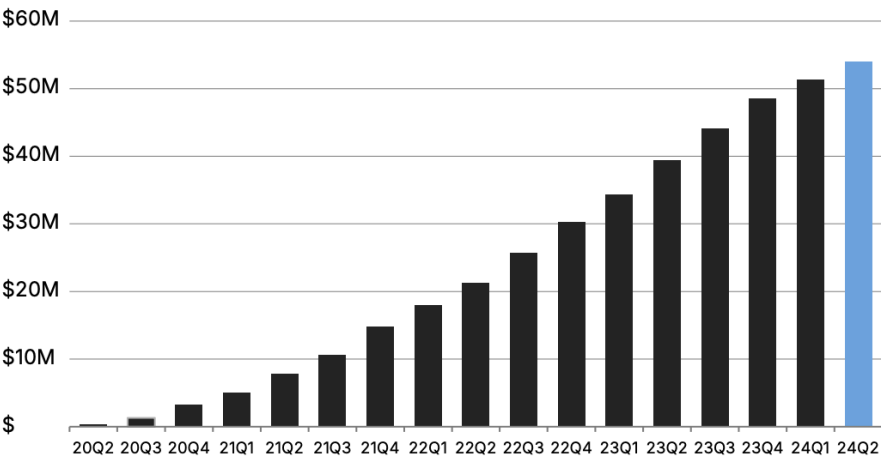
Growth Initiative #2 - Virtuosity | SMB

Increasing Penetration in Small and Medium-Sized Businesses ("SMBs")

Number of Infrastructure Engineers, by Size of Firm



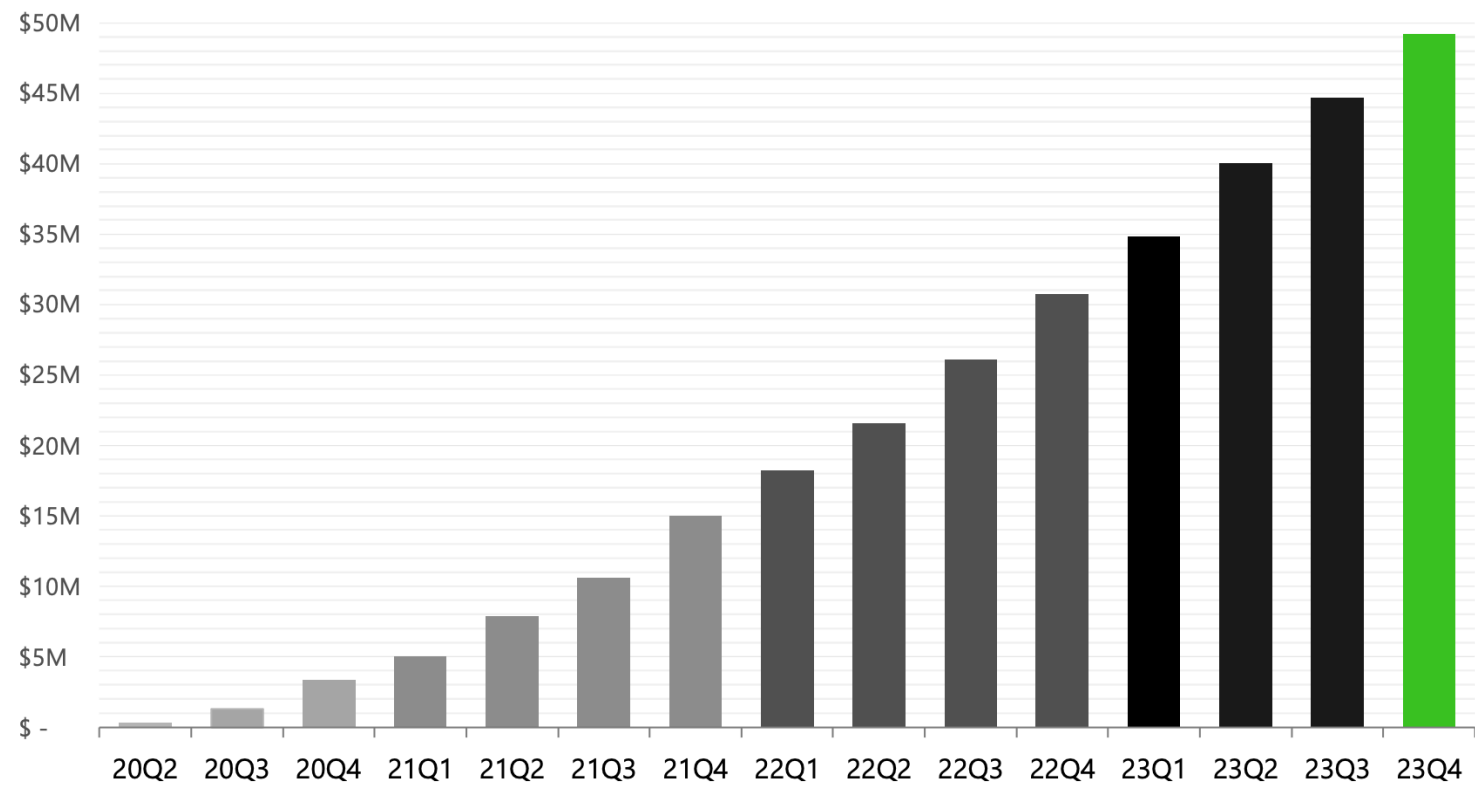
Virtuosity ARR⁶



- Virtuoso Subscriptions combine license with expert assistance
- Targeted at SMB via direct-sales Digital Experience
- >175 inside sales quota carriers
- Added ~3-4% in ARR growth⁷, and 600+ new logos, for last ten quarters

Although smaller clients, volume of clients is propelling valuable ARR

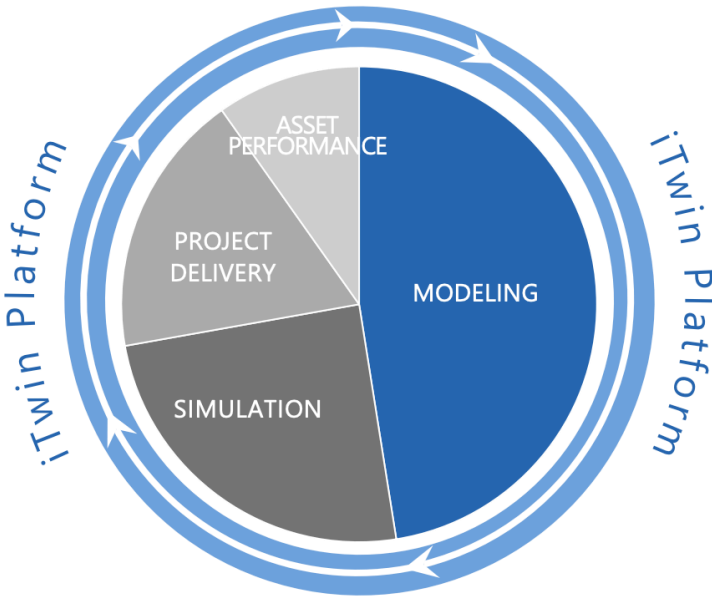
Virtuosity ARR⁶



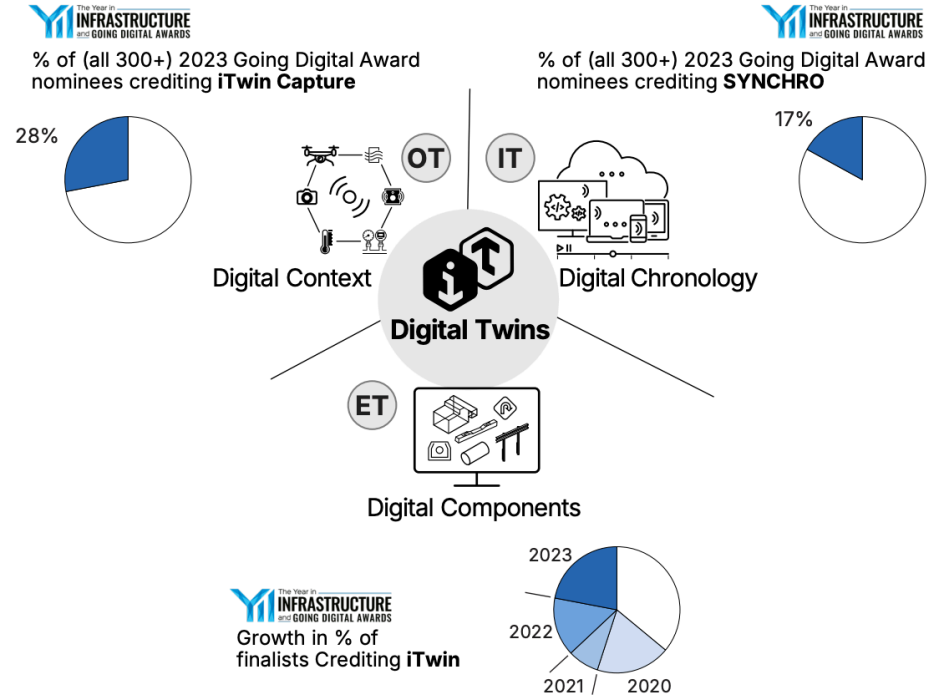
The longer (and large) tailed initiative is enabling all clients to utilize digital twins that expands capabilities across all functions of BSY's solutions

Growth Initiative #3 - Digital Twins (Powered by iTwin Platform)

Cloud Services Synchronizing, Aligning, Federating Infrastructure Engineering Data for AI Accessibility



Note: Chart segment sizing corresponds to underlying % of 24Q2 Sector-attributable ARR⁶



In addition, Bentley has acquired over 100 companies in its 40 years, adding capabilities and expanding the depth of its solutions

Programmatic Acquisitions

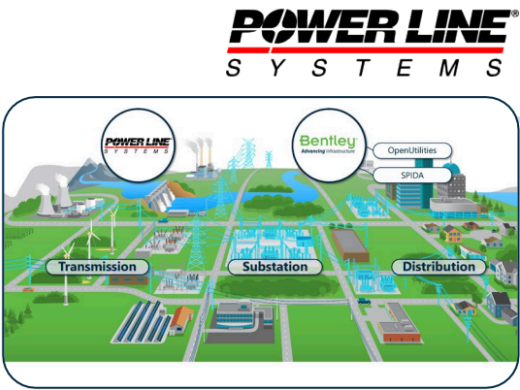
most programmatic acquisitions are “pre-integrated”(specialized applications developed on BSY platforms), ensuring smooth integration with BSY



Platform Acquisitions

Bentley's platform acquisitions solidify its leadership position by offering substantial expertise/value-add to a market and across existing solutions

Expanding Opportunities for Grid and Environment Digital Twins

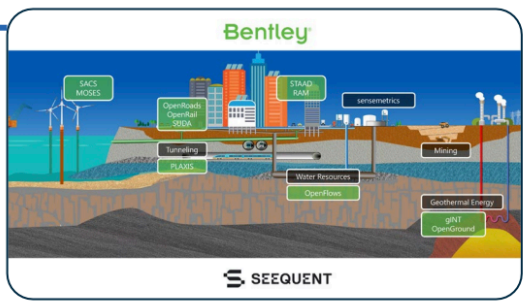
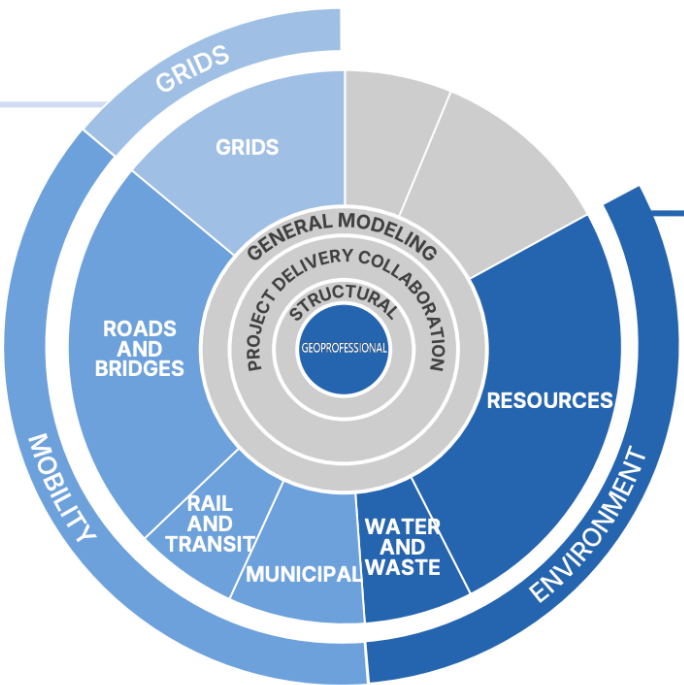


~\$700MM
net consideration

January 2022

Financed with
senior debt

PLS is the leader in power systems and will benefit from the "electrification" of America, and the world



~\$1.1BN
consideration

June 2021

Financed primarily with
convertible debt

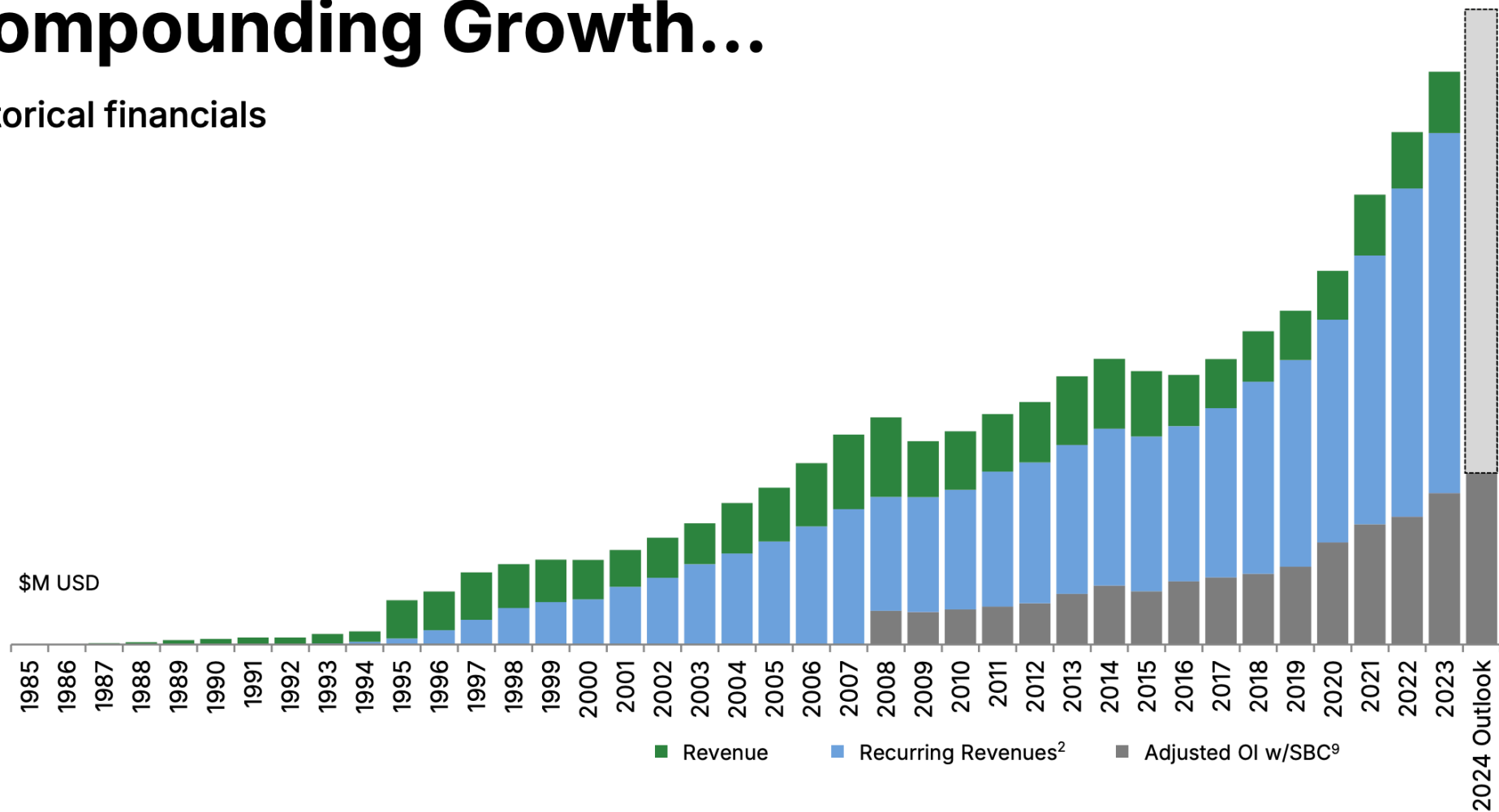
Sequent provides the underground modeling/risk analysis that provides a more comprehensive model for buildings, bridges, roads and water systems (beyond its core market of mining)

a glimpse into Bentley's numbers

Bentley has delivered consistent, profitable growth since its founding

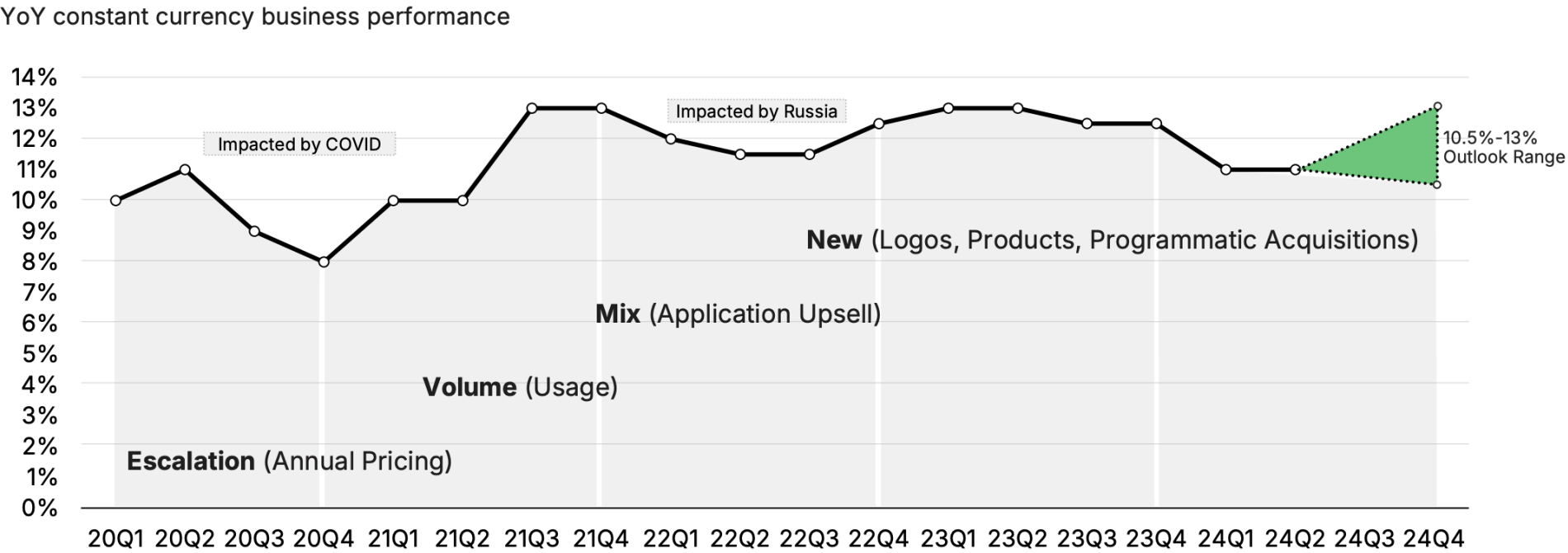
Compounding Growth...

Historical financials

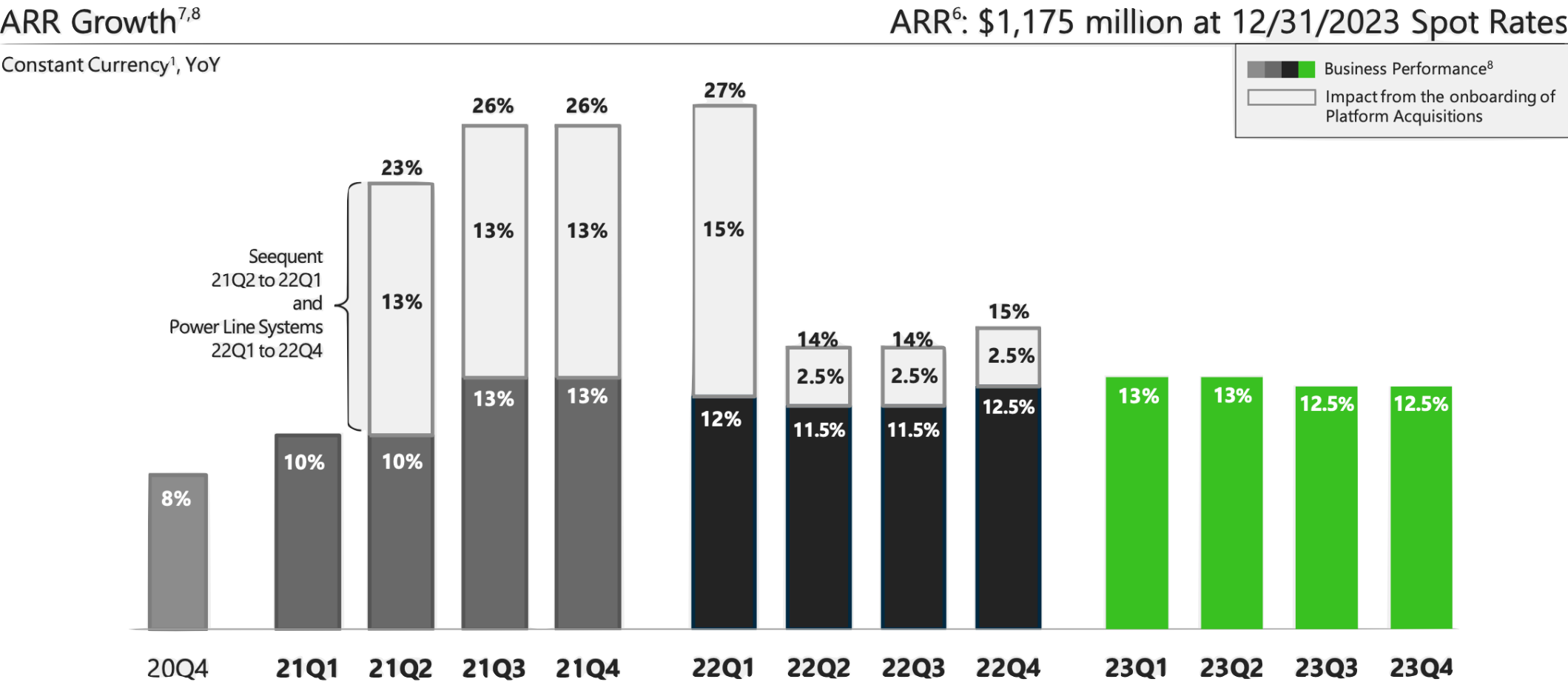


Bentley’s most important metric is ARR growth, which has been relatively predictable, driven by pricing, volume, mix and new customers

Resilient ARR Growth⁸ Layering Multiple Growth Drivers



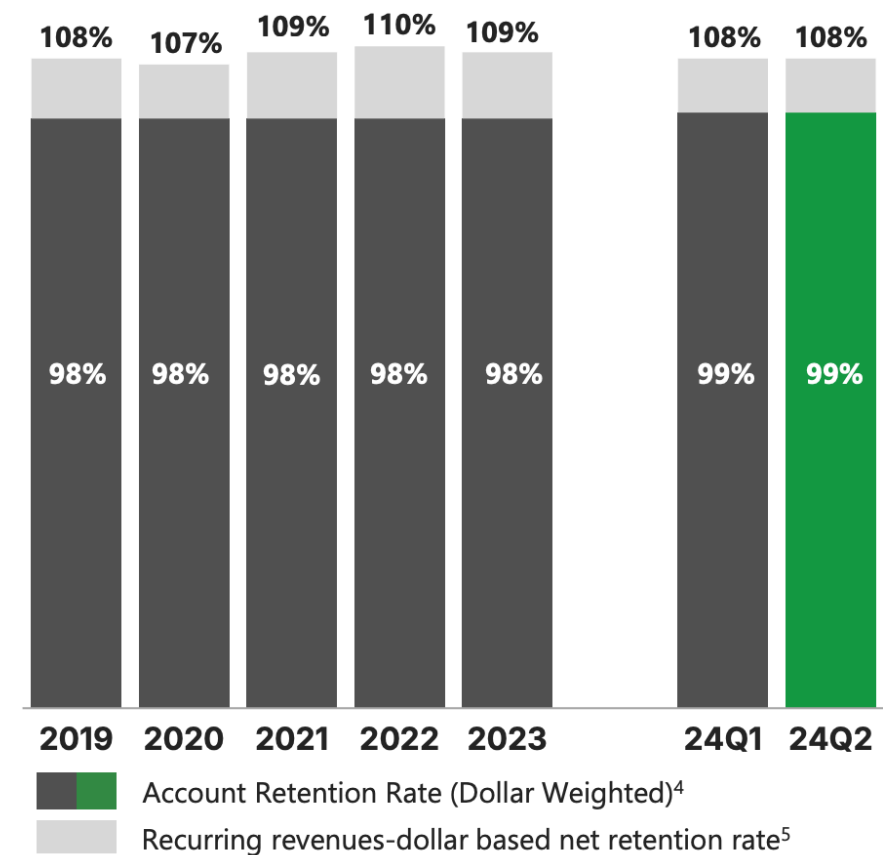
Platform acquisitions provide upside to ARR, that often creates downstream effects on total ARR



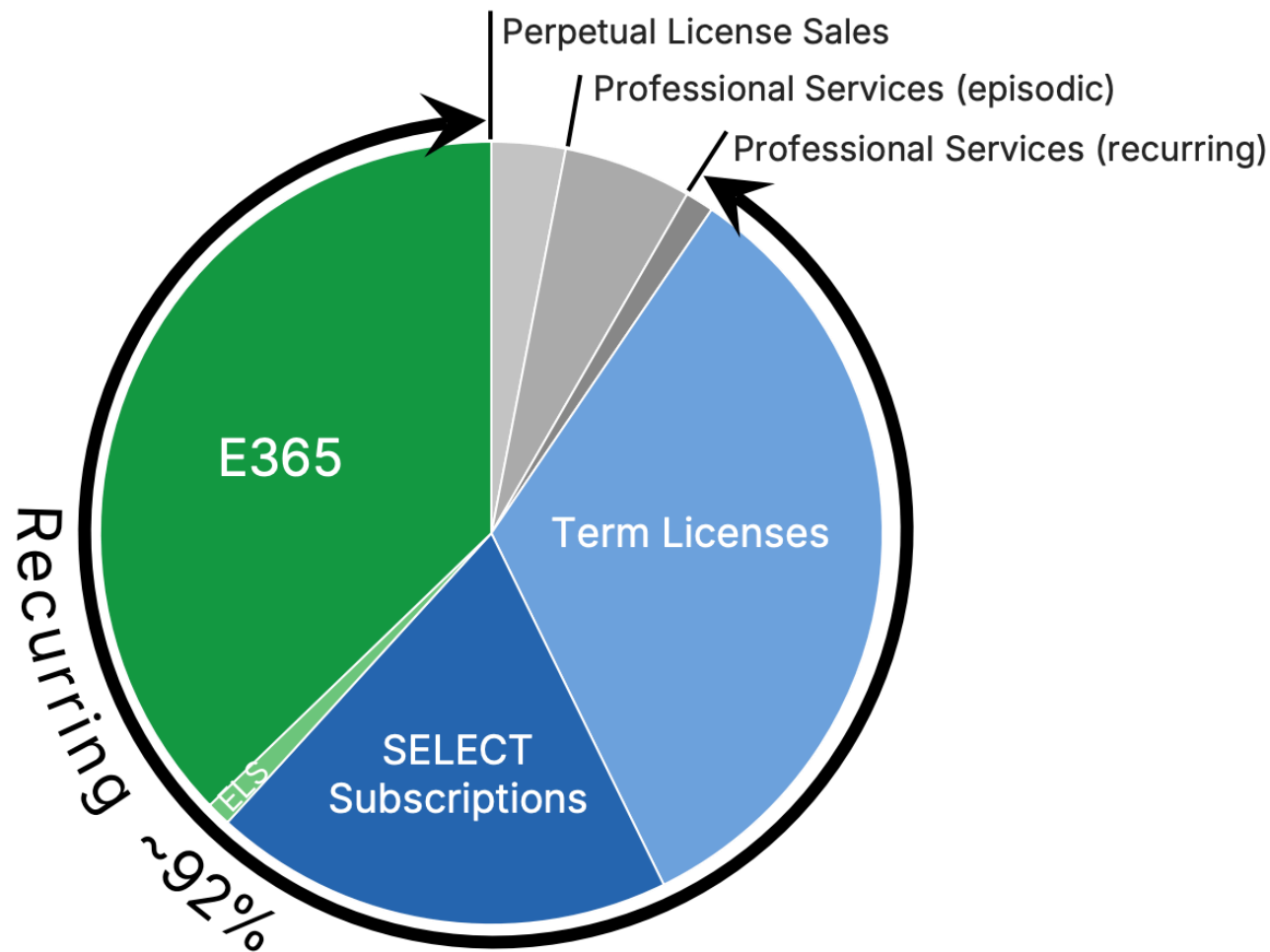
A big driver of its consistent revenue performance is Bentley's stable net recurring revenue (NRR) and revenue retention

LTM Recurring Revenue Retention

\$ in millions
Constant currency¹, YoY

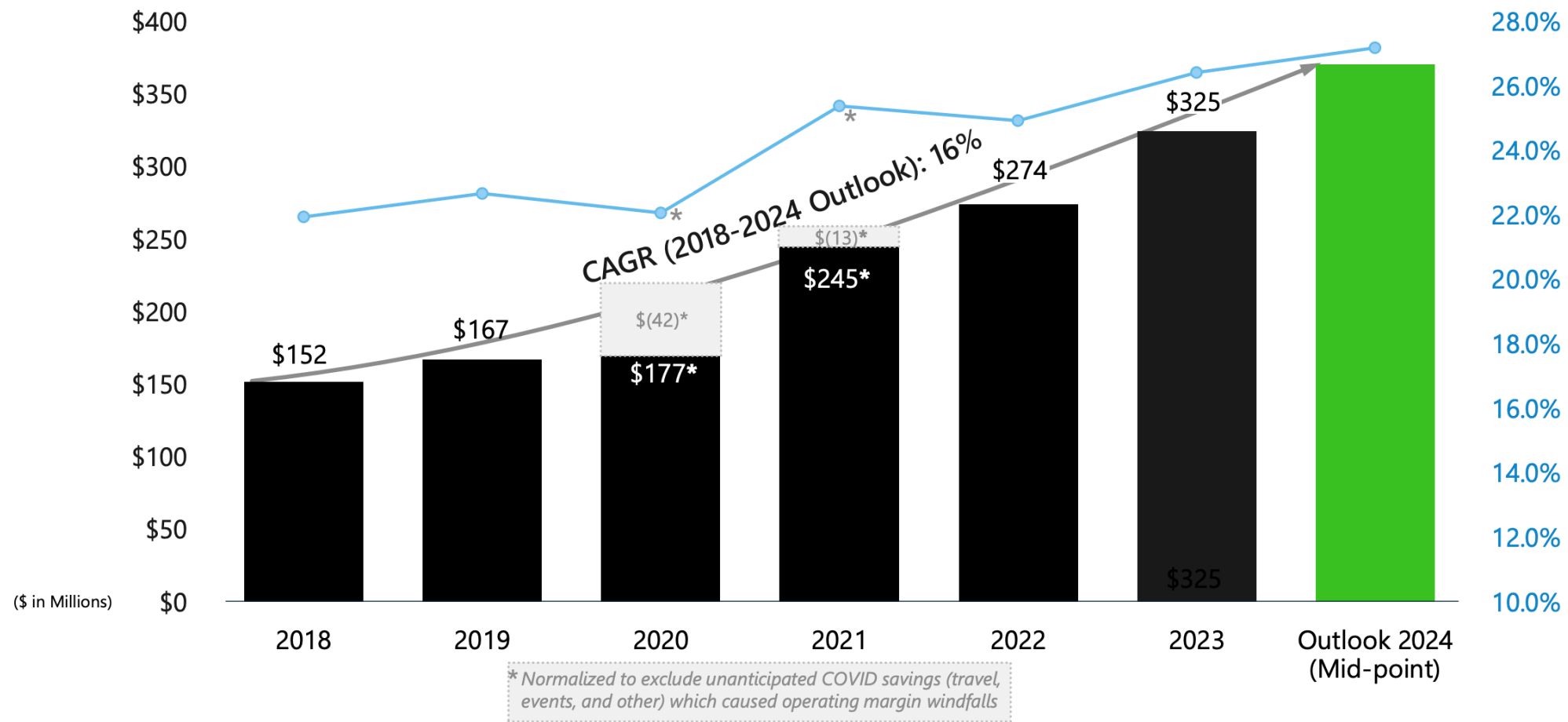


Bentley leverages its high recurring revenue, to make investments in creating new software (R&D, 22% of revenue) and acquisitions



Bentley has delivered profitable growth through its history (and keeps itself accountable by including SBC)

Compounding *Operating Profit* (Adjusted OI w/SBC)



Adjustments to operating income are reasonable and provide a better view into Bentley's core earnings power

Historical OI to Adjusted OI w/SBC

(\$ in thousands)	2018	2019	2020	2021	2022	2023
Operating income	\$ 121,391	\$ 141,865	\$ 150,150	\$ 94,589	\$ 208,612	\$ 230,542
Amortization of purchased intangibles	17,215	18,731	20,721	34,001	53,592	51,219
Deferred compensation plan	(75)	408	177	95,046	(15,782)	13,580
Acquisition expenses	6,410	6,597	11,666	34,368	25,398	17,866
Realignment expenses (income)	6,778	(584)	10,022	-	2,109	11,470
Expenses associated with IPO	-	-	26,130	-	-	-
Adjusted OI w/SBC	\$ 151,719	\$ 167,017	\$ 218,866	\$ 258,004	\$ 273,929	\$ 324,677

Bentley's competitive position

Bentley is the dominant player in the “horizontal” infrastructure space, but there are some very strong players in adjacent markets

	BSY	ADSK	TRMB	ESRI	HEX	AVV	NEM	DASTY	AZPN
PUBLIC WORKS / UTILITIES	★								
GRIDS	★								
ROADS AND BRIDGES	★								
RAIL AND TRANSIT	★								
MUNICIPAL				★					
WATER AND WASTE	★								
RESOURCES	★								
INDUSTRIAL					★	★			
COMMERCIAL / FACILITIES		★							
GEOPROFESSIONAL	★								
STRUCTURAL	★								
PROJECT DELIVERY COLLABORATION	★								
GENERAL MODELING									
MODELING	★								
SIMULATION	★								
PROJECT DELIVERY	★								
ASSET PERFORMANCE				★					
Market Presence	Strong Moderate Low Minor ADSK - Autodesk TRMB - Trimble ESRI - Esri HEX - Hexagon AVV - Aveva NEM - Nemetschek DASTY - Dassault Systems AZPN - AspenTech								
★ Market Leader									



ADSK is the “big gorilla” in “vertical” infrastructure. ADSK competes with BSY in some areas, often at lower prices but less functionality. Extremely well-run company. ADSK was one of the 100-Baggers from the study.

as of August 2024,
 Revenue: \$5.6B (TTM)
 Market Cap: \$56B

BSY has very strong, competent competitors; however, each leverages their own advantages and typically operate in their own industries. ADSK is the most direct competitor for BSY.

Competitive Advantages

Bentley has some very powerful competitive advantages in the form of switching costs and (eventually) network economies

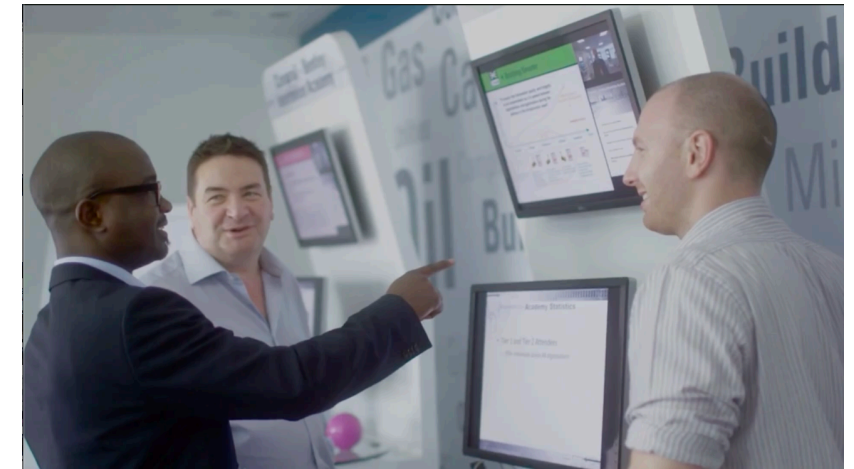
switching costs ...



- Infrastructure engineers require substantial training/experience to become experts on the software; shifting to a new software would require substantial re-tooling/upskilling employees to regain productivity
- most of Bentley's projects are on "long-lived assets" - when something needs to be fixed, they go back to the original plans; since BSY has been around for 40 years, oftentimes these plans were originally created on BSY

... and emerging, network economies

- as BSY's digital twins and other collaboration tools (within ProjectWise and AssetWise) become more integrated into users' process, it will exponentially increase the power of switching costs (even more people to train, etc) but also as more users collaborate, it creates a network effect whereby the system becomes more valuable as more users are on it



Risks

Although a compelling opportunity, Bentley stock entails real risks

Most Critical Risks:

- valuation
- reversal of project funding from the infrastructure bill, other funding
- management transition falters
- mis-allocation of capital, particularly acquisition(s)

Response:

- the stock sports a rich valuation, but the predictability of the growth should allow BSY to deliver on expectations (risk is valuation, not operating performance)
- unlikely given the deteriorating infrastructure in US (strong support by citizens)
- wildcard - will Greg/brothers loosen up on the reins, or fight back at every turn?
- historically, BSY has done “programmatic” acquisitions, which are smaller and fill-in capabilities; if new team chooses more “platform” acq’s, this could be more challenging for the stock

Pre-Post-Mortem (ie, why did the investment fail?)

over a 5 year horizon:

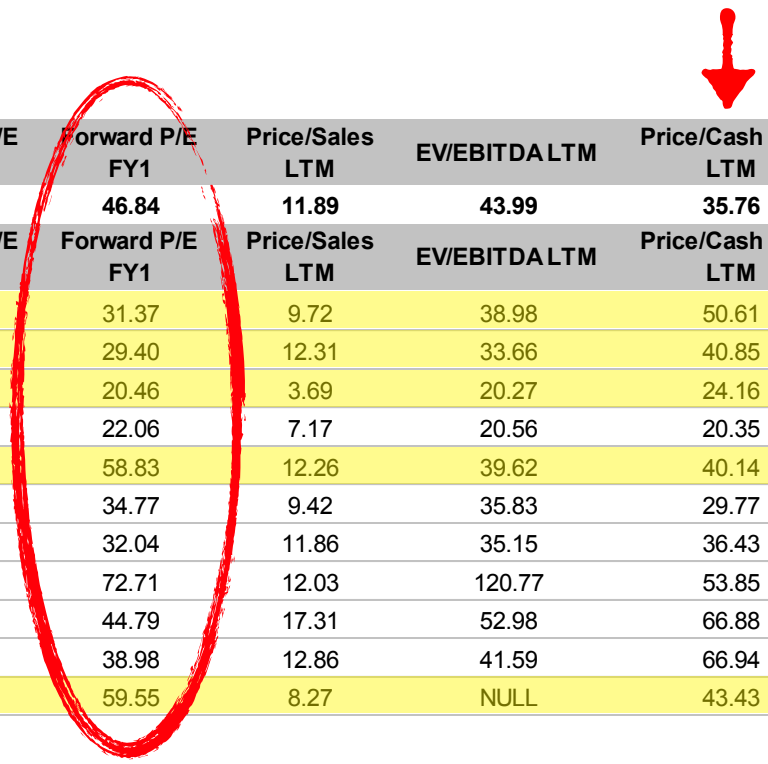
- valuation too high, BSY couldn’t meet expectations
- bad acquisition(s)
- competitive threats become more aggressive
- turmoil in Board room as new leaders push back against the brothers

over the long-term:

- culture collapse with new leadership not able to successfully recruit, motivate and retain key employees
- mis-allocation of capital (poor returns from mis-guided acquisitions)
- given high debt:GDP levels, countries de-prioritize infrastructure and investment falters
- lack of infrastructure engineers causes challenges to growth

Valuation

On current numbers, Bentley looks expensive on absolute basis, but relative to peers BSY appears in-line



RIC	Company Name	Trailing P/E LTM	Forward P/E FY1	Price/Sales LTM	EV/EBITDA LTM	Price/Cash Flow LTM	Price/Book LTM	Dividend Yield Latest (%)
BSY.N	Bentley Systems Inc	44.56	46.84	11.89	43.99	35.76	7.17	NULL
RIC	Company Name	Trailing P/E LTM	Forward P/E FY1	Price/Sales LTM	EV/EBITDA LTM	Price/Cash Flow LTM	Price/Book LTM	Dividend Yield Latest (%)
ADSK.OQ	Autodesk Inc	55.17	31.37	9.72	38.98	50.61	25.33	NULL
AZPN.OQ	Aspen Technology Inc	NULL	29.40	12.31	33.66	40.85	1.08	NULL
TRMB.OQ	Trimble Inc	9.16	20.46	3.69	20.27	24.16	2.43	NULL
ORCL.N	Oracle Corp	37.19	22.06	7.17	20.56	20.35	43.64	1.16
NEKG.DE	Nemetschek SE	61.85	58.83	12.26	39.62	40.14	13.87	0.52
PTC.OQ	PTC Inc	70.95	34.77	9.42	35.83	29.77	6.92	NULL
ANSS.OQ	ANSYS Inc	55.84	32.04	11.86	35.15	36.43	4.94	NULL
ALTR.OQ	Altair Engineering Inc	276.96	72.71	12.03	120.77	53.85	9.51	NULL
CDNS.OQ	Cadence Design Systems Inc	68.04	44.79	17.31	52.98	66.88	16.91	NULL
SNPS.OQ	Synopsys Inc	52.55	38.98	12.86	41.59	66.94	10.16	NULL
PCOR.N	Procore Technologies Inc	NULL	59.55	8.27	NULL	43.43	6.99	NULL

When considering returns, profitability and growth, Bentley looks attractive relative to peers

RIC	Company Name	ROE LTM	ROALTM	Gross Margin LTM	Operating Margin LTM	Operating Margin 5 Yr Avg	Pretax Margin FY0	EBITDA/Equity LTM
BSY.N	Bentley Systems Inc	46.10	11.68	79.97	21.31	16.74	14.94	46.30
RIC	Company Name	ROE LTM	ROALTM	Gross Margin LTM	Operating Margin LTM	Operating Margin 5 Yr Avg	Pretax Margin FY0	EBITDA/Equity LTM
ADSK.OQ	Autodesk Inc	65.21	10.55	90.77	21.43	16.88	20.67	92.54
AZPN.OQ	Aspen Technology Inc	-0.08	-0.07	66.07	-7.94	NULL	-3.89	3.13
TRMB.OQ	Trimble Inc	30.34	15.78	62.12	56.83	13.82	9.40	14.41
ORCL.N	Oracle Corp	214.14	7.60	71.41	28.99	30.45	22.17	454.33
NEKG.DE	Nemetschek SE	24.35	13.77	95.95	24.10	24.24	24.02	37.26
PTC.OQ	PTC Inc	10.53	4.79	79.81	23.22	18.25	15.86	22.33
ANSS.OQ	ANSYS Inc	9.43	7.11	88.24	25.96	29.06	26.09	14.75
ALTR.OQ	Altair Engineering Inc	3.78	2.06	80.92	3.56	0.97	2.06	8.52
CDNS.OQ	Cadence Design Systems Inc	29.44	17.05	88.51	28.19	27.09	31.34	38.08
SNPS.OQ	Synopsys Inc	22.12	13.91	80.25	24.22	19.42	22.28	26.88
PCOR.N	Procore Technologies Inc	-7.64	-4.91	82.53	-11.43	-32.46	-19.83	-3.00

Bentley's stock implies 11.6% to 14.3% 3-5 year operating profit growth rate hurdle

this should be viewed as the “spread” - the market’s expectations for next 3-5 years; if BSY exceeds the “spread”, the stock will move higher (or vice versa)

8/29/2024

8/29/2024	(valuation date)
Bentley Systems Inc	BSY.N
Current Price:	\$50.56

BSY.N
Target

Growth	ROIIC	Rate of Return
BSY.N	BSY.N	BSY.N
Market Fit	Market Fit	Market Fit

SUPER COMPOUNDER
BSY.N Target
11.6
300.0
240%
10.00
25.2
Aug-2049
25
\$50
29-Aug-24
\$50.56
0%

Business Model Value Creation:

Operating Profit (3-5 year) growth rate:
Pretax Capital Efficiency (ROIIC)

Note: Aftertax ROIIC (%)

15.0
300.0

14.3
300.0

15.0
90.0

15.0
300.0

240%

72%

240%

240%

Investment Neighborhood:

Required Rate of Return (cost of capital):
Value horizon years (from balance sheet date to CAP):
C.A.P. (Duration of value creation):
years

10.00
18.2
Aug-2042
18

10.00
18.2
Aug-2042
18

10.00
18.2
Aug-2042
18

10.48
18.2
Aug-2042
18

10.00
25.2
Aug-2049
25

Value-Equation Value Est.

\$55

\$50

\$50

\$50

\$50

Price Date:

29-Aug-24

29-Aug-24

29-Aug-24

29-Aug-24

29-Aug-24

Actual Price
Diff (%)

\$50.56
9%

\$50.56
0%

\$50.56
0%

\$50.56
0%

\$50.56
0%

if BSY delivers approximately 14% to 15% operating profit growth (as we expect), implies stock value of \$80 to \$125 by 2029 (CAGR of 9% to 20%).

Bentley's growth should continue for the foreseeable future

growth drivers

	% contribution
• pricing	3%
• upsell/mix accretion	6%
• new logos	3%
• consumption	"a little bit"

*doesn't include acquisitions - programmatic acq's historically
have added ~1% to ARR growth*

confidence growth can continue...

- MicroStation (BSY's base software) still 2nd largest revenue contributor (big upsell/mix accretion oppty)
- digital twins is in its infancy
- China optionality
- asset analytics opportunity
- acquisitions

**low double-digit ARR growth + 100bps margin
improvement drove ~16% Adj OI w/SBC CAGR**



Over the long-term, as BSY continues to compound earnings and cash flow, the company creates more value which should result in stock outperformance

Bentley Systems (tkr: BSY)
Scenario Analysis of 2039 Implied Value

		Incremental Adjusted OI with SBC margin														
		30.0%	32.5%	35.0%	37.5%	40.0%	42.5%	45.0%	47.5%	50.0%	52.5%	55.0%	57.5%	60.0%	62.5%	65.0%
R E V E N U E	6.50%	3.2	3.4	3.5	3.7	3.8	4.0	4.1	4.2	4.4	4.5	4.7	4.8	5.0	5.1	5.2
	7.00%	3.5	3.6	3.8	4.0	4.1	4.3	4.4	4.6	4.8	4.9	5.1	5.2	5.4	5.6	5.7
	7.50%	3.7	3.9	4.1	4.3	4.4	4.6	4.8	5.0	5.2	5.3	5.5	5.7	5.9	6.1	6.2
	8.00%	4.0	4.2	4.4	4.6	4.8	5.0	5.2	5.4	5.6	5.8	6.0	6.2	6.4	6.6	6.8
	8.50%	4.3	4.5	4.7	5.0	5.2	5.4	5.6	5.8	6.1	6.3	6.5	6.7	6.9	7.1	7.4
	9.00%	4.6	4.8	5.1	5.3	5.6	5.8	6.1	6.3	6.5	6.8	7.0	7.3	7.5	7.7	8.0
	9.50%	4.9	5.2	5.5	5.7	6.0	6.3	6.5	6.8	7.1	7.3	7.6	7.9	8.1	8.4	8.6
	10.00%	5.3	5.6	5.9	6.2	6.5	6.7	7.0	7.3	7.6	7.9	8.2	8.5	8.8	9.1	9.4
	10.50%	5.7	6.0	6.3	6.6	6.9	7.3	7.6	7.9	8.2	8.5	8.8	9.2	9.5	9.8	10.1
	11.00%	6.1	6.4	6.8	7.1	7.5	7.8	8.1	8.5	8.8	9.2	9.5	9.9	10.2	10.6	10.9
G R O W T H	11.50%	6.5	6.9	7.2	7.6	8.0	8.4	8.8	9.1	9.5	9.9	10.3	10.6	11.0	11.4	11.8
	12.00%	7.0	7.4	7.8	8.2	8.6	9.0	9.4	9.8	10.2	10.6	11.0	11.4	11.9	12.3	12.7
	12.50%	7.4	7.9	8.3	8.8	9.2	9.6	10.1	10.5	11.0	11.4	11.9	12.3	12.8	13.2	13.6
	13.00%	7.9	8.4	8.9	9.4	9.9	10.3	10.8	11.3	11.8	12.3	12.7	13.2	13.7	14.2	14.7
	13.50%	8.5	9.0	9.5	10.1	10.6	11.1	11.6	12.1	12.6	13.2	13.7	14.2	14.7	15.2	15.8
	14.00%	9.1	9.6	10.2	10.8	11.3	11.9	12.5	13.0	13.6	14.1	14.7	15.2	15.8	16.4	16.9

over a long enough timeframe, a stock's performance will mirror the company's underlying fundamental performance

BSY's stock returns will be driven by operating performance, not multiple expansion

Sensitivity to FCF Yield Multiple

	15 Yr Returns	
	BAGGER	CAGR
1.50%	10.52	16.6%
1.75%	9.09	15.5%
→ 2.00%	8.02	14.5%
2.25%	7.19	13.7%
2.50%	6.52	13.0%
2.75%	5.98	12.4%
3.00%	5.52	11.8%
3.25%	5.14	11.3%
3.50%	4.81	10.8%
3.75%	4.52	10.3%
4.00%	4.27	9.9%

market-beating returns

BSY currently trading at ~2.0% FCF Yield
(we do not project that BSY will sustainably realize a higher multiple)

If the market re-rates the stock to 2.5% FCF Yield, the stock could be “dead money” for 2 years and not provide “market-comparable” returns until 2027/2028; however, over the longer-term (10 years+), the stock will trade in-line with its fundamentals and out-perform if it delivers on our expectations

Triangulating across multiple valuation methodologies, Bentley stock appears to have an acceptable asymmetric risk/reward opportunity

DCF	ROIC Valuation	Multiple Approach
Upside: \$105 - \$115	Upside: \$99 - \$150	Upside: \$110 - \$125
Downside: \$55 - \$68	Downside: \$40 - \$50	Downside: \$40 - \$55

2029 Price Target Range		Assumed Probabilities		Implied Valuation (using mid-point)
Upside: \$100 - \$150		Upside: 25%		
Most Likely: \$70 - \$90	×	Most Likely: 50%	=	\$82.50
Downside: \$40 - \$50		Downside: 25%		(+60.3%; +10.4% CAGR incl. dividend yield of 0.5%)

Investment Conclusion



Recommendation: BUY

Bentley is the leader in “horizontal” infrastructure engineering software with the most comprehensive suite of solutions. BSY’s solutions have been used in 9 of every 10 projects in the US. BSY should continue to enjoy double-digit growth as the demand for infrastructure grows and the company delivers operating leverage. BSY’s competitive advantages are very powerful and sustainable. BSY’s stock performance will be driven by continued successful execution and delivering growth. The investment is “low-risk operationally, medium-risk from valuation”.

Our variant perspective is: 1) growth is more sustainable due to underlying market demand/digital shift and new product offerings (asset analytics & digital twins); 2) competitive power is growing with collaboration and higher reliance on software; 3) company economics improving (higher returns through higher margins and better cashflow conversion); and 4) optionality for higher growth due to China, asset analytics and digital twin acceptance.

Valuation - stock is not cheap at ~2% FCF Yield (14x TEV/Revenue). Stock price performance will be driven by high-return/value-creating growth, not re-rating of the shares. Investment is justified due to the high-quality of the business and long-tailed growth (“higher for longer”). Patience and fortitude are required.

Matthew Ankrum, CFA

investor with entrepreneurial insight and drive



Differentiated Approach:

- true investor, not speculator - long-term owner of the business
- uniquely positioned to leverage experience and expertise from leading businesses
- utilizes a proven, disciplined investment process with analytical rigor
- adheres to scalable methodology to build a sustainable, profitable franchise

Biography:

Matthew A. Ankrum, CFA – 20+ years investment experience (Portfolio Manager and Analyst). Mr. Ankrum was a Portfolio Manager and Managing Director for Lateef Investment Management, a concentrated asset manager. At Janus, he was a Founder and Portfolio Manager of the Janus Long/Short Fund, Assistant Portfolio Manager of Janus Contrarian Fund and Senior Equity Research Analyst, Assistant Portfolio Manager of Janus Enterprise Fund. He also worked for William Blair & Company and Consecro Capital Management. In addition, Mr. Ankrum was Head of Strategy for Apollo Education Group, Inc., a Fortune 500 company and he founded, funded and sold his software Fin-Tech startup. In 2014, he founded MFA Opportunity Fund to invest in multi-family apartments. Over the latest 5 years, Mr. Ankrum has helped several startups “stand up” their business either in an operating role (CEO), advisor or as a member of the Board of Directors. Matt earned a BBA from the University of Wisconsin – Madison with high honors and an MBA from the University of Chicago with honors.

“I am a better investor because I am a businessman, and a better businessman because I am an investor”
- Warren Buffett

Contact Info



*Quality Companies
Compounding Cashflow*

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Appendix