

Eric Boyer: Good morning, and thank you for joining Bentley Systems' Q2 2024 results webcast.

I'm Eric Boyer, Bentley's investor relations officer.

On the webcast today, we have Bentley Systems' Executive Chair Greg Bentley, Chief Executive Officer Nicholas Cumins, and Chief Financial Officer Werner Andre.

This webcast includes forward-looking statements, made as of August 6, 2024, regarding the future results of operations and financial position, business strategy and plans, and objectives for future operations of Bentley Systems, Incorporated.

All such statements made in or contained during this webcast, other than statements of historical fact, are forward-looking statements.

This webcast will be available for replay on Bentley Systems' Investor Relations website at investors.bentley.com on August 6, 2024.

After our presentation, we will conclude with Q&A. And with that, let me introduce the Executive Chair of Bentley Systems, Greg Bentley.

Greg Bentley: Good morning, and thanks to each of you, as always, for your interest in BSY. In this first operating results reporting in new roles, our lineup will remain the same—but the format is updated to correspond to new responsibilities. In particular, I bequeath to Nicholas, as CEO, the charts to review our operating performance numbers, especially ARR growth as our key indicator, along with his expanded commentary on the underlying tone of business across all notable dimensions.

As now Executive Chair, my perspective on directions and developments will, here and henceforth, be qualitative and comparatively succinct.

While I think our 24Q2 operating results should be recognized as commendably robust on their face, my qualitative characterization of the quarter is even more favorable. In all-around pace and balance, it seems to me, with now perhaps the benefit of a broader perspective in my new role, that everything has come together—more so than ever.



Hence, some observations on our busyness directions, in keeping with my new qualitative focus.

For me, "BSY busyness" describes the unprecedented stride now being hit both in our infrastructure engineering end markets and in our own efficient execution, which, of course, will be further detailed in turn by Nicholas and Werner.

And speaking of quality, rarely if ever in my experience has our ARR growth shown as much balance, visibility, and linearity as it has of late.

In fact, I consider the fundamentals of our business to have further improved year-over-year, as would be reflected in ARR growth net of subsiding inflation-based escalation, intentional commercial model changes in China, and onboarding from programmatic acquisitions.

Likewise, I think 2024 revenues have significantly grown in quality, with recurring subscription revenues surpassing 90% of the total, by virtue of mid-double-digit year-to-date growth in subscription revenue that is virtually all organic.

And my new focus on qualitative observations leads me to also emphasize the transparency and accounting quality of our revenues, rare or unique among even software peers with likewise subscription preponderance. Our distinction is that we have virtually no multiyear recognition, or billing, as is elsewhere booked at the expense of the future. Moreover, by virtue of our ever-growing E365 plurality, over three-quarters of our subscription revenues are recognized strictly ratably throughout the year (for which we collect in advance), with only the shrinking remainder of less than 25% still subject to any 606 obscurity even just across quarters.

Our what-you-see-is-what-we-get revenue quality, in turn, makes our profitability margins meaningful and consistent. And, as you know, for further financial transparency and usefulness, our key profitability metric—adjusted operating income inclusive of stock-based compensation—tracks reliably with cash flows *after* stock repurchases to offset the dilution which would otherwise result.

Incidentally, for the first half of 2024, all of these measures thus follow suit, with subscription revenues in significant favorable variances.



Lastly, among qualitative observations of our unprecedented busyness, recall my high hopes for our asset analytics initiatives to make a mark in 2024. In this incremental opportunity, beyond our existing commercial model—where ARR is charged per user—our asset analytics subscriptions are charged per asset for insights derived through AI from digital twin cloud services.

While still not quite moving our overall ARR growth needle, I am pleased to say that in 24Q2, asset analytics did reach the pace of ARR growth (a rate of eight digits for the year), which I posited last quarter as a reasonable aspiration.

Turning now to such long-term prospects, the asset analytics initiative is characteristic of the auspicious expectations I have for our new generational leaders to explore and develop incremental opportunities. While I am confident that we have the right leadership, I regard it as my responsibility as Executive Chair to make sure that our board structures the appropriate incentives and rewards for "success in succession," given what we've organizationally learned.

And it happens that, in a month, we will officially celebrate the 40th anniversary of Bentley Systems. Coinciding as this does with our CEO transition, it has been natural and important for me to reflect on the factors that I think have contributed to BSY remaining, in my humble assessment, sufficiently entrepreneurial for so long—and what we can do to perpetuate that growth mindset culture and its sustained compounding performance.

Significantly, I think, a stalwart constant ever since our founding 40 years ago has been our unusual executive bonus plan for top management.

Having been a primary beneficiary of that plan for the last 33 years (and still remaining so, as per this recent disclosure filing), I feel entitled to say with some authority that the design and operation of this plan, on the one hand, and BSY's continually compounded growth in profitability (and hence share valuation) on the other hand, have not been just coincidental. The plan has incentivized just that by paying me an established fixed percentage of operating income each quarter for the very long term.

At the outset of the plan, of course, our operating income magnitude was insignificant compared to today's. But knowing that the parameters of this plan would prevail indefinitely, as CEO, I could—and did all along the way—make



intentionally long-sighted resource allocation decisions to benefit the magnitude per share of future profitability, sowing the seeds for incentives reaped more recently.

These days, the same underlying premise tends to be enshrined in the market as a rule of 40. At BSY—where this plan set our compass to ingrain a growth mindset—as we reach our 40th anniversary (and even in our conservative way of calculating operating income after stock-based compensation), we have reached the rule's 40—and counting, as this chart shows!

So, on this occasion of our first CEO transition, our shared priority to further perpetuate this compounding likewise needs to underlie our new CEO's incentives by way of long-term visibility into his compensation opportunities, comparable to what worked for me and BSY to date.

During 24Q2, our board's sustainability committee finalized this new CEO compensation plan, anchored by what is indeed meant to be a career stock program for Nicholas.

It incorporates the distinctive and proven philosophy of our historical executive bonus plan, but refactored and modernized to begin now with our current profitable public company point of departure.

Career stock awards and appreciation are designed to provide the increasing majority of cumulative CEO earnings over what we expect to be another tenure of double-digit years.

As in our original plan, the career stock program pays out—in this case as an annual restricted stock award—an established fixed percentage of operating income—but now only to the extent of growth above an also fixed threshold annual growth rate.

Each such annual grant does not vest until after five years of continued service to assure a sufficient rolling horizon for everyone to plan for. But importantly, during those rolling five years, the percentage parameters of the career stock program can't be changed, and probably won't be changed even thereafter. This is of the essence—the CEO needs and deserves visibility to know how their resource allocation investment returns will be duly rewarded. It immunizes the CEO from



the perverse disincentive, otherwise, of their goalposts being raised to the very extent they succeed.

By continuing and compounding BSY's dependable growth, the CEO's career stock will accumulate and compound to result in a competitively benchmarked and deserved reward over the course of a desired decade-plus at the helm.

But as importantly, the career stock program appropriately contemplates our next CEO retirement. Though we believe in the value of continuity, recent events—and I'm not talking about my retirement, mainly—reinforce the virtue of a top leader not being incented to outstay their effectiveness. The vesting of all earned career stock accelerates upon an expected tenure as CEO that we have mutually agreed, facilitating the decision then to retire.

Through career stock, our first generation of BSY leadership, now as board members, has in mind to "program" our new generational leadership to benefit much, and most, from the long-term thinking which we believe has served us optimally—and as much in the capacity of owners as executives—for our 40 years so far.

And speaking of our confidence in such succession, may I introduce, for the first time as CEO, Nicholas Cumins to cover operating perspectives and operating performance.

Thanks.

Nicholas Cumins: Thank you, Greg.

Having completed my first month as CEO, I want to start my prepared remarks today by reiterating my enthusiasm for Bentley's role in the world of infrastructure and for the many opportunities that lie ahead of us.

Infrastructure sectors have benefited greatly from the massive capital investment in projects and jobs post-pandemic, but much more remains to be done to make infrastructure more resilient—from retrofitting aging infrastructure and mitigating the effects of climate change, to closing the gap in engineering resources. Our



collective ability to overcome those challenges will determine the quality of life for generations to come.

Fortunately, a paradigm shift in software is reshaping the landscape. All is going to be a major driver of our business moving forward, helping engineering services firms to increase their productivity, and owner-operators to better understand the condition and improve the performance of their assets.

The traction we are generating in the market with our Al-based solutions for asset analytics is worth noting. The vast majority of costs are incurred during the operations phase of the infrastructure lifecycle, which represents a significant growth opportunity for us. With asset analytics, we can transform the way organizations monitor the condition of roads, bridges, dams, water networks, and telecommunications towers. As Greg referenced in previous quarters, we are seeing increased adoption of our Al-based solution for roadway maintenance, and our Al-based offering for cell towers is also ramping up globally.

Of course, this all builds on our broader strategy of bringing data to life—federating it, enriching it, reusing it—through digital twins.

Our first 40 years as a company were successful because we saw opportunity in paradigm shifts—to the personal computer, to the cloud, to digital twins, and now, to Al. The foundation laid over the last four decades has uniquely positioned Bentley for success, and it ensures we will be there to help the world's engineering firms and owner-operators answer the call for more resilient infrastructure for decades to come.

Now to our business performance for the quarter.

Q2 was another strong quarter with very positive end-market and operational momentum.

ARR performance was broad-based across industries and geographies. Our E365 and Virtuosity growth initiatives continued to be strong contributors as well.



The two headwinds to our overall performance continue to be China, in particular for ARR, and Cohesive, our digital integrator business, with respect to professional services revenues. Cohesive continues to be impacted by the slow uptake of the next generation of IBM Maximo for enterprise asset management.

Throughout the first half of 2024, we delivered very strong profitability and cash flow.

Moving to ARR growth, our key metric of business performance year-over-year. In Q2, this remained at 11%, including contributions from programmatic acquisitions, which have become negligible.

We expect ARR growth to benefit from significant E365 renewals towards the end of the year, based on the impact of floors and ceilings, as explained last quarter. Excluding the impact of China, ARR growth was 11.5%. China now represents only 2.5% of our total ARR.

Moving to our growth by commercial models, our E365 program remains a major growth driver, with continued conversions of accounts from the SELECT subscription program, and application mix accretion (upsell or cross-sell) within existing E365 accounts.

In terms of our SMB accounts, which we classify as accounts less than \$100,000 of ARR per year, we continue to add new logos at a strong pace. In Q2, new logos contributed four percentage points to ARR growth for the second consecutive quarter, and at least three percentage points for the sixth quarter in a row.

Our Virtuosity subscriptions, targeted primarily at SMBs through our online store, continued to add a strong number of new logos in Q2—the tenth straight quarter of more than 600 new logos.

Moving to industry dynamics, which continue to be robust. In the most recent ACEC quarterly survey, the main themes continue—U.S. engineering firms across sectors expect higher backlogs 12 months from now. They also continue to



express optimism regarding the outlook for the U.S. economy, the design and engineering sector, and their own firm's overall finances.

Looking at our performance by infrastructure sector in Q2.

Public works/utilities, our largest sector, was once again the main growth driver for the company as we continue to benefit from strong global infrastructure spending across transportation, water utilities, and the electric grid. Civil is also the largest growth driver for Seequent.

Growth in resources remained solid, with Seequent strengthening its position in mining, despite new mine investments remaining subdued. The industrial and the commercial/facilities sectors had modest growth.

Moving on to regions.

The Americas was the fastest growing region, again led by North America. We continue to see tailwinds from the IIJA, with only 38% of the overall funding having been announced to date—and primarily for transportation. We are also benefiting from increased spending for highways and bridges by the states themselves (estimated by trade groups at 13% this year).

As another positive development in the U.S., the Senate Energy & Natural Resources Committee just proposed a bipartisan reform bill representing the biggest change to federal permitting in years. The president recently signed into law the ADVANCE Act, a bipartisan nuclear energy bill to ease permitting restrictions. And the House passed the Water Resources Development Act, which delivers critical water resource infrastructure improvements and streamlines processes and permitting. We believe this bipartisan support for infrastructure will continue in the U.S., regardless of election outcomes in November.

Moving to EMEA. Q2 performance was steady, driven by public works/utilities and resources. The Middle East had a particularly strong quarter driven by municipalities and mining. We are monitoring the recent political developments in



Europe but, at this point, we do not believe there will be major implications for infrastructure priorities.

Asia Pacific continues to be a growth driver with strong performance across sectors, with Australia/New Zealand standing out. India had solid growth, despite the expected slowdown, given the elections. We expect growth in India to reaccelerate in the second half, as the government is keen to resume funding infrastructure projects. President Modi's third-term government published its budget, which remains unchanged from an earlier version and still foresees a record \$133 billion in infrastructure spending in the financial year ending March 2025. The rest of the region experienced solid growth.

China's performance was consistent with recent quarters. The headwinds remain the same, with soft economic conditions, and geopolitical tensions intensifying the shift in preferences by state-owned enterprise accounts for perpetual licenses and local software.

Moving on to another operational highlight.

In previous quarters, we have talked about our efforts to help U.S. state DOTs in going digital. This quarter, I want to highlight a recent example in our headquarters' home state of Pennsylvania. Earlier this year, we hosted PennDOT's top executive team, the Commonwealth's legislative leaders, and engineering firm CEOs at our campus to discuss digital project delivery. This exemplifies the outreach we look to do within the ecosystems of our state DOT partners.

PennDOT had already upgraded to Bentley's OpenRoads 3D design software, and ProjectWise for data management, to support roadway, bridge, drainage, traffic, and geotechnical engineering.

During Q2, we expanded our scope of business with PennDOT by more than half to advance digital project delivery through SYNCHRO for 4D construction modeling and broader usage of ProjectWise—both part of Bentley Infrastructure Cloud.



At the same time, PennDOT is transitioning to become "platform inclusive," largely to expand their design supply chain to smaller civil engineering firms, given the capacity constraints of established DOT consultants.

In our experience in other states where DOTs have also taken steps to broaden their supply chain, this opens up an opportunity for us to reach these smaller firms as potential new SMB logos.

To conclude, I am pleased with the strong quarter and the operational momentum entering the second half, which puts us on track to deliver another year of strong and consistent results.

Before I turn it over to Werner, I want to thank our colleagues around the world for their continued hard work and dedication in achieving a very successful quarter.

Over to you, Werner.

Werner Andre: Thank you, Nicholas.

We are pleased with another consistent and strong quarter.

Total revenues for the second quarter were \$330 million, up 11% year-over-year and 12% in constant currency.

Year to date, total revenues grew 9% on a reported and constant currency basis.

Subscription revenues for the quarter grew 15% year-over-year in reported and constant currency, representing 90% of our total revenues, up from 87% in 23Q2.

Q2 has historically been our lowest subscription revenues quarter, when compared to other quarters and particularly Q1, due to a lower proportion of contract renewals with any degree of upfront revenue recognition. But the continued expansion of our consumption-based E365 program yields more ratable revenue recognition throughout the year, benefiting Q2.

For the first half, more normalized for mix and timing, subscription revenues grew 13% on a reported and constant currency basis [year-over-year].



Our E365 and SMB initiatives continue to be solid contributors to our subscription revenue growth.

Perpetual license revenues for the quarter were \$11 million, down \$1 million year-over-year.

Perpetual license sales make up only 3% of total revenues and will remain small relative to our recurring revenues.

Our professional services revenues for the quarter declined by \$4 million, down 15% year-over-year or 14% in constant currency, driven primarily by the expected delays in IBM Maximo-related implementation and upgrade work within our digital integrator Cohesive. Such delays are now likely to continue through the third quarter before the pace of upgrade projects is expected to increase during the fourth quarter of 2024.

On a positive note, our professional services related to Bentley software continued to grow modestly, as expected.

Moving on to our recurring revenue performance.

Our last 12-months recurring revenues increased by 12% year-over-year in reported and 11% in constant currency, and represent 90% of our total last 12-months revenues.

Our last 12-months constant currency account retention rate was 99%, and our constant currency recurring revenues net retention rate was 108%, led by continued accretion within our E365 consumption-based commercial model.

Ex China, where our ARR is subject to erosion from commercial model changes, our NRR [net revenue retention] was 109%.

We ended Q2 with ARR of \$1.216 billion at quarter-end spot rates, with our E365 and SMB growth initiatives remaining the key growth drivers.

Our constant currency ARR growth rate was 11% year-over-year, or 11.5% excluding China, where we continue to experience ARR headwinds.

China now represents 2.5% of our ARR, down from 3% a year ago.



The contribution from programmatic acquisitions to our year-over-year ARR growth rate is currently negligible, while in the year-ago period, onboarded ARR from programmatic acquisitions contributed in the range of 1%.

On a sequential quarterly basis, our constant currency ARR growth rate was 2.9% and was fully in line with our expectations.

As we discussed in more detail during last quarter's call, we have an increased percentage of our E365 accounts on consumption floors and ceilings, which impacts our ARR growth seasonality and tends to align an increasing portion of our ARR accretion related to E365 consumption with the contract renewal timing, which is heavily weighted towards Q4.

Based on our ARR performance for the first half of the year, we are in a solid position within the 10.5% to 13% range of our ARR growth outlook for 2024.

Now moving to profitability performance. Our GAAP operating income was \$80 million for the second quarter and \$172 million year-to-date.

We have previously discussed the impact on our GAAP operating results from amortization of purchased intangibles, deferred compensation plan liability revaluations, and acquisition expenses.

Moving on to adjusted operating income with stock-based compensation expense, our primary profitability and margin performance measure.

Adjusted operating income with stock-based compensation expense was \$95 million for the quarter, up 30% year-over-year, with a margin of 28.8%, up 410 basis points.

Year to date, adjusted operating income with stock-based compensation expense was \$208 million, up 27%, with a margin of 31.1%, up 430 basis points.

Our profitability continues to reflect run-rate savings associated with the strategic realignment program, which we initiated during the fourth quarter of 2023. While most of the realignment actions were completed at the beginning of 2024, we continue to ramp towards fully reinvesting these run-rate savings into priority investment areas, such as AI in product development and marketing.



Our operating margin also benefited from the mix shift from lower margin professional services revenues to the higher margin subscription revenues, which represented 90% of total revenues in the quarter, up 3% year-over-year. While our services revenues declined for the reasons we discussed, we pay close attention to our services delivery cost structure to adjust for volatility in episodic services work. This nets to higher gross margin to the benefit of profitability for the quarter and year-to-date.

Based on these developments, our margin is trending higher than planned, and while this puts us in a strong position to deliver on our 100 basis points intended annual margin improvement, we do not undertake to maximize short-term profitability, and over the full year, we instead will prioritize investing in longer-term initiatives.

I also want to remind you of our Opex seasonality, which is more heavily weighted towards the second half, with our annual raises occurring as of April 1 of each year, further compounded by larger promotional- and event-related costs concentrated during the second half of the year.

With respect to liquidity, our operating cash flow was \$63 million for the quarter, and \$268 million for the first half of 2024, and benefited from our strong profitability.

For the remainder of 2024, we continue to expect that our conversion rate of adjusted EBITDA to cash flow from operations will gravitate towards the 80% range.

With regards to capital allocation, during the first half of the year, along with providing sufficiently for our growth initiatives, we deployed \$197 million towards bank debt reductions, which includes repayments of \$103 million of our term loan during the second quarter, reducing our outstanding senior debt to \$85 million at the end of the quarter.

We further paid \$36 million in dividends and applied \$47 million to share repurchases to fully offset dilution from stock-based compensation.



As of the end of Q2, our net senior debt leverage was 0.1 times, and, including our 2026 and 2027 convertible notes fully as debt, our net debt leverage was 2.8 times.

With our strong free cash flow generation profile, we have year-to-date delevered 0.7 times adjusted EBITDA to increase our balance sheet strength and M&A flexibility.

From a rates exposure perspective, all of our remaining debt is protected from high or rising interest rates—through either very low fixed coupon interest on our convertible notes, or our \$200 million interest rate swap, expiring in 2030.

We are comfortable with our capital structure in terms of leverage, maturities, and especially interest rate exposure, and believe we have sufficient flexibility for the upcoming renewal of our credit facility.

And finally, with regards to our outlook for the year, our 24Q2 financial performance puts us in a solid position to deliver within the range of our annual outlook for ARR growth, profitability, and cash flow from operations.

However, while recurring subscription revenues exceed expectations year-to-date, total revenues are trending below the mid-point of our outlook range due to weakness within our non-recurring professional services revenues caused by delays in Maximo-related implementation and upgrade work.

For modeling seasonality, we expect year-over-year ARR growth to accelerate in the second half, and particularly in Q4, due to E365 renewal timing and consumption dynamics around floors and ceilings.

With regards to foreign exchange rates, for the first half of 2024, the U.S. dollar has only slightly weakened relative to the exchange rates assumed in our 2024 annual financial outlook, resulting in less than \$1 million of incremental revenues from currency.

If end-of July exchange rates would prevail throughout the remainder of the year, then we would not expect a significant FX impact on GAAP revenues, relative to the exchange rates assumed in our 2024 financial outlook.

And with that, we are ready for Q&A. Over to Eric. Thank you.



Eric B: Thanks, Werner. Before we begin, I just want to remind you that please limit your questions to one so we can get to everybody. First question comes from Matt Hedberg of RBC.

Matt Hedberg: Hey, good to see you guys. One question. OK. Let's see. I think—thinking about the second half, it's great to hear that full-year ARR is on target. And I think it sounds like Nicholas, you were talking about second half E365 renewals more so 4Q weighted. I guess, could you talk to us about the confidence around some of those deals?

Obviously, you guys are delivering good results, but it feels like the broader macro environment seems like it's a bit uneasy now. We're hearing some other companies talk about elongated deal cycles, extra signatures. Just walk us through sort of the confidence level in that second half E365 renewal base, which obviously predicates sort of the full-year guide.

Greg B: I'm going to let Nicholas talk about the observations on the ground, but just structurally. Of course, sentiment matters. But the sentiment among infrastructure engineering organizations, their concern is capacity, not demand. And their backlogs are strong and their visibility is long at this point. But it should be remembered that most of our ARR growth comes atomically from consumption.

And consumption is not a matter of enterprise decisions. It's—our software is a factor of production in the throughput of infrastructure engineering organizations. And the consumption occurs as a matter of course. Now, we do have some competitive procurements for ProjectWise and AssetWise. New ProjectWise and AssetWise implementations do occur and are a matter of RFPs and are subject to decisions that you're talking about.

But that's a very dilute portion of our ARR growth. And in any case, going digital is the priority for our users. So, I'm saying structurally, we do not rely much on enterprise decisions. And even there, the sentiment in our end markets is concerned about capacity, not demand. But Nicholas, you're better, much able to speak about the observations on the ground.

Nicholas C: The sentiment in end markets is indeed very positive. The bulk of our business is with public works/utilities. Our accounts are busier than ever. Nothing has changed from that standpoint. The demand is still very high. The biggest



challenge is just they don't have enough resources, which, for us, is a fantastic opportunity. We are right there to help them in getting more productivity from the engineering resources that they already have.

So, yeah, the market sentiment is positive. And based on this, by the way, and the momentum that we have also with our own programs, E365 and SMB, we are confident with what Werner has shared, which is we're going to be solidly within our ARR range.

Matt H: Great. Thanks. Congrats, guys, and congrats to both Greg and Nicholas on your new roles.

Nicholas C: Thank you.

Eric B: Thanks, Matt. Next question comes from Joe Vruwink from Robert Baird.

Joe Vruwink: Yeah, great. Thanks for taking my question this morning. Staying on the infrastructure and IIJA funding topic. So, it's still very early, as you noted earlier. I think it's also well appreciated that project starts have been a bit uneven to date.

Does this extended timeline, maybe this is an ironic way, provide better opportunities for Bentley to grow at enterprise accounts since you get a bit of a flavor of the opportunity ahead, but you still have time to engage with a key software vendor, like yourselves, and you can strategize around future improvement? And I'm wondering if maybe that explains PennDOT and some of the decisions they're making, which, as you said, is leading to a good step up in spend there.

Greg B: Yeah, I definitely think higher for longer is the consensus in the U.S. But it's interesting that states are stepping up their spending also. And Nicholas, maybe you have more commentary on that.

Nicholas C: Yeah, it does mean indeed that the momentum we've seen from IIJA is just going to last. It's just going to last longer. So, this is positive in that sense. It's sustained momentum from IIJA. It is true that most of the funding that has been announced has been for transportation. So, this is with the DOTs. The DOTs are typically better equipped, they are more experienced to apply for grants and then to execute on those grants. And we have a solid position with those DOTs.



But I think whether it's the DOTs themselves or their supply chain which are struggling with engineering capacity, the fact that the funding is being announced over time is actually, I guess, good news for the whole supply chain to be able to deliver on that funding over time.

Joe V: Thank you.

Eric B: So, the next question comes from Jason Celino from KeyBanc.

Jason Celino: Great. Thanks for taking our question. The performance in SMB continues to be quite strong. I wanted to get an update on how retention is in that segment. I know you've talked about 80% retention previously. Just curious how it's been trending.

Greg B: Well, we don't quantify each quarter, but we're happy with how it's tracking. We're working on automating it more and more so and allocating resources between the digital experience upgrades to do that. That's what we spend capital on now. And the mix of people working on that versus new subscriptions and so forth we're experimenting with, but we'll have a quantitative update of that within the year as well, I think. Nicholas, anything more to add?

Nicholas C: Yeah, the SMB is a growth driver for the company and it's really around the world, by the way. It is with new accounts—that's what I mentioned in the prepared remarks—but it is also with the existing accounts. Overall, the retention is high in a market where the firms would potentially use the software for a project within the term of their subscription, which is one year. What we're seeing here is that, no, they use the software beyond that term—so, maybe because the project goes beyond one year or they start to use the software across the projects.

But in general, and I mentioned that actually in the last call already, the retention we see in SMB is definitely higher than what we were expecting when we started the initiative many years ago.

Eric B: Thanks, Jason. Next question comes from Clarke Jefferies from Piper Sandler.

Clarke Jeffries: Hello. Thank you for taking the question. Nicholas, one thing that stood out to me was the mention of Al being of increasing importance to the go



forward operating of the company. Could you talk about what will be the nearest-term effect on the traditional portfolio based off this increased disposition? Are you rethinking monetization opportunities? Are there things that stand out from asset analytics that you think you could port over to the traditional portfolio sooner rather than later? Thank you.

Nicholas C: There are two, let's say two areas of investments for Al right now. The one which is ready and in the market is around asset analytics. That's what I was commenting on, saying we're generating quite a bit of traction with this Albased asset analytics solutions. It's in the U.S. and globally.

There was one account that used our solution OpenTower IQ to create digital twins for tens of thousands of towers just in the U.S. And we believe that usage of digital twin technology and Al at that scale is quite unprecedented. And we also see traction with our solution for road maintenance called Blyncsy, the acquisition we did a year ago. We see that with DOTs across the U.S., and we're getting a lot of interest from transportation authorities around the world, to the extent that we're exploring now rolling it out to other geographies.

Now, the business model around asset analytics is completely incremental to the core business because the pricing is based on assets, which can be a number of towers or it can be the length of a roadway network. So, it's all on top. And by the way, all of that revenue that we're realizing right now and the growth opportunity going forward is on top of the total addressable market we've been discussing for years, which was all around the number of engineers and how much more engineering software value we can create with them.

Now, there's another area of Al which is quite interesting, and it's around design. This is more in development right now, and we're getting great traction from representative accounts who see a huge potential in leveraging Al, again, to get more from less, to get more from the existing resources that they have, automating mundane tasks if needs be—for example, drawing production, or simply allowing the engineers to be more effective by acting truly as a copilot. The monetization there will have to be potentially different for some of those capabilities. If we're talking about automation, then a user-based pricing, obviously, is not totally adequate. You can be sure that whatever efficiency gains we generate, we will capture our fair share of that value.



Clarke J: Perfect, thank you very much.

Eric B: The next question comes from Warren Myers from Griffin Securities.

Warren Myers: Good morning, everybody. Thank you. Just, I guess, one question. What is the status of what, I guess, Bentley is called phase 2 of your products and platform development? And when do you foresee a meaningful commercial impact in terms of deliverables?

Nicholas C: So, what you're referring to, for those in the audience who are not fully aware, is the adoption of our digital twin technology across our portfolio. Phase 1 was the development of iTwin itself as a platform. Phase 2 is leveraging iTwin capabilities to complement existing applications. Phase 3, by the way, will be totally native digital twin applications that we're working on.

So, we actually just released a new version of MicroStation. And as promised, it does include capabilities that are truly powered by iTwin to enable ad hoc collaboration, unstructured collaboration, if you want. We just released it, so this is in tech preview. And then, we'll keep iterating on it together with our users to make sure that it is absolutely fit for purpose.

Now, in parallel—so the phasing can be a bit misleading because you might think, OK, we'll do phase 2, and then we'll do phase 3, thus the naming. But actually, we're working on applications that are truly phase 3. The application I was referring to, the investments we're doing for a AI-based solution, actually, the use case is site engineering. It truly is a next-generation engineering application for site engineering, which will be native digital twin, leveraging AI capabilities, and we expect to launch it at YII this year, at our annual conference.

Warren M: OK, excellent. Thank you.

Eric B: Thanks. Next question comes from Kristin Owen from Oppenheimer.

Kristin Owen: Great, good morning. Thank you for taking the question. Nicholas, I wanted to come back to the permitting reform legislation that you discussed in the prepared remarks. You've previously talked about Power Line Systems really sitting on a launch pad, I think is how you describe it, waiting for that permitting bottleneck to clear. I'm just wondering, can you speak to the PLS fundamentals today and how you would assess that opportunity unlock, understanding there's a



little bit of lag from when the legislation is signed to when we see those bottlenecks clear?

Nicholas C: So, the growth of PLS, without the permitting reform having all of its impact yet, is already very strong. There is very strong growth of PLS still in the U.S., but very strong as well in Canada, very strong in EMEA. And this is all, again, before the permitting reform is having impact, and we see the logjam of potential expansion projects going on.

And the reason is because of the existing infrastructure, which needs to be able to support the increase—because one thing which is not waiting is the increase of demand in electricity. In the U.S., by the way, with the reshoring of companies, with all the incentives for companies to move on from fossil fuel to, maybe, cleaner sources of energy with electricity—and, by the way, all of these data centers—we were talking about Al—data centers that are being created in order to support the usage of generative Al in particular, which are extremely consuming in terms of electricity.

So, it's all about making the most of the existing electric grid. And this is where we see the growth with PLS right now. So now, as the permitting reform has impact—and it will take a while. For in the last quarter, we talked about the federal rule, which was to make all the environmental reviews fit within a two-year schedule. Well, they still take two years for these environmental reviews to take place, for the permitting to be done, and then to see the impact on those projects moving forward and our software to be used. So, from a PLS standpoint, it means that without, again, the full expansion of the electric grid, very strong growth already, just by making the existing grid be able to support the increase of demand in electricity.

Eric B: Thanks, Kristin. The next question comes from Michael Funk from Bank of America.

Michael Funk: Hey, good morning. Good to see you all.

Nicholas C: Morning.

Michael F: So, quick question on the ARR growth guidance for the year. Good to see that you're coming within the range that you guided to. And I heard the



comments about some of the seasonality in the second half of the year. But maybe just to focus on what you had baked into the high end of the range, maybe some of the more optimistic scenarios you had baked in that might be driving you below the high end for 2024?

Greg B: I'll remind you that we widened our range from our traditional two percentage points to 2.5, I think, this year, because asset analytics, the incremental opportunity, is lumpy and considerable. And I mentioned that we're on the track to the eight digits of ARR growth from asset analytics alone, but the tiger is by the tail. And that could inflect up considerably.

And we're in competition for very large procurements. And it is a significant part of the top end of the ARR growth forecast or range to have that come through. But so far in the year, it has come true. And we're very hopeful. I'm just speaking to that aspect of it.

Michael F: Of course. And the timing difficulty, is that more a geopolitical, or is that more macro-based, do you think? Greg or Nicholas, I don't who has the best view on that.

Nicholas C: Sorry, what do you mean by timing?

Greg B: I think geopolitical exists only in China for us. In the countries of electoral regime change, we think infrastructure investment—for instance, in the U.K.—continues to be a priority in India. I guess that wasn't the regime change, but continues to be a priority. So, the word "geopolitical" for us, we only use in China for anti-American concerns, and those continue.

However, are not the only problem in China with general softness there. And as we say, that China ARR is down to 2.5%. A little bit more than two years ago, it was 5%. So that's been a drag on overall ARR growth. And it's likely to continue. There's 2.5% more to worry about, at least. Nicholas, over to you.

Nicholas C: Indeed, there are no geopolitical concerns. I did mention that there was an expected slowdown in India, which remained solid nevertheless, because of the elections in Q2. But the government of President Modi is quite clear that they want to immediately resume the investments in infrastructure. So, that's all very good.



There were lots of elections in Europe—at the European Union level, we expect continuity. The President Ursula von der Leyen has been reconfirmed, re-elected as the president of the EU Commission. Changes of governments in the U.K., changes of government in France—but we don't expect any major implications in terms of investment priorities. So indeed, the only area, the only country, where—for geopolitical reasons, more than political—there are some challenges: that's China.

Greg B: And we emphasize that the U.S. legislation has been—the only place the word "bipartisan" appears in the U.S. is attached to infrastructure legislation. I'm exaggerating perhaps a little bit, but we think that's not up for electoral change.

Michael F: Very clear. Thank you for the time.

Eric B: Thank you. Next question comes from Dylan Becker from William Blair.

Dylan Becker: Hey, guys. Great to see everyone and nice job here. Maybe Nicholas, sticking with the energy reform theme to a certain extent: I think people think of infrastructure as public investments. If that gets pulled forward in some capacity, how are you guys thinking about the opportunity for private capital to start flowing into the ecosystem and maybe what that can mean around broader investment opportunities?

Nicholas C: I think all boats will rise across public and private for the whole supply chain, including us as software providers, as there is more investments going into the electric grid beyond maintaining the existing grid to expand it. And we know that this is—we all know it is needed. We must be able to expand the electric grid to support the rise of demand in electricity, but also to be able to go and tap into these renewable sources of energy, which are typically far, far away from where the energy is actually needed. If you think of water, for example, or you think of solar, or you think of geothermal, et cetera.

So, the expansion of the grid is needed. And we know that this is indeed going to be benefiting everyone in the supply chain. I wouldn't be surprised if there are some private investments going along the way in order to support.

Eric B: So, the next question comes from Matt Martino from Goldman Sachs.



Matt Martino: Hey, Nicholas, just wanted to get an update, as well from Werner, on just the prospects of your growth algorithm as the year progresses for ARR growth, especially as we get in the back half of the year. Just trying to understand the dynamics between the extent to which renewals, application, mix accretion, and pricing escalators will factor into the remainder of your growth as we think through the back half of the year. Thank you.

Nicholas C: Is that a question you want to tackle, Werner?

Werner A: Yeah. Yeah. Happy to do. So, we expect, as mentioned in the prepared remarks, that our ARR will take up in the second half of the year there. It is the renewal timing of E365 and the dynamics around floors and ceilings we discussed in the last quarter.

It's the ramp of asset analytics deals that we previously discussed, which started to have more traction in Q2. And there's a deal pipeline into the second half of the year that we are positive about. And there will be—currently, ARR year-over-year growth has negligible impact from programmatic acquisitions as we go into the second half. We also would expect that there's a little bit more pickup. So that's on timing.

With regards to the underlying growth factors, we mentioned before, earlier is the annual escalations. Escalations will be, for this year, a little bit of a headwind. So, we expect escalations to come in slightly below the last year. It is still in the mid-single-digit range. We believe we are very reasonable about escalations. And it's predominantly to pass on our own inflation, which is inflation around colleague compensation, our own cloud costs, our own software internal use inflation, and so forth.

So, pricing is a key component. And application mix is, I think, also, as we mentioned before, a key growth driver for us. It is within the range that we expect. We don't expect significant changes between H1 and H2 on the application mix. It develops as expected.

And then, new logos also continues to be very strong. We have year-to-date new global growth at 4%, and that is at a historical high for us. It has been high over the last six quarters, with 3% to 4%. And so, we would continue to expect that new logos will be strong contributors as we go throughout the year.



Greg B: Just on escalation, I will remind you that we set that once per year. It isn't subject to determination between those annual settings. And it occurred at the beginning of last quarter, I believe. And that's on the order of a percent or more lower than it was the previous year.

Eric B: Next question comes from Siti Panigrahi from Mizuho.

Siti Panigrahi: Oh, hi. Thanks for taking my question. And Greg and Nicholas, congratulations on your new roles. I want to ask about the current macro environment and potential lower interest rate and U.S. election. How does that impact your business? And could you talk about the train and IIJA spending heading into 2025?

Nicholas C: Yeah, I'm happy to. But you want to start, Greg?

Greg B: No, go ahead, Nicholas, please.

Nicholas C: OK. So, again, from a political standpoint, when it comes to the U.S. elections—I think this is what you're referring to—infrastructure is a very bipartisan topic. And you heard it in my prepared remarks when you see the president that signed the ADVANCE Act, which was a bipartisan nuclear energy bill, when the Senate has proposed a new bill, which is also bipartisan.

It is a topic which reconciles everyone. Everybody agrees we need to invest into infrastructure. So, we don't expect that to slow down or to change with whatever is the outcome of the elections in the U.S.

Overall, as we commented earlier in this Q&A session, the market sentiment is very positive for infrastructure investments in where we operate. Remember that the bulk of our business is with public works/utilities. There are parts of our business that are private firms, where they may need to raise money, for example, to explore new mines when it comes to mining companies. Yes, this has been impacted by the very high interest rates. It has been impacted by the difficulty to be able to raise money, to mobilize capital. And this has caused that part of our business to not be as strong as it was maybe just two years ago. But the bulk of our business is really public works/utilities. The bulk of our business is coming from public investments. And we don't see any slowdown there. And then—sorry.

Greg B: No, go ahead, I'm sorry, with IIJA.



Nicholas C: With respect to IIJA, again, only 38% has been announced. Remember that "announce" also doesn't mean that it's awarded. That's the next step. And it can take six months, 12 months, depending on the projects. Once it's awarded, then the money starts to flow to the extent that the receiving entity is able to start the work.

And at that point, then it becomes additional usage of our software. And it becomes a growth opportunity for us. But it means we're still, from that standpoint, early on in the IIJA funding as a tailwind. And there are still many, many—

Greg B: If I could just summarize the tone for us from the perspective of the four years now that we've been public, really, the resilience of road and rail and water and grid in the world, the resilience of all those networks, has just become recognized as a long-term necessity. It's not a discretionary aspect of public policy. It's the most important thing that governments are responsible for, and we don't think it's subject to sentiment or even politics very much at the moment. It's a consensus priority that's keeping civil and structural and geotechnical engineers busier than ever they have been, with a big backlog of more of the same.

Siti P: Thanks for the color.

Eric B: Thank you. The next question comes from Joshua Tilton from Wolfe Research.

Joshua Tilton: Hey, guys, can you hear me?

Greg B: Yes.

Nicholas C: We can.

Joshua T: Well, congrats on the quarter, and I echo my congratulations, Nicholas and Greg. This question is for either of you guys, qualitative and quantitative. So, I guess, just how do you guys think about the durability of double-digit ARR growth in the context of the NRRs kind of tracking in that single-digit range? And, as you mentioned, a lot of the new growth is coming from smaller customers. How do we, as investors, get confidence and conviction in the ability to see that durable double-digit growth rate that we love so much continue from here into the future?



Greg B: Well, I have been one to say for a while, if you want to ask about future ARR growth rate, please tell me what assumption to make about inflation, because the escalation, which is one of the layers of it, is strictly reactive to the market inflation. And that will tend to normalize.

What we think is that the demand environment, in unit terms or real terms, the demand environment is not very subject to macro cycles. We used to say, of course, that arguably, public spending is even counter-cyclical. I think that's maybe dampened down a bit now because it's as high as it already is.

And public finances are a concern. The question earlier about public-private partnerships and private funding, I think even a new government like the Labour government in the U.K. is open to greater private financing of infrastructure. I definitely think that lies in the future. So, concern wouldn't be demand.

As far as the durability of our SMB growth and the four percentage, now, of ARR growth that comes there—it's proven to be rather sustained already, as we emphasize, for multiple years. And the engineering firms' sentiment—for instance, that Nicholas reports on—includes the sentiments of the smaller firms as well, whom are increasingly being invited to participate in more of the network, for instance, in roadway and highway projects, as we mentioned with PennDOT. So, those are our reasons. I do agree that, for double digits, we need to have both of those things going on. It seems to be subject to the inflation component, the escalation component. It seems to be rather higher for longer, in our perspective.

Eric B: Thanks. Our last question comes from Blair Abernethy from Rosenblatt Securities.

Blair Abernethy: Thank you, gentlemen. Just a follow-up on the roadway maintenance business, now that you've had a couple quarters under your belt with this—what's sort of the selling cycle looking like now? In terms of timing, how long does it take you to introduce pilot and sort of get this thing, get the revenue ramp coming up for Bentley?

Greg B: Well, the full state that has most recently come up started with a pilot that went for three months, and it was a paid pilot. So, I think it's like that. It's a matter of quarters. But the great thing about selling to departments of transportation, for instance—and the highway maintenance is not applicable only to states, but also



at the county and municipal level and so forth—is they're not competitive with one another. They eagerly share their innovations and birds of a feather, and they're closely looking at the successes.

And they're all now also subject to a federal requirement, which hasn't yet become binding, to report on and maintain the reflectivity of lane striping, which is a particularly good application for our asset analytics, our Blyncsy asset analytics. So, that doesn't need to take long, and that is part of the enthusiasm we have for exiting this year with a very steep slope in asset analytics.

And the question we had earlier, with AI, are we folding that into existing products? That had been our direction with iTwin Platform, but asset analytics, as Nicholas said, is entirely incremental, charging per asset. And generally, Nicholas' insight in his new executive-group way of looking at things is that asset operations is this biggest next-generational opportunity for us, and asset analytics kicks that off. And it doesn't need to take long for it to become literally significant, and I think it can be significant in ARR growth rate by the end of the year. Nicholas, last words to you.

Nicholas C: It's a very easy sell because it's a very easy solution to deploy. It's very easy to show the impact of it because it generates insights so quickly from dashcam data, et cetera.

Overall, as Greg said, asset analytics is hugely exciting because it does tie to the much bigger growth opportunity we have with asset operations—which, by the way, is also a massive growth opportunity for the engineering services firms that we serve. That many of them, as busy as they are right now on the projects, many of them are expanding their business or want to expand their business, nevertheless, beyond the handover point of the infrastructure assets. They want to have a more recurring business, if you want, with owner-operators to help them for maintenance, and we happen to have software to help them do exactly that. So, it's a hugely exciting growth opportunity for us at many levels.

Greg B: Maybe I can just say that that's what I refer to in my quote, where I say that even though we work hard and do well in this particular quarter, is one that really impressed me in terms of the balance, visibility, linearity, and so forth—but the focus on the long term, and especially the asset operations opportunity, is really what we're entrusting our next increment in TAM.



And in growth, to get back to your question about that, I think it's in great hands with Nicholas' new team. Focusing there, you can see we're way ahead on profitability this year, so far, but that's not what we want. We want to have a predictable 100 basis-point increment in our efficiency and margins every year and otherwise invest everything we can into long-term futures. And that's what, asset analytics and asset operations, we'll have some return to programmatic acquisitions in these areas. It's very exciting, I think.

Blair A: Great. Thank you very much.

Eric B: Yeah. Thanks, Greg. So, that concludes our call today. We thank you for your interest and time in Bentley Systems. Please reach out to Investor Relations with further questions and follow up, and we look forward to updating you on our performance in coming quarters.