Bentley
Advancing Infrastructure

Bentley Q2 2023 Earnings Call Transcript

Sandra-Ann Morency: Good morning and thank you for joining Bentley Systems' Q2 2023 operating results. I'm Sandra-Ann Morency, Bentley's investor communications manager. On the webcast today, we have Bentley Systems' Chief Executive Officer Greg Bentley, Chief Operating Officer Nicholas Cumins, and Chief Financial Officer Werner Andre.

This webcast includes forward-looking statements made as of August 8, 2023—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. After our presentation, we will conclude with Q&A, which I will moderate in Eric's absence.

And with that, let me introduce the CEO of Bentley Systems, Greg Bentley.

Greg Bentley: Good morning and, as always, thanks to each of you for your interest.

I will start today by sharing my observations of some notable directions within our strong 23Q2 operating results, and then, as usual, I will briefly remark upon some corporate developments.

In preview, our growth in the quarter was more broad and balanced, which I consider to be better—ranging from E365 accretion across our largest enterprise accounts, through broadening and compounding penetration within our large SMB opportunity.

Among infrastructure sectors, resources (by way of mining and, hence, Seequent) slowed down and lost its lead, for now, to strongly growing public works/utilities. Despite the countervailing dip in global Capex for new mines, Seequent remains growing considerably faster than BSY otherwise, following only our other platform acquisition Power Line Systems. And as to our key metric, year-over-year ARR growth, this all nets out, while broader and better, to a narrower full-year 2023 range, considering that in China, which is where all relative obscurity is concentrated, virtually any second-half new business outcome will continue to erode our ARR there.

In 23Q2, we were BSY-busier than ever before, meeting or surpassing our own expectations on all corporate outlook metrics. Of course, we all primarily focus on constant-currency (business performance) ARR growth year-over-year, which we sustained within the robust level of 13%, our high-water mark. However, going behind this headline, I consider that our ARR growth has "directionally improved."

One aspect in the math is that programmatic acquisitions happen now to be contributing only minimally.

But while acknowledging this year's favorable end-market conditions, I think that strong operational execution by Nicholas's teams is ever broader and better. Although such balance and consistency increasingly characterize virtually every axis of our business, an example is the breadth of new business momentum ranging from our largest to smallest accounts.

Recall that we use this term "new business" to factor in license sales, as well as ARR growth—though for quotas and achievement, we multiply recurring revenue by an appropriately higher weighting factor.

By virtue of our main growth initiatives since going public in 2020, this quarter, the bulk of our new business was divided almost equally between our E365 program and our Virtuosity-led growth in SMB.

E365 ARR growth is a combination of one-time uplifts from accounts upgrading to the program—where our consumption charges per application per day are meant to cover our costs of the enterprise success team—digital workflow experts that we dedicate to each E365 account—and what is now most prevalent—accretion in these accounts' consumption and application mix.

Within 23Q2, our ARR proportion from E365 increased very largely from this accretion in existing E365 accounts, for whom going digital through E365 blueprints is a more urgent priority than ever. Constrained by skill shortages, these accounts need to improve the quality and throughput of their engineers' work, as they face substantial and growing backlogs.

In fact, this quarter's ACEC survey of all U.S. engineering firms shows that the median backlog is now a full year, as demand for infrastructure engineering continues to outstrip capacity.

The same survey shows that while these firms are not so sure about the macro U.S. economy 12 months from now, each firm tends to be ever more confident in their own resilience a year from now.

As to a greater degree than ever, they expect their backlogs then to be even greater.

These firms' year-ahead market outlook by infrastructure sector tends to correspond with our own 23Q2 tone of business, led in growth sentiment now by public works/utilities, then resources, followed by industrial, and lastly commercial/facilities.

This quarter, ACEC also surveyed the extent of the labor shortage brought about by this unprecedented workload. Across all firms, there is one unfilled infrastructure engineering position for each 10 full-time positions.

This is a motivator for our E365 accounts to prioritize blueprints for new digital workflows that entail “upselling” users to more specialized applications better fit-for-purpose for their particular project work at any given time. This leads to the greater spending per day, holding constant pricing for each product, that we annually measure as application mix accretion. I can directionally confirm that our steadily expanding E365 program is continuing to broaden and accelerate our application mix accretion, driving directionally better ARR growth.

Our overall net revenue retention rate, in turn, reflects this progress in going digital within our existing accounts, led by E365 consumption and upsell, even or particularly as our accounts deal with workforce constraints. I’m pleased to report that NRR was sustained for the quarter at our 110% high-water mark.

Getting from these 10 percentage points of NRR accretion in existing accounts to this year’s 13% ARR growth is attributable to sustaining, at our 3% high-water mark, ARR growth from subscriptions in new logos, of course mostly in SMB.

Because the SMB share of the overall infrastructure engineering market substantially exceeds the SMB share of our own ARR, I believe that our investments and improvements in SMB are bearing fruit to make our ARR growth sustainably broader and better.

In particular, our SMB-focused Virtuosity subscriptions for individual practitioners have grown exponentially in new and cumulative ARR, including in 23Q2, and again including a record number of quarterly new logos for Virtuosity, which is now approaching another digit.

Now, obviously, this magnitude of continued ARR compounding depends upon the renewal rates for these subscriptions, and I have previously mentioned that we would quantify this at such time as we would have statistically sufficient experience.

Within smaller businesses and for individual practitioners, we cannot expect retention rates comparable to those of subscriptions used widely and diversely across an enterprise account. This is particularly the case for specialized Virtuoso subscriptions, which may be entered into for a particular infrastructure project with a finite duration.

So, I am pleased to now be able to report that after much hard work, our Virtuosity renewal rates have stabilized at about 80%. We believe that with our digital experience automation to make self-serviced renewals even easier, we can improve this somewhat. And by the way, given that the absolute ARR numbers are still relatively small, we won’t report this renewal rate regularly.

But even beyond ARR, our license sales new business is generated mostly in SMB accounts. For 23Q2, about one-third of these SMB license sales are to almost 300 new logos. Recalling that we continue to offer perpetual licenses principally because our main competitor does not, I believe that a significant proportion of these SMB new logos, including the many more for Virtuosity subscriptions, must be competitive takeaways.

Finally, SMB's broadening and bettering contribution to our new business extends globally. In China, with geopolitical factors overhanging our prospects with our historical mainstay state-owned enterprises, the majority of our reasonably improved net new business in 23Q2 was thanks to perpetual license sales in SMB.

Among the axes of directionally broader and better growth, I would like to turn now to infrastructure sectors, where—as Nicholas will provide our usual color—we saw in 23Q2 the normalization (that is, the convergence toward the mean) of resources, and mining in particular, its major impetus for us, down from its extraordinary global pacesetting. You may have seen reports that this phenomenon is another reflection of an overlaid cycle of reduction in demand from China.

I don't think there's much doubt anywhere that the economic and environmental factors driving the current mining super-cycle are still long-lived, but the momentum won't be consistently sustained at the maximum. Most recently, the mining majors are confronting pricing fluctuations, and are thus acting more cautiously in their procurements, and the mining juniors are considerably fettered by tighter equity markets, higher interest rates, and inflation.

These factors mainly impact Capex for new mines and major extensions, rather than the Opex for throughput of existing mines, which accounts for *most* of the volume and growth for Seequent. But Seequent's subsurface modeling is also used as a precursor to new mine development, so on the margin, these factors are impinging upon what have been Seequent's consistently very high growth rates.

Since acquisition over two years ago, while growing organically more than twice as fast as BSY otherwise, Seequent has in fact doubled in scale, including incorporating, along with many subsequent programmatic acquisitions, our previously acquired geotechnical engineering software. During the past year, we have prioritized Seequent's integration generally into our corporate systems, processes, and commercial models, including into our E365 accounts and blueprints. And by virtue of lots of attention, this is going well.

One purpose has been to extend the benefits of, and opportunities for, subsurface digital twins in the civil infrastructure market, which will also serve to bring Seequent an environmental modeling counterbalance to their historical concentration in mining.

The predictable result of these maturing and integration factors has been a direction toward convergence between Seequent's growth rate and the increasing fundamental norm for BSY otherwise, which reflects largely the successful growth initiatives I've been discussing. A footnote is that the inflation factor since the beginning of 2022 would make it mathematically harder for Seequent's rate of growth to remain at an integer multiple. The result as in 23Q2 is broader, better, balance and consistency across our company and market sectors.

And that takes me to our midyear-updated outlook for the full-year 2023.

Our established 2023 outlook ARR growth range (of course, constant-currency business performance) has been 11.5% to 13.5%, which we are now reasonably prepared, given the consistently robust first half, to narrow to 12% to 13%. Most of our initial caution about ARR growth for this year had to do with China, and visibility there remains relatively limited. While China now represents only about 3.3% of our overall ARR, and despite a welcome turnaround in SMB-driven new business there in Q2, over the course of 2023 to date, the Chinese proportion has fallen by about 0.4 percent of total ARR. This has correspondingly reduced what would otherwise have been our overall ARR growth rate had China merely kept pace with the rest of the world.

This ARR growth drag is likely to continue or to increase, as traditionally in China, each year's fourth quarter accounts for most of the year's new business. This year, we share with the rest of the world, and for instance with the mining market, obscured visibility into China's direction. But in our case, it's amplified by our own intentional go-to-market pivot in China, which, as I described last quarter, will tend to relatively reduce our ARR even if and as it, hopefully, becomes successful. After only one quarter so far, it's too soon to report on the net impact, but by the end of the year, presumably this will have become apparent.

And in comparison to previous years, which have generally included more ARR acquired with programmatic acquisitions than in our current outlook for this full year, again I consider our sustained ARR growth to be, behind the numbers, directionally broader and better. As I have discussed, this is true across commercial models and account size, and across infrastructure sectors. Nicholas will reinforce this from the standpoint of regions and products as well.

First, by way of corporate developments, and related to these subjects, we announced during the quarter the recruitment of Allen Li, formerly Chief Operating Officer of SAP China, and a wise veteran of creative alliances there, as our only General Manager anywhere in the world, with responsibility for on-the-ground leadership of our new and unique-for-us go-to-market strategy in China by way of joint ventures and channels. Allen is now aboard in China and is enthusiastically at the helm.

And we'll have more to say about this at the *Year in Infrastructure* 2023 Conference. The conference will be in Singapore in October this year, and to make up for the time zone difficulties of travel or even live-streaming for most of you, I have asked Eric to compile concise video excerpts of the proceedings relevant to investors.

The independent juries are presently judging our accounts' 300-plus *Going Digital* Awards nominations, and the finalists who will present in person in Singapore will be announced next week. Their case studies will help us all to assess the pace and distribution of infrastructure digital twin advancements in the world, which I can't wait to see and report upon.

And now, over to Nicholas for fuller operating perspectives on 23Q2.

Nicholas Cumins: Thank you, Greg.

We had a strong quarter and a strong first half of 2023. Demand remains very positive, and we continue to build pipeline, with market dynamics and government investments playing in our favor.

Project delivery firms are dealing with an extremely tight labor market, an aging workforce, and increasing costs due to high interest rates and inflation—all factors that lead them to seek new ways to improve productivity and efficiency. Bentley Systems is well positioned to help.

Additionally, government programs around the world continue to invest in the resilience and sustainability of critical infrastructure. We expect this to be a long-term trend that benefits our markets.

Looking at relative performance across infrastructure sectors, Q2 reflected some reordering from previous quarters.

Leading the way, growth in public works and utilities remained very strong—the sector being the biggest beneficiary of infrastructure investments around the world. Industrial improved, while resources normalized from record levels, with commercial and facilities remaining flat.

Next, looking across regions.

Growth remained very solid in North America. The trends follow the direction of the previous quarter, with strength in public works and utilities, indications of IIJA funding flowing through somewhat more broadly, and project delivery firms having more work than they can handle, with their project backlogs extending further out.

We achieved steady growth in Europe, with EU funding of transportation, water, and green initiatives, and purposeful targeting of the ecosystems of large infrastructure projects, which drives our software adoption across both owner-operators and their project delivery firms—large and small. We are also getting good traction and achieving notable wins with water utilities in the U.K.

In Asia Pacific, India remained a major growth driver, even after many quarters of accelerated growth, as it continues to benefit from strong tailwinds, in particular large investments from the government into local infrastructure, and global project delivery firms continuing to tap into the large population of engineers in India to supplement their workforces for projects abroad. The SMB segment is also performing well, and Virtuosity revenue in India year-to-date has already surpassed the 2022 total.

In China, ARR continue to show signs of stabilization in Q2. We continue to do well there in the SMB segment, which is encouraging. However, as Greg mentioned, we believe it is prudent to be cautions for the balance of the year.

Growth in Australia is benefitting from large investments in public works. The Australian government's five-year pipeline for major infrastructure projects is valued at more than USD 150 billion, and it is mostly focused on transportation, our sweet spot in Australia.

One example is Brisbane's Cross River Rail project, a publicly funded mega project with digital twins at its core. The project comprises a 10.2-kilometer section of rail that includes 5.9 kilometers of tunnel under the Brisbane River, four new underground stations, and rebuilds for eight aboveground stations. Significantly, it was a key component of Brisbane's successful bid to host the 2032 Summer Olympics.

Digital twins enable them to plan for the whole life of the project, with a full digital representation from construction through operations and maintenance. With virtual versions of stations, team members and stakeholders can bring the project to life, walking across concourses, traveling down escalators, and even riding the network. In addition, they are working to develop technically accurate and immersive environments that will assist with infrastructure acceptance, assurance, testing, and commissioning. The team can even attach information to stations and overlay real-time data feeds, such as air quality, to geospatial locations for ongoing monitoring and analysis.

While Cross River Rail is the largest project in Queensland's history, the state has 400 to 500 major projects slated over the next 10 years. As with other regions, these projects not only provide opportunities for owner-operators, but also with entire ecosystems.

Moving on to products. Notable strong product performers in the quarter included STAAD, our general structural analysis software; SACS, for offshore structural analysis; and Power Line Systems. OpenRoads and OpenBridge also performed well, stand alone, and as part of a broader "OpenCivil" offering for SMBs.

One topic that has been top of mind recently, and which I am sure you have questions about, is AI. Let me take a couple of minutes to explain our position.

AI is not new to Bentley. Our primary focus to date has been on computer vision for asset condition monitoring and inspection use cases. A great example of that is our Bridge Monitoring solution, which became generally available in Q2. The solution leverages AI to automatically identify potential issues in bridges, such as cracks and spalling, and to prompt interventions. You are going to see more and more of this type of solution in operations and maintenance, starting with bridges and dams, and then for other critical infrastructure.

But AI has a lot of potential for design assistance. We already have generative design capabilities for the concept phase, primarily parameter-based, in civil site engineering. And our users see low-hanging fruit in the form of generative components, which facilitates the programmatic reuse of modular digital components.

One thing I would say is that for AI, you need data. All engineering services firms realize how valuable their data is. The issue is that their data is typically locked into files. Digital twins are the key to unlock that data, surface it, and make it available for AI. The good news is that adoption of digital twins has significantly increased over the past few years, thanks largely to our iTwin Platform. iTwin is strongly positioned to enable the endless ways that AI may be applied. And remember, most of the data that we are talking about is already in ProjectWise, part of Bentley Infrastructure Cloud.

We believe we are just starting to tap into the potential for our iTwin Platform and products for AI, and we look forward to providing more details at our *Year in Infrastructure* 2023 Conference.

And with that, I will now hand over to Werner to go over our financial results.

Werner Andre: Thank you, Nicholas.

We are pleased that we started the first half of the year strong. Total revenues for the second quarter were $297 million, up 11% year-over-year, or 10% on a constant currency basis. Year-to-date total revenues grew 12%, or 14% in constant currency.

For the quarter, subscription revenues grew 12% year-over-year, or 11% in constant currency, and represented 87% of our total revenues. As a reminder, Q2 is typically our lowest revenue quarter, and we discussed last quarter that we saw a shift in revenue seasonality from the continued expansion of our consumption-based E365 program, which yields a more ratable revenue recognition, when compared to the accounting treatment of our traditional software subscriptions. That shift benefited Q1 and was a drag on Q2. Therefore, the more meaningful comparison to the prior year is our first half, in which subscription revenues grew 13%, or 15% in constant currency.

The onboarding of Power Line Systems at the end of January 2022 accounts for about 1 percentage point of this year-to-date improvement.

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

Perpetual license revenues remained essentially flat, reflecting our preference for recurring subscription revenues. However, license sales continue to play an important role for us, especially within SMB, where they serve as a competitive differentiator helping to attract new logos, and in China, due to local preferences as we go-to-market increasingly indirectly.

Our professional services revenues benefited from the acquisition of Vetasi, which we acquired within our Cohesive digital integrator group in 22Q4.

Moving on to our recurring revenue performance.

Our last 12-months recurring revenues increased by 12% year-over-year, or by 16% on a constant currency basis. On a constant currency basis, the acquisition of Power Line Systems contributed about 2 percentage points to this improvement.

Our constant currency account retention rate remained at 98%, and our constant currency recurring revenue net retention rate remained at 110%, led by continued accretion within our E365 consumption-based commercial model.

We ended Q2 with ARR of $1.106 billion at quarter-end spot rates.

Our constant currency ARR growth rate was 13% year-over-year, and 3.1% on a sequential quarterly basis. In this quarter, compared to our usual norm, we had no programmatic acquisitions.

Our strong and sustained ARR growth performance was supported by broad market growth led by our resources and public works/utilities sectors. Year-over-year, resources led the way, while quarter-over-quarter, the pace was set by public works/utilities.

Our growth was further supported by our balanced business performance across our regions, other than China, and by our E365 and SMB growth initiatives.

Our GAAP operating income was $53 million for the second quarter and $119 million year-to-date.

We have previously explained 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 starting this year. Adjusted operating income with stock-based compensation expense was $73 million for Q2, up $9 million or 14% year-over-year, with a margin of 24.7%, up 70 basis points. Year to date, our adjusted operating income with stock-based compensation expense was $164 million, up $21 million or 15%, with a margin of 26.8%, up 60 basis points.

Our Q2 and year-to-date margins are fully in line with our expectations. Q2 is typically a lower margin quarter for us, compared to Q1, due to Opex seasonality. We concentrate our annual raises for colleagues to occur as of April 1st each year. And since approximately 80% of our cost structure is headcount and related support cost, annual raises have a significant impact on our operating expenses in Q2, Q3, and Q4, relative to Q1. Margin progression through the year should improve, in part, due to lower relative impact of stock-based compensation, compared to the second half of last year.

We expect that our annual stock-based compensation expense will be decreasing as a percentage of revenues towards a range of 6% from approximately 7% in 2022. There will continue to be some stock-based compensation expense volatility between quarters, including for the timing of our ongoing annual rounds of broad-based equity grants, which are predominantly granted in the first and fourth calendar quarters.

With respect to liquidity, our Q2 operating cash flow of $81 million increased by $14 million year-over-year and had a trailing twelve-months conversion from adjusted EBITDA of 92%.

As previously discussed, our business model produces reliable and efficient cash flows over a trailing twelve-months period, but with some variability between quarters due to timing. Prospectively, we estimate that our conversion rate of adjusted EBITDA to cash flow from operations will be approximately 80% over a trailing twelve-months period.

During the first half of the year, along with providing sufficiently for our growth initiatives, we paid $29 million in dividends, we spent about $51 million on de facto share repurchases to offset dilution from stock-based compensation, and we repaid $147 million of bank debt.

As of the end of Q2, our net senior debt leverage was 0.8 times, and including our 2026 and 2027 convertible notes fully as debt, our net debt leverage was 4 times. This is down from the end of 2022, which was 1.3 times and 4.7 times respectively.

Approximately 85% of our debt is now protected from rising interest rates, through either very low fixed coupon interest on our convertible notes, or our $200 million interest rate swap, expiring in 2030.

With regards to our 2023 financial outlook, given our strong first half of the year and expectations for the second half, we have narrowed our constant currency business performance ARR growth range to 12% to 13% from 11.5% to 13.5%, while maintaining our financial outlook for the other metrics. This ARR growth range balances our broad-based business momentum with offsets from lower expectations for programmatic acquisitions, a cautious approach towards our commercial and facilities infrastructure sector, and China, as Greg has explained.

Given the relative volatility of license sales and services, we are not narrowing our revenue outlook.

With regards to foreign exchange rates, the U.S. dollar has weakened relative to the exchange rates assumed in our 2023 annual financial outlook. The impact during the first half of 2023 was not significant, with approximately $4 million of incremental revenues from currency. And if end-of-July exchange rates would prevail throughout the remainder of the year, our second half GAAP revenues would be positively impacted by approximately $8 million.

And with that, I think we're ready for Q&A. Over to Sandra-Ann, who is going to moderate in Eric's absence. Thank you.

Sandra-Ann M: Thank you, Werner. We now move to the Q&A portion of our call, and we ask each analyst to please limit themselves to one question only so we can get to everybody today. Our first question will come from Matthew Broome from Mizuho Group. Matthew?

Matthew Broome: All right, thanks very much. Good morning, everyone. So, I guess just to get started, how are your customers really think they have the longest-term demand environment? Is the increase in government spending giving them the confidence to commit to larger investments and software? Or is any of the sort of broader uncertainty we see across other areas of design sort of increasingly creeping into their thinking?

Greg B: I would say that nothing from other areas is creeping into the thinking of those in infrastructure engineering. And the confidence you can see in the surveys that things are getting better, and they expect to continue to get better. And that's broken down by subsector, as well—one of the things I noted this time in the surveys.

And by the surveys are those of the U.S.—ACEC is the U.S. group, but I don't think it's different in our perception across the world, but in the U.S., expectations are thought to be better in the water sector now. And indeed, some IIJA funding—recall that the other half of the IIJA funding beyond transportation is only starting to flow, but water is where it's starting.

So yes, I think there's not any bleed from other macro concerns into infrastructure engineering that's perceptible. Now, when you talk about confidence of our accounts, generally, I think in the mining sector, as we mentioned, there is some bleeding. And it's perhaps by way of volatility and prices having to do with demand fluctuations from China in particular.

And it is notable in renewals in mining somewhat. There's still a need to use a lot more technology and consumption is increasing well but not to the same extent of a couple quarters back. And we think that's a cycle sort of overlaid on the general supercycle there. But other than mining, no, infrastructure engineering is quite confident.

Nicholas C: The only thing I will add is in our conversation with engineering firms, in particular, the discussion is more about capacity and supply than demand. They're very positive about the demand, but that's the point. They see their backlogs that are getting bigger and longer and extending further out.

The question is, how exactly can they execute on that backlog? How can they cope with that demand when they're not able to hire fast enough? And obviously, our conversation then goes into how can we help them make more with what they have? With the capacity they have, how can we increase the productivity of their engineers?

Greg B: Going digital.

Matthew B: Right, that absolutely makes sense. And then, we did notice some recent price increases on the Virtuosity website. Fairly consistent with what we saw in the prior year. I guess how are you thinking about pricing currently, and how much pushback are you seeing from customers to increases?

Greg B: Nicholas?

Nicholas C: Yeah, as you said, it's aligned with the previous years. So, we can defend those price increases because of the value that we bring in with our software. And that's what we're making sure that there is no disconnect between the price and the value that we are delivering with our capabilities. And that is for both our accounts in SMB and in enterprise.

Matthew B: That makes sense. All right, thanks.

Sandra-Ann M: Thanks, Matthew. OK, our next question will come from Joe Vruwink from Robert W. Baird.

Joe Vruwink: Great, hi, everyone. Can you hear me?

Greg B: Yes.

Joe V: Maybe just on the ARR outlook being narrowed to 12% to 13%, can you bridge what changed and maybe quantify the growth factor for M&A in China, and then also what got better or went up to offset those two items?

Greg B: Yes, in the offsets, the programmatic acquisitions are nil for the quarter. And our outlook is consistent with that for the remainder of the year. So, that's a major component of the math.

As far as China, what's interesting is even though we're more or less satisfied with our—I am anyway—with our business in China in the second quarter, it has shifted to SMB and to perpetual license sales already. We have in mind further things that will shift it yet further in our new go-to-market strategy.

But what we're measuring here is ARR growth. And ARR growth—or ARR from China—is already, for the first half, down by 0.4% from what it would have been if China were merely at the average. And I think we're extrapolating that it may even increase that rate of impact on the ARR growth during the remainder of the year, even though we're still hopeful for—I am—a good turnaround in China.

So those are the major offsets. What's broader and better is everything else, and especially the balance in general, large accounts and small accounts, globally. And among sectors, relying less in particular on resources and more on the broader, for us, public works and utilities. Nicholas, anything to add?

Nicholas C: I think you've answered it quite well. The narrowing is really because of the uncertainty in China, and then the fact that we haven't done as much programmatic acquisitions as we've done in the past. Everything else is indeed balancing itself.

Joe V: OK, that's helpful, thank you. And then I wanted to go back to the comment on OpenRoads and OpenBridge doing well within SMB. I think one thing that's been happening is as state DOTs are looking to qualify and build out a larger supply chain, as engineering firms just see infrastructure as one of the better end-markets to be associated with now and going forward, you're seeing growth in these supply chains.

Is the strength in those product areas in SMB related to new customer opportunities surfacing for you, and then how do you see that playing out as these other infrastructure subsectors spring to life with some of the IIJA money getting more broadly deployed?

Nicholas C: Happy to answer this. So, OpenRoads and OpenBridge: we have more and more transportation authorities, including DOTs in the U.S., that are standardizing on it. And then, when that happens, the entire ecosystems starts to use the software as well.

So, what's happening, and what we're seeing is in the U.S., but not just in the U.S., we see a lot of new accounts that are subscribing via Virtuosity to OpenRoads or OpenBridge individually or together as part of OpenCivil Suite in order to be able to serve those transportation authorities.

And I think we're getting better and better at understanding those dynamics and working across channels in order to leverage those dynamics to win an entire ecosystem, not just the owner-operators, but all the project delivery firms working with them, whether they're large or small—whether they're large, we will go after them with our enterprise sales accounts, whether they're small, we'll go after them with our SMB teams or even our channel partners.

And yes, you could argue this is a good playbook that could be applied to other industries. In fact, it's a similar playbook we're following with the water infrastructure in India, where we're winning not only large projects with the owner-operators, but also with their ecosystem.

And in fact, OpenFlows—which is used by hydraulics, hydrology engineers—is in the top three products that we're selling through Virtuosity in India because of the large ecosystems.

Joe V: Right, thank you very much.

Sandra-Ann M: Thanks, Joe. So, next question will come from Matt Hedberg from RBC.

Matt Hedberg: Hi there, guys. Good morning. Thanks for the time. On the industry surveys that you guys noted on the call, why do you think that engineering firms are feeling better about their position in the economy? Do you think it's just a function of capacity from a head count project perspective? They see it in their pipelines. But just any more color on what sounds like good results from that survey?

Greg B: Well, when the backlog is a year and they're confident about winning new business and if they could do it, the period of time you're confident about goes out for longer than what you might think is true in the economy in general. And I guess it's the stability and duration of the funding of the public works and utilities programs that makes that dichotomy prevail, persist.

Matt H: Got it. So, it feels to me like it's a really good leading indicator on maybe sentiment from those buyers, which could be good for the next 12 to 18 months to that effect.

Greg B: Well, we know they're not going to be able to add capacity because the demographic is such that their workforce is retiring. And there are not sufficient replacements in engineering schools now. And there can't be very quickly.

Matt H: Got it. Thanks a lot. Congrats, guys.

Sandra-Ann M: All right, thanks, Matt. Our next question will come from Devin Au from Keybanc.

Devin Au: Great. Can you guys hear me?

Greg B: Yes.

Devin A: Awesome. So yeah, my one question is on the renewal rate in Virtuosity. Nice to hear that 80%. And you also mentioned that you continue to develop the self-serve and also the automation motion there. You could see that figure improving.

So, I'm just kind of curious, where do you see this figure improving in the long term? And how should we think about the pace of improvements?

Greg B: Well, so, I might say that the SMB subscriptions are new enough to us that we didn't have a clear view of where this would settle out. And even now, it's aspirational to grow above that. But we have really strong plans and budgets for our digital experience projects. And perhaps, Nicholas, you'd like to comment on some of what that will accomplish.

Nicholas C: Yeah, it has improved because we've increased the number of touch points during the terms of the subscriptions. And we've done it at scale. Obviously, we have to do it at scale because we're talking about a very large account base now with Virtuosity. And we have started to automate the renewal process itself.

It's not fully, fully automated yet. The automation is not fully deployed. So, we do expect to be able to improve yet again the renewal rate. But as Greg has said, we don't think it will get close to kind of renewal rate we have with enterprise. And that's the nature of the companies that we're dealing with.

They are smaller organizations. They will use our software for a project, as opposed to enterprise accounts who will use our software across projects, going from one project to the other. So, it's a very high renewal rate actually we think for SMB. We think we can still improve it. But it won't reach the kind of levels we see in enterprise.

Devin A: Got it. That's very helpful. Thank you.

Sandra-Ann M: Thank you, Devin. Our next question will come from Joshua Tilton from Wolfe.

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

Greg B: Yes.

Nicholas C: Yep.

Joshua T: All right, thanks for sticking me in here. We've definitely talked in the past about how important this whole pricing dynamic is to the story. You guys mentioned the accretion and the prepared remarks. Can you just maybe give us like a sense or a flavor of what the ASP uplift is for these customers as they start to choose some of these higher priced applications?

Greg B: Right. So, of course, we do have pricing escalation per se for the same product, and there was a question earlier about that. That tends to be in the inflation range of 2% to 5%, depending on which year it is. But the application mix accretion holds the pricing constant and measures the pace by which engineers begin using more specialized products.

And the potential uplift there is an order of magnitude actually. MicroStation, our most generic modeling product, any E365 the price might be per day, might be half of OpenRoads or OpenBridge. And then OpenFlows, OpenWindPower, et cetera could grow by a factor of 5 or even 10. But the more specialized modeling applications include the appropriate simulation engines and so forth. It takes the place of needing a number of different products.

But it's a broad range. And this is where I say the potential to go from what I referred—last time, I showed that, on average, the top design firms spend $1.41 per hour on our applications. And that can grow by a magnitude as they need to have their engineers use more specialized applications to increase the throughput and quality as they going digital to make up for not having the increased number of hours to do the same and more work in backlog.

So, there's quite an order of magnitude potential there over the long term, I think.

Joshua T: And if I could just sneak one more follow up in.

Greg B: If it's quick.

Sandra-Ann M: Sorry, sorry, go ahead.

Joshua T: Sorry, super quick. I know you guys obviously have a really strong competitive positioning in transportation. But you're talking about some of these funding dollars starting to be allocated towards water projects. How do you feel about your competitive positioning in water maybe compared to transportation? And how should we think about your ability to capture these dollars as more of that funding starts to get allocated?

Greg B: In water, I believe we are also the leader. But it's much closer. And, of course, you know that our competitor, Autodesk, did an acquisition there of the other leader. In water, we're broader. We have a lot more to do with processing plant, with plant design, process plants, and so forth, not only the modeling of the networks.

But it is a great market worldwide. There's a lot of digital twin potential in water operations and maintenance, improving energy, reducing nonrevenue water, the leakage, and so forth. It's just something great for infrastructure engineers to work on and going digital.

Joshua T: Super helpful. Thank you.

Sandra-Ann M: Thanks, Joshua. Our next question will come from Andrew DeGasperi from Berenberg Capital Markets.

Andrew DeGasperi: Thanks for taking my question. I guess, first, could you elaborate a little more in terms of the Seequent resource deceleration? I know you mentioned it was growing around 2x the Bentley group ARR growth. I'm just wondering what should we expect at this point in terms of that growth? Should we still exceed Bentley's group revenue? And if so, how much would the swing be?

Greg B: Well, it's because I'm on record saying their growth is twice as fast as the company as a whole that I wanted to report when that was no longer quite the case. And of course, Bentley otherwise is growing by percentage points faster now than a couple of years ago when the acquisition occurred.

So, it would have been required that they grow twice that increment in order to keep pace. So, over that time, as we mentioned, Seequent has doubled in scale. It's taken on attention to the broader civil market, which is good for incorporating subsurface modeling to de-risk infrastructure projects in general. It's good to balance and spread out what Seequent does.

So, that has taken away some of the mining focus. But the mining market also had a significant change this quarter. And that's what it took to have it be less than that integer multiple of the growth of the company otherwise. It's still very significantly faster growth than the company overall. We don't expect that to change. And we're simply observing that it is converging to a degree as the rest of the company grows. But only PLS is growing faster than Seequent still. And we are very satisfied with the Seequent business, the Seequent management, lots of opportunities, fantastic that it has doubled in the two years since the acquisition. But mining is going to go through some fluctuations on this supercycle, we think. And we're in one of them now.

Andrew D: Thank you.

Sandra-Ann M: Thanks, Andrew. Our next question will come from Jay Vleeschhouwer from Griffin Securities.

Jay Vleeschhouwer: Thank you. Good morning. Greg, Nicholas, Werner, I'm appreciative of the comments you've been making about current momentum with regard to parts of the business getting directionally better. That was some very interesting commentary. I'd like, however, to ask a longer-term question, specifically about the extensibility of or the preparation of your portfolio for the next half decade or more. And the reason I'm asking is at YII last November, Keith and Nicholas and Mike made some very interesting comments around your software development. You announced [Bentley] Infrastructure Cloud. You announced various flavors of iTwins. We've not really heard much about any of that since then.

More recently in June, there was a very interesting AEC conference in London. Bentley was there. There were some really interesting indications of what I would call customer ferment or interest in new technologies and processes related to AEC and BIM. So, I know that's perhaps a too large a technology question for an earnings call, but maybe talk about where you think the company is positioning itself for that next half decade or more building upon the current momentum.

Greg B: Nicholas, I know we're preparing, of course, for *Year in Infrastructure*, so we're going to keep some powder dry for that. But go ahead please.

Nicholas C: We will indeed give a more comprehensive update at YII. So, what we explained at YII last year is resonating extremely well with our accounts. And we see not only a lot of interest with Bentley Infrastructure Cloud and some of the iTwin products we talked about, but we see a good uptake as well of the capabilities that are powered by iTwin. So, the fundamental change to the industry, as we discussed before, is going from file-based to becoming data-centric. Digital twins are critical to make this happen. Digital twins are the way we can actually get to the data, which is locked into files right now, which is becoming dark because it's on different file formats, different file systems, et cetera.

So, the evolution of the industry overall is, how can we break free from those files, how can we get to data? And then by data, how can we improve efficiency, improve effectiveness, potentially also change—evolve the business models and offer new things to owner-operators as engineering firms?

And it's quite fascinating in our conversation with engineering firms, not only are they talking about how exactly they need to go digital in order to close the gap between demand and capacity, but they're also telling us, "Help us with all of that data. The data is growing stale and help us. We want to use your products so that data can be reused from one project to the other." And that data potentially could be reused as well for AI and ML, who knows? Yeah, for design assistance, as I explained in the prepared remarks. So, I won't say too much today. But, yes, we'll give you a comprehensive update at YII.

Sandra-Ann M: Thanks Jay. Our next question will come from Kristen Owen from Oppenheimer.

Kristen Owen: Great. Good morning. Thank you for taking the question. I was hoping you could break down some of the performance a little bit more in the public works and utilities space, how much uplift you're seeing from PLS. And since my follow up is related, I'll ask it now—just what permitting reform in the debt ceiling legislation can mean for your business coming into the back half of the year and in 2024. Thank you.

Greg B: I happen to think that electric transmission especially is a forthcoming supercycle. But it's still forthcoming. PLS' growth leading the company at the moment is still in anticipation of that. It isn't yet actually due to major transmission projects having been permitted in the world. But I do think that the engineering firms are adding capacity for transmission engineering and contemplation of that. By the way, it's not possible to hire new transmission engineers. They're all busy. So, one project that's underway is cross training some civil and structural engineers from other disciplines to be competent in transmission engineering and applying the tools to that.

So, I will mention as far as permitting, where we tend in the U.S. to be waiting for major legislation—but there was over the past month rulemaking by our FER, Federal Electricity Regulations Commission, that did start to continue to improve, I'll say, the permitting environment. But it is being measured that there is a multiple of renewals capacity coming on stream or ready to come on stream that's in a queue waiting to be interconnected and, depending on transmission capacity, being extended and augmented. And that's bound to happen and to be a strong driver for PLS. Now PLS is still a fraction only of the size of Seequent among our platform acquisitions. But it's on the launching pad, I think still.

Thank you, Kristen.

Sandra-Ann M: Thanks, Kristen. OK, so let's move to Michael Funk from Bank of America.

Michael Funk: Yeah. Hi, good morning, everyone. How you doing? So, one for you, Greg, if I could. Can you help me conceptualize the potential benefit to NRR growth from application uplift, digital twins, and IIJA? Do you expect them to be beneficial to that growth rate in '24 and '25?

Greg B: Yes. I think each of them would be, probably not individually any of them in their own right. But collectively, I think, we could aspire to increase NRR. I'll point out that NRR, of course, also includes escalation and inflation. I think all of us would be glad to see the end of that. But each of the factors you mentioned—digital twins application, mix accretion, and broadening of the IIJA in the U.S.—are going to benefit the existing, our existing, accounts that are in our NRR.

Michael F: And then related to that, Greg, you previously spoke about shovel-ready IIJA projects obviously getting off earlier and then kind of the majority kind of awaiting more work approval. How close are we to that point in the process where that long tail begins to pick up spending and you start seeing benefit?

Greg B: Well, I remember reporting after the third quarter that in the U.S., we saw rather a sudden uptick in our ARR growth rate. And that's been sustained. But I've been reporting it hasn't yet increased, and I'm beginning to think that the second half of the IIJA—the broadening beyond transportation to grid and broadband and water, although water has begun—is going to be something where that's going to be spread out for so long and such a dribble that it won't register in quite the same way, although it should prevail for longer. But it's—even now, water funding is occurring, but broadband, while it's been allocated, that will be next year. Grid, while it's been allocated, won't start, I think, till next year. And of course, from our standpoint, these may not be bad things if that means they last for longer and are more spread out, given the capacity issues and the infrastructure engineering space, anyway.

Michael F: OK. Thank you all for the time.

Sandra-Ann M: Thanks, Michael. Our next question will come from Matt Martino from Goldman Sachs.

Matt Martino: Hey, guys. Hey, Greg. How are you?

Greg B: Good, thanks.

Matt M: Thanks for the question here on for Kash. I just wanted to get a quick update on Europe and just kind of geographic distribution and the performance that you guys saw there in each quarter. Thank you.

Greg B: Nicholas, if you wouldn't mind?

Nicholas C: Yeah. So, steady growth in Europe overall, the growth drivers primarily, I will say, transportation and industrial. The trends are very similar to what we've seen in the previous quarters, maybe with an S. We clearly see linkage here between the large funding from the European Union that is going to the countries, to the projects. So, there is a number of projects in water and in rail, where our software is being used. And we know that there are funded by the EU. So steady—steady is the word.

Greg B: I might say that when I look at this, that as between Northern Europe and Southern Europe and Central Europe, it always seems to fluctuate enough from quarter to quarter that steady is the right way to put it over the course of a year.

Sandra-Ann M: Thanks, Matt. Our next question will come from Blair Abernethy from Rosenblatt Securities.

Blair Abernethy: Good morning. Thank you for fitting me in here. Just a question on India. Greg, I just wonder if you can give us a sense of—it seems like things are going well there, maybe even better than in China. Is this domestic driven, or is it helping to make up for capacity in, say, North America or Europe, where civil engineering is pretty constrained with these big backlogs?

Greg B: Well, it's much better than China. And we ask the same question because it's for both reasons. The domestic programs in India and, of course, their need for infrastructure is greater than any other country in the world. At the same time, they have this greater source of capacity with students and universities and so forth coming into the engineering professions.

So, we have studied it closely. The bulk of the faster growth in India these couple of years is domestic, to do with the programs there. And I might say that it's our impression that the programs there have been very well received by the population in India and we hope are likely—even though they're reaching, in a year or two, their stated exploration, we like to think there will be successor programs. What would you like to add, Nicholas?

Nicholas C: You answered it, again, perfectly. The bulk is indeed local infrastructure projects. I will say the share keeps getting higher, actually. So, the growth is really primarily coming from those local infrastructure projects, but not only. As you were asking, and as I also mentioned in the prepared remarks, India is also benefiting from global firms tapping into the local engineering talent to help for projects.

When they do that, it's interesting. By the way, it's not just outsourcing some of the functions. They outsource entire, let's say, responsibility for technical delivery, including project management, which is a change from the past.

Greg B: And maybe we haven't had a question about demand in China. But China, historically, has had the higher spending on infrastructure. And I think the government there intends to resume that. But it's in fits and starts. You want to comment further on that, Nicholas?

Nicholas C: Yeah, in China, the infrastructure plan?

Greg B: Yeah.

Nicholas C: So, it was discussed multiple times last year. We saw it coming into action in Q4. It was mostly for projects already under construction. And then it has shifted to fund projects in design in the first half of the year, and primarily with airports—new airports and expansion of existing airports.

And our software is used there, right? So, we're benefiting from this somehow. Given the difficult, let's say, overall business environment in China, this actually is a tailwind.

Greg B: And I just want to emphasize that we feel pretty good about China. China, this year, has been reassuring, so far, compared to last year. But almost anything that happens isn't going to register in ARR, except probably as a decrement to ARR because of the preference there for perpetual licenses, and in SMB especially. So, we'll need to look more broadly at how we measure tone of business in China.

But it's not a bleak picture there, necessarily. And we think our structural changes in go to market are timely and worthwhile, not particularly bearing fruit yet. Although, we see some instances of what we've been expecting and leading us to emphasize. It's going to increase the pressure on ARR, while the overall business can grow.

Blair A: That's great. Thanks very much, guys.

Sandra-Ann M: Thanks, Blair. We will move on to Clarke Jeffries from Piper Sandler for our next question.

Clarke Jeffries: Hello, hello. Thank you for taking the question. I wanted to ask, when you reflect on the year so far, where do you specifically expect to invest most incrementally for the rest of the year, and then maybe beyond that for the next 12 months will be the highest investment priority in terms of Opex investment?

Greg B: Well, let me just say first that the year so far really has been reassuring—that without very much of a pace of programmatic acquisitions, without the extreme reliance on mining and Seequent, with everything broadening out, and especially the SMB and E365 doing better than ever, it feels to us broader and better behind the numbers, as we've emphasized. The principal investments on our mind in Opex—and it's also Capex—are for the digital experience. The SMB opportunity is so large, and we're getting such reinforcement.

As I say, we think there's competitive takeaways going on there. It's as Nicolas described, learning that where there is a major project, there's an ecosystem of tier 1 and tier 2 for us to fully penetrate and help as well. And digital experience is a lot of how you do that. And it's a lot of different projects. Maybe you might even want to mention some of them, Nicholas.

During the remainder of the year, in the 12 months, as you asked about, Clarke, we have a number of major new digital investments coming on stream. And some of them have—so far already this year, we've implemented ServiceNow and a couple of other broad, digital experience things we're integrating rather than inventing.

Nicholas C: Yeah, we've changed most of the marketing tech stack, the marketing automation platform, the account-based marketing platform, the website itself. We are in the process of switching our commerce platform as well, which so far has been used only for SMB with Virtuosity. But we intend to use the same capabilities in enterprise as well. So, when it comes to our front-office systems, it's almost a complete overhaul that we're doing in order to be able to scale. And by the way, it's an investment in systems and people as well. So, if you look at the openings we have, you will see that the biggest function where we're hiring is actually, function. or department, is digital experience.

And so, not just implement the systems, but to actually operate them, right, so that our user experience, our customer experience, is becoming more and more digital first. And only when the users, the accounts want to talk to real colleagues, will this happen. Yeah, and across SMB and enterprise.

Greg B: So, we're engineers. And we love working on this. And it's just hitting a sweet spot, it seems, in SMB. So, we simply have to say, so by the way, this is the first quarter that I had looked myself at license sales in SMB. And that's 300 new logos alone from the license sales, first-time names for us.

So, we really are seeing that license sales are a outright competitive differentiator for us, perpetual licenses, and again, consummates this notion that we measure ourselves by ARR growth. We're very comfortable about that. But when we expand our sites to SMB, and for instance, to China with local preference for perpetual licenses, we need to appreciate that doing broader and better will be reflected beyond ARR growth.

Sandra-Ann M: That concludes our call today. And we thank each of you for your interest and time in Bentley Systems and look forward to updating on our progress in coming quarters. Have a great week, everyone.

Nicholas C: Thank you.