Thoughtworks

Q4 2022 earnings conference call transcript

February 28, 2023

Corporate participants:

- **Guo Xiao** — President and Chief Executive Officer
- **Erin Cummins** — Chief Financial Officer
- **Rob Muller** — Global Head of Investor Relations

Presentation

Rob Muller
Hello, everyone, and welcome to Thoughtworks' earnings call for the fourth quarter of 2022. We will be recording today's call and during the call all lines will be on listen-only mode. Joining us today will be Thoughtworks President and CEO, Guo Xiao; and CFO, Erin Cummins.

The earnings press release was issued earlier today and is also available on our investor relations page at thoughtworks.com. Some of the matters we'll discuss on this call, including our expected business outlook, are forward-looking and, as such, are subject to known and unknown risks and uncertainties, including, but not limited to, those factors described in today's press release and discussed in the Risk Factors section of our annual report on Form 10-K, our quarterly reports on Form 10-Q and other reports we may file with the SEC from time to time.

These risks and uncertainties could cause actual results to differ materially from those expressed on this call. These forward-looking statements are made only as of the date when made. During our call today, we will reference certain non-GAAP financial measures. We will also provide growth rates in constant currency as a framework for assessing how our underlying business performed, excluding the effect of foreign currency rate fluctuations.

We include non-GAAP to GAAP reconciliations in our press release furnished as an exhibit to our Form 8-K. The non-GAAP financial measures provided should not be considered as a substitute for or superior to the measures of financial performance prepared in accordance with GAAP. Thoughtworks assumes no obligation to update or revise the information presented on this conference call.

I will now hand the call over to Xiao.

Guo Xiao
Thank you, Rob. For those not aware, Rob Muller joined us from Salesforce in November as our new Global Head of Investor Relations. Rob is based out of Boston. We're delighted to have him join our team.

Welcome, everyone, to our fourth quarter earnings call. I'd like to start by sharing an overall update on the business, and then Erin will take you through our fourth quarter and full year financial results in more detail. I will then share some of our business highlights before Erin provides guidance and we'll open for Q&A.

Let me start with a recap about Thoughtworks. We are a global technology consultancy that integrates strategy, design and engineering to drive digital innovation. We enable enterprises and technology disruptors to thrive as modern digital businesses. Now let me turn to the financials.

I'm pleased to report solid results in our fourth quarter, driven by the continued demand for our digital transformation services. We delivered revenue of $310.7 million in the fourth quarter of 2022, reflecting year-over-year growth of 8.3% and 14.7% in constant currency.

In the quarter, we achieved adjusted EBITDA of $58.2 million, reflecting adjusted EBITDA margin of 18.7%. And coming to the full year. I'm pleased to share that our revenues grew 21.1% year-on-year and 26.8% in constant currency, resulting in 2022 reported revenue of $1.3 billion. And our adjusted 2022 EBITDA was $256.8 million, representing 15% year-over-year growth.

Thoughtworks has established a reputation for thought leadership and fostering a unique and cultivating culture. Our diverse and global culture continues to track and retain what we believe to be the best talent in the industry.

Forrester, the leading global research and advisory firm, last quarter recognized Thoughtworks as a leader in two reports: the Forrester Wave Cloud Migration and Managed Service Partners in China Q4 2022 and the Forrester Wave Cloud Migration and Managed Service Partners, Asia Pacific Q4 2022.

In the Asia Pacific report, Thoughtworks received the highest possible scores across eight criteria, including vision, organizational structure and cloud modernization service capabilities. In the China report, we also received the highest possible scores in eight criteria, including service development and innovation.

The Forrester report on Asia Pacific stated that Thoughtworks' software engineering expertise created by hiring technical specialists and talented developers gives it some of the market's strongest modernization capabilities.

At the end of December 2022, we had over 12,500 Thoughtworkers in 18 countries across five continents. This represents a net headcount increase of 17.9% year-on-year.

I would like to thank every Thoughtworker around the world for the extraordinary impact they create through our technology excellence and culture. Today, the world faces a higher level of economic uncertainty. Throughout this period, we continue to stay close to our clients, helping them to be adaptive to change and resilient in the face of unpredictability.

We continue to drive our business with rigor and discipline, managing supply and demand and being proactive with clients to help them achieve a better return from their technology budgets. The Thoughtworks business is diversified across industries and geographies, and we see this as a long-term differentiator.

We believe that Thoughtworks has the best talent in the industry and that clients continue to value our people and our services. Our clients are looking to digital innovation to help them navigate uncertainty. We're seeing continued interest from clients in our data services, especially data mesh, data governance and how data can transform and scale their businesses. We're seeing solid demand from our clients for Thoughtworks' expertise in enterprise modernization and platforms.

We also continue to see client interest in our propositions that drive productivity and cost efficiencies. For example, developer experience platforms, which boost the productivity and retention of critical engineering talent. Also, our digital application management and operations offerings which aim to make customer software zero maintenance.

Within digital application management and operations, we apply ahead-of-the-curve engineering practices, like extreme programming and continuous integration, continuous delivery, (CICD) to the post-build phase of the software.

In this way, Thoughtworks aims to revolutionize digital operations by evolving the software run phase to be further automated and intelligence driven. This will reduce client total cost of ownership of target software over a fixed timeframe with predictable costs.

And our clients continue to look to Thoughtworks to enhance their customer experiences and develop new digital products and services, removing friction and bringing customer-facing services together. In January, we published research in association with Harvard Business Review Analytic Services showing that while 94% of business leaders say industry-leading customer experience is crucial to their business, only 10% of customer experience professionals say that their organization's strategy is effective.

The acquisitions of Connected and Handmade that we made in 2022 have expanded our customer experience and digital product services to further address this opportunity. We're pleased with both the pace of the integration and the leverage we're getting by working together with clients.

And, you may recall, two years ago, Thoughtworks acquired Fourkind to boost our AI capabilities. We believe AI is a significant opportunity, and we have been investing for some years to build capabilities. It has been interesting to see the renewed interest from clients in generative AI created in part by the recent launch of Open AI's ChatGPT.

Our thought leadership article, ChatGPT, A Useful Tool Buried Beneath the Hype, has been well received by clients. Enabled by our Looking Glass lens "Partnering with AI" Thoughtworks is helping clients navigate the risks and seize the opportunities of generative AI technologies in areas like AI-augmented product development.

A client where we're achieving scale business benefits is Mondelez International, one of the world's largest snack companies. We have worked in close collaboration with them since 2019, helping their product developers create snacks in tandem with generative AI. We have designed and built an AI-augmented product development platform that enables product developers in Mondelez R&D to interact with machine learning models independently without data science expertise.

This amplified creativity has yielded amazing results, including faster experimentation and iteration capabilities that lead to better products with reduced time to market. For all these reasons, we believe that Thoughtworks is well positioned in the market.

Now let me share some more details of our growth strategies. At the core, our revenue growth is from deepening relationships with existing clients and winning new logos. We then supplement this with focused strategies around M&A, partners and geographic expansions.

Turning first to M&A. Earlier this month, we announced our acquisition of Itoc, a leading Amazon Web Services (AWS) advanced consulting partner and cloud managed services provider in Australia. They have deep expertise with AWS services and have over 100 AWS certifications, including security and SaaS.

Itoc's 70-strong team has helped accelerate hundreds of clients' digital transformations through the creative and optimal use of their IT infrastructure on a highly-flexible AWS cloud platform.

Now let me share an update on partners as a growth strategy. Our primary focus is to develop go-to-market partnerships with hyperscale cloud providers, including AWS, GCP and Azure. For example, in the fourth quarter, we published a case study about our previous work with Etsy, a global marketplace for unique and creative goods with over 90 million buyers as of the end of 2021.

With similar ideologies of agile software development, technology sustainability, employee care, diversity and open source, Etsy chose Thoughtworks as their strategic partner to assist scaling efforts and migration to Google Cloud Platform. Etsy relied on physical hardware in two data centers, presenting several scaling challenges. With their expected growth, it was apparent that the cost would ramp up quickly. The migration was eventually completed in nine months — less time than the full year originally planned, with the monolith then tweaked and tuned to situate better in the cloud, adding features like auto scaling and auto fixing bad nodes. The observability stack was the last to move over due to its complex nature. It requires a rebuild rather than a lift and shift.

Observability is the ability to determine the internal states of systems from their output and provides a means to evaluate data in real-time and build better software. With Etsy's commitment to hyper-observability, the amount of data being analyzed isn't small. Observability is self-service, each team gets to decide what it wants to measure, creating 20 terabytes of logs a day.

To help you visualize the sheer daily volume, 20 terabytes is equivalent to about 340,000 hours of digitally-stored music. Large parts of the observability stack were moved into managed services and third-party SaaS products. And after the cloud migration, the optimization for the cloud didn't stop.

Each team continued to look for opportunities to utilize the cloud to its full extent. For example, the move to the cloud enables Etsy to build a new machine learning platform. Etsy leverages machine learning to create personalized experiences for their millions of buyers around the world with state-of-the-art search, ads and recommendations.

Now let me share three of the benefits Etsy has seen. First, seemingly small inefficiencies such as non-vectorized code can result in a massive performance degradation. And in some cases, Etsy has seen that optimizing a single tensorflow transform function can reduce the model run time from 200 milliseconds to 4 milliseconds.

In numeric terms, that's an improvement of two orders of magnitude. But in business terms, this is a change in performance easily perceived by the customer. Second, a key metric is Time to Productive. The time it takes for a new engineer to set up their environment and make their first change.

What exactly that means changes by domain. For example, it might be the first website push or the first data pipeline working in the big data platform. Something that used to take two hours now takes 20 minutes.

Third, another interesting stat is that the infrastructure has extended to use 10x the number of nodes, but only requires 2x the number of people to manage them. And I'm also pleased to share that in the fourth quarter, we achieved AWS machine learning competency, a validation of our differentiated expertise in AI and ML ops.

Thoughtworks has strong capabilities in putting machine learning products into production to help our clients navigate the challenges ML and AI raise in production environments, challenges that few operations teams will have faced before.

Now to our geographic expansions. In October, we opened our new office in Ho Chi Minh City, Vietnam. This reflects Thoughtworks' wider effort to geographically diversify our business and meet demand from clients in Southeast Asia and Australia and to enable Thoughtworks to leverage the skilled, diverse talent base in Vietnam.

Turning now to our client portfolio. The depth of our expertise and breadth of our capabilities means that we can help clients address all their challenges from strategy right through to business outcomes. Our clients appreciate the value we create with them and increasingly look at Thoughtworks as a strategic digital transformation partner, able to scale new technology across the enterprise.

For example, you may be aware that in 2022, Ford and ADT formed a JV called Canopy, whose aim is to fortify vehicle security using breakthrough technology. The FBI estimates that theft of equipment from inside vehicles in the U.S. cost more than $7.4 billion in 2020.

What you may not know is that we partnered with Ford early in this process, to take what was an experimental project that Ford had built on Raspberry Pi to something that could be launched to millions of vehicles. To evaluate how to scale the experiment we developed a series of high-fidelity prototypes, running two end-to-end pilots with real users in the US and the UK.

These evaluated four areas: manufacturing — what does it take to create this physical product? Installation — what steps are required to install the device on vehicles? Performance — how does this perform on actual commercial vehicles? And usability – is it easy to use and does it provide intended piece of mind?

Canopy is in the product pre-launch phase and expects to launch its first smart vehicle security system offering this year.

And at our client Authority Brands, we have been deploying our digital application management and operations offerings. Thoughtworks partnered with Authority Brands, the parent company of leading home service franchise brands, to deliver a brand-new state-of-the-art field service mobile application.

Thoughtworks focused on the proactive management of software to reduce cost of ownership, maintain business resilience and ensure that the application software is cloud and future-ready. We worked with Authority Brands to cost-effectively maintain and further develop the application, which enabled

Authority Brands' portfolio brands to provide enhanced service and gain market share.

Now turning to new clients. We have a focused approach to new clients, helping the organizations we work with to deliver rapid business value from digital transformation. We see continued momentum in new logo acquisition, and we have contracted with 33 new clients in the fourth quarter.

For example, we're working with our new client Experian UK&I. Experian is a world-leading global information services company. Experian UK&I has chosen Thoughtworks to assist with its technology transformation program. You can find details of some of these customer successes on the news section of our website, Thoughtworks.com.

I'm now going to hand over to Erin so that she can take you through the numbers in greater detail.

Erin Cummins
Thank you Xiao and thanks everyone for joining us today. We were pleased with our performance this quarter, with continued solid execution across our geographies and industry verticals. Our team continues to perform well while navigating a cautious macro landscape.

Let me begin with a few of the highlights for the quarter and the full year. Revenue growth for Q4 was 8.3% compared to the prior year period. Constant currency revenue growth was 14.7%. Adjusted EBITDA for the quarter was $58.2 million, and our adjusted EBITDA margin of 18.7% was approximately 120 basis points higher compared to the midpoint of the range I guided to in November.

Q4 adjusted EBITDA margin expanded approximately 70 basis points when compared to the prior year period. For the full year 2022 reported revenue was $1.3 billion, representing 21.1% year-over-year revenue growth and 26.8% in constant currency. For the full year, acquisitions contributed approximately two percentage points to revenue growth.

Adjusted EBITDA for the full year was $256.8 million, representing year-over-year growth of 15%.

Now let me share some details. Our clients remain committed to large digital transformation programs. However, we continue to see changed client behavior. Some clients are contracting in smaller phases to allow themselves flexibility and sales cycles are normalizing from the accelerated post pandemic levels. Despite near-term caution across our client base, the medium-term demand environment remains healthy and clients value working with Thoughtworks.

This is evidenced by our average revenue per employee of $108,000 for 2022 and which remains higher than the industry average. Our overall bookings at the end of 2022 on a TTM basis stood at $1.4 billion.

Our revenue base remains well diversified across geographies and industry verticals. In the fourth quarter, North America grew by 14.7%; Europe by 8.2%; LATAM by 4.2%; and APAC grew by 2.1%. Our growth in APAC continues to be impacted by the COVID situation in China.

I am pleased with the results of our business this quarter. Due to the diverse nature of our business on a geographic basis, 62.5% of our 2022 full year revenues were contracted in non-USD currencies. As a reminder, our primary revenue-generating currencies alongside the US Dollar are the Euro, Great British Pound and Australian Dollar.

On a local currency basis during Q4, our revenue contracted in Euros grew by 19.3%, Australian Dollars by 6.9% and Great British Pounds by 5.4% compared to the prior year period. For the full year, our revenues contracted in Australian Dollars grew by 31.4%, Euros grew by 25.6%, Great British Pounds by 24.3%.

We also continue to see growth across our industry verticals during the quarter. The strongest growth during Q4 was in Automotive, Travel and Transportation growing at 27.4%. Energy, Public and Health Services grew at 13.7%. Technology and Business Services grew at 10.1%. Financial Services was flat in the face of FX headwinds, and our Retail and Consumer vertical decreased by 4.9%.

As we shared previously, in the Retail and Consumer vertical, we are seeing normalizing spend after the post-pandemic boom with essential retail continuing to outperform discretionary retail. For the full year 2022, around 87.2% of our business came from existing clients.

We now have 35 clients with 2022 revenues greater than $10 million, five more compared to 2021, a 16.7% increase year-on-year. We have a balanced customer portfolio with relatively low client concentration. In 2022, our top five, top 10 and top 50 clients generated 15.4% and 24.7% and 64.1% respectively as a percentage of total revenues.

Moving down the income statement. For the quarter, adjusted gross margin was 39.7% compared to 42.9% during the prior year period. For the full year 2022 adjusted gross margin was 41.6% compared to 44.2% for the full year 2021.

Utilization impacted both our quarterly and annual adjusted gross margin. In the fourth quarter, our adjusted SG&A as a percentage of revenue was 22.1%, which is better than the fourth quarter 2021 by 250 basis points on improved operational efficiencies.

For the full year 2022, adjusted SG&A as a percentage of revenue was 22.4%, down approximately 90 basis points compared to 2021. Adjusted EBITDA was $58.2 million for the fourth quarter, and adjusted EBITDA margin was 18.7%, an increase of 70 basis points compared to the fourth quarter last year. This was due to improved SG&A leverage and a recovery of prior bad debt expense, partially offset by lower utilization.

For the full year, adjusted EBITDA was $256.8 million, up 15% from $223.2 million in 2021. 2022 adjusted EBITDA margin of 19.8% was down approximately 110 basis points from 2021. GAAP diluted earnings per share was $0.05, impacted by non-cash stock compensation charges. On an adjusted basis, our adjusted diluted EPS was $0.10 compared to $0.09 in the fourth quarter of 2021.

For the full year, 2022, GAAP diluted loss per share was $0.34. On an adjusted basis, 2022 adjusted diluted EPS was $0.43 compared to $0.46 in 2021. Free cash flow for the quarter was $27.3 million compared to $18.2 million in the prior year quarter.

For the full year 2022, free cash flow was $64.9 million compared to $92.2 million in 2021, and we continue to have good liquidity. Our cash balance at December 31, 2022, was $194.3 million.

Our debt continues to go down and stood at $402.5 million as of December 31, 2022, and we further reduced the balance by $100 million in February. In addition, during Q4, we upsized our revolving credit facility by $135 million to $300 million of total borrowing capacity. There is currently no outstanding balance on the revolver.

Now I would like to hand back to Xiao to share additional updates on our business from the fourth quarter.

Guo Xiao

Thanks, Erin. Let me start with our amazing Thoughtworkers. With a long-term focus on diversity and inclusion, our community of over 12,500 Thoughtworkers included 42.8% women and underrepresented gender minorities, WUGM, as of December 31.

We continue to improve our employee value proposition and we're pleased that attrition at the end of December 2022 was 12% on a TTM basis, significantly better than industry norms. Our better-than-expected attrition demonstrates the strength of our employee value proposition. We believe that Thoughtworks has the best digital talent in the industry and this positions us well to create extraordinary impact for our clients.

Our annual employee survey in the fourth quarter showed the strength of our employee engagement with our score of 8.7, placing Thoughtworks in the top 25% in the industry. Our diversity and inclusion score of nine places us in the top 5% in the industry.

This is a reflection of Thoughtworks' aligned values and cultivating culture. In the fourth quarter, we're pleased that Thoughtworks once again received Great Place to Work certification in India, Chile, Ecuador and, for the first time, in Italy.

Our average Trust Index score was 91%, an increase from 88% in the third quarter. Additionally, Great Place to Work ranked Thoughtworks Singapore and Brazil in the top five companies to work for in technology and IT services.

Our priority is for Thoughtworks to be a place for talented technologies to grow and have impact. Our global Glassdoor rating is a measure of the progress we're making. In the fourth quarter, our overall rating was 4.47, which is again higher than the rating of the IT services sector of 3.95.

We’re known as thought leaders who revolutionize the technology industry. And that's how we built our brand and our reputation from our early days as a company. I'm pleased to share that in January 2023, Thoughtworks was named as a Brand Finance IT Services top 25 brand for the second year in a row.

According to the Brand Finance report, Thoughtworks has achieved one of the strongest Brand Strength Index scores of 77.3 out of 100. This places the Thoughtworks brand in the top five in the IT services sector, earning a AA+ rating.

Thoughtworks is also among the top 10 fastest-growing IT services brands with an estimated 15% year-on-year growth in brand value. I've also been proud of the work we're doing in the market and with the clients around the topic of responsible technology.

We published the State of Responsible Technology report last month in collaboration with MIT Technology Review Insights. This is a landmark moment in charting the growing boardroom acceptance of responsible technology thinking. It builds on the work we've done in providing technologies, methodologies and tools to help clients such as retailer H&M and German ride-sharing service MOIA in their responsible tech efforts. Both clients made invaluable contributions to the report.

Now let me hand back to Erin.

Erin Cummins
Thank you, Xiao. Now let me turn to our business outlook for Q1 and the full year 2023. While there is caution being exercised in the macro environment, our clients continue to have ongoing needs for digital transformation, which draws them to Thoughtworks.

For the first quarter of 2023, we expect revenues to be in the range of $303 million to $305 million, reflecting a year-over-year decline of negative 5.5% to negative 5% or negative 2.5% to negative 2% in constant currency.

We expect acquisitions will contribute approximately three points to revenue growth in Q1. Given the more cautious demand environment, we are taking steps to better align our cost base with our revenue expectations, which includes headcount management. These targeted actions will result in an approximate 4% reduction to our employee base.

Please recall that our reported attrition figure of 12% as of this quarter is based upon a trailing 12-month total. Consequently, these actions will result in an elevated level of attrition until we lap these changes in Q1 of 2024.

In the meantime, we will continue to hire on a limited basis with a focus on specialized skill sets and demand generation. We expect adjusted EBITDA margin for the first quarter to be in the range of 9.5% to 10.5%, negatively impacted by approximately $8 million of non-recurring severance-related costs in the quarter.

For the first quarter, we expect adjusted diluted EPS to be in the range of $0.03 to $0.04, assuming a weighted average share count of approximately 333 million diluted shares outstanding. Our Q1 guidance incorporates share-based compensation of $19 million.

Turning to full year guidance. For the full year 2023, we expect revenue growth year-on-year on a reported basis in the range of 0.5% to 2.5% or 0% to 2% in constant currency. We expect acquisitions will contribute approximately 2 points to full year revenue growth. Our full year guidance incorporates modest sequential top line growth in Q2 with higher sequential growth in the second half of the year.

We have increased our sales and marketing investments to drive additional demand generation and we remain optimistic about our growth prospects given our view into a healthy pipeline. For 2023, we expect adjusted EBITDA margin to be in the range of 18% to 19%.

We expect that our targeted actions will reduce our cost base by approximately $12 million in Q2 when compared to Q1. Accordingly, beginning in Q2, we expect a go-forward adjusted EBITDA margin that is in line with our historical EBITDA margin range.

We expect full year adjusted diluted earnings per share for 2023 to be in the range of $0.38 to $0.41, assuming a weighted average share count of approximately 335 million diluted shares outstanding. We expect stock-based compensation expenses of approximately $81 million during 2023.

Beginning in 2024, we anticipate annual stock-based compensation to range between 2% to 4% of revenue. In addition, we have switched to straight-line expensing of stock-based compensation from the previous accelerated method.

Accordingly, there is a recasting of historical financials, which decreased net loss in 2022 by $2.7 million and decreased 2021 net loss by $23 million. Now we would like to provide some context that is informing our guidance for Q1 and the rest of the year 2023.

First, as we mentioned previously, we expect some clients' contracting behavior to be at more normalized decision cycles compared to the compressed cycles we witnessed post pandemic. Additionally, some clients continue to break larger digital transformation programs into smaller statements of work to provide themselves with flexibility.

Furthermore, some clients are in-sourcing work to protect the jobs of their own teams. Second, we expect continued caution in our business in APAC into the first quarter. We expect the benefits of China's exit from the Zero-COVID policy to slowly materialize during the first half of the year.

Third, we continue to see clients in the retail and consumer segment moderate spend due to additional scrutiny on budgets. Retail clients are being more cautious in response to overall consumer sentiment and economic uncertainty. And we are also seeing this moderation of spend in some of our clients in the technology sector as some of our clients balance internal and external supply in the context of available budgets.

For 2023, we are focused on execution while remaining vigilant of any potential impact of external factors. We are highly focused on cost management, balancing supply and demand, and investing in our growth while scaling our operations efficiently. Our value proposition and services remain highly relevant.

Our clients are continuing with their multiyear journeys. Our renewal rates are strong. We continue to stay close to our clients and expect to gain additional visibility as clients continue to finalize spend decisions.

We believe that our talent is the best in the industry and attrition remains low. We will continue to calibrate supply and demand in order to balance solid utilization with an ability to respond to new and expanded opportunities.

Now let me hand back to Rob.

Rob Muller
Thanks, Erin. You can find our investor presentation on the Thoughtworks Investor relations website. We will now move on to Q&A. I would ask that you each keep to one question and one follow-up to allow as many participants as possible to ask a question. Operator, would you please provide instructions for those on the call?

[operator instructions]

Q&A

Operator

Our first question comes from Tien-tsin Huang with J.P. Morgan.

Tien-tsin Huang, J.P. Morgan
I wanted to drill into the first quarter outlook, if that's okay? Because we're two months in, I think historically, we've seen sequential revenue growth for Thoughtworks and you're guiding to a decline. So I just wanted to drill in on the -- how broad-based is some of the weakness that you're seeing in the first quarter?

I know you mentioned normalizing sales cycles and some evidence of in-sourcing also the retail sector. Just how broad-based is this change in demand or the slow start to the year? Any additional detail would be great.

Guo Xiao
Thanks, Tien-tsin. 1Q, we're looking at we're almost more than halfway through with the current demand environment is, we believe, it's still similar to Q4. As you mentioned, we expect a small revenue decline from Q4 to Q1. Normally, we would see probably a bigger upside in the previous years. And this is still a reflection of this macro headwind that still persists in this market.

We are seeing our clients are still being cautious and tight on budget. From a vertical perspective, tech and retail verticals are still underperforming, but we are seeing automobiles, public and health care sectors are overperforming.

We still see stronger, from a geo perspective, headwinds in Asia Pacific. Europe is doing better and North America is having a more modest January than we've seen before, but is seeing a fast rebound in February and beyond Q2 and Q3 for sure.

So overall, still cautious about Q1, but the pipeline is very healthy and very active. We continue to see the total pipeline expand to a historic level. We have a large opportunity set in front of us to work for the next few months.

Tien-tsin Huang, J.P. Morgan
Great. And my follow-up to Xiao is if I heard Erin correctly, you are increasing your sales and marketing to drive some demand. But you did show a lot of sales and marketing leverage. So I'm just trying to think how you're balancing the margins embedded in your guidance? So you are upping your sales and marketing efforts, but you've made some savings in other places, can you just comment on that balance as well as your visibility on utilization, forgive the jumbled question, but just a little bit more on margins? And that's my follow-up.

Guo Xiao
Sure. Erin, do you want to comment on that?

Erin Cummins
Sure. I'll start with your first point, Tien-tsin, which is around sales and marketing. So we are investing in our sales and marketing spend. But overall, if we compare the margin guide for 2023 versus 2022 performance, it's relatively in line.

The sales and marketing spend, our focus there is really looking for opportunities to drive efficiencies in G&A and then reallocating that cost and that spend into sales and marketing. That's something that we really started doing as early as the fourth quarter of last year and continue doing into Q1 and we'll do so for the remainder of the year.

In order to understand the margin for 2023 and just a little bit more color and commentary from me, I think it's fair to say that our Q1 margin has been impacted, I talked about the reasons why in my prepared comments, but would just remind, in the Q1, we have about $8 million of non-recurring severance costs that are impacting our first quarter.

After that, in the second quarter, we do expect to see margin returning to higher levels and further expect that our H2 margin is going to be stronger than our H1 margin. Tien-tsin, you mentioned utilization, and we are focused on driving higher levels of utilization in 2023.

If you recall, in the second half of 2022, we were operating at lower levels of utilization. And that's why we made the decision to rightsize our cost base now, and we're resetting early in the year. We will continue to manage our cost base, as we always do. Our focus right now really is returning to growth and making sure that the spend is in the right areas for the business.

Operator
Our next question comes from Maggie Nolan with William Blair.

Maggie Nolan, William Blair
Can you talk through the pricing trends that you've seen in the last several months? A little bit more granularity on kind of a month-over-month basis, as we think about how 1Q is developing.

Guo Xiao
Sure. Thank you, Maggie. We still -- in Q4, we saw low single-digit pricing increase from a year-on-year perspective. We certainly believe that the strategic partner

position allows us to drive, generate higher bill rates for higher value-added services in the market.

During the last few months, we do ourselves have seen more pressure from our clients just in terms of general budgeting pressure and cost-cutting measures. We have become more mindful of how much our clients would be willing to pay given these budget constraints.

We definitely observe more pricing pressure than usual, but not evenly distributed. For higher-value services, we've seen continued willingness to pay for the higher rates. We definitely see -- it's reflected more on the mix of work. We see clients pushing more of vanilla engineering work from onshore to offshore, they're more -- they're still willing to pay for transformation, special skill sets for workdown onshore.

So that -- I think that change of pricing mix is where we are seeing more just from an average downward pressure perspective on pricing than necessarily the average bill rate for the same work we're doing before. At the same time, given the macro constraint, we are becoming very flexible in the short term to help our clients through difficult times.

And obviously, the most important thing for us is to stay close to our clients, focus on delivering value early with high quality, we believe that's how we win trust and commitment for the long run.

So if you extrapolate forward, we believe that we're going to continue to see more pressure on pricing, but not significantly higher than what we have seen in Q4.

Maggie Nolan
And then, obviously, I can appreciate that it's difficult to get visibility into the COVID policies in China. How much of that risk are you trying to take out of the model with the current guidance? Or how did you consider that when you were putting together the full year guidance?

Guo Xiao
We believe our guidance is appropriate and also incorporates the risk we have seen in China, we believe it's going to evolve later this year. We certainly saw a bigger impact from the strict Zero-COVID policy in Q4, which caused economic slowdown in China. However, extending the Q1, the COVID outbreak itself following the lifting of the Zero-COVID policy, also contributed to the slower growth in China in Q1.

That said, we have seen the country largely went through the first outbreak, the major outbreak and then there hasn't been any signs of follow-up later outbreaks. We expect China growth, from an economy perspective, has been demonstrating growth since January-February this year. We expect China, our business growth to recover starting in Q2 on the back of accelerated economic growth.

Operator
Our next question comes from Bryan Bergin with Cowen.

Bryan Bergin
I wanted to dig in a little bit more on the types of engagements and client behavior. So can you give more detail on the type of work that clients have really deferred here versus those that are continuing? So I'm trying to understand what programs really fell out of the pipeline?

And can you draw any tangents to the early COVID quarters as it relates to client decision-making and whether you think any of this work can come back quickly or not?

Guo Xiao
Sure. Thank you, Bryan. So as Erin mentioned earlier, the behavior change we're seeing from clients is mostly on the sales cycle, the deal size. Specifically from a portfolio type of work perspective, the biggest change we've observed between early COVID and now is the -- or the post-COVID and then now — is the rotation from just growth, purely growth-oriented investments to more efficiency-oriented initiatives, investments.

We -- from a data perspective, about 30% of our portfolio, we believe, at the beginning of the last year 2022, was efficiency focused. At this moment, it's probably 50% and then slightly -- even slightly higher than that. And then where we see the biggest traction is engineering effectiveness platforms we're providing allow developers to be more productive.

There seems to be a bigger focus from our client where they are trying to increase the productivity of their own teams more than they were focusing on before. And then I mentioned earlier that some of the work is being pushed more to offshore.

Obviously, a lot of engineering work is being pushed, but a lot of the transformation work, special skill sets are still in high demand from our clients.

From the work perspective that you mentioned early -- during the early COVID quarters are they coming back?

We -- from our portfolio perspective, we have many of these programs that are running are multiyear programs. They didn't disappear. They just didn't grow as fast as it was during those quarters. We continue to work with most of our clients on these large programs of work. We believe they will continue.

We're also seeing some of them, especially in Q1, Q2 this year, some of these were coming back. There's definitely signs that despite the macro uncertainty, despite the concerns that the client -- our clients are looking beyond 2023, looking at 2024, they believe that given the macro conditions '24, we're going to likely see much healthier, stronger economic growth, and they are making investments from a growth perspective, from a tech digital perspective, trying to capture that growth. So we're seeing definitely green shoots and then lots of interest in that kind of work coming back.

Bryan Bergin
Okay. That's helpful. And then just a follow-up here, just considering the pricing trends that you had mentioned in 4Q, and I guess, the early part of '23, can you give us a sense on how you expect gross margin and per capita revenue to trend in '23 after you get past the 1Q?

Erin Cummins
Thanks, Bryan. Sure. With respect to gross margin, again, on the whole, we will expect to have, particularly when comparing to the second half of the year, a favorable impact on gross margin resulting from higher utilization. Specifically from a pricing perspective, we're not seeing that as a significant impact on the margin when comparing 2022 to our expectations for 2023.

So then if we just look at revenue per employee or the per capita view, we do anticipate our revenue per employee, we'll see the benefit of higher utilization. That said, there's various puts and takes in that. As I know you realized, Xiao has already touched on, some of the work seeing some stronger growth offshore. So we do expect that to be a component. So there will be a mix shift factor in there as well, and that's been consistent for the last few years.

Operator
Our next question comes from Jason Kupferberg of Bank of America.

Tyler DuPont, Bank of America
This is Tyler DuPont on for Jason. So first, can you just speak a little bit more on the project elongations you mentioned. One of the puts to the story was that the clients are breaking up projects into smaller pieces. Is there a specific vertical or geographic tilt towards those delays? And then also, when clients break up projects, can you just speak to the duration of those projects and whether Thoughtworks is being able to win those follow-on opportunities?

Xiao Guo
Sure. So from a geography and vertical perspective, it's pretty consistent across different regions and different verticals. This behavior that you mentioned, we observed that in all the verticals even if -- for the ones that automotive and then health care, public sector, we've seen very strong growth in those sectors.

We're seeing similar contracting behaviors. Now the work itself, many of them are -- the programs are multi year programs. During the post COVID quarters, clients were willing to sign up for three-year, five-year contracts right away, in a single SOW sometimes. We're now seeing them signing up for only 12 months or sometimes even six months SOWs to start with. Now with this kind of work in our experience in the previous two, three -- two quarters and what we're observing right now, they are highly strategic, and our win rate on the renews and extensions are especially high, higher than the usual extensions and renews we've seen before. So we're very, very confident about the continuation of this work despite the contracting behaviors.

Tyler DuPont
Okay. I appreciate that. And then also just on a sequential basis, it seems like the financial services and tech verticals experienced more of the softest growth. Anything specific to call out there, whether it's specific types of projects within those verticals that are more likely to be pushed out or if the slowdown was driven more by a few larger clients or broad-based? Any sort of clarity there would be helpful.

Guo Xiao
Sure. The changes in the tech sector is less about the type of projects, it's more about just the type of budgeting process we're seeing from technology clients, as we have all seen the technology sector is taking on a lot of challenges recently with -- especially with their own cost base.

Many have announced layoffs. And then as part of the results, we're seeing more of our technology clients wanting to in-source work as much as they can so that they can keep their own people busy. And so that's one of the things that's causing a lot of the changing behaviors in the tech sector from a sequential perspective.

Financial Services, in fact, that if we look at our own portfolio, it's having a sequential growth, but the reported number you've seen is mostly due to tough comps. About the same time last year or slightly earlier than last year, the same time in Q4 the previous year, we saw a huge growth in the financial service sector.

A lot of this is due to the cryptocurrency surge, the rise of digital banks, especially the critical part of it has came down gradually last year. So from a year-on-year perspective, we are seeing more modest growth in the financial services sector, but sequentially is doing relatively well.

Operator
Our next question comes from Moshe Katri with Wedbush.

Moshe Katri, Wedbush
Two follow-ups. One, you mentioned the $1.4 billion in bookings that's trailing 12 months, I think. And I think, Xiao, you indicated it's a record level kind of number. Is there a way to kind of figure out how -- what sort of growth that would represent year-over-year? So that's my first question.

Xiao Guo
Sure. So I think what I was trying to highlight is that our pipeline is at record level. From a booking perspective, the $1.4 billion is relatively flat from the last two quarters, if we adjust it by the foreign exchange, the currency exchange.

Part of the reason that bookings is not increasing at the same pace that the pipeline is because the deal size is being compared. So we're signing smaller SOWs to start with. But the overall pipeline, the kind of work we know that we're going to get that we're seeing our clients are committing to is very healthy.

So that, to your point, Moshe, that's exactly what we're seeing right now. And then we observed that inbound and outbound leads and the overall size of the pipeline continues to expand. We added 33 new logos. We have a large size of opportunities in front of us to execute. So we feel that while [inaudible] is a bit uncertain is a bit modest, we do believe that if we execute against this pipeline, we should be able to see sequential growth from Q1 to Q2 and then even more additional incremental revenue from Q2 to Q3 to later this year.

Moshe Katri
Okay. Understood. And then you -- I think, Erin, you spoke about some clients still finalizing some spending decisions. So this is a pretty big deviation from prior years. I guess, there's maybe one to two months kind of delay in budget decisions.

Is that what you're seeing out there? And then one -- I mean, what sort of indications are you getting about some of those -- when do we get that timeframe where clients are kind of done finalizing those spending decisions?

Guo Xiao
We think there -- most of them are close to being done. It is -- absolutely you're right, we are seeing unusual budgeting behavior where January -- towards the end of February, some of them are still finalizing their budget.

It's definitely at least two, three months, sometimes longer than we've seen in the previous years. Now what gave us comfort is that -- well, first of all, the challenge was due to that was a lot of the work that we were committed earlier to start couldn't start because of the budgeting cycle and then some of the decisions impacted our clients' priority.

We're seeing work stopped and then start during January and sometimes in February. That's, I think, why we're seeing more of a modest January in North America. We think that majority of this decision-making is behind us right now. Most of our clients are settled one way or the other on their budget for the year. And then as we mentioned earlier, some of them are more focused on efficiency and cost optimization. But overall, we're seeing a -- from a -- it varies from client to client from flat to small increase in budget due to the -- some of the macro concerns.

But this digital transformation is still a key component of their future strategy. We've seen commitments on the long-running programs, both those things are carried from previous years and from last year as well as new programs that are supposed to start in Q2, sometimes later in Q2.

So we feel that this budgeting challenge is largely behind us, and we're confident that we're going to see incremental growth going from here.

Moshe Katri

If I can just squeeze in the last one. You didn't talk a lot about Europe. Are the -- are we seeing any sort of those headwinds coming out from your European-based customers?

Guo Xiao

We felt more of that in earlier last year in the Q2-Q3 time frame. Since then, we have seen reasonably strong tailwinds in -- especially in the automotive sectors, which we think offset some of perhaps the other sectors like retail. So overall, we've seen pretty steady growth in Europe. I think that overall the automotive sector, the focus on digital and electric cars are taking the center stage in many of the car companies' future strategy that's driving all the growth we're seeing at this moment.

Operator

And our last question comes from Arvind Ramnani with Piper Sandler.

Arvind Ramnani

I just sort of wanted to follow up on guidance. Certainly expected -- I mean, your guidance is better than expectations. I'm trying to understand what assumptions have you included in fiscal '23? Specifically trying to figure out are there any client-specific -- large client-specific dynamics or are there kind of specific parts of the business that are particularly weak that have been included? Just so trying to figure out, is there more downside or conservatism sort of built into your estimates? That's the first question, and then I have a follow-up.

Guo Xiao

Sure. Thanks, Arvind. So first of all, our guidance are, we believe, is appropriate. And then I think what you observed the Q1 is below expectation. It was mostly due to -- from a year-on-year comparison perspective due to the larger slowdowns, the drawdowns we've seen Q3 and Q4 compared with perhaps some of the peers.

And then the two main reasons from Thoughtworks perspective was the higher APAC exposure and higher onshore headcount, as we talked about before, as some of the clients rotate work to offshore.

Our onshore mix, which is about 25% compared with around 10%, was the main difference that we've seen in Q3-Q4. Now if we project forward and even just looking from Q4 to Q1 and then Q1 to -- just mathematically, if we look at the full year guidance, our sequential growth from Q1 throughout the year of '23 is pretty healthy.

It's pretty in line with what our peers are reporting. Now we are definitely feeling that H2 this year we should see more incremental higher growth, especially with a stabilized outlook, we expect for clients to return to more typical buying behavior, but we're not forecasting macro to change significantly later this year.

What we believe gives us the confidence of sequential growth are twofold. One is, as I just mentioned, we continue to see a large sizable opportunity set in front of us and our pipeline continues to grow and offer significant opportunities ahead of us.

The second, as Erin mentioned earlier, we are making a lot of focused investments in driving additional growth. It's not just in sales and marketing capacity, we're investing more in verticals that are, we believe, resilient in this current macro environment, public, energy, health care sector, for example, that's now roughly 25% of our global revenue; automotive and financial services.

We're also focusing our service offerings that's really catching on with our clients' intention to focus on efficiency and cost saving programs. For example, engineering effectiveness platforms and also digital application management and operations services.

So we feel that we've done the right thing. We're investing in the right area. We feel that a sequential growth from Q1 to later this year, we feel confident about what we're guiding.

Arvind Ramnani
Perfect. And then just a follow-up question here. You indicated you're taking some cost actions given kind of just the reality of the business environment. But in terms of like a turn in demand, right, like when things really start to pick up, I'm sure you'll kind of rehire and kind of accelerate your headcount growth. But what are some of the signs you're going to be looking for to kind of mark like kind of a change or pickup in the end market?

Guo Xiao
We have -- so for us, it's really the demand outlook we're looking at in terms of what's in the pipeline, what's getting close to being signed, what kind of deals are high confidence of renewing and expansion.

And you're right, Arvind we are going to need to hire people. If we want to capture the growth that we believe should come later this year. And then -- but even despite the changes we're making recently, we feel that we are -- the realignment we're doing is exactly what we need to do to prepare ourselves for the growth later this year.

There will be different skill sets required, different kinds of allocation of capacity we need onshore versus offshore, the skill sets we need in different places. And we also believe that the recruiting efforts will vary from region from even country to country.

Different countries will have very different behaviors in terms of their growth trajectory later this year. A lot of these recruiting decisions will be driven by the more nuanced demand outlook for a country itself.

Operator
At this time, I'd like to turn the call back over to Xiao for closing remarks.

Guo Xiao
Well, thank you, and thank you, everyone, for joining us today for the 4Q earnings call. I would like to acknowledge the continued support of our board and our shareholders. And in closing, I'd like to thank all Thoughtworkers, clients and partners for the extraordinary impact we're delivering every day together, stay well, and we look forward to catching up with you next quarter.

Operator
This concludes the program. You may now disconnect. Everyone, have a great day.

