**Introduction**

Thank you. I’d like to welcome you to IBM’s second quarter 2024 earnings presentation. I’m Olympia McNerney, and I’m here today with Arvind Krishna, IBM’s Chairman and Chief Executive Officer, and Jim Kavanaugh, IBM’s Senior Vice President and Chief Financial Officer. We’ll post today’s prepared remarks on the IBM investor website within a couple of hours, and a replay will be available by this time tomorrow.

To provide additional information to our investors, our presentation includes certain non-GAAP measures. For example, all of our references to revenue and signings growth are at constant currency. We’ve provided reconciliation charts for these and other non-GAAP financial measures at the end of the presentation, which is posted to our investor website.

Finally, some comments made in this presentation may be considered forward looking under the Private Securities Litigation Reform Act of 1995. These statements involve factors that could cause our actual results to differ materially. Additional information about these factors is included in the company’s SEC filings.

So with that, I’ll turn the call over to Arvind.
CEO Perspective

Thank you for joining us today to discuss IBM's second-quarter earnings. We delivered a strong quarter, exceeding our expectations, driven by solid revenue growth, profitability and cash flow generation. We had strong performance in Software and Infrastructure, above our model, as investment in innovation is yielding organic growth, while Consulting remained below model. Our results underscore the continued success of our hybrid cloud and AI strategy and the strength of our diversified business.

Let me start with a few comments on the macroeconomic environment. Technology spending remains robust as it continues to serve as a key competitive advantage allowing businesses to scale, drive efficiencies and fuel growth. As we stated last quarter, factors such as interest rates and inflation impacted timing of decision making and discretionary spend in Consulting. Overall, we remain confident in the positive macro-outlook for technology spending but acknowledge this impact.

It has been a year since we introduced watsonx and our generative AI strategy to the market. We have infused AI across the business. From the tools clients use to manage and optimize their hybrid cloud environments, to our platform products across .ai, .data and .gov, to Infrastructure and Consulting, you can find AI innovation in all of our segments. For example, in Software, our broad suite of automation products like Apptio and watsonx Orchestrate are leveraging AI and we expect to do the same with HashiCorp, once the acquisition is complete. Red Hat is bringing AI to OpenShift AI and RHEL AI. In Transaction Processing we’re seeing early momentum in watsonx Code Assistant for Z. In Infrastructure, IBM Z is
equipped with real time AI inferencing capabilities. And in Consulting, our experts are helping clients design and implement AI strategies.

Our enterprise AI strategy is resonating as we evolve to meet client needs. Let me start by discussing IBM models. Choosing the right AI model is crucial for success in scaling AI. While large general-purpose models are great for starting on AI use cases, clients are finding that smaller models are essential for cost effective AI strategies. Smaller models are also much easier to customize and tune. IBM’s Granite models, ranging from three billion to 34 billion parameters and trained on 116 programming languages, consistently achieve top performance for a variety of coding tasks. To put cost in perspective, these fit-for-purpose models can be approximately 90% less expensive than large models. Hybrid cloud remains a top priority for clients as flexibility of deployment of AI models across multiple environments and data sovereignty remain a key focus.

We believe in the power of open innovation, and recently announced at IBM Think, that we open-sourced IBM’s Granite family of models, now available under Apache 2.0 licenses on both Hugging Face and GitHub. We see parallels to Linux becoming dominant in the enterprise server space thanks to the speed and innovation offered by open source. We are confident that the same dynamic will play out with AI as we benefit from developer mindshare and community innovation. We also recently launched InstructLab, a tool for more rapid model tuning through synthetic data generation, allowing our clients to more efficiently customize models using their own data and expertise. The last 12 months of AI pilots has made it clear that sustained value from AI requires truly leveraging enterprise data.

In summary, our AI strategy is a comprehensive platform play. RHEL AI and OpenShift AI are the foundation of our Enterprise AI platform. They
combine open-source IBM Granite LLMs and InstructLab model alignment tools with full-stack optimization, enterprise grade security and support, and model indemnification. On top of that we have an Enterprise AI middleware platform with watsonx and an embed strategy with our AI assistants infused throughout our software portfolio and those of our ecosystem partners. In addition, our Consulting services are critical in helping clients build their AI strategies from the ground up. We also continue to see our Infrastructure segment play a larger role as clients leverage their hardware investments in their AI strategies.

Our book of business related to generative AI now stands at greater than $2 billion inception to date. The mix is roughly one-quarter software and three-quarters consulting signings. We believe these strong results highlight our momentum and traction with clients. Our early leadership positions us for long-term success and this transformational technology, which is still in the initial stages of adoption.

As clients build out AI strategies, the IT landscape is becoming increasingly complex. Labor demographic shifts further emphasize the importance of optimizing IT spend and automating business processes. We continue to innovate and invest and have created a leading automation portfolio to capture this opportunity which you can see in our results. This includes Apptio for cost management, capabilities for observability and resource management, and with the announced acquisition of HashiCorp, the automation of cloud infrastructure. The powerful combination of Red Hat's Ansible and Terraform will simplify provisioning and configuration of applications across hybrid cloud environments. The latest addition to this portfolio is IBM Concert – also announced at Think – a GenAI powered tool which helps clients get end-to-end visibility across business applications. We also recently completed the acquisition of the StreamSets and webMethods assets from Software AG. This acquisition
brings together leading capabilities in integration, API management and data ingestion.

Let me now spend a minute on the continued strength we are seeing in Infrastructure. IBM Z, our mainframe solution, is an integral part of our clients' hybrid cloud environments, driving their most secure and mission critical workloads. Our latest cycle z16 is uniquely tailored to offer clients security, scalability and resiliency, which help clients address both cybersecurity threats and complex regulatory requirements. z16's Telum processor is a unique differentiator, driving real time, in-line AI inferencing at unprecedented speed and scale for applications like real time fraud detection. Our storage offerings are also benefitting from generative AI as clients address data readiness and need high-speed access to massive volumes of unstructured data.

We continue to invest in innovation and make great progress in emerging technology like quantum computing. This quarter, we expanded Qiskit, IBM’s quantum computing software, into a comprehensive stack aimed at optimizing performance on utility-scale quantum hardware. These updates aim to enhance the stability, efficiency, and usability of Qiskit, supporting advanced quantum algorithm development and fostering broader adoption across various industries.

This strong momentum and innovation across the portfolio manifests itself in client adoption. In virtually all industries and geographies, clients leverage IBM solutions to help them transform their operations and create better experiences for end-users. Names like Virgin Money, Crédit Mutuel and Panasonic all turned to IBM in the quarter. We also continue to strengthen our ecosystem. At our Think event, we announced a series of new AI partnerships with industry leaders like Adobe, AWS, Microsoft, Meta, Mistral, Salesforce and SAP. In May, IBM and Palo Alto Networks
announced a partnership to deliver AI-powered security solutions using watsonx. As part of this, Palo Alto is acquiring IBM's QRadar SaaS assets, and we are partnering to offer seamless migration for QRadar customers to XSIAM. IBM will also train over 1,000 security consultants on Palo Alto Network products to drive a significant book of business with them.

In summary, we are excited to continue delivering strong results. Given our first half performance, we are raising our expectations for free cash flow to greater than $12 billion for the year. I will now hand over to Jim to walk you through the details of the quarter. Jim, over to you.
Financial Highlights

Thanks Arvind. In the second quarter, we delivered $15.8 billion in revenue, $2.8 billion of operating pre-tax income and $2.43 operating diluted earnings per share. Our 4% revenue growth at constant currency combined with greater than 200 basis points of operating pre-tax margin expansion drove 17% operating pre-tax income growth and 11% operating diluted earnings per share growth, highlighting our strong execution. And through the first half, we generated $4.5 billion of free cash flow. Our free cash flow generation is the strongest first half level we have reported in many years. We are pleased with these results, exceeding our expectations for revenue, profitability, free cash flow and earnings per share.

Revenue growth was led by Software and Infrastructure. It is clear that our investments in innovation are yielding results and driving strong organic growth across these segments. Software grew by 8%, with solid growth across Hybrid Platform & Solutions and Transaction Processing, and strong transactional performance. Infrastructure had great performance, up 3%, delivering growth across IBM Z and Distributed Infrastructure. Consulting was up 2% and continued to be impacted by a pullback in discretionary spending.

Looking at our profit metrics, we expanded operating gross margin by 190 basis points and operating pre-tax margin by 220 basis points over last year, inclusive of about a 30-basis point currency headwind to pre-tax margin. Margin expansion was driven by our operating leverage, product mix and ongoing productivity initiatives. Driving productivity is core to our operating and financial model. This includes enabling a higher value workforce through automation and AI, streamlining our supply chain,
aligning our teams by workflow and reducing our real estate footprint. These actions allowed for continued investments in innovation, with R&D up 9% in the first half. This includes investments in both AI and hybrid cloud, as well as Infrastructure ahead of our next Z program in 2025, which we expect to accelerate our organic growth profile over time.

Our results this quarter reflect broad-based growth and the strength in the fundamentals of our business, with revenue up about $300 million, operating pre-tax income up about $400 million, Adjusted EBITDA up more than $350 million and free cash flow up about $500 million. For the first half, we generated $4.5 billion of free cash flow, up $1.1 billion year over year. The largest driver of this first half growth comes from Adjusted EBITDA, up about $550 million year over year, and timing of capex. We are a few points ahead of our two-year average attainment levels through the first half.

In terms of cash uses, we returned $3.1 billion to shareholders in the first half in the form of dividends. From a balance sheet perspective, we have a very strong liquidity position with cash of $16 billion, up $2.5 billion since year end 2023. Our debt balance at the end of the second quarter was flat with year-end 2023 at $56.5 billion, including $11.1 billion from our financing business.

Putting this all together, our business fundamentals remain solid with continued revenue growth, margin expansion, cash generation and a strong balance sheet with financial flexibility to support our business.
Software

Turning to the segments, Software revenue growth accelerated to 8% this quarter. Both Hybrid Platform & Solutions and Transaction Processing grew, as clients leverage the capabilities of our AI and hybrid cloud platforms. This performance reflects the investments we’ve been making in Software, both organically, which drove more than six points of the growth, as well as acquisitions. As mentioned in January, the Software revenue growth drivers for the year include Red Hat growth, the combination of innovation, recurring revenue and Transaction Processing, as well as acquisitions. Let me spend a minute on each of these elements.

In Red Hat, annual bookings growth accelerated to over 20% this quarter. Within that performance, OpenShift annual bookings were up over 40% and RHEL and Ansible growth was double-digit. This strength reflects the demand for our hybrid cloud solutions, including app modernization, management automation, generative AI and virtualization. In a subscription-based business, the majority of revenue is under contract for the next two quarters – think of it as our cRPO for the next six months. This metric is growing in the mid-teens and accelerated more than five points versus the first half of the year.

We continue to bring new innovation to our portfolio and it’s contributing nicely to our software performance. Our new innovation includes generative AI offerings like watsonx, our AI middleware, watsonx assistants, the recently announced IBM Concert and others, which contributed about half-a-billion dollars to our AI book of business inception to date. And we delivered good growth across our recurring revenue base, which is about 80% of annual software revenue. This is
evident in Hybrid Platform & Solutions where our ARR is now $14.1 billion, and up 9% since last year.

Transaction Processing delivered 13% revenue growth. This performance demonstrates the innovation and value of our mission critical hardware stack across IBM Z, Power and Storage. The combination of growing demand for capacity, good client renewals and strong large deal performance fueled our results. And, notably, our new generative AI portfolio innovation, watsonx Code Assistant for Z, is resonating well with clients. Together, these dynamics contributed to both recurring and transactional software revenue growth again this quarter.

Revenue performance this quarter also benefitted from our focused M&A strategy, including synergies realized across the portfolio. This included the recent Apptio acquisition. Less than 12 months since closing, we have accelerated annual bookings and are seeing an uptick in ARR growth, already in the mid-teens. The synergy between Apptio's FinOps offerings and our broader automation portfolio helps clients manage, optimize and automate technology spending decisions. Earlier this month, we completed the acquisition of StreamSets and webMethods from Software AG and expect the HashiCorp acquisition to close by year end.

Looking at Software profit, gross profit margin expanded, and segment profit was up over 350 basis points year to year, with the latter reflecting operating leverage driven by our revenue scale and mix this quarter.
Consulting

Our Consulting revenue was up 2%, consistent with last quarter and largely reflecting organic growth. In April, we discussed that we were seeing solid demand for our large transformational offerings as clients continue to prioritize driving productivity with AI and analytics. At the same time, we saw a pull back on discretionary projects as clients prioritized their spending. The second quarter buying behavior played out much in the same way.

Signings for the quarter were $5.7 billion, driven by solid demand for large engagements across finance and supply chain transformation, cloud modernization and application development. This contributed to backlog growth of 5% year over year and our trailing twelve-month book-to-bill remaining over 1.15. Meanwhile, continued discretionary spending constraints impacted our small engagement performance and backlog realization in the quarter.

As Arvind mentioned, our book of business in generative AI inception to date is greater than $2 billion, and about three-quarters of it represents consulting signings, with strong quarter over quarter momentum. Our extensive industry and domain expertise has placed us in an early leadership role, which is crucial at the onset of a technology shift. IBM has both technology and consulting, which is a unique and powerful combination to help clients navigate this technology transition. Similar to previous technology shifts, such as the advent of the internet, globalization, and cloud computing, generative AI is driving the next wave of growth. In a human capital-based business, signings represent clients re-prioritizing spend on this technology transition while there is some potential for lift as the total addressable market expands.
We are delivering value in two ways. First, partnering with our clients to design and scale AI solutions, whether that be leveraging AI capabilities of IBM, our partners, or a combination. Second, we are developing new ways of working, driving productivity and improving delivery, all with our Consulting Advantage platform. In summary, GenAI is acting as a catalyst for companies to grow revenues, cut costs and change the ways they work, creating a significant opportunity for us. We are seeing this already as IBM is the strategic partner of choice for clients using this technology including WPP, Elevance Health and the UK’s Department of Work and Pensions.

Turning to our lines of business, Business Transformation revenue grew 6% led by finance and supply chain transformations. Data transformation also contributed to growth. In Technology Consulting, revenue was up 1%. Growth was driven by application modernization services. Application Operations revenue declined reflecting weakness in on-prem custom application management, partially offset by strength in cloud-based application management offerings.

Looking at Consulting profit, we expanded gross profit margin by 40 basis points driven by productivity and pricing actions we have taken. Segment profit margin was modestly down reflecting continued labor inflation and currency.
Moving to Infrastructure, revenue was up 3%. We’re capitalizing on the strong and broad-based demand for our hardware platforms, especially IBM Z.

Within Hybrid Infrastructure, IBM Z revenue was up 8% this quarter. We’re now more than two years into the z16 cycle and the revenue performance continues to outperform prior cycles. Our clients are facing increasing demands for workloads given rapid business expansion, the complex regulatory environment, and increasing cybersecurity threats and attacks. IBM Z addresses these needs with the combination of cloud-native development for hybrid cloud, embedded AI at scale, quantum-safe security, energy efficiency and strong reliability and scalability. Increasing workloads translates to more Z capacity or MIPS, which are up about three-fold over the last few cycles. IBM Z remains an enduring platform for mission critical workloads, driving both hardware and related software, storage and services adoption. In Distributed Infrastructure, revenue grew 5% driven by strength in both Power and Storage. Power growth was fueled by demand for data intensive workloads on Power 10 led by SAP Hana. Storage delivered growth again this quarter, including growth in high-end storage tied to the z16 cycle and solutions tailored to protect, manage and access data for scaling generative AI.

Looking at Infrastructure profit, we delivered solid gross profit margin expansion and segment profit accelerated quarter-to-quarter to the high teens. Segment profit margin was down 230 basis points in the quarter, reflecting key investments we’re making in the business across areas like AI, hybrid cloud and quantum, and almost a point of impact due to currency.
Summary

Now, let me bring it back to the IBM level to wrap up. We feel good about our performance in the first half with revenue growth reflecting the investments we’ve been making, both organically, as well as acquisitions. Our focus on execution and the strength in the fundamentals of our business resulted in strong performance in the quarter across revenue, margin expansion, and growth in profitability and earnings.

Looking to the full year 2024, we are holding our view of revenue. We see full year constant currency revenue growth in line with our mid-single digit model, still prudently at the low end. For free cash flow, given the strength in our performance in the first half, we feel confident in raising our expectations to greater than $12 billion, driven primarily by growth in Adjusted EBITDA. This also includes a modest contribution resulting from the Palo Alto QRadar transaction, largely offset by related structural actions to address stranded costs. We continue to expect the QRadar transaction to close by the end of the third quarter.

On the Segments, in Software, we had a solid first half performance, up more than 7%. This performance reflects strength in our recurring revenue base and early traction in GenAI. With this performance, we are raising our view of growth in Software to high-single digits for the year. And given ongoing productivity initiatives and operating leverage, we now expect Software segment profit margin to expand by over a point. In Consulting, given the continued pressure we have seen on spending related to discretionary projects, we now expect low single digit growth for the year and segment profit margin to expand by about half a point. And given the strength in Infrastructure in the first half, we now expect it to be about neutral for the year with segment profit margin in the mid to high teens.
With these segment dynamics, we are raising our expectations of operating pre-tax margin expansion to over half a point year to year. And we are maintaining our view of operating tax rate in the mid-teens range, consistent with last year. On currency, given the strengthening of the dollar, we now expect a 100 to 200 basis point impact to revenue growth for the year.

For the third quarter, we see revenue growth consistent with the full year. For profit, we expect our net income skew through the third quarter to remain a couple points ahead of the prior year, driven by the strength of our business. And again, we expect the gain from the Palo Alto QRadar transaction will be offset by related structural actions to address stranded costs.

In closing, we are pleased with our performance this quarter and for the first half, driving confidence in our updated expectations. We are positioned to grow revenue, expand operating profit and grow free cash flow for the year. Arvind and I are now happy to take your questions.

Olympia, let’s get started.


Closing

Thank you, Jim. Before we begin the Q&A, I’d like to mention a couple of items. First, supplemental information is provided at the end of the presentation. And then second, as always, I’d ask you to refrain from multi-part questions.

Operator, let’s please open it up for questions.