Introduction

Thank you. I'd like to welcome you to IBM's second quarter 2023 earnings presentation. 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 have provided reconciliation charts for these and other non-GAAP 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 being here. Our second quarter results reflect continued solid execution of our hybrid cloud and AI strategy. We again had strength in our growth vectors of software and consulting and solid cash generation, consistent with our financial model. Clients and partners continue to view technology as a source of competitive advantage. Clients turn to us to speed up their transformation journeys, modernize applications and optimize their business workflows. At the same time, they continue to prioritize projects that focus on productivity and deliver quick time to value. To seize this opportunity, we are bringing new innovations to market, expanding strategic partnerships, and making investments in targeted growth markets, while unlocking value through our productivity initiatives. All of this gives us confidence in our ability to achieve our full-year expectations for revenue and free cash flow, which remain our two primary areas of focus.

We have made progress in our strategy around hybrid cloud and AI - the two key drivers of business innovation. Hybrid cloud is the most widespread form of IT architecture. Red Hat OpenShift, our leading container platform based on open-source innovations, plays a crucial role in making this possible, along with IBM software and infrastructure. Our consultants use their technical and business knowledge to speed up clients' digital transformation journeys and help drive adoption of our technology platforms. Our broad ecosystem of partners amplifies our reach and ability to meet client demand.

Let me highlight a few collaborations from this past quarter that take advantage of our platform-centric approach. We're helping Air Canada improve its digital footprint, including their website, mobile application, and loyalty program. Using a hybrid cloud approach helps Air Canada

better connect and tap into their commercial, operational, and financial data. With Diageo, IBM Consulting embarked on a large global digital transformation to improve customer satisfaction, optimize business workflows, and enhance its financial performance reporting capabilities. We also forged a strategic partnership with Nokia, where Red Hat OpenShift becomes the preferred platform provider to Nokia's core network applications business.

This past quarter, we made strategic moves to bolster our hybrid cloud and AI capabilities with the announcement of our plans to acquire Apptio, which offers a virtual command center for CEOs, CFOs and CIOs to manage their technology investments. Apptio's offerings, combined with IBM's IT automation software and our AI capabilities, will give clients the most comprehensive approach to optimize their IT environments.

AI is a transformative technology that has the potential to unlock tremendous business value. According to a recent McKinsey study, AI could add up to $4.4 trillion annually to the global economy. Our focus is on enterprise AI designed to address these opportunities and solve business problems. The list of use cases is long, and includes IT operations, code generation, improved automation, customer service, augmenting HR, predictive maintenance, financial forecasting, fraud detection, compliance monitoring, security, sales, risk management and supply chain, amongst others.

AI is being infused into our software products. We are already building products that address specific enterprise use cases, such as digital labor with Watson Orchestrate, customer service with Watson Assistant, and code generation with Watson Code Assistant. At our Think conference in May, we announced watsonx, our enterprise-ready AI and data platform to help clients and partners capitalize on the AI opportunity. Watsonx

delivers the value of foundation models to the enterprise, enabling them to be more productive.

We began to roll out watsonx a little over a week ago, and we are excited by the client response. To date, the platform has been shaped by more than 150 businesses across industries, from telco to banking. Businesses around the world are excited about tapping foundation models and machine learning in one place, with their own data, to accelerate generative AI workloads. For example, Samsung is exploring generative AI to deliver unprecedented innovations for clients, Citi is pursuing the potential usage of large language models for connecting controls to internal processes, NatWest is embedding watsonx into its chat bot to improve customer experience and SAP is integrating IBM Watson AI into their solutions. IBM is also working with an expanding ecosystem of partners to co-create and innovate across industries and use cases, from space to sports, including work with NASA to build the first foundation model for analyzing geospatial data and Wimbledon, where watsonx was used to produce tennis commentary.

Large language models are a step change in the evolution of AI, with more than 80% of enterprises exploring their use. We believe the opportunity for large language models for enterprises is immense given the existing amount of business data. This includes sensor data, chemistry data, materials data, geospatial data, code, and of course, speech. Because enterprise AI draws from both public and private data, it is more effectively trained when companies adopt a hybrid cloud approach. Enterprise AI can also be based on multiple models, including public, private, and open source. Our watsonx platform takes into account this reality and is differentiated in a few important ways. For instance, instead of relying on a single model, watsonx enables companies to leverage the best models to meet their needs, whether they are open-source

technologies, IBM's models, or those co-created with us. Another fundamental aspect of watsonx is trust, ensuring transparency and bias-free models. In addition, beyond offering companies the capability to tap into existing AI models, IBM empowers them to create their own.

To help clients on this journey, we have over 20,000 data and AI consultants, and recently launched our new Center of Excellence for Generative AI, already staffed with more than 1,000 consultants with specialized generative AI expertise. The investments we are making in products and skills will help us to seize the AI opportunity.

Our path is clear. In the same way we've built a consulting practice around Red Hat's hybrid cloud platform that is now measured in the billions of dollars, we will do the same with AI. And just like OpenShift is the technology platform at the heart of our hybrid cloud capabilities, watsonx will be the core technology platform for our AI capabilities.

Watsonx is just one of many new technology innovations. Shortly after previewing watsonx at our Think conference, at the Red Hat Summit we introduced OpenShift AI, which is a unified solution to train, serve, monitor, and manage the lifecycle of AI models and applications. We also unveiled IBM Hybrid Cloud Mesh, a SaaS solution that streamlines application-centric connectivity for edge, hybrid, and multi-cloud environments. To help clients with their sustainability agendas, we launched our AI-powered cloud-based tool that helps clients track their greenhouse gas emissions for cloud workloads. And, as an example of how we continue to push the boundaries of innovation, IBM recently demonstrated using error-mitigating techniques, quantum computers can produce accurate results at a scale of 100+ qubits. This is a significant breakthrough that firmly puts us on a path toward building practical

quantum computers that can solve hard problems in areas such as risk, finance, and materials.

Let me conclude by reiterating our confidence in our strategy and execution. It is clear that the work we have done to better align IBM to the needs of our clients is paying off. The momentum in our business and continued focus on productivity position us to achieve our full-year expectations and deliver sustainable revenue and free cash flow growth.

With that, I would like to hand it over to Jim, who will delve deeper into our performance and expectations.

Financial Highlights

Thanks Arvind. As always, I'll start with the key financial highlights of the second quarter. We delivered fifteen-and-a-half billion dollars in revenue, $2.4 billion of operating pre-tax income, $2.18 of operating earnings per share and, through the first half, nearly three-and-a-half billion dollars of free cash flow. In the second quarter, we had modest revenue growth at constant currency, and that includes over a point of impact from the businesses we divested last year. Currency rates continue to be a headwind to growth. With dollar strengthening over the last 90 days, currency impacted our reported revenue growth by about 80 basis points, which is about a half a point worse than what spot rates suggested in April. As is typical, I'll focus my comments on constant currency.

Revenue performance was again led by Software and Consulting. These are growth vectors that together represent about three quarters of IBM's revenue – and contribute to a solid base of recurring revenue and profit. Software revenue was up 8%, with good growth across both Hybrid Platform and Solutions – led by Red Hat and Data & AI – and Transaction Processing. IBM Consulting revenue growth of 6% was also broad based, with growth across all three lines of business and geographies. Our Infrastructure revenue in any quarter reflects product cycle dynamics. Infrastructure revenue was down 14%. This, as expected, had a disproportional impact to IBM's overall revenue growth this quarter, given the very successful launch of z16 in the second quarter last year. Looking at the 2-year compounded growth rate, Infrastructure revenue was up.

Turning to our profit metrics, operating gross margin expanded 140 basis points, driven by our portfolio mix and productivity. We had good performance this quarter, with gross margin improvements in every reportable segment. Our operating pre-tax margin was down 70 basis

points. Last year we had a gain of about $230 million from the sale of our healthcare software assets. Without the year-to-year impact of the divestiture gains, our operating pre-tax margin was up 70 basis points. This is a better indication of our ongoing operational performance.

Let me comment on a couple of items within our expense profile that impacted our pre-tax income performance. As we discussed in the last couple of earnings calls, we addressed the remaining stranded costs from our portfolio actions – resulting in a higher level of workforce rebalancing activity this year, about $115 million in the quarter. Workforce rebalancing impacted our year-to-year pre-tax margin expansion by another 60 basis points. And then currency remained a year-to-year headwind, not only to revenue, but also to our expense and pre-tax profit. The combination of translation and hedging impacted operating pre-tax profit growth by about $150 million and operating PTI margin by about 80 basis points year to year. As I've discussed in the past, this disproportionately impacts our product-based businesses.

We have good momentum in our underlying operational profit performance. I mentioned a strong business mix, but we're also making progress on our productivity initiatives. We're digitally transforming IBM as client zero, simplifying workflows and deploying AI across our processes, from IT operations, to HR, to source-to-pay. The productivity benefits free up spend for reinvestment and contribute to margin expansion.

Turning to free cash flow, we generated $2.1 billion in the quarter and nearly three-and-a-half billion dollars in the first half. This first half performance is up over $100 million year to year and keeps us on track to our full-year expectation. Growth is driven by the cash from our profit performance, working capital efficiencies, and lower payments for

structural actions. This was mitigated by higher performance-based compensation payments given last year's strong results and higher cash taxes.

In terms of cash uses, through the first half we returned $3 billion to shareholders in the form of dividends and spent about $350 million to acquire six companies. Later this year, we expect to close the acquisition of Apptio, which complements and advances our IT automation capabilities.

From a balance sheet perspective, we continue to have a very strong liquidity position with over $16 billion of cash – that's down over a billion dollars since March, and up seven-and-a-half billion dollars since December. Our debt balance at the end of the second quarter was over $57 billion, which is up six-and-a-half billion dollars from year end. You'll recall earlier in the year we were opportunistic in accessing the debt market and issued debt to prudently get ahead of 2023 and 2024 maturities as well as capital allocation priorities.

Software

Turning to the segments, Software revenue growth accelerated to 8% this quarter. Both Hybrid Platform & Solutions and Transaction Processing grew, as clients leverage our hybrid cloud and AI platform capabilities. This performance again reflects growth across both our recurring revenue base, which is about 80% of annual software revenue, as well as transactional revenue.

In Hybrid Platform & Solutions, revenue was up 7%, fueled by growth in Red Hat, Data & AI, and Automation. Our Hybrid Platform & Solutions ARR is now over $13.6 billion and up 7%, reflecting the importance of our strategic offerings with our clients. Red Hat revenue grew 11%. OpenShift, our leading hybrid cloud platform, grew more than 30% in the quarter and now has $1.1 billion in annual recurring revenue. Ansible also delivered double-digit growth and gained market share this quarter. In Automation, revenue was up 2%, reflecting growth across Integration, Application Servers, and Business Automation as clients drive enhanced business value through productivity and performance optimization. Data & AI revenue was up 11%. The broad-based growth included areas like Data Management and Business Analytics given enterprise needs for data visualization, organization, analysis, and insights as the underpinnings for AI workloads. Security revenue declined 1%. We delivered growth in security software driven by Data Security with Guardium Insights. This was more than offset by declines in security services this quarter.

In Transaction Processing, revenue grew 10% off of an easier compare last year. The increase in zSystems installed capacity over the last couple of cycles and strong software renewal rates reflect the importance of zSystems platform in a hybrid cloud environment. These dynamics contributed to both recurring and transactional software revenue

opportunity again this quarter. Putting this together with price increases, we had strong performance in Transaction Processing.

Moving to profit for the Software segment, our pre-tax margin was up a half a point, while absorbing over a point of impact from currency. We delivered operating leverage given both the revenue scale and mix this quarter.

Consulting

Consulting revenue was up 6%. In April, we discussed that we were seeing sustained demand for larger transformations that delivered meaningful ROI. At the same time, other projects considered to be more discretionary were being delayed, predominantly in the United States. The second quarter client buying behavior played out much in the same way. Our signings were solid, up over 20%, with double-digit growth in both large and small engagements. This takes our book-to-bill ratio up to 1.1 over the last twelve months. We addressed continued demand for technology-driven transformations as clients prioritize projects that drive cost savings and increase productivity.

Turning to our lines of business in Consulting, growth across our service offerings was broad based. Business Transformation grew 5% percent, driven by data and technology transformations including AI and analytics-focused projects. Digital transformations continue to be underpinned by clients embracing a hybrid cloud strategy. Technology Consulting grew 5% and Application Operations grew 8%, as we again saw strength in cloud-based application services, across development, modernization, and management. Contributing to growth across the business, our strategic partnerships grew signings and revenue double-digits, with solid performance from partnerships with AWS and Azure. Our Red Hat practice also grew signings and revenue double digits. We have an annualized revenue run-rate in excess of $2 billion.

Moving to Consulting profit, we expanded both gross and pre-tax margins 180 basis points. Our margin expansion is a reflection of the pricing and productivity actions we've taken, more than offsetting the increased labor costs and investments.

Infrastructure

Turning to the Infrastructure segment, revenue was down 14% reflecting product cycle dynamics. This impacted both Hybrid Infrastructure and Infrastructure Support.

Within Hybrid Infrastructure, zSystems revenue declined 30%. We've wrapped on strong revenue performance last year, up 77%, when z16 launched in a seasonally strong quarter. Through the first five quarters of availability, revenue is well ahead of prior cycles. Z16 brings the power of embedded AI at scale, cyber-resilient security, and cloud-native development for hybrid cloud to our clients. For example, clients are adopting IBM z16 and the Telum processor as the foundation for real-time AI insights across significant volumes of data. Distributed Infrastructure revenue was down 6%. Let me remind you we're wrapping on strong growth last year, up 17%, driven by strength in Storage and Power10 high-end systems.

Moving to Infrastructure profit, we expanded gross margin 200 basis points while pre-tax margin was down 40 basis points, including about a point of impact from currency.

Summary

Now that I've gone through the segment results, let me bring it back up to the IBM level to wrap up. We feel good about our first-half performance, with momentum in our growth vectors of Software and Consulting, and a solid recurring revenue base driven by our high-value software. We're delivering strong gross margin performance with growth across our segments, driven by portfolio mix and productivity. Our overall year-to-year profit dynamics, as expected, reflect the impact of last year's divestiture.

As we look to the full year of 2023, we're holding our view of the year on our two primary metrics, revenue growth and free cash flow. We see constant currency revenue growth of three to five percent. And we expect free cash flow of about ten-and-a-half billion dollars, which I'll remind you is up over a billion dollars year to year. Let me comment on a few items within these full-year expectations. We expect IBM's operating pre-tax margin to expand by about a half a point year to year, driven by a combination of product mix and progress on our productivity initiatives. That's consistent with our view 90 days ago, and in line with our model. We're also maintaining our view of our tax rate for the year – which is in the mid-to-high-teens range. And then finally, while there has been some volatility in currency rates over the last couple of weeks, at current spot rates currency translation is still expected to be fairly neutral to our revenue growth for the year. I'll remind you that our profit and cash dynamics this year are impacted by the wrap on last year's hedging gains – which is about a point of headwind to our pre-tax margin expansion.

In terms of segment dynamics, in Software we had a good first half, and now expect revenue growth at the high end of Software's mid-single digit model. This is all in, including acquisitions. Our revenue growth drives

operating leverage, with Software pre-tax margin expected to expand a point-and-a-half to two points year to year. In Consulting, we've repositioned our business to address today's clients' needs. What we saw in the second quarter didn't change our view of the year. We continue to expect Consulting revenue growth in the range of six to eight percent, and to expand Consulting pre-tax margin by at least a point. And then for Infrastructure, as I've described in the past, revenue is roughly flat over the mid-term model horizon, with performance in any year reflecting product cycle dynamics. In the second quarter we wrapped on the z16 introduction, in a seasonally strong quarter. For the year, as you'd expect, 2023 Infrastructure revenue will decline, impacting IBM's overall revenue growth by over a point. We continue to expect pre-tax margin in the low teens.

Our expectations for 2023 reflect a higher-growth, higher-value business with strong cash generation – what we have referred to as "today's IBM". The analyst estimates also reflect these dynamics, and as we look at the third quarter, the average of analysts' estimates look reasonable. In closing, we are pleased with our first-half performance, and it keeps us on track to deliver revenue growth, expand margin, and grow free cash flow for the year.

I'm happy to provide more color on the quarter and our expectations in the Q&A. Patricia, 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.