IBM Announces Breakthrough Hybrid Cloud and AI Capabilities to Accelerate Digital Transformation at 2021 Think Conference

ARMONK, N.Y., May 11, 2021 /PRNewswire/ -- IBM (NYSE: IBM) announces advances in artificial intelligence (AI), hybrid cloud, and quantum computing at the company's Think conference at 12:00 p.m. ET today. The innovations highlight IBM's role in helping its clients and partners accelerate their digital transformations, return to work smarter, and build strategic ecosystems that can drive better business outcomes.

"We will look back on this year and last as the moment the world entered the digital century in full force," said IBM Chairman and CEO Arvind Krishna. "In the same way that we electrified factories and machines in the past century, we will use hybrid cloud to infuse AI into software and systems in the 21^{st} century. And one thing is certain: this is a future that must be built on a foundation of deep industry collaboration. No one understands this better than IBM, which is one of the reasons we are boosting investment in our partner ecosystem. Also at Think 2021, we are unveiling our latest hybrid cloud and AI innovations – the very technologies that serve as the building blocks of a new IT architecture for business."

IBM is all-in on hybrid cloud and AI because we understand that businesses need a clear and credible path to modernizing their mission-critical systems. A new IBM study on the adoption of AI for business reveals that the imperative to embed AI into business processes became more urgent during the pandemic. Of IT professionals surveyed, 43 percent said that their companies had accelerated their rollout of AI. And nearly half of global IT professionals surveyed said they evaluate AI providers in large part on their ability to automate processes. That is why IBM has invested heavily in building rich and powerful AI capabilities for business.

We are already helping thousands of clients across every industry transform their businesses with the power of our hybrid cloud and AI platform. The following innovations are designed to equip businesses for the next stage of their digital journeys.

New Capabilities Bring Data and AI Together

• Al to Help Automate How Customers Access, Unify and Manage Data Anywhere with Cloud Pak for Data: A breakthrough capability in Cloud Pak for Data that uses Al to help customers get answers to distributed queries as much as 8x faster than previously and at nearly half the cost of other compared data warehouses. AutoSQL (Structured Query Language) automates how customers access, integrate and manage data without ever having to move it, regardless of where the data resides or how it is stored. AutoSQL solves one of the most critical pain points customers are facing as they look to reduce the complexity of curating data for Al and eliminate the high cost of moving data, while also uncovering hidden insights to make more accurate Al-driven predictions. With the launch of AutoSQL, IBM Cloud Pak for Data now includes the highest-performing cloud data warehouse on the market (based on our benchmarking study) that can run seamlessly across any hybrid multi-cloud environment – including private clouds, on-premises and any public cloud. AutoSQL will be one of several new technologies woven into a new data fabric in the Cloud Pak for Data. The new intelligent data fabric will automate complex data management tasks by using Al to discover, understand, access and protect distributed data across multiple environments, while unifying disparate data sources across a common data foundation. For more information, read the blog: 5 Things to Know about Cloud Pak for Data and New Data Fabric.

- Watson Orchestrate Helps Professionals Automate Work to Increase Productivity: Watson Orchestrate is a new interactive Al capability designed to increase the personal productivity of business professionals across sales, human resources, operations and more. Requiring no IT skills to use, Watson Orchestrate enables professionals to initiate work in a very human way, using collaboration tools such as Slack and email in natural language. It also connects to popular business applications like Salesforce, SAP and Workday®. Watson Orchestrate uses a powerful Al engine that automatically selects and sequences the pre-packaged skills needed to perform a task, and connects with applications, tools, data and history on-the-fly. This can help workers more quickly perform routine tasks, such as scheduling meetings or procuring approvals, or more mission-critical tasks, like preparing proposals or business plans. Watson Orchestrate is the latest Al-powered automation capability from IBM designed to help people reclaim a significant amount of their time to focus on more strategic tasks. It was developed by IBM Research and is now available in preview as part of the IBM Automation Cloud Paks and is expected to be generally available later this year. For more information, read the blog: 5 Things to Know about Watson Orchestrate.
- Maximo Mobile Transforms the Work of Field Technicians: IBM has launched Maximo Mobile, an easy-to-deploy mobile platform with IBM's leading Maximo asset management solution at the core. Maximo Mobile is designed to transform the work of field technicians who maintain physical assets such as roads, bridges, production lines, power plants, refineries and more. A new, intuitive interface provides technicians with the right asset operational data at the right time. Even in the most remote locations, users can access Watson AI and in-depth organizational knowledge to easily solve complex issues. This powerful combination of AI, intelligent workflows, remote human assistance and access to digital twins puts decades of industry experience directly into the hands of technicians for safer, more efficient operations. For more information, watch the video: Empowering the Technician of the Future with Maximo Mobile.

New AI Transforms How Companies Develop, Deploy and Operate IT and Modernize Applications

- Project CodeNet Dataset Advances Al's Understanding and Translation of Code: IBM Research is releasing Project CodeNet, a large-scale, opensource dataset comprised of 14 million code samples, 500 million lines of code and 55 programming languages, to enable Al's understanding and translation of code. Project CodeNet is currently the largest, most differentiated dataset in its class and addresses three main use cases in coding today: code search (automatically translating one code into another, including legacy languages like COBOL); code similarity (identifying overlaps and similarities among different codes); and code constraints (customizing constraints based on a developer's specific needs and parameters). IBM believes Project CodeNet will serve as a valuable benchmark dataset for source-to-source translation and transitioning legacy codebases to modern code languages, helping businesses speed up their application of Al. For more information, read the blog: Kickstarting Al for Code: Introducing Project CodeNet.
- Mono2Micro Helps Take the Pain Out of Cloud Migration: IBM has added a new capability into WebSphere Hybrid Edition that enables enterprises to optimize and modernize their applications for hybrid cloud. IBM Mono2Micro uses AI developed by IBM Research to analyze large enterprise applications and provide recommendations on how to best adapt them for the move to cloud. It can simplify and speed up an error-prone process, which can reduce costs and maximize ROI. IBM Mono2Micro is one of IBM's suite of AI-powered products and services that can make it faster to migrate to the cloud. For more information, read the blog: IBM Mono2Micro: Three Things You Need to Know.

- IBM Watson Assistant Fuels COVID Response for CVS Health: IBM is collaborating with leading diversified health services company, CVS Health to help the national health care company handle a tenfold spike in call volume as the US rolls out its Covid-19 vaccination program. IBM Global Business Services (GBS) and CVS Health developed and delivered a customer care solution using IBM Watson Assistant on IBM Public Cloud in just four weeks. Infusing Al and natural language processing into the critical workflow of its telephonic customer care system, CVS Health has been able to quickly and accurately respond to a range of questions on COVID-19 from tests, to vaccines, symptoms, proof of vaccination, cost and more, freeing up human agents to handle the most complex requests. As government guidance has evolved, the team's rapid updates have enabled the virtual agent to customize responses based on vaccine status across all 50 US states. Since launching in early January, the virtual voice assistant has handled millions of calls –a majority without human assistance –and cut call length down significantly.
- EY and IBM create Financial Services Center of Excellence for Hybrid Cloud: EY and IBM have established a Center of Excellence that offers new open hybrid cloud solutions built with Red Hat OpenShift for the IBM Cloud for Financial Services. The solutions will be centered on regulatory compliance, digital trust and security, leveraging IBM technology and EY experience working with financial institutions to drive digital transformation and accelerate cloud adoption. They will be designed to address the specific and evolving requirements of financial services organizations as they transition to the cloud and transform business processes. IBM Cloud for Financial Services incorporates regulatory and compliance standards and offers a highly secure environment for financial services institutions to transact with their technology partners and customers. For more information, read the release from EY: EY and IBM announce the creation of Center of Excellence to help accelerate digital transformation for financial services institutions.

Continued Investments in IBM's Partner Ecosystem

• New Benefits to Drive Partner Success: As part of a \$1 billion investment to support its partner ecosystem, IBM unveiled new competencies, skills training, and benefits to ensure its partners succeed in an increasingly competitive market. For example, IBM has created a new competency framework to enable partners to demonstrate expertise, technical validation, and sales success in specialized areas such as hybrid cloud infrastructure, automation and security. IBM ecosystem partner Tata Consultancy Services (TCS) has already achieved competencies for building an industrial and manufacturing AI solution for data scientists and AI developers. To further its investment in ecosystem partners, IBM is also expanding availability of its Cloud Engagement Fund (CEF), to all partner types, whether they build on, service, or re/sell IBM technology. CEF provides investment through significant technical resources and cloud credits for partners to help migrate customer workloads to hybrid cloud environments. IBM's collaboration with Siemens Digital Industries Software is just one example of how the CEF is helping IBM partners scale. Through this joint initiative, Siemens will apply IBM's open hybrid cloud approach, built on Red Hat OpenShift, to extend the deployment flexibility of MindSphere, the industrial IoT-as-a-service solution from Siemens. For more information, read the blog: IBM Announces New Benefits to Drive Partner Success as Ecosystem Momentum Accelerates.

IBM Brings Quantum Computing One Step Closer to Everyday Use

• Qiskit Runtime Software Boosts Quantum Circuit Processing Speed by 120x: IBM is making it faster and easier for developers to use quantum software by introducing Qiskit Runtime. This software is containerized and hosted in the hybrid cloud, instead of running most of its code on the user's computer.

Together with improvements in both the software and processor performance, this allows Qiskit Runtime to boost the speeds of quantum circuits, the building blocks of quantum algorithms, by 120 times. Qiskit, the IBM-developed open-source framework for quantum computing for a global community of developers, aims to make quantum computing accessible to all. By introducing Qiskit Runtime, IBM is enabling quantum systems to run complex calculations such as chemical modeling and financial risk analysis in hours, instead of several weeks. To show the power of the software, IBM recently demonstrated how the lithium hydride molecule (LiH) could be modeled on a quantum device in nine hours, when previously it took 45 days. This kind of improvement is key to scaling quantum computation for new use cases. **For more information, read the blog:** IBM Quantum Delivers 120x speedup of quantum workloads with Qiskit Runtime.

The announcements made during today's Think event come just days after IBM unveiled the world's first two nanometer chip which will enable faster, more efficient computing from the datacenter to the edge; Cloud Engine, a front-end platform that can help developers quickly deploy cloud-native applications without having to acquire new skills or configure complex code; Spectrum Fusion, a fully-containerized version of IBM's storage and data protection software designed to provide a streamlined way to discover data from across the enterprise; and IBM's alliance with Zscaler on Zero Trust where IBM Security Services combines the technology of Zscaler and the expertise of IBM to help clients adopt an end-to-end secure access service edge (SASE) approach, marrying authentication and permission to deliver security and privacy enhancements.

About IBM

IBM is a leading global hybrid cloud and AI, and business services provider. We help clients in more than 175 countries capitalize on insights from their data, streamline business processes, reduce costs and gain the competitive edge in their industries. Nearly 3,000 government and corporate entities in critical infrastructure areas such as financial services, telecommunications and healthcare rely on IBM's hybrid cloud platform and Red Hat OpenShift to affect their digital transformations quickly, efficiently and securely. IBM's breakthrough innovations in AI, quantum computing, industry-specific cloud solutions and business services deliver open and flexible options to our clients. All of this is backed by IBM's legendary commitment to trust, transparency, responsibility, inclusivity and service. Visit www.ibm.com for more information.

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