IBM Business Model

Idea In Short

IBM makes most of its money today from software subscriptions and consulting services rather than the mainframes and typewriters that built its early reputation. Its 2019 acquisition of Red Hat for $34 billion positioned the company as a hybrid cloud provider, letting enterprise clients run workloads across public clouds, private servers and on-premises systems through a common Linux-based layer. Software now generates 45% of total revenue, with roughly 80% of that recurring through subscriptions and licensing rather than one-time sales. IBM still designs and sells mainframe hardware and the z17 model launched in 2025 posted the strongest annual mainframe revenue in two decades. This article traces how a company once known for punch-card tabulators became a recurring-revenue software and consulting business built around enterprise clients rather than consumers.

-

From tabulating machines to Big Blue

IBM's origins trace to 1911, when the Tabulating Machine Company merged with three other manufacturers to form the Computing-Tabulating-Recording Company, a business built around machines that processed data for governments and large businesses using punch cards. The company renamed itself International Business Machines in 1924 under Thomas Watson Sr. and expanded internationally over the following decades, building the foundation for what later became known informally as Big Blue.1 IBM entered the personal computer market in 1981 with the IBM PC, a product that helped standardize the PC architecture across the industry even as IBM itself later exited that hardware category entirely, selling its PC division to Lenovo in 2005.

The shift to services and consulting

Facing a near-collapse in the early 1990s as mainframe demand slumped and personal computers reshaped enterprise technology, IBM under Chief Executive Louis Gerstner

pivoted from a hardware-first company toward one built around services, software and integration work for large enterprises. That transformation through the 1990s and 2000s changed how IBM made money, shifting the center of gravity from one-time hardware sales toward longer-term service contracts and consulting engagements, a shift that helped lift IBM's market value from about $29 billion to $168 billion over Gerstner's nine years as chief executive.2 The pivot let IBM survive a period when rivals built around personal computing, including many hardware makers of that era, either shrank or disappeared entirely. It also set the template IBM has followed since:

> sell platforms and expertise to enterprises rather than devices to consumers

Red Hat and the hybrid cloud bet

IBM closed its acquisition of Red Hat for $34 billion in July 2019, the largest deal in company history, after regulators in the United States and European Union cleared the transaction.3 The deal gave IBM a leading position in hybrid cloud, the practice of running workloads across public cloud providers, private infrastructure and on-premises systems through a consistent Linux-based layer rather than locking clients into a single vendor. Red Hat's OpenShift platform has continued growing since the acquisition, posting seven consecutive quarters of high-teens bookings growth and pushing its own annual recurring revenue to roughly $1.5 billion. That growth trajectory validated the price IBM paid at a time when the deal drew skepticism from investors concerned about integration risk and the premium over Red Hat's pre-acquisition valuation.

> We bring together all the necessary technology and services, regardless of where those solutions come from, to help clients solve the most pressing business problems

Software becomes the anchor

Software generated 45% of IBM's total revenue in 2025, supported by annual recurring

revenue of $21.7 billion, up 11% from the prior year, with roughly 80% of that revenue recurring through subscriptions rather than one-time license sales.4 That recurring structure gives IBM more predictable revenue than its historical hardware business, where sales cycles moved in step with enterprise refresh schedules rather than continuously. Consulting revenue grew more slowly, up roughly 1% to 3% depending on the quarter measured through 2025, reflecting how enterprise clients increasingly buy platforms directly rather than paying for extensive implementation work first. Chief Executive Arvind Krishna, who took over in 2020 and championed the Red Hat integration, has continued steering the company toward software and away from commoditized hardware and services businesses that carry thinner margins.

Hardware still matters

Despite the shift toward software, IBM's mainframe business posted its strongest annual revenue in two decades following the June 2025 launch of the z17, a mainframe model built specifically around Artificial Intelligence workloads running alongside traditional transaction processing.5 IBM Z infrastructure revenue grew 21% in the fourth quarter of 2025 to $5.1 billion, a reminder that large banks, insurers and governments still depend on mainframe systems for workloads that require the reliability and security those machines are built for. IBM has increasingly marketed mainframes as infrastructure for enterprise AI rather than legacy technology, betting that clients running sensitive workloads will pay for AI capability embedded directly into systems they already trust.

Betting on generative AI

IBM's generative AI business, spanning both consulting engagements and its watsonx software platform, generated more than $12.5 billion in cumulative bookings, with consulting contributing over $10.5 billion of that total and software contributing roughly $2 billion.6 The company has positioned watsonx and its newer Orchestrate platform as tools that let enterprises build and manage AI agents within existing business processes, rather than competing directly with consumer-facing AI products from other technology companies. IBM's strategy leans on its existing relationships with regulated industries, including banking, government and healthcare, where clients often need AI deployed with the security and compliance guarantees IBM has built its enterprise reputation around.

Key Partners

Cloud infrastructure providers, including Amazon Web Services and Microsoft Azure, work alongside IBM's hybrid cloud strategy despite competing directly with IBM Cloud in some areas. Technology partners like Cisco, Adobe and Oracle integrate with IBM's software and consulting offerings to deliver combined solutions for enterprise clients. Systems integrators and consulting partners, including firms like KPMG, extend IBM's reach into implementation projects the company cannot staff entirely on its own.

Key Activities

Developing and maintaining software platforms, including Red Hat's OpenShift and the watsonx AI suite, represents the core activity driving IBM's largest revenue segment. Designing and manufacturing mainframe and enterprise hardware systems, most visibly the IBM Z line, remains an ongoing activity even as its share of total revenue has shrunk relative to software. Consulting and technology implementation services, spanning digital transformation, cloud migration and AI deployment, round out the activities IBM performs directly for enterprise clients.

Key Resources

IBM's patent portfolio, one of the largest in the technology industry, protects decades of research and development investment across computing, AI and materials science. Its enterprise client relationships, built over decades with governments, banks and large corporations, give IBM a trusted position that newer competitors struggle to replicate quickly. Human capital, including researchers, consultants and engineers, supports both the software platforms IBM sells and the implementation services that accompany them.

Value Propositions

Large enterprises get integrated hardware, software and consulting solutions built around their existing infrastructure rather than requiring a wholesale technology replacement. Regulated industries, including banking, healthcare and government, get AI and cloud tools built with the security and compliance standards those sectors require. Businesses running hybrid infrastructure get a consistent platform through Red Hat's OpenShift that works across public clouds, private servers and on-premises systems. Organizations processing high-volume, mission-critical transactions get mainframe systems engineered for reliability that competing architectures have not matched at the same scale.

Customer Relationships

IBM maintains long-term account relationships with large enterprise clients, often spanning decades and multiple generations of technology through dedicated account teams. Support channels, including 24-hour phone assistance, live chat and community forums, serve clients who need ongoing technical help outside those account relationships. The company also builds community engagement through developer forums and its Watson-branded support tools, extending relationships beyond the largest enterprise accounts to smaller technical teams.

Channels

Enterprise sales teams and dedicated account managers remain the primary channel for large, complex deals involving software licensing, consulting and hardware. IBM's website supports self-service purchasing for smaller software products and cloud services that do not require a dedicated sales process. Industry events, webinars and technical conferences help IBM reach potential clients and showcase new products like watsonx and the z17 mainframe. Partner and reseller networks extend IBM's reach into markets and client segments its direct sales force does not cover as efficiently.

Customer Segments

Large enterprises across every major industry, including retail, manufacturing and technology, represent IBM's broadest customer base for software, consulting and hardware. Financial services institutions rely on IBM for transaction processing, data security and increasingly AI-driven analytics tools. Healthcare providers and government agencies form specialized segments served with solutions built around regulatory compliance and data protection requirements specific to those sectors. Academic and research institutions use IBM's computing and AI tools to support large-scale research projects that require significant processing power.

Cost Structure

Research and development spending remains one of IBM's largest recurring costs, funding the software, AI and hardware innovation that supports its patent portfolio and product pipeline. Salaries and benefits for a global workforce spanning engineering, consulting and

sales functions represent a substantial and ongoing expense. Facilities, technology infrastructure and the costs of maintaining IBM Cloud's data centers add further overhead alongside marketing spending aimed at enterprise decision-makers.

Revenue Streams

Software revenue, including Red Hat subscriptions, security tools and the watsonx AI platform, generated 45% of total revenue in 2025 and continues growing faster than the company's other segments. Consulting revenue from technology implementation, digital transformation and AI deployment services contributes a large though more slowly growing share of total revenue. Infrastructure revenue from mainframe and other hardware sales, led by the z17 launch, rebounded to its strongest level in two decades during 2025. Financing revenue from IBM Global Financing, which offers loans and leases that let clients spread out hardware and software purchases, contributes a smaller but steady stream alongside the larger segments.

- 1IBM Company History
- 2Lou Gerstner's IBM Turnaround
- 3IBM Completes Red Hat Acquisition
- 4IBM Fourth-Quarter 2025 Earnings Filing
- 5IBM Z17 Mainframe Launch
- 6IBM Fourth-Quarter 2025 Earnings Beat

Summary

IBM's transformation from hardware seller to software and consulting company took decades and the Red Hat acquisition in 2019 gave that shift its clearest turning point. Software now supplies 45% of revenue with roughly 80% of it recurring, a structure that insulates the company from the boom-and-bust cycles that once defined its hardware business. The z17 mainframe's strongest sales performance in 20 years shows hardware still matters, particularly as IBM markets it as infrastructure built for Artificial Intelligence workloads rather than a legacy product line. Consulting growth has slowed relative to software, reflecting how enterprise clients increasingly buy IBM's platforms directly rather than paying for implementation services first. The company's next test is whether its

generative AI bookings, which topped $12.5 billion, convert into the kind of durable recurring revenue that Red Hat and traditional software licensing already deliver.