OUR HISTORY OF PROGRESS

1890s to 2001

Early Ambitions

A merger of three 19th-century companies — the Tabulating Machine Company, the International Time Recording Company and the Computing Scale Company of America — creates the Computing-Tabulating-Recording Company (CTR) on June 16, 1911. CTR is the precursor to IBM. Thomas J. Watson Sr. joins CTR in 1914 and over the next two decades transforms it into a growing leader of innovation and technology and a prototype for the newly emergent multinational corporation. This shift is signalled in 1924, when the company's name changes to International Business Machines Corporation (IBM). From the beginning, IBM defines itself not by strategies or products — which range from commercial scales to punch card tabulators — but by forward-thinking culture and management practices grounded in core values. By adhering to its vision and values throughout the Depression — providing continued employment, even adding engineers and other staff in order to sustain its production output — IBM is able to play a pivotal role in enabling the U.S. government's Social Security Act of 1935, "the biggest accounting operation of all time."

IN 1914, THOMAS J. WATSON SR. JOINS CTR, A COMPANY
WITH 1,346 EMPLOYEES AND $9 MILLION IN REVENUES.

1886

FIRST TEST OF HOLLERITH'S TABULATING SYSTEM

Dr. Herman Hollerith conducts the first practical test of his tabulating system by recording and tabulating vital statistics for the Baltimore, Maryland, Department of Health. He will later patent this system and form one of IBM's predecessor companies.

1888

DIAL RECORDER

Invented in 1888, this visually striking daily attendance recorder from IBM's International Time Recording Company will be marketed to employers well into the 1930s.
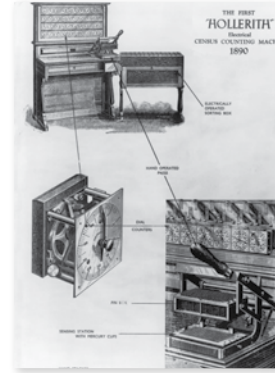
1890

U.S. CENSUS

Dr. Herman Hollerith's tabulating system is used in the U.S. Census, reducing a nearly 10-year-long process to two-and-a-half years and saving $5 million.

1911

CTR IS FORMED

Charles R. Flint arranges the merger of the International Time Recording Company, Computing Scale Company, and Tabulating Machine Company to form the Computing-Tabulating-Recording Company. The new organisation is based in New York City and has 1,300 employees.

1914

FIRST DISABLED EMPLOYEE

IBM hires its first employee with a disability — 59 years before the passage of the Rehabilitation Act of 1973, and 76 years before the Americans with Disabilities Act.

1914

FRANCE

CTR establishes a branch of the International Time Recording Company in Paris, France. Six years later, Thomas J. Watson Sr. will establish a new company — Société Internationale de Machines Commerciales — to promote CTR tabulating machines in 10 European countries.

1906

UNITED KINGDOM

The Tabulating Machine Company, an IBM predecessor, gives an exclusive licence to the British Tabulating Machine Company of London to market its Hollerith-designed punch card technology in Britain. In 1912, the International Time Recording Company — the precursor to IBM United Kingdom — is formed.

1910

GERMANY

Representatives of the Tabulating Machine Company reach an agreement to manufacture and market the company's products in Germany.

1911

CANADA

The Computing-Tabulating-Recording Company forms in Canada as a merger of the Computing Scale Company, Tabulating Machine Company and the International Time Recording Company Limited. Six years later, the International Business Machines Company Limited incorporates to run the Canadian operations, marking the first formal use of the IBM name.

1914

THOMAS J. WATSON SR. JOINS CTR

Thomas J. Watson Sr. joins CTR as general manager. The next year he is elected president of the company.

1915

IBM BAND

At Thomas J. Watson Sr.'s behest, five Endicott employees form a band to perform at a CTR sales convention. A year later, 32 employees will formally organise a concert band, starting a musical tradition that will last until 2001, when the IBM Band in Endicott plays its final notes.

1917

BRAZIL

IBM appoints its first sales representative in Brazil. The country's operations grow rapidly in size and scope, and in the 1930s IBM opens manufacturing facilities in São Paulo and Rio de Janeiro.

1918

CHARITABLE CONTRIBUTIONS

This list of CTR's diverse charitable contributions demonstrates philanthropic leadership and commitment to the community dating back to the company's earliest years.

1920

FIRST PRINTING TABULATOR

The printing tabulator is introduced by CTR. It not only improves speed and accuracy, but also sets the stage for further mechanisation of the tabulation process.
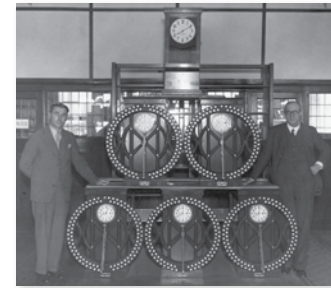
1921

SOUTH AFRICA

CTR equipment is used in the South Africa national census. Although the company will not appoint a general manager for the country until 1951, IBM products form a familiar part of the South African business landscape throughout the intervening decades.

1925

JAPAN

IBM appoints its first sales representative in Japan, and a tableware manufacturer becomes the site of the first IBM tabulating machine installation.

1925

THE HUNDRED PERCENT CLUB

The first meeting of the Hundred Percent Club, composed of IBM sales representatives who have met their annual quotas, convenes in Atlantic City, New Jersey.


1923

THE IBM CARD

CTR introduces the first electric key punch, setting its tabulating equipment apart from its competitors' mechanically-driven systems. Five years later, the company — by then known as IBM — will introduce a revolutionary 80-column punch card design. The "IBM Card" becomes an industry standard.

1924

IBM IS NAMED

The Computing-Tabulating-Recording Company is renamed International Business Machines Corporation (IBM). The company has operated under the IBM name in Canada since 1917.

1924

QUARTER CENTURY CLUB

Thomas Watson Sr. establishes the Quarter Century Club (QCC), recognising employees with 25 years of service. Inaugural employees to the QCC include four women and one African-American.
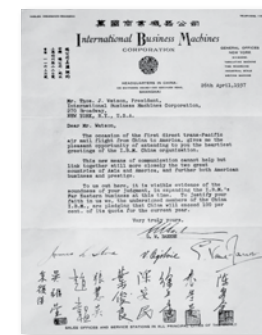
1928

CHINA

An agency is appointed to represent IBM in China. In 1934, the first IBM tabulating equipment will be installed at Peking Union Medical College in Peiping (Beijing), and two years later IBM China will be established, with headquarters in Shanghai.

1929

IBM BASEBALL TEAM

IBM Endicott forms an employee baseball team to participate in a town league. Over the years, IBM will engage with the sport in many ways, ranging from product lines (IBM-produced stadium scoreboards) to services engagements (analysis of baseball statistics) to marketing opportunities (tabulating All-Star ballots).

1930

NETHERLANDS

Just 10 years after appointing its first sales agent in the Netherlands, IBM sponsors a lavish exhibit to show off its wares at a Dutch trade show.

1933

IBM SCHOOLHOUSE AND ENGINEERING LABORATORY

IBM dedicates its Schoolhouse and Engineering Laboratory buildings in Endicott, New York. The front entrance of the Schoolhouse is engraved with Thomas J. Sr.'s famous Five Steps to Knowledge: "Read, Listen, Discuss, Observe, Think."

1934

405 ACCOUNTING MACHINE

IBM introduces the 405 Accounting Machine. It will remain the company's flagship product until it is taken out of production in 1949.

1934

IBM ELIMINATES PIECEWORK

IBM places all factory employees on salary, eliminating piecework and providing its workforce an added degree of economic stability. A group life insurance plan is also initiated for employees, marking the beginning of IBM's pioneering employee benefits programs.
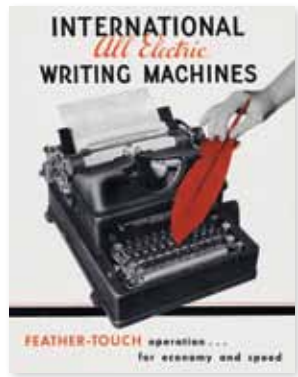
1935

ELECTROMATIC TYPEWRITER

IBM markets the first commercially successful electric typewriter, the Electromatic. The company will produce typewriters until 1990.

1935

FIRST CLASS FOR WOMEN SYSTEMS SERVICE PROFESSIONALS

Under the innovative and visionary leadership of IBM's Anne Van Vechten, the company holds its inaugural systems service engineering class for women. The class, which trains employees for professional-level positions, marks the start of an increased business role for women at IBM.

1935

THINK MAGAZINE

The first issue of THINK® is published. A magazine for IBM employees and clients, it features articles on such wide-ranging topics as education, science, art and international relations.

1936
SOCIAL SECURITY

IBM installs punched-card equipment to support administration of the U.S. Social Security Act of 1935. The project requires the creation and maintenance of employment records for 26 million Americans.

1936 SOCIAL SECURITY

1936
"IT CAN'T BE DONE"

The initial assessment by United States Secretary of Labour Frances Perkins and other tabulating experts is one of extreme skepticism, but IBM CEO Thomas Watson Sr. tells his Washington sales representative, "We want that business and will give you anything you need to get it." It takes almost two years to develop a successful proposal, but Watson ultimately gets his wish.

1937
"WE WOULD HAVE BEEN LOST"

The IBM Social Security sales team is a partnership between the Washington office sales personnel and engineers from IBM's New York-based research group. The collaboration results in the IBM 077 Collator, designed expressly for the Social Security project. H.J. MacDonald, sales lead for the team, recalls, "We couldn't have done a decent job with Social Security unless we had the Collator."


1937
THE JOB BEGINS

The United States Social Security payroll programme begins with the issuance of 26 million Social Security Numbers and 3.5 million Employer Identification Numbers.

1937
A HEAVY LOAD

No building in Washington, D.C., has floors sturdy enough to support the weight of the paper records and IBM equipment, so the Social Security tabulating installation occurs in an old Coca-Cola factory in Baltimore, Maryland.

1937
"I THINK WE'VE FOUND IT"

United States Secretary of Labour Frances Perkins recalls fondly the day on which an employee walked into her office and said, "These new IBM machines — I believe they can do it." Perkins, always nervous about the massive scope of the Social Security project, would later express her gratitude — and relief: "Out of that really inventive group, that worked in the IBM research group, we found a way by which this could be done."
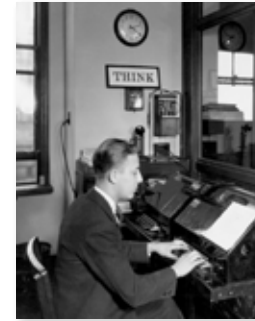
1915

THINK

Recognising the motivational potential of the word "THINK" even before joining CTR, Thomas Watson Sr. takes steps immediately upon arrival to ingrain the concept into company culture. The word quickly becomes synonymous with IBM.

Appearing on materials that range from plaques to banners to employee publications, "THINK" remains a ubiquitous part of life at IBM into the 21st century.

1938 to 1951

Growing Influence

Although international commerce is brought to a halt by the Second World War, IBM expands its manufacturing capacity to meet wartime demands — adding to its Endicott, New York, plant, and opening new facilities in Poughkeepsie, New York, Washington, D.C., and San Jose, California. Following the war, the company accelerates its international growth, and in 1949, it forms the World Trade Corporation to manage its foreign operations. In the span of two decades, the organisation will generate more than half of IBM's bottom line. Business innovation works hand in hand with social innovation during this period, as IBM promotes diversity and corporate philanthropy in its policies. The company begins to focus on opportunities for women, minorities and the disabled — years before such considerations would become the norm.

IN 1943, IBM HITS THE $100 MILLION
MARK IN REVENUES.

1938
WORLD PEACE THROUGH WORLD TRADE

This IBM mantra encapsulates one of Thomas Watson Sr.'s quintessential beliefs — that business holds the potential to influence global society for the better. During the 1930s, Watson labour tirelessly on behalf of world peace, travelling around the planet to meet with political and business leaders.

1939
INTERNATIONAL GROWTH

As IBM marks a quarter century of Thomas J. Watson Sr.'s leadership, the use of the company's products spans the globe.

1941
SPAIN

IBM Spain is established, 25 years after the company first appointed a representative in the country and 16 years after the first IBM machines were installed there.

1944
AUTOMATIC SEQUENCE CONTROLLED CALCULATOR (ASCC)

IBM presents its first large-scale calculating computer, the ASCC, to Harvard University. Also called the Mark I, it is the first machine capable of executing long computations automatically.

1944
UNITED NEGRO COLLEGE FUND

Thomas Watson Sr. joins the Advisory Committee of the United Negro College Fund™ (UNCF), and IBM becomes an inaugural contributor to the organisation. The mission of the UNCF is to strengthen historically black colleges and universities and to promote interracial understanding in America.

1945
WATSON SCIENTIFIC COMPUTING LABORATORY

IBM creates the Watson Scientific Computing Laboratory at Columbia University. It is the first IBM laboratory devoted to pure science, and it marks the beginning of world-class scientific research at IBM.

1942
TRAINING FOR PEOPLE WITH DISABILITIES

Michael Supa, a blind psychologist and IBM employee, helps launch a corporate programme to train and employ disabled people in Topeka, Kansas. The next year, classes will begin in New York City, and soon the company will be asked to join the President's Committee for Employment of the Handicapped.

1943
FIRST FEMALE VICE PRESIDENT

Ruth Leach becomes IBM's first female vice president. Between 1940 and 1943, one third of IBM's manufacturing hires are women.


1943
VACUUM TUBES

IBM develops the Vacuum Tube Multiplier, which substitutes vacuum tubes for electric relays and becomes the first complete machine to perform arithmetic electronically.

1946
603 ELECTRONIC MULTIPLIER

IBM announces the 603 Electronic Multiplier, the first small commercial product to incorporate electronic arithmetic circuits. Designed to outperform the gigantic ASCC, the 603 uses vacuum tubes to perform multiplication far more rapidly than electromechanical devices.
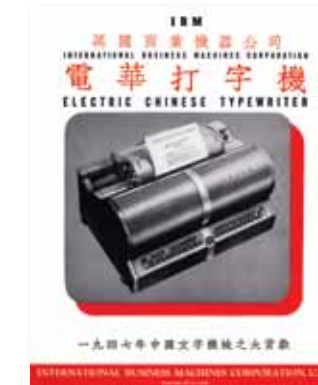
1946
CHINESE IDEOGRAPHIC CHARACTER TYPEWRITER

IBM introduces an electric Chinese ideographic character typewriter. Utilising a cylinder engraved with 5,400 ideographic characters, the machine allows an experienced user to type at a rate of 40 to 45 Chinese words per minute.

1946
FIRST BLACK SALES REPRESENTATIVE

IBM hires its first black sales representative, T.J. Laster, 18 years before the Civil Rights Act of 1964.

1946

FIRST IBM LOGO

IBM's globe-shaped logo expresses the young company's growing ambitions.

1948

AUSTRALIA

After decades of selling just scales and time recording equipment, IBM's Australian subsidiary begins marketing tabulating machines for the first time.

1951

INDIA

IBM opens its first office in India. Over the next few years, the company opens a punch card manufacturing facility and several service bureaus.

1948

**SELECTIVE
SEQUENCE ELECTRONIC
CALCULATOR (SSEC)**

IBM's first large-scale digital calculating machine, the Selective Sequence Electronic Calculator (SSEC), features 12,000 vacuum tubes and 21,000 electromechanical relays. It is the first computer capable of modifying a stored program.
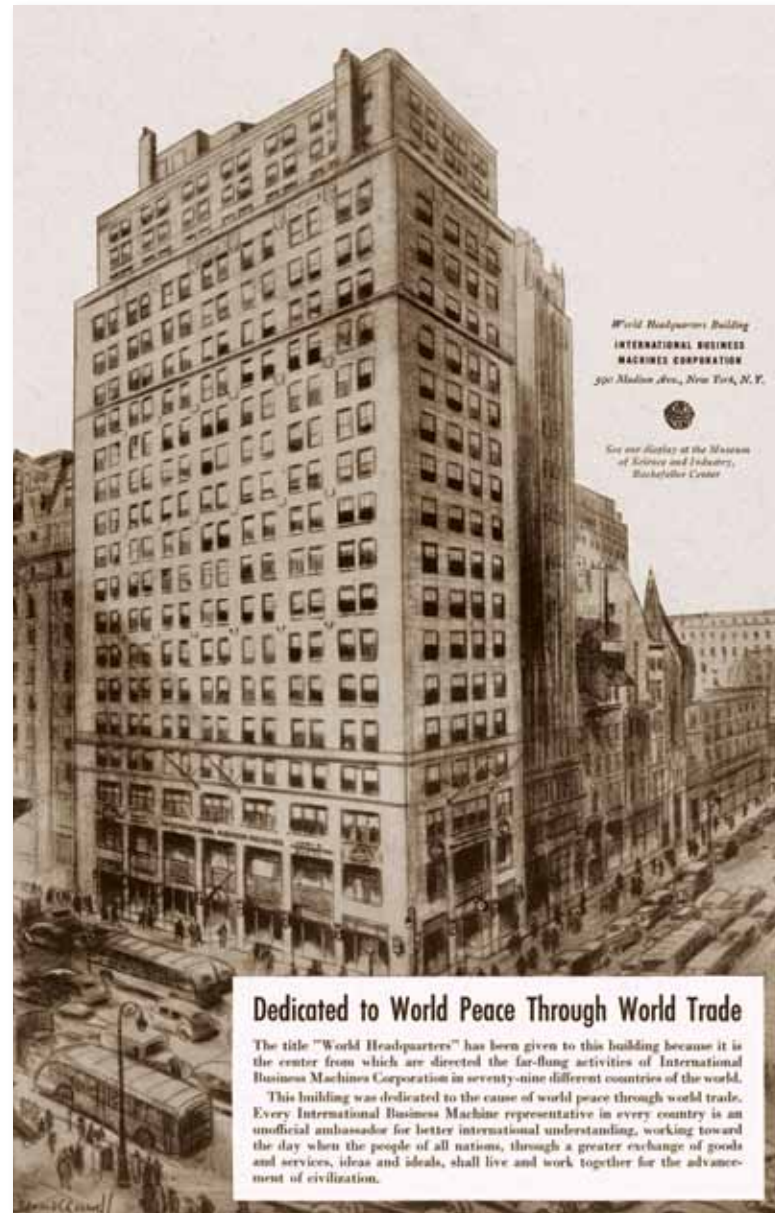
1948

THAILAND

The Royal Thai Government selects IBM to provide equipment and expertise for Thailand's first detailed census. The following year IBM will appoint a manager to direct its business in the country.

Dedicated to World Peace Through World Trade

The title "World Headquarters" has been given to this building because it is the center from which are directed the far-flung activities of International Business Machines Corporation in seventy-nine different countries of the world.

This building was dedicated to the cause of world peace through world trade. Every International Business Machine representative in every country is an unofficial ambassador for better international understanding, working toward the day when the people of all nations, through a greater exchange of goods and services, ideas and ideals, shall live and work together for the advancement of civilization.

1938

WORLD HEADQUARTERS

The IBM World Headquarters building, located at 590 Madison Avenue in New York City, is dedicated.

1936

WORLD HEADQUARTERS

IBM Chairman Thomas Watson Sr. recognises that IBM's current offices are insufficient to meet the administrative needs of the company's booming domestic and international sales. To consolidate IBM's worldwide operations, he acquires a 20-story office building at the corner of 590 Madison Avenue and 57th Street in New York City.

1938

BUILDING DEDICATION

IBM's newly acquired Madison Avenue building is extensively renovated, and in January 1938 it is dedicated as IBM World Headquarters. Here, IBMers work in the accounting department at the time of the building's dedication.

1941

HALL OF PRODUCTS

The refurbished facility features an employees' club room, a library, a museum focused on international contributions to the field of accounting and a space for showcasing IBM's wares (pictured).

1938

OFFICE OF THE PRESIDENT

Thomas Watson Sr.'s office features a "THINK" plaque and bust of Thomas Edison on the fireplace mantle.

1949
TABULATION DEPARTMENT

IBMers operate a row of Alphabetic Tabulators as a portrait of Thomas Watson Sr. watches over them.

1942
GIVING THANKS

IBMers gather in the Employees' Clubroom to thank Thomas Watson Sr. for increases in the group insurance plan and other benefits provided by the company.

1950s
DATA PROCESSING CENTRE

Situated in the lobby areas of the World Headquarters, the Eliot Noyes–designed IBM Data Processing Centre features a spare, modern design and a working IBM 702 system that runs 24 hours a day. Passersby on the sidewalk can look through the plate glass windows to see well-dressed technicians tending to the machines as they process client data.

1940 TENT CITY

1941
AN ARMY OF SALESPEOPLE
This aerial photograph captures the sweep of Tent City. The Main Tent (left), where Hundred Percent Club sessions are held, is a massive circus tent. The smaller tents are those in which attendees are lodged.

1941
A FULL HOUSE
The chairs are uncomfortable. The main tent is hot. And the bugs attracted by the stage lighting are annoying. Nevertheless, the Hundred Percent Club programme always attracts a crowd.

1940
TENT CITY
IBM hosts qualifying sales representatives for the Hundred Percent Club in a sprawling tent complex — officially known as Convention City — at the IBM Country Club in Endicott, New York. In 1946, Tent City will comprise seven acres of tents, housing more than 800 qualifiers.

1946
TENT CITY DRIVE
Pedestrians walk along one of Tent City's main thoroughfares during the 1946 Hundred Percent Club convention.

1941

THE MAIN TENT

Festooned with THINK banners, IBM logos and Hundred Percent Club regalia, the main tent is where the bulk of the convention is held. After inoculating its leading sales representatives with a heavy dose of corporate culture, IBM sends them back into the field.

1949

A PASTORAL SETTING

This scenic image of Tent City captures the idyllic quality of a summer day at the Hundred Percent Club convention. Club members take advantage of the setting to play golf, try out the shooting ranges, watch ball games at the local minor league stadium and listen to outdoor concerts.

1950

AMENITITES

Tent City is hardly a five-star resort, but IBM makes Hundred Percent Club members as comfortable as possible. The tents sit on wooden platforms, and there are paved sidewalks so attendees can avoid muddying their shoes in rainy weather. There are medical facilities, shoe shine and laundry services, a daily newspaper and even a Coca-Cola tent — in 1947, attendees drink more than 20,000 bottles of the soft drink over the course of three and a half steamy days.

1950

ACCOMODATIONS

Despite having water and electrical hookups, the roomy but spartan two-person attendee tents are a step down from the ambience of the Waldorf-Astoria. Some IBMers think Chairman Thomas Watson Sr.'s idea to reward his top salespeople with three days outdoors will backfire. But the representatives catch the spirit of the convention and respond enthusiastically to the Tent City accommodations.

Foundations of Modern Computing

The ascension of Thomas J. Watson Jr. to IBM's presidency in 1952 marks the beginning of the company's transition to a modern corporation. During the first decade of his tenure, Watson Jr. — later labelled by *Fortune* as the "most successful capitalist who ever lived"— begins to transform IBM from a leading industry player into a business behemoth that spans the globe. He refocuses IBM toward the development and commercialisation of electronic computer technologies, creates and institutionalises professional corporate management practices, and codifies unwritten IBM philosophy and behaviours into formal policies and programmes. These technological, business and social innovations propel IBM into the 1960s as the world's leading high-technology firm.

BY 1957, IBM EXCEEDS $1 BILLION
IN REVENUES.

—

IN 1960, IBM'S WORKFORCE REACHES
THE 100,000-EMPLOYEE MARK.

1950s
IBM SALES FORCE

The IBM sales force is widely lauded as a world-class organisation. A symbol of that elite status is IBM's traditional sales "uniform" — dark suits, white shirts, quiet ties and the ubiquitous hat.

1950s
TYPEWRITER SUPPLIES PACKAGING

Designed by Paul Rand, IBM's packaging for its typewriter supplies uses bold, distinctive colours with a logotype and an informal script to help humanise the product and the corporation.

1952
MAGNETIC TAPE DRIVE VACUUM COLUMN

IBM introduces the magnetic tape drive vacuum column, which uses a vacuum to prevent tape breakage caused by sudden starts and stops. The innovation paves the way for magnetic tape to become a popular storage medium.

1953
SINGAPORE

IBM opens its first office in Singapore to sell electric typewriters and time equipment. Four years later, IBM will install its flagship 405 punch card accounting machine at a rubber company — the first IBM data processing equipment installation in the country.

1954
EGYPT

IBM's newly formed Egyptian organisation participates in a worldwide tribute marking Thomas Watson Sr.'s 40th anniversary with the company.

1954
SWEDEN

IBM's Vällingby manufacturing facility, a producer of IBM Model C typewriters, is constructed as part of the original design of Sweden's famed New Town — the nation's "Town of the Future."


1952
NEW LOGO BY PAUL RAND

Designed by noted graphic designer Paul Rand, the new logo marks the transition from Thomas Watson Sr. to his son, projecting both continuity and boldness.

1953
650 MAGNETIC DRUM CALCULATOR

IBM announces the 650 Magnetic Drum Calculator, a medium-sized electronic computer designed to handle widely diversified accounting and scientific computations. Nearly 2,000 will be sold by 1962, making it the most popular computer of the 1950s.
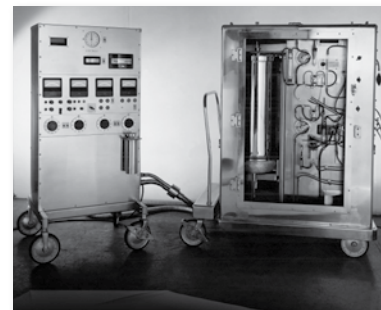
1953
HEART / LUNG MACHINE

Using a heart/lung machine built by IBM, Dr. John H. Gibbon Jr. of Philadelphia's Jefferson Medical College performs the world's first successful open-heart surgery on a human.

1956
CORPORATE DESIGN PROGRAMME

IBM launches its Corporate Design Programme under the direction of Eliot Noyes, shown here with Charles Eames and a team of IBM designers. In the ensuing decades, world-renowned designers and architects like Paul Rand, Charles and Ray Eames, Eero Saarinen, Ludwig Mies van der Rohe, and Richard Sapper will leave their creative imprints on IBM graphics, products and architecture.

1956
FIRST "SELF-LEARNING" PROGRAMME

Arthur L. Samuel of IBM's Poughkeepsie, New York, laboratory programs an IBM 704 to play chequers. It is believed to be the first "self-learning" program, an early demonstration of the concept of artificial intelligence.


1956
SWITZERLAND

IBM chooses Zurich, Switzerland, to serve as the home of its first research lab outside the U.S.

1956

WILLIAMSBURG CONFERENCE

Thomas Watson Jr. gathers some 100 senior IBM executives for a special three-day meeting in Williamsburg, Virginia. This executive gathering, the first since the passing of Thomas Watson Sr., results in a new corporate organisational structure and marks the emergence of the second generation of IBM leadership.
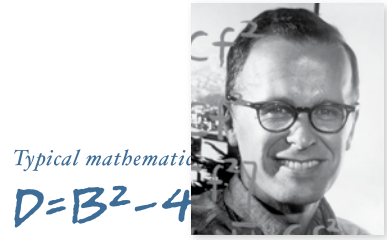
Typical mathematic...

$$D=B^2-4...$$

Equivalent FORTRAN statement:

$$D=B**2-4*A*C$$

1957

FORTRAN

IBM makes the FORTRAN (FORmula TRANslation) scientific programming language — developed under the leadership of John W. Backus — available to clients. FORTRAN becomes an industry standard and the most widely used computer language for technical work.

1957

HONG KONG

IBM opens its first Hong Kong office, with four employees marketing electric typewriters, time systems and calculators. Within three years the company will open a service bureau and begin marketing its data processing line.

1958

SALARIED EMPLOYEES

IBM becomes one of the first major companies to place all hourly U.S. employees on salary.

1959

1401 DATA PROCESSING SYSTEM

IBM introduces the 1401 Data Processing System, the first computer system to reach 10,000 units in sales. The system's printer, the IBM 1403, launches the era of high-speed, high-volume printing, and will remain the standard for print quality until the advent of laser printing in the 1970s.

1960

DENMARK

The Datamobile featuring the new IBM 1401 drives past Christiansborg Palace, home of the Danish Parliament, in Copenhagen, Denmark. The Datamobile spends four months travelling through Europe as part of the 1401's introductory tour.
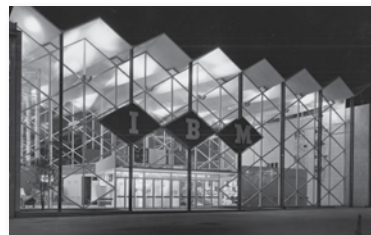
1958

BELGIUM

The Eliot Noyes-designed IBM Pavilion at the Brussels World's Fair attracts nearly 100,000 visitors — including European royalty and 'high-ranking government officials — in its first six weeks. In addition to its impressive display of IBM products, the pavilion features a popular "Typing Bar," where visitors can type postcards to send home.


1958

OPEN DOOR PROGRAMME

First implemented by Thomas Watson Sr. in the 1910s, the "open door" system encouraged employees with complaints to speak with senior executives, up to and including Watson himself. In 1958, this practice is formalised as policy with the creation of the Open Door Programme.

1958

SAGE

In the 1950s, IBM builds the core of the U.S. air defence system, the Semi-Automatic Ground Environment (SAGE) computer.
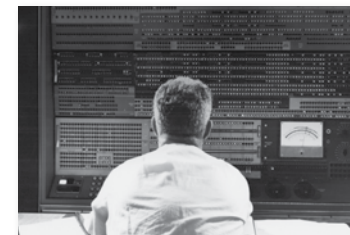
1960

STRETCH COMPUTING SYSTEM

IBM introduces the Stretch computing system, the most powerful computer of its day and the pioneer of such advanced systems concepts as lookahead, pipelining, the transistor and the byte.

1961

THOMAS J. WATSON RESEARCH CENTRE

The Thomas J. Watson Research Centre, headquarters for IBM's Research Division, opens in Yorktown Heights, New York.

1962

A TRADITION OF CLIENT SERVICE

IBM's belief in the significance of client service is summed up in the words of Thomas Watson Jr.: "We want to give the best customer service of any company in the world....The relationship between the (IBMer) and the customer, their mutual trust, the importance of reputation, the idea of putting the customer first — always all — these things, if carried out with real conviction by a company, can make a great deal of difference in its destiny."

1962

SABRE

IBM develops the SABRE® reservation system for American Airlines. The industry's first system to work over phone lines in "realtime," it links high-speed computers and data communications to handle seat inventory and passenger records from terminals in more than 50 cities.

1962

THE BASIC BELIEFS

Thomas Watson Jr. codifies IBM's unwritten core values into three basic beliefs, grounded in respect for the individual, dedication to customer service and excellence in all that IBMers do.
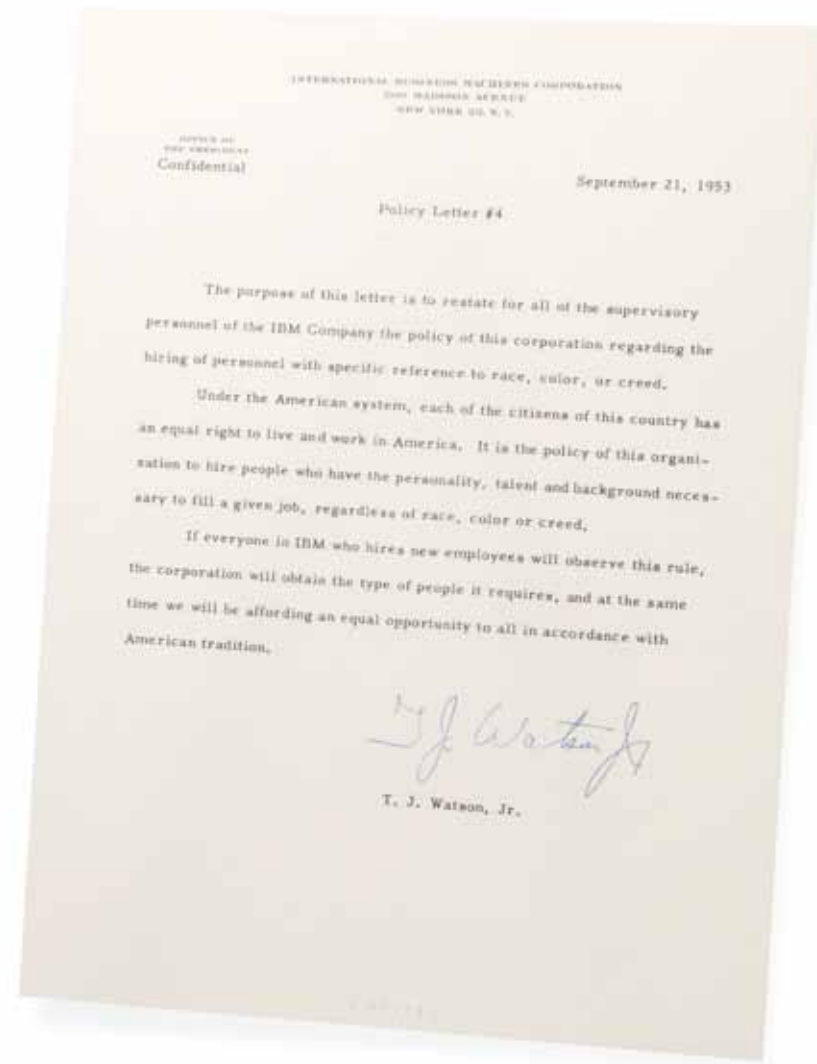

1963

FIRST IBM FELLOWS

The company announces its first eight inductees into the IBM Fellows Programme, which honours distinguished and sustained technical achievements in engineering, programming, science and technology. The title of IBM Fellow comes with a unique opportunity to pursue special projects and is the highest honour an IBMer can receive for technical innovation.

1963

NATIONAL URBAN LEAGUE

IBM joins the National Urban League® (NUL) to launch on-the-job training for unemployed black individuals. NUL President Whitney Young calls IBM's efforts "a classic example of a company accepting its social responsibility."

1930s
ERFORD WILLIS

IBM's inclusive workplace enables every employee to contribute to the success of the company. Here, Erford Willis — a blind IBMer — celebrates winning an award in IBM's Suggestion Program.

1949
T.J. LASTER

T.J. Laster, IBM's first black sales representative, sits with Thomas Watson Sr. at a sales event.

1953

EQUAL OPPORTUNITY POLICY

Thomas Watson Jr. publishes the company's first written equal opportunity policy letter — one year before the U.S. Supreme Court's decision in Brown v. Board of Education and 11 years before the Civil Rights Act of 1964.

1949
RUTH LEACH

Ruth Leach, IBM's first female vice president, poses with colleagues outside the company's San Jose, California, office.

1966
BEATE E. HAGER

IBM Austria's first female Systems Engineer, Beate E. Hager, also becomes the first female instructor at the company's Training Centre in Vienna.

1968
HARRY SCOTT

There is more to career advancement than education
and technical knowledge — character counts, too.
Here, IBM honours manager Harry Scott for the unique
qualities he brings to the organisation.

1968
JOYCE MASSENGILL

Joyce Massengill, IBM employee, works on software
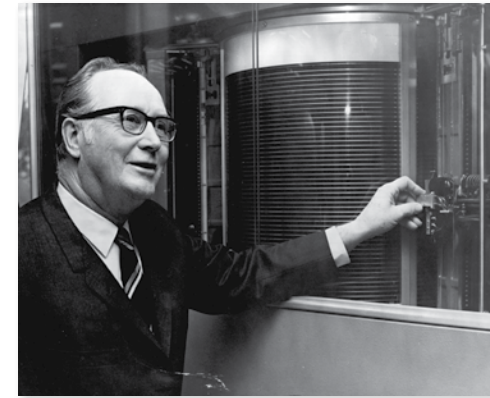for NASA in this advertisement.

1967
MICAHEL SUPA

Michael Supa, an advocate for handicapped
employees, celebrates his 25th anniversary
with IBM.

1952

REYNOLD B. JOHNSON

IBM Fellow Reynold B. Johnson, one of IBM's most innovative minds, forms a small team with a single objective: to develop entirely new technologies for the company. Working out of a small rented building in downtown San Jose, California, Johnson's team focuses its efforts immediately on random access storage. The result? The world's first commercial magnetic hard-disk drive — a technology that will revolutionise data storage as well as launch a new computer peripherals industry.

1959

LATIN AMERICAN INTRODUCTION

The first IBM RAMAC system delivered to Latin America arrives at the office of Anderson Clayton and Co. in São Paulo, Brazil, on June 8, 1959. In the years following the Second World War, IBM's international subsidiary, the World Trade Corporation, proves to be a highly efficient channel for providing cutting-edge computer technology to businesses and governments around the world.

1956

1956

RANDOM ACCESS METHOD OF ACCOUNTING AND CONTROL (RAMAC)

IBM introduces its 305 RAMAC and 650 RAMAC machines. The first to use a magnetic hard disk for data storage, RAMAC technology becomes an industry standard. The storage capacity of the 305's 50 two-foot-wide disks amounts to five megabytes of data.

IBM 305 RAMAC SYSTEM

The IBM 350 RAMAC Disk Storage Unit is a major component of the larger IBM 305 RAMAC system — a flexible, electronic, general-purpose data processing machine that enables businesses to record transactions as they occur. The system maintains records on a realtime basis, provides random access to any record, eliminates peak loads and simultaneously produces output by either print or punch cards.


1956

IBM 350 RAMAC DISK STORAGE UNIT

The original hard disk drive, the IBM 350 RAMAC Disk Storage Unit, stores five megabytes of data on 50 magnetic disks, each 24 inches in diameter. The disks spin at 1200 rpm, and read-write heads locate and access data on the disks in less than one second. RAMAC stands for "Random Access Method of Accounting and Control," a name that wins out over rejected labels for the system — DREAM (Direct Reference Electronic Accounting Machine) and UNCLE (Universal Numeric Calculating and Logic Engine).

1956 RANDOM ACCESS METHOD OF ACCOUNTING AND CONTROL (RAMAC)
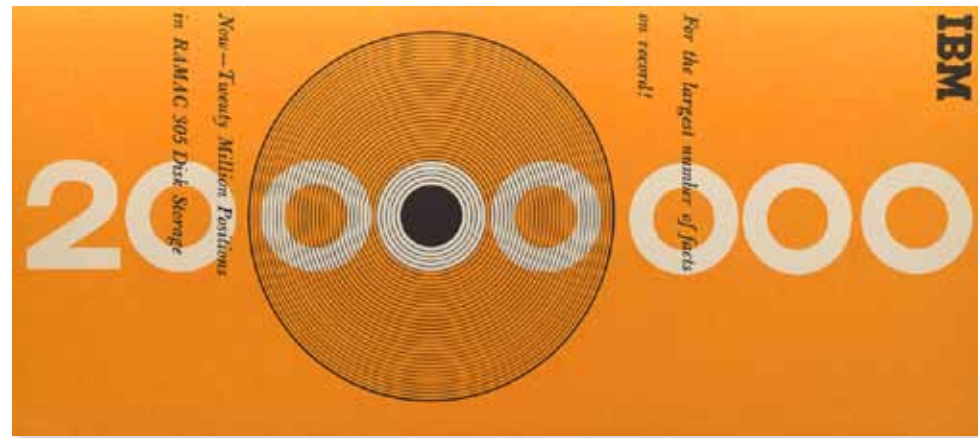
1958
ENHANCED 305

Two years after the product's launch, IBM enhances the 305 system to permit an additional 350 Disk Storage Unit — doubling maximum storage capacity to an astounding 20 megabytes of data. The 305 RAMAC is one of IBM's last vacuum tube systems, and the company produces more than 1,000 RAMAC systems before production ends in 1961.

RAMAC VIDEO TRANSCRIPT

Presenting RAMAC, Random Access Method of Accounting and Control. Another business service of tomorrow, made possible today by IBM. Companies have long dreamed of an accounting system capable, in a single operation, of recording transactions as they occur. RAMAC is that dream-come-true, processing with amazing speed unrelated data, randomly presented and randomly transacted.

In the 305 RAMAC, IBM has combined the power, speed and flexibility of electronics required in the Random Access Method of Accounting and Control. Here is a data processing machine that is beautifully designed, a machine whose compact, integrated construction makes possible a multitude of operations. In addition to random or in-line data processing, the 305 will serve as a flow of other information.

This includes online printed documents and various types of punched-card output. RAMAC also contains extensive facilities easily accessible for storing information. RAMAC requires a miracle memory; the 305 has it. Five million characters magnetically recorded on 50 disks, revolving 12 hundred times a minute. These 50 disks will hold as much information as 32 cartons containing 64,000 IBM cards. Input to RAMAC is by IBM unit record cards fed in at up to 125 per minute. Each card is read, recorded and checked.

The magnetic process drum, revolving 6,000 times per minute, has recording tracks for stored program instructions, data storage, arithmetic functions and inquiry data.

Input and output tracks permit independence of input and output units. The address register pinpoints the location of information in disk storage. Each block of 100 characters has an address. The access arm, given any address, will locate the information with a random access average of six tenths of a second. Data can be read or written from a stored program instruction or from a manual inquiry station.

For the first time IBM combines the stored program for data processing and the wire control panel for logic elements and control. All these components that we have just seen are housed within the trim grey process unit. Also compactly stored inside are miles of electronic circuiting, the very nerve network of the 305 RAMAC.

To provide flexibility and data processing, the 305 is equipped with two output devices, an IBM unit record card-punch and an online printing device capable of accepting information directly from RAMAC in readable form.

A forceful reminder of the 305's processing ability is the rapid display of instruction execution, faster even than the eye can follow. In modern business, where time is money, the 305 RAMAC has made bookkeeping a matter of split seconds.

1961 **SELECTRIC TYPEWRITER**

1961

A REVOLUTION IN TYPING

With the Selectric, switching typeface styles is as simple as changing the trademark "golf ball" typing element. This revolutionary feature ushers in the era of desktop publishing by enabling users to quickly change font, print size — even language.

1961

"GOLF BALL" TYPING ELEMENT

The pedigree for the typing element dates back to 1946 and an umbrella-shaped development model called the "mushroom printer." It takes seven years of additional development, however, before the technology is perfected for the Selectric.

1961

WORLD-CLASS DESIGN

The Selectric is an early success for IBM's corporate design programme, led at the time by famed designer Eliot Noyes. Featuring an innovative sunken keyboard, the product is a striking departure from its boxy competitors and remains one of the 20th century's classic industrial designs.

1964

THE BEGINNING OF WORD PROCESSING

The IBM Magnetic Tape Selectric Typewriter (MTST) pioneers the use of magnetic recording devices and electronics in typewriters, and marks the beginning of "power typing"— what we know today as word processing. The stored-text feature improves office efficiency by allowing typists to type at "rough draft" speed without fear of mistakes.

1970s and BEYOND

THE SELECTRIC LIVES

More than 20 years after its introduction, an estimated eight million Selectrics were still twisting, tilting and typing away in offices and homes around the world. Even today, in the era of ubiquitous personal computers, the Selectric remains a hot item and the focus of many online bidding wars. What made it a best-seller then and a collectible now? Top quality, rugged reliability, classic design and that famous snap-in, snap-out typing element.

1961

SELECTRIC TYPEWRITER

IBM introduces the Selectric® Typewriter, known for its revolutionary "golfball" replaceable typing element. One of the first IBM products to reflect the influence of renowned design consultant Eliot Noyes, the Selectric becomes a design classic.

1964 to 1970

The 360 Revolution

In the early 1960s, IBM sees its marketplace lead threatened by a series of worthy challengers. In a bold business move — Thomas J. Watson Jr.'s legendary "bet the company" decision — IBM develops the revolutionary System/360™ family of mainframe computers. Sparked in part by the triumph of the System/360, IBM experiences a nearly fivefold increase in revenues and earnings over the course of the decade. The organisation wears its mantle of success well, adopting a host of progressive new employee and social programmes that make it one of the world's most admired companies. If IBM ended the 1950s as a technology leader, it ends the 1960s as a global business icon.

IN 1967, IBM TOPS 200,000 EMPLOYEES
AND $5 BILLION IN REVENUES.

1960
MATHEMATICA

IBM funds Mathematica, the first major museum exhibit by famed modernist designers Charles and Ray Eames. Featuring interactive physical representations of mathematical concepts such as Bell Curves and Mobius Strips, the exhibit will remain on display at the California Museum of Science and Industry for four decades.

1964
MICROELECTRONICS

IBM announces the System/360™ family of computers, featuring IBM's Solid Logic Technology microelectronic circuits. The System/360 is the first commercially available data processing system to have a design based on the use of microminiaturised computer circuits.

1964
NEW CORPORATE HEADQUARTERS

IBM moves its corporate headquarters from New York City to Armonk, New York.

1965
IBM'S CULTURE

There is little that represents IBM's technical culture in the 1960s better than the accoutrements that will eventually become synonymous with scientific and engineering "geekdom"— black rimmed glasses, a slide rule and a pocket protector.

1965
NASA

A 59-pound onboard IBM guidance computer is used on all Gemini flights, including the first spaceship rendezvous. That same year, the NASA Space Centre in Houston, Texas, receives the IBM 2361, the largest computer memory yet built by the company.

1965
WILD DUCK AD

In IBM culture, the wild duck symbolises the internal tension between the unbounded nature of innovation and the rigour of operating a for-profit enterprise. As Thomas Watson Jr. once said, "We are convinced that any business needs its wild ducks. And in IBM we try not to tame them."

1964
WORLD'S FAIR

Noted architect Eero Saarinen designs the IBM Pavilion at the 1964 New York World's Fair, echoing the shape of the "golfball" element of the IBM Selectric® typewriter. Famed graphic designer Paul Rand oversees the creation of a booklet for the exhibit, which educates the public on how computers work and the roles they play in society. When the IBM Pavilion closes in 1965, it will have hosted more than 10 million visitors over the course of two years.


1965
EIGHT BARS

Paul Rand updates his earlier IBM logo, creating one of the world's most recognised and imitated trademarks. Horizontal stripes embody the confidence, speed and dynamism of the technology world's new leader.

1965
HONG KONG AND SHANGHAI BANKING CORPORATION

The Hong Kong and Shanghai Banking Corporation becomes the first Hong Kong firm to order a System/360.™
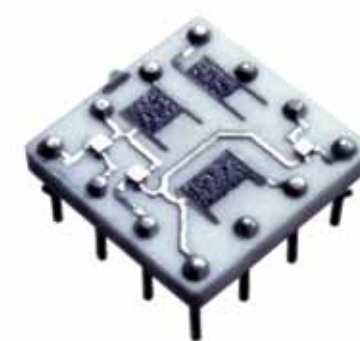
1966
DRAM

IBM researcher Robert H. Dennard invents Dynamic Random Access Memory (DRAM) cells, one-transistor devices that store each single bit of information as an electrical charge in an electronic circuit. The technology permits major increases in memory density, and is widely adopted throughout the industry.

1967
REPUBLIC OF KOREA

The first computer installed in the Republic of Korea — an IBM 1401 — is used to process data collected during the 1966 Korean national census.

1968
BEDFORD-STUYVESANT PLANT

At Senator Robert Kennedy's urging, IBM opens the Bedford-Stuyvesant Plant in Brooklyn, New York, to train and hire local residents. Over the next decade, the plant — a producer of advanced electronic units — will grow from eight to 400 employees.
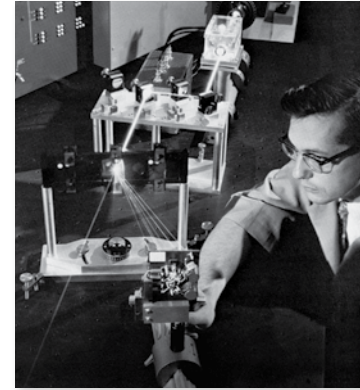
1968

CUSTOMER INFORMATION CONTROL SYSTEM

IBM's Customer Information Control System (CICS®), first developed in conjunction with Michigan Bell in 1966, is introduced. Assigned to IBM's Hursley, England, facility in the early 1970s, CICS remains the industry's most popular transaction monitor to the present day.
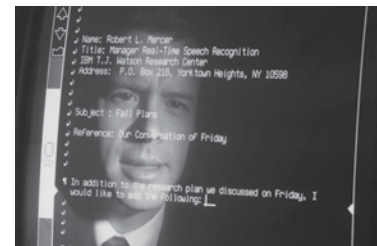

1968

MANAGEMENT SEMINARS

IBM provides management seminars to organisations such as Opportunities Industrialisation Centres, the National Urban Coalition, the New York Coalition, the Navajo Nation and the League of United Latin American Citizens.

1968

LASER OPTICAL MEMORY

IBM researchers develop an experimental laser optical memory system, eventually producing devices that use laser beams to store large amounts of information.

1968

TECHNOLOGY CAREERS

Computer usage increases dramatically during the 1960s, giving rise to new computer-related industries such as microelectronics and software. These emergent industries create a host of equally new job opportunities that hadn't existed just a decade before.

1969

ITALY

IBM's Scientific Centre in Venice, Italy, joins a multi-institutional study aimed at preventing the eventual destruction of the city by high tides.

1969

SPEECH RECOGNITION

IBM researchers develop techniques for word recognition, speaker identification and advanced audio response.

1970

RELATIONAL DATABASE

The relational database, conceived by IBM researcher Edgar F. "Ted" Codd, calls for information stored in a computer to be arranged in easy-to-interpret tables that allow non-technical users to manage and access large amounts of data. Today, nearly all database structures are based on the relational database.

1964 SYSTEM/360

1962

BETTING ON COMPATIBILITY

In 1962, IBM Chairman Thomas Watson Jr. decides to "bet the business" on a revolutionary concept in computing: compatibility. The concept of computer compatibility enables clients to easily migrate their data and applications to increasingly powerful machines as their processing needs change.

1962

A FAMILY OF COMPUTERS

Needing to update IBM's current computer product lines, but uncomfortable with the thought of creating yet another proprietary computer architecture, Thomas Watson Jr. authorises the creation of a compatible family of computers — the IBM System/360.

1964

SYSTEM/360

In the most important product announcement in company history to date, IBM introduces the IBM System/360.™ Built on the industry-transforming concept of a compatible "family" of computers, the 360 incorporates the IBM-designed Solid Logic Technology (SLT).

1962

KILLING THE GOLDEN GOOSE

Thomas Watson's choice is not an easy one. The new product line will force IBM's clients to fundamentally change their data processing operations based on an unproven concept. In addition to posing this daunting marketing challenge, it will also kill off IBM's golden gooses — a wildly disorganised but very profitable line of existing computer products.

1962

THE TECHNICAL CHALLENGE

Thomas Watson will later recall, "From the beginning we faced two risks, either of which alone was enough to keep us awake nights. First there was the task of coordinating the hardware and software design work for the new line. We had engineering teams all over America and Europe working simultaneously on six new processors and dozens of new peripherals.… In the end all this hardware would have to plug together."

1962
THE CODING CHALLENGE

"The software was a bigger hurdle still," Thomas Watson would explain. "In order for the System/360 to have a consistent personality, hundreds of programmers had to write millions of lines of computer code. Nobody had ever tackled that complex a programming job, and the engineers were under great pressure to get it done."

1962
THE COMPONENT CHALLENGE

According to Thomas Watson, "Our other source of worry was that we were trying for the first time to manufacture our own electronic parts. Nobody was using integrated circuits in computers yet, but the System/360 called for a lot of them."

1964
IBM'S $5 BILLION GAMBLE

The System/360 development effort takes two full years and costs $5 billion — more than $30 billion today. It is the largest privately financed commercial project ever undertaken.

1964
THE FUTURE ARRIVES

"Within IBM there was a great feeling of celebration because a new era was opening up," Thomas Watson would later explain.

1964 | *left*
ANNOUNCEMENT ANGST

On April 7, 1964, Thomas Watson unveils the System/360 to the world. "But when I looked at those new products, I didn't feel as confident as I'd have liked. Not all of the equipment on display was real; some units were just mockups made of wood. [It was] an uncomfortable reminder to me of how far we had to go before we could call the programme a success."

1964 | *below*
BE CAREFUL WHAT YOU WISH FOR

Within eight weeks of the announcement, clients have ordered well over two thousand machines. For Thomas Watson, the client enthusiasm for the Systm/360 is a tremendous relief. But it will take all the resources of the company, working 60-hour weeks — and in some cases round-the-clock shifts — for nearly two years before the System/360 can be called a success.

1964
FAITH DELIVERS

Thomas Watson will later recount that "[the System/360] was the biggest, riskiest decision I ever made, and I agonised about it for weeks, but deep down I believed there was nothing IBM couldn't do."

1964
FULL CIRCLE

The success of the IBM System/360 family of compatible computers changes the computer industry forever, and makes the power of computers more accessible to companies of all sizes.

SYSTEM/360 VIDEO TRANSCRIPT

Thomas Watson, Jr.:

We're not at all humble about asking you to come here today, because we've asked you to be here to share with us the most important product announcement that this corporation has ever made in its history. We're announcing not a product today, but a line of products, which expands a very wide part of our market area, and we think it represents a tremendous step forward for us and, we hope, for our industry.

This begins a new generation of computers, and a new generation of the way computers reply to the government, industry and science. 360 is a sharp departure from the past in designing and building computers.

System 360 Promotional Video:

Today IBM brings you that system. This is System 360.

And so is this, and this, and this. A single system featuring unprecedented performance range, new microelectronic circuitry, over eight million characters of core storage, speeds measured in billionths of a second, scores of input/output devices, billions of characters of

random storage, constant communications readiness, comprehensive programming support. A system to serve every application area. One system with full-circle capability, encompassing the needs of science, industry, business and government.

System 360 starts here, in the world of the super small. This is IBM's new Solid Logic Technology in production. Microelectronic circuits more compact, making possible faster logical decisions than ever before. The product of years of progress.

Another new concept in System 360: power for growth, single system growth. Processors that offer many speeds, memory sizes, features, select what you need to do your job best. You can start small, and without reprogramming you can grow.

System 360: the beginning of a new age in processing power, in systems versatility, in programming efficiency. The entire concept of computers has changed. Memory in the millions, storage in the billions. Solid Logic Technology. System 360: full-circle capability, encompassing all your data handling needs. The beginning of a new age of data processing.

1960

SIMULATED FLIGHT

IBM computers and personnel were key players from the very start of America's space programme. Here, Dr. Helmut Hoelzer (left) and Dr. Rudolph Hoelker of the Marshall Space Flight Center in Huntsville, Alabama, study the highly complex calculations of a lunar orbit. Flights of the Saturn's 30,000,000-horsepower super booster (model at right) will be simulated on an IBM 7090 computer.

1969

FORMULAE FOR SUCCESS

A successful lunar landing requires more than just rocket technology and computer power — it demands extensive software programming, as well. In this publicity still, three IBM programmers pose with a representative sample of the mathematical formulas involved in the Apollo 11 mission.

1969

PREPARING FOR LAUNCH

IBM designs and builds the digital computer and instrument unit that guide the massive Saturn V rocket during the Apollo moon missions. Here, IBMers stand on the Apollo 11 launch pad.

1969

AT THE CONTROLS

The lunar module ascent and descent team works in IBM's Realtime Computer Complex at NASA's Manned Spacecraft Centre in Houston, Texas.

1969

ONE GIANT LEAP

The cover of the August 11, 1969 issue of IBM News Magazine features an illustration of the first step on the moon.

1969

CONGRATULATIONS TO IBM

In the euphoria that follows this historic Apollo 11 moon landing, George E. Mueller, Associate Administrator for Manned Space Flight at NASA, pens this letter of congratulations to IBM Chairman, Thomas Watson Sr.

1969

MOON LANDING

IBM computers help NASA land the first men on the moon.

Computing Gets Personal

Building on its success in the 1960s, IBM solidifies its position as the IT industry's — and the business world's — most profitable, admired and iconic corporation, and continues to develop innovative new products throughout the 1970s. From the magnetic-strip technology used on credit cards, to floppy disks, to the Consumer Transaction Facility (an early form of today's ATM), IBM's ingenuity is felt everywhere. As a new era of computing begins to take hold in the 1980s, the company creates standards that legitimise the PC, turning it from a hobbyist device into an indispensable tool of modern life — in homes, businesses and schools around the world. The company also continues to push the boundaries of scientific discovery, with five IBM researchers sharing three Nobel Prizes in Physics. However, despite its depth and breadth of innovation, by the late 1980s IBM finds itself thrown into turmoil by the very revolutions it helped launch — initiating a downturn and period of unrest for the company that will persist into the following decade.

BY 1977, IBM'S WORKFORCE EXCEEDS
300,000 EMPLOYEES.

—

IN 1985, IBM REACHES $50 BILLION
IN REVENUES.

61

1970

SYSTEM/370

The successor to the legendary System/360, the System/370® is fully compatible with its predecessor's architecture and software applications, but is more reliable and several times faster. It is also the first computer to feature a memory composed entirely of monolithic circuitry.

1971

BAY AREA RAPID TRANSIT SYSTEM

An IBM-built fare-collection system is installed for the Bay Area Rapid Transit System (BART), the new San Francisco, California, commuter line.


1971

FLOPPY DISK

IBM introduces floppy-disk magnetic storage, so named because of its flexibility. The new storage medium sets a standard for small systems, allowing information to be transferred easily from one computer to another.

1973

3340 DISK UNIT

IBM introduces the 3340 disk unit (also known as "Winchester" after IBM's internal project name), an advanced technology that more than doubles the information density on disk surfaces.
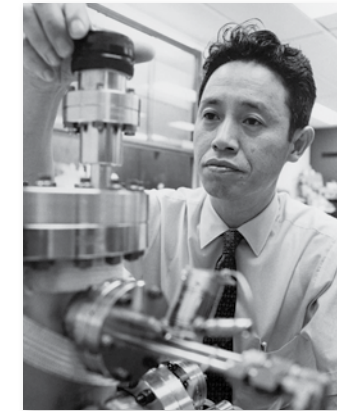
1973

NOBEL PRIZE

Dr. Leo Esaki, an IBM Fellow who joined the company in 1960, shares the 1973 Nobel Prize in Physics for his 1958 discovery of the phenomenon of electron tunnelling.

1974

TELEMETRY ONLINE PROCESSING SYSTEM

IBM signs a contract with NASA to develop a telemetry online processing system (TELOPS) that will accept and process experimental data from satellites and store up to one trillion bits of information.

1971

RUSSIA

IBM's participation in a technology fair in Leningrad marks the first time in 33 years that the company has conducted business with the Soviet Union. (However, Soviet Premier Nikita Khrushchev did visit IBM's San Jose facility in 1959.)

1972

CHINA

IBM hosts only the third official delegation from mainland China to the U.S. since 1949. The visitors, a group of leading Chinese scientists, tour IBM's Watson Research Laboratory in Yorktown Heights, New York.

1972

ISRAEL

The IBM Haifa Research Lab opens as the IBM Scientific Centre. Over the next several decades, the lab will be the site of valuable research in areas such as storage systems, verification technologies, multimedia, information retrieval and life sciences.

1975

5100 PORTABLE COMPUTER

IBM introduces the 5100 Portable Computer, a 50-pound desktop machine that puts computer capabilities at the fingertips of mobile problem-solvers. More "luggable" than portable, the 5100 can serve as a terminal for the System/370® and costs up to $20,000.

1975

FRACTAL GEOMETRY

IBM researcher Benoit Mandelbrot develops the principles of fractal geometry, making it possible to describe mathematically the kinds of irregularities that exist in nature. Mandelbrot's work in fractals will earn him the 2003 Japan Prize for outstanding achievements in the science and technology of complexity.

1976

U.S. SPACE SHUTTLE PROGRAMME

The Enterprise, the first vehicle in the U.S. space shuttle programme, makes its debut at Palmdale, California, carrying flight computers and special hardware built by IBM.

1979

UPC

IBM introduces a supermarket checkout station that uses holographic scanner technology to read Universal Product Code (UPC) stripes on merchandise. IBM developed UPC in the mid-1970s to embed pricing and identification information on individual retail items.

1980

IBM 3380

IBM introduces the 3380 Direct Access Storage Device. The 3380 gives users the ability to store up to 2.52 billion characters of information — almost four times the amount afforded by previous IBM storage devices — while new film head technology allows data to be read and written at three million characters per second — two-and-a-half times the previous rate.

1980

RISC ARCHITECTURE

IBM produces the experimental 801, based on the Reduced Instruction Set Computer (RISC®) architecture developed by IBM researcher John Cocke. RISC technology is the basis of most workstations in use today. Its simplified machine instructions for frequently used functions boost computer speed greatly. Cocke receives both the National Medal of Technology and the National Medal of Science for his innovation.

1986

NOBEL PRIZE

IBM Fellows Gerd K. Binnig and Heinrich Rohrer of the IBM Zurich Research Laboratory win the 1986 Nobel Prize in Physics for their work in scanning tunnelling microscopy.

1987

NOBEL PRIZE

J. Georg Bednorz and IBM Fellow K. Alex Müller of IBM's Zurich Research Laboratory receive the 1987 Nobel Prize in Physics for their breakthrough discovery of high-temperature superconductivity in a new class of materials.

1988

NATIONAL SCIENCE FOUNDATION NETWORK

IBM collaborates with MCI Communications and the University of Michigan to form the National Science Foundation Network, a computer network that provides the infrastructure and lays the groundwork for the explosive growth of the Internet in the 1990s.

1985

IBM SOUTH AFRICA PROJECTS FUND

During apartheid, IBM creates the IBM South Africa Projects Fund to maintain its positive influence in the country. The fund's contributions include both economic and technical support in the areas of education, health and job creation for local citizens.

1985

WORKING MOTHERS

Working Mother Media's "100 Best Companies for Working Mothers" award is bestowed upon IBM for its pioneering work/life programmes. The company will remain on the "100 Best" list every following year, holding a place in the top 10 starting in 1987.

1986

CORPORATE CONTRIBUTIONS

IBM's corporate contributions total $189 million, establishing IBM as the largest corporate contributor worldwide
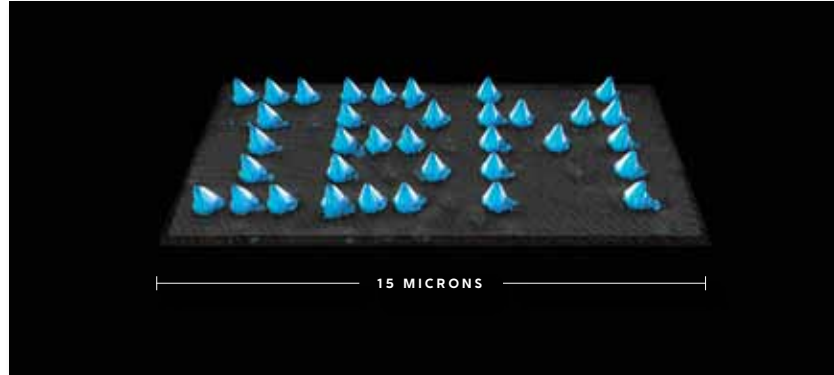

1990

ENVIRONMENTAL PROGRAMME

IBM joins other leading U.S. corporations to establish a worldwide programme to improve environmental management practices and performance. Since 1973, IBM has invested more than $1 billion to provide environ-mental protection for the communities in which its facilities are located.

1990

FUNDING DEPENDENT CARE

IBM creates the IBM Funds for Dependent Care Initiatives and commits $25 million to dependent care — the largest such commitment of any U.S. corporation — to help meet employees' needs in balancing their work and personal lives.

15 MICRONS

1990

SPELLING WITH ATOMS

IBM scientists discover how to move and position individual atoms on a metal surface using a scanning tunnelling microscope. The technique is demonstrated at IBM's Almaden Research Centre, where scientists assemble the letters "I-B-M," one xenon atom at a time.

1991

POLAND

Having conducted business in Poland since 1935, IBM forms a Polish subsidiary in 1991. By the year 2000, IBM will be the country's third largest information technology company.

1981

COMPUTERS FOR THE MASSES

IBM's leadership in personal computing dates to the mid-1970s, when the company identifies opportunities for smaller, more user-friendly devices aimed at science, engineering and business users. When the IBM PC is unveiled in 1981, it becomes the first computer of its kind to be recognised and embraced as a valuable tool for businesses, homes and schools alike. Over the next two decades, IBM continues to expand and refine its line of personal computers, climaxing with the overwhelming success of the ThinkPad at the turn of the 21st century.

1981 COMPUTERS FOR THE MASSES

1975

5100 PORTABLE COMPUTER

Weighing approximately 50 pounds and sized slightly larger than an IBM typewriter, the IBM 5100 Portable Computer puts computing capabilities at the fingertips of engineers, analysts, statisticians and other problem-solvers. Available in 12 models providing 16K, 32K, 48K or 64K positions of main storage, the 5100 sells for between $8,975 and $19,975.

1981

5150 PERSONAL COMPUTER

IBM unveils its smallest, lowest-priced computer system to date: the IBM Personal Computer. Designed for business, school and home, and selling for as little as $1,565, the easy-to-use system relies on readily available, "off-the-shelf" components from external vendors. This open architecture approach dramatically accelerates the acceptance of the IBM PC as an industry standard, and gives rise almost overnight to the personal computer industry.

1983

PERSONAL COMPUTER XT

IBM extends its personal computer line with the introduction of the Personal Computer XT. The XT's storage capability is nine times larger than that of prior IBM personal computer models, and the machine features networking capabilities that make it ideal for businesses with established network infrastructures. With a price tag of $4,995, the XT is also affordable enough to serve as a stand-alone productivity tool for professionals and small businesses.

1983

IBM PCJR

With an entry-level configuration that costs less than $700 — half the price of the immensely popular IBM PC — the PCjr targets the home, classroom and office markets as the most affordable personal computer of the time. However, due to a widely criticised keyboard design, as well as price and compatibility issues, it struggles to find acceptance in the marketplace.

1987
PERSONAL SYSTEM/2

Just six years after the introduction of the IBM PC, the company launches its third generation of personal computers with the introduction of the IBM Personal System/2. The PS/2 family of computers, with prices ranging from $1,695 to $10,995, comprises a variety of models that feature powerful new technologies while remaining compatible with legacy IBM PC software applications. Although generally too expensive for the consumer market, the PS/2 is a hit in business circles.

1992
THINKPAD 700C

Although IBM has built portable computers since the 1970s, the ThinkPad 700C — reasonably priced at $4,350 — represents the company's renewed focus on the needs of the mobile user. Featuring a stylish black case, the innovative red TrackPoint pointing device and the largest colour screen ever available in a laptop, the ThinkPad 700C quickly becomes the fashionable computing choice for business travellers


1995
THINKPAD 701C

IBM introduces the ThinkPad 701C as a marvel of mobile computing design. Open the 701C, and the machine's two keyboards ingeniously spread and interlock to form a comfortable 85-key typing surface that overhangs the unit's case by almost one inch on each side.

2001
THINKPAD TRANSNOTE

Targeting mobile professionals, the ThinkPad TransNote combines a mobile computer with a digital notepad in a stylish package to enable busy users to share handwritten information via e-mail, word processing documents and presentations.
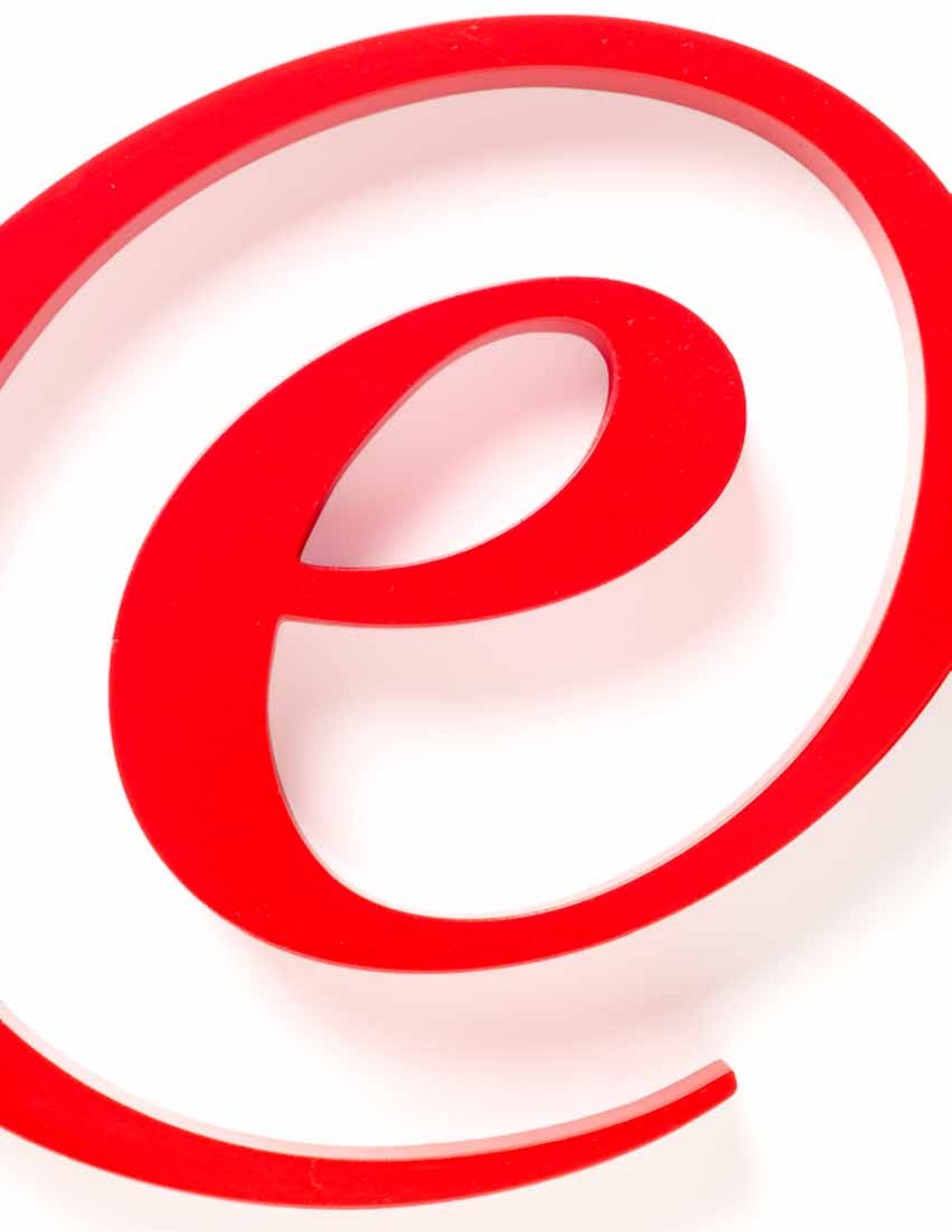
The Birth of e-business

Entering the 1990s, IBM confronts its most significant strategic challenges since the Depression and successfully undertakes one of the great turnarounds in business history. It moves into major new growth businesses, principally services and software, and embraces open standards for computing. The company also fundamentally reshapes its culture to refocus on clients and to be more agile, responsive and collaborative. This transformation coincides with the advent of the Internet, and IBM is a pioneer in helping clients capitalise on the new possibilities of global networked computing and business — what it dubs "e-business." As the 20th century comes to a close, IBM stands, once again, at the forefront of global technology and business.

IN 1996, IBM TOPS $75 BILLION
IN REVENUES.

1994

CZECH REPUBLIC

With business dating back to the 1920s, IBM Czech Republic was one of the company's earliest European offices. The operations were later nationalised, but were reestablished in 1991, with new offices built three years later.

1994

REINVENTING EDUCATION PROGRAMME

IBM launches a groundbreaking school reform programme that demonstrates how technology can help spur and support higher student achievement and improve teacher instruction. Today, the $75-million, global programme has resulted in significant gains in core academic areas for students in grades 7 to 11.

1995

CHINA RESEARCH LABORATORY

The IBM China Research Laboratory (CRL) is the company's first in a developing country. CRL is a model for tapping and nurturing local talent and expertise, drawing the majority of its staff from China's leading universities.

1995

Y2K

Four years before headlines start to warn of "millennium meltdowns" and "the Y2K bug," IBM begins to plan, staff and implement a programme to help its clients prepare for the Year 2000 challenge.

1996

ALPHAWORKS/ DEVELOPERWORKS

IBM introduces two Web portals aimed at tapping into the creativity and entrepreneurial spirit of the masses: alphaWorks® offers direct access to the latest technologies from IBM Research while developerWorks provides resources for software developers using open standards.

1996

IBM GLOBAL SERVICES

With the formation of IBM Global Services, which grows to become the world's largest provider of technology services and business consulting, IBM defines the outlines of a new model for the IT industry.

1995

GLOBAL DIVERSITY TASK FORCES

As part of its commitment to diversity, IBM convenes eight executive-level diversity task forces representing Asians; blacks; gays, lesbians, bisexuals and transgenders; Hispanics; men; Native Americans; people with disabilities; and women, to help the company continually understand the interests, talents and needs of its workforce.

1995

IBM 701C THINKPAD

IBM introduces an award-winning notebook design, the 701c "butterfly" ThinkPad.® The "butterfly" nickname stems from its split keyboard design, which allows a full-sized keyboard to be housed in a subcompact notebook computer.

1996

W3

IBM's first Web-based intranet rolls out in late 1996. By the following year, the site's search function handles two million hits per day. By the year 2000, it is rated by IBMers as their most trusted, useful information source — ahead of managers and co-workers.
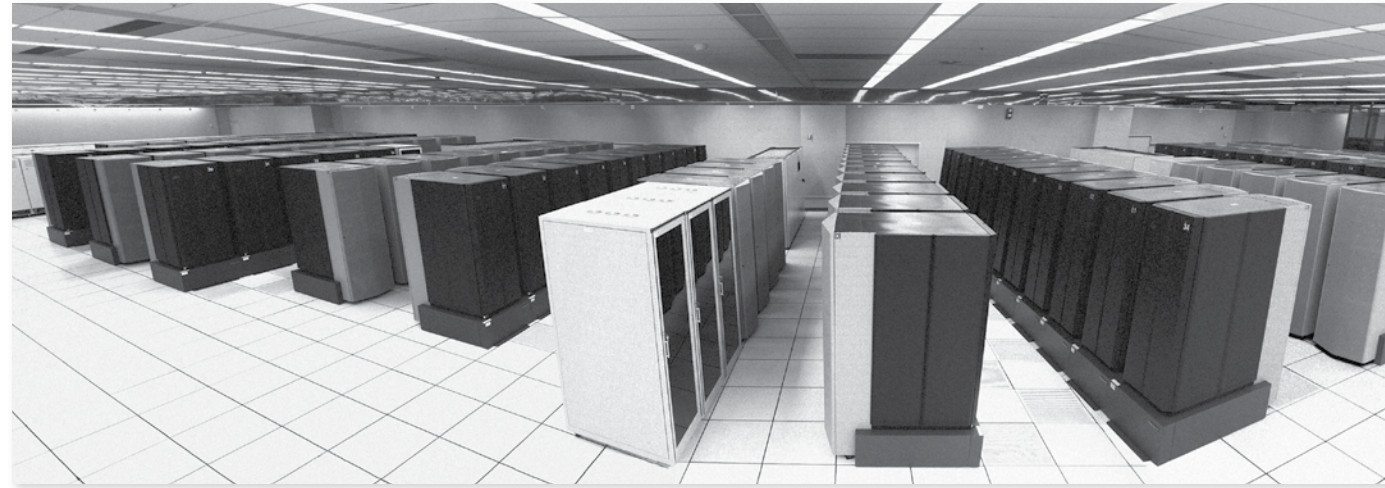

1997

COPPER TECHNOLOGY

IBM scientists announce CMOS 7S, a breakthrough semiconductor manufacturing process that uses copper instead of aluminium to link transistors in chips. The culmination of 30 years of experimentation and inquiry, the innovation results in about a 33 percent boost in chip performance.

1997

HOME PAGE READER

IBM introduces Home Page Reader, an award-winning Web browser that uses speech to help the blind and visually impaired use the Internet. The first product of its kind, Home Page Reader was developed by blind IBM researcher Chieko Asakawa.

1998

BLUE PACIFIC

U.S. Vice President Al Gore announces Blue Pacific, the world's fastest computer, developed by IBM and the U.S. Energy Department's Lawrence Livermore National Laboratory.

2002

300MM FABRICATION PLANT

IBM begins operations at its state-of-the-art chip production facility in Fishkill, New York. The semi-conductor manufacturing plant leverages realtime information to control the fabrication process automatically, enabling employees to be more productive and responsive to clients' product-status inquiries.

2002

BLADECENTER

One of the most powerful blade systems in the industry, IBM's BladeCenter® maximises resource productivity while minimising IT and network administration costs.

1997

STATE HERMITAGE MUSEUM

IBM launches a digital library project with Russia's world-renowned State Hermitage Museum. Built with IBM software and hardware, the library helps the Hermitage's Web site become the museum's face to the world.

2000

LINUX

IBM announces the general availability of Linux® for the System/390® (S/390) mainframe platform. The company adds S/390 hardware to its supported environments for Linux, completing a list of systems that extend from laptops to the largest mainframes it produces.

2001

ECLIPSE

Based on a vision of community-style software development, IBM publishes $40 million of source code for the Eclipse® platform and Java® Development Tools project. More than 150 companies unite around this seminal contribution and form the Eclipse Foundation to help the open-source developer ecosystem grow and succeed.

1997 DEEP BLUE

1997

DEEP BLUE CHESS MATCH

Perhaps the most viewed chessboard in history — the one on which IBM's Deep Blue supercomputer defeated the reigning World Chess Champion — is seen live by millions on ibm.com.

1997

CHESS LESSONS

A. Joseph Hoane Jr., F.H. Hsu and Murray Campbell of the Deep Blue team hone the computer's skills.

1997

CHESS TECHNOLOGY

Feng-hsiung (F.H.) Hsu, IBM researcher and member of the Deep Blue team, holds a circuit board equipped with chips optimised for playing chess.

1997

EN ROUTE TO THE MATCH

IBMers roll Deep Blue along a New York City street on the way to the match.

2008

A SUPERCOMPUTING BENCHMARK

Despite its victory against a human opponent, IBM's Deep Blue is not the most powerful supercomputer of its day. Indeed, the true significance of the machine lies in the attention it brings to the field of supercomputing, both within IBM and throughout the public sphere. More than a decade later, Deep Blue will remain a global benchmark for supercomputers like IBM's Blue Gene.

The New York Times

SUNDAY, MAY 18, 1997

What Deep Blue Learned in Chess School

1997

DEEP BLUE

In a six-game match, IBM's Deep Blue®, an RS/6000® SP computer capable of calculating 200 million chess positions per second, defeats the World Chess Champion, marking the first time a reigning world champion has lost a match to a computer opponent in tournament play.

DEEP BLUE VIDEO TRANSCRIPT

Paul Horn, Senior Vice President, IBM Research:

Think about a computer that's 1,000 times faster than Deep Blue, about a quadrillion operations a second. If you take all the world's fastest computers, the top 40 of them, put them all together, Blue Gene will be 40 times faster than the sum total of all of them.

Today you walk into a doctor's office and you get a drug that's really independent of how sick you are, who you are personally, your age, your height, even your weight.

If you could understand the human genome through protein folding, we'll be able to prescribe drugs that are tailored to your individual DNA, perfect match, the drug for exactly what's wrong with you and exactly who you are.

You can think of Blue Gene as Deep Blue having grown up to do a real job. Think of a computer that, like Deep Blue, will allow us to change the future of computing, but also change the future of health care.

1997 **E-BUSINESS**

1998

IBM AND THE U.S. OPEN

Through the use of IBM technology, the official U.S. Open Web site is able to bring every detail of every point to fans around the world.

1998

IBM AND VIDEOSERVE

IBM helps VideoServe harness the power of the Internet to become the world's most complete home video store — offering virtually every VHS, LaserDisc and DVD title on the market.

E-BUSINESS VIDEO TRANSCRIPT

IBM e-business commercial

Man 1: Says here, "The Internet is the future of business." We have to be on the Internet.

Man 2: Why?

Man 1: Doesn't say.

Interview with Louis V. Gerstner Jr., IBM Chairman & CEO

e-business is about the search for new models: new models of consumer behaviour, new models of economic behaviour, new models of institutional competitiveness. The underlying driver is technology, but sometimes I think the media gets carried away with some of the technology, and we fail to understand this is going to change every institution in the world. Everybody is going to change.

This is like the harnessing of electricity or the Industrial Revolution. This is the ultimate revolution of computers and communications. What do I mean by that? e-business is all about "everybody is going to be connected", and when everybody gets connected, the implications are profound.

We need to think about all of the transactions that take place in the world, because that's what connection is all about. It's about transactions. So think about doctors, physicians: how they learn, how they keep up-to-date, how they treat patients. It's all going to be enhanced through the use of network technology.

Think about teachers, think about how we learn. Think about how governments deliver services. All of these transactions are going to move partially or totally to a networked environment, and that creates very different economic models. It reduces cost. It increases reach.

So if your competitors get there before you do, you have a very serious problem. For every single industry in the world, what will be the changes brought about by the networked world? What are the e-business applications that they would want to implement in banking, in retailing, in government, in communications? And so it's the central driving strategy behind the company's products, and the way we go to market.

IBM e-business commercial

Man 1: What are you doing?

Man 2: I'm figuring out what our Web site should be. We can have the spinning logo, like this, or a flaming logo. It is cool.

Man 2: You know what would be a great idea? If people with PCs, anywhere, could order our products. And that was all tied together: inventory, billing, vendors. You know, the works. Then that would change everything.

Man 1: I don't know how to do that.

1997dik

IBM INTRODUCES E-BUSINESS

In a speech considered by many to be a wake-up call to Wall Street on the implications of the networked world, Gerstner describes the Internet's ability to challenge centuries-old business models and to transform the nature of transactions between individuals and institutions.

For more information about IBM and its history, visit
http://www.ibm.com/ibm/history/

For more information about IBM's privacy policy visit
http://www.ibm.com/privacy/uk/en