

Background: Design @ IBM

IBM's latest transformation comes at a time when consumers expect enterprise IT to be as intuitive as their devices. There's also been a change in the people who develop and purchase enterprise IT, and they expect technology to be delightful and easy to use. And retailers, banks and sports stadiums all want to create personalized, iconic digital experiences for consumers to keep them coming back.

Today IBM is using design - and design thinking – at scale, to deliver iconic user experiences to clients. IBM is also building a global culture of design and the world's largest design team. The company has more than 1,250 designers, with the goal of reaching 1,500 by 2017, and has become one of the top draws for talent at d-schools, startups and agencies.

IBM Designers work on:

- Software for analytics, cloud, Watson, security, mobile, etc. - more than 100 projects currently in the works.
- Consulting services via IBM Interactive Experience, or IBMix, one of the largest digital agency in the world. Teams focus on data-driven design for everything from virtual showrooms for Jaguar's Land Rover, to making the Atlanta Falcon's new stadium immersive and interactive, to building business apps for the Apple Watch.
- IBM brand experience and digital marketing, where designers create content, experiences and interactions inside and outside the company.
- Hardware (IBM mainframe and Power systems) and even areas like open source.

Global Fast Facts

In 2012, IBM had 375 designers. By 2015, the total grew to 1,100 across the company – perhaps the largest design team in the world. That number has grown to 1,250 and will exceed 1,500 designers by 2017.

IBM product teams are currently working on 100 projects, using IBM Design Thinking and IBM Design Language. Multi-disciplinary teams work on products that support IBM's strategic imperatives – cloud, analytics, mobile, social and security, and IBM's big push into “cognitive business” and Watson.

IBM design teams also work on 30 “incubator” projects as part of IBM Design Bootcamp for new hires and the IBM Design Maelstrom Internship program. Incubator projects explore bold concepts for the future of IBM's products - some of these projects led to new offerings like Bluemix, Watson Developer Cloud and IBM Verse.

25,000 IBMers have received design thinking education and are working on teams delivering products and solutions for clients. By the end of 2016 that number will be 100,000. About 200 multi-disciplinary teams across IBM are using IBM design thinking today, split equally between product and client-facing teams.

IBM Design Thinking is also used more during the pursuit phase of client work, establishing IBM as a partner who listens and helps uncover unique human-centric insights alongside our clients. This approach has directly contributed to winning dozens of engagements.

A Draw for Talent

- Over 12,000 applicant's portfolios have been reviewed with an 82% acceptance rate. We've hired from over 75 schools including Stanford, SCAD (Savannah College of Art and Design), RISD (Rhode Island School of Design), Carnegie Mellon, School of Visual Arts, Parsons, Michigan, Georgia Tech
- Professional hires from companies (Microsoft, frog design, Wolf Ollins, project202, adaptive path, SapientNitro, MIT Media Labs) and organizations including AIGA and IxDA
- New hires specialize in front end development, user experience (UX) design, visual design or design research. They immediately contribute to product teams and practice design thinking at scale.

IBM Distinguished Designers

Twenty years ago, IBM established the role of Distinguished Engineer, establishing engineering innovation as critical to IBM's success. DEs, who represent their technical craft at the highest levels, have propelled IBM as a leader in technical innovation, including our industry-leading patent portfolio.

Today IBM named its first Distinguished Designers, who will drive innovation by leading the development of IBM's Design practices, initiatives, technical vitality and reputation. IBM recognizes design as a technical craft on a par with engineering as critical to the long term success of the company, and key driver of innovation and value for our clients. They will report to Phil Gilbert, IBM Design General Manager.

IBM Design is three years into its mission of driving a sustainable culture of design at IBM. IBM has built the world's largest design team, with 1,250 designers and 29 design studios around the world. Designers work on multi-disciplinary teams on IBM products, digital engagement platforms for clients via our agency, IBM Interactive Experience, and branding and marketing initiatives.

IBM Design Bootcamps

To reorient IBM's culture around design, IBM holds three-month IBM Design bootcamps for new hires. IBM also holds 2-day workshops for IBM executives and week-long sessions to establish the right tools and techniques for product and project multi-disciplinary teams. IBM also holds workshops for clients.

For new hires: after a 6-week intro, teams of 7-8 people work on "incubator" projects that evolve into strategic products, such as Bluemix, IBM's cloud development platform.

Each project has an "executive sponsor" from a business unit and a product manager to understand market prospective. Teams work on user experience and market perspective alongside the project manager, bringing new understanding to how users think and feel about the experience. In past IBM thought of markets in terms of size; now markets are made up of users, and IBM wants to understand users and how they work. Every project, going back to Summer 2013, has directly shaped a commercial product release that followed it, either by its ideas and concepts. Also, Bluemix, Watson Ecosystem, Watson Discovery Advisor, Predictive Maintenance (Analytics), QRadar (Security), Cloud Marketplace, PureSystems all had their commercial release strongly shaped as Design Incubator Projects.

IBM Studios

IBM Studios are the heart of IBM's design rebirth , with over 30 around the world, including Singapore, Seoul, Atlanta, Austin, Boeblingen, Boston Chicago, Dubai, Dublin, Groningen, Hamburg, Hursley, London, Madrid, Mexico City, New York, Ottawa, Paris, Prague, Raleigh, Rome, Sao Paulo, San Francisco, Shanghai, Toronto, Warsaw

Examples of Studio projects:

Atlanta –Atlanta Falcon's Stadium)

Austin –Bluemix, Hybrid Cloud, Cloud Data Services, Analytics, Security, Watson, Mobile - 50,000 square feet, with 25K expansion in 2016

Böblingen –System z

Boston –Verse, Boston Children's Hospital

Dublin – Verse, Mobile for Care Management, Security, Smarter Workforce

Hursley – Internet of Things, System z, analytics, Cloud

London –Jaguar, Wimbledon and Nationwide

New York –Watson Health, Commerce, Citi app for Apple Watch

Ottawa – Analytics

San Francisco – Commerce

Shanghai – Commerce, Pure Application System

Toronto - Watson Analytics, Commerce, Air Canada

History of IBM Design

Thomas Watson, Jr. was the force behind the creation of IBM's Corporate Design Program, the first of its kind in America. It went beyond architecture, sculpture, photography, film and graphic design masterpieces, but introduced the idea of harmony between business and design.

The shift had its roots in a stroll down Fifth Avenue in New York that Watson Jr. took in the early 1950s. He stopped at an Olivetti shop where typewriters were set out on sidewalk stands for passersby to try out. The machines had sleek designs and a variety of colors. Inside, the shop was bright and modern looking. In contrast, the display areas in IBM's offices in those days were dimly lit and its computers were drab and boxy. The

lobby of the headquarters on Madison Avenue had been designed to please Thomas Watson Sr.'s early 20th century aesthetic: it looked, his son wrote, like the "first-class saloon on an ocean liner." A few years later, as Watson Jr. was preparing to take over as IBM's chief executive, he decided, "I could put my stamp on IBM through modern design."

Later, in a 1973 lecture at the University of Pennsylvania, Watson Jr. declared that "good design is good business."

Shortly after Thomas Watson Jr., became president of IBM in 1956, he worked with consultant Eliot Noyes. His goal was to create a first-of-a-kind corporate design program that would encompass everything from IBM's products, to its buildings, logos and marketing materials. Noyes recruited some of the best creative talent in the world as consultants, such as Paul Rand, and Charles and Ray Eames—to work with the program. For the next 20 years, under the guidance of Watson Jr., these four formed the core design team for IBM, working closely with each other and with Noyes's office of architects and designers—as well as IBM internal designers worldwide—to shape how design could express the character of IBM.

Noyes produced designs himself, including that of the iconic IBM Selectric typewriter. Saarinen designed the company's Thomas J. Watson Research Center in Yorktown Heights, New York, a long curve of glass and stone that gives researchers inspiring views of the countryside even while encouraging them to interact with one another. Rand's series of IBM logos culminated in a 1972 version formed from stacked stripes, suggesting speed and dynamism, which made the company's initials instantly recognizable worldwide. The "eight-bar" logo is still in use today. The husband and wife team of Charles and Ray Eames were best known at the time for their molded-plastic and plywood chairs. But for IBM, the couple designed everything from the exhibit at the 1964 World's Fair, to the film Powers of 10, to the famous exhibit Mathematica, to dozens of educational films for school and television that helped teach generations about science, math and technology.

IBM's early philosophy of design has influenced many other enterprises and institutions in the decades since Noyes. In recent years, other companies have employed the principles of "design thinking," including observation of how humans interact with new things, rapid prototyping and collaboration across multidisciplinary teams.

Today, IBM is scaling design - and design thinking - at a scale no company has attempted. Design thinking drives the creation of hundreds of products, services and digital platforms for engaging IBM clients and employees.

Consider this: at the same time Watson launched the design program in the 1960s, he was also building the sales force of the future. Watson recruited liberal arts majors from elite Ivy League schools who went through six-month apprenticeships to learn how to sell. This created a sales force that could relate to IBM customers and teach the C-suite what technology could do for their industries. It also gave rise to stereotypical IBMers in

blue suits and white shirt.

Fast forward to today, where IBM CEO Ginni Rometty is rapidly reinventing IBM, breaking old models and creating a new way to work. The company is being infused with design thinking at unprecedented scale. We are recruiting from the top design schools to build the biggest design team in the world. As for the old blue suit-white shirt cliché, it's been replaced by sneakers, hoodies and tattoos.