A LEGACY OF INVENTING THE FUTURE

If you're reading this on a computer, it's more than likely we've played a part in making that happen. This is because at PARC, we've been pioneering developments, creating systems and devising solutions that improve the human experience of technology for almost half a century. We're proud of our history of creative innovation, and we're always looking to a future where our Focus Areas can be applied and achieved.

Since its inception in 1970, PARC has pioneered technology platforms, invented groundbreaking solutions, generated over thirty startups, and enabled the creation of an estimated $1T worth of new companies and new industries. We live at the leading edge of innovation, merging creative imagination, scientific investigation, strategy, and commercialization savvy to pioneer technological change.

Today, PARC continues the research that enables scientific breakthroughs, commercial opportunities, and new ventures. We provides custom R&D services, expertise, technical best practices and intellectual property to a whole range of companies, from Fortune 500 and Global 1000 firms to startups and government agencies all over the world. With our help, organizations can reduce risk, accelerate their time to market and create new opportunities that would otherwise not exist.

If you would like to know more about how you can benefit from our history and future, visit Working with PARC.

PARC History Timeline

1970: PARC Founded

Xerox Corporation assembles a team of world-class experts in information and physical sciences to become what is known as 'The Architects of Information.' The company establishes the Xerox Palo Alto Research Center (Xerox PARC) under the direction of Dr. George Pake. The charter for Xerox PARC is to create 'The Office of the Future.'

1971: Laser printing

Xerox PARC modulates a laser to create a bit-mapped electronic image on a xerographic copier drum. Not only does this demonstrate a novel way to print documents, but this invention of laser printing enables seamless rendering of digital documents onto paper, creating a multibillion dollar printing business for Xerox.

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within a local area network. The benefit is that components can join or leave the network without disturbing data traffic. The memo's author coins the term "Ethernet" to describe the network. Ethernet grows into a global standard.

1973: Superpaint frame buffer

Xerox PARC computer scientists record the first video image on the first computer paint system – a graphics program and framebuffer computer. This paves the way for the earliest computer animations and later earns its inventors an Emmy and an Academy Award.

1974: WYSIWYG

Xerox PARC coins the phrase to describe cut-and-paste bit-mapped editing: What You See Is What You Get (also known as 'wizzy-wig'). This year, Xerox PARC also demonstrates the seminal Bravo word processing program (which leads to Microsoft Word) and device-independent imaging (which leads to Page Description Languages and influences subsequent design of Postscript).

1975: Graphical user interface (GUI)

Xerox PARC debuts the first GUI, which uses icons, pop-up menus, and overlapping windows that can be controlled easily using a point-and-click technique. The GUI famously (or infamously) influences the development of all subsequent personal computer interfaces.

1977: VLSI circuit design

Xerox PARC (with Caltech) defines a new representation of Very Large Scale Integration (VLSI) circuit design. This allows for greater computing power in more compact machines, reduces design time, and leads to a new generation of computer-aided design tools.

1979: Corporate ethnography

PARC pioneers the use of ethnography for human-centered technology design, work practice redesign, and more. It requires initiating collaboration among computer scientists, engineers, anthropologists, sociologists, psychologists, and other social scientists. This approach leads to improvements in many workspaces, office products, and processes.

1979: Natural language processing

To enable spell-checking, dictionary, and other tools, Xerox PARC invents computational linguistic technologies based on understanding the structure of language. These lead to computer-automated visual recall, intelligent retrieval, and linguistic compression…and later enable deep meaning-based language parsing systems for search, text analytics, and more.

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1983: a-Si for printing

A one-inch array of amorphous silicon (a-Si), thin-film transistors is used to drive a small Corjet ionographic printhead. This technology enables Xerox to offer lower cost multifunction machines. Evolving expertise in a-Si thin-film transistors and sensors will become the backbone for many large-area electronic technologies.

1986: Multi-beam lasers

Xerox PARC is home to the world's first dual-beam lasers. These print twice as fast as single beams. Multi-beam lasers become a key enabler for high-speed, high-resolution production printing systems.

1987: Unicode/multilingual computing

Xerox PARC designs a 16-bit coding system to represent any world script – in documents, user names, file names, or network services – in any combination with a single encoding. These scripts lead to the ISO/IEC 10646 and the corresponding Unicode industry standard that allow computers to consistently represent text.

1988: Ubiquitous computing

The term 'ubiquitous computing' is coined at Xerox PARC to describe a future where people seamlessly access resources and control environments using mobile devices. Xerox PARC invents and builds fundamental devices that enables this to happen. Examples include the palm-sized PARCTab, notebook-sized PARCPad, lightweight portable document reader, and flexible computational infrastructure.

1989: Embedded data glyphs

After inventing data glyphs, Xerox PARC pioneers the development of embedded data schemes that transform paper, and other surfaces, into computer-readable interfaces. Applications evolve to include check verification, smart paper, tracking codes, and much more.

1989: Information visualization

Taking a unique approach to the visualization of information, Xerox PARC invents techniques that use human perceptual and cognitive capacities to help people make sense of large amounts of diverse information. The approach results in 3D rooms, the hyperbolic browser, and other 'Focus+Context' visualization techniques that present 3D views of information databases.

1990: a-Si displays and digital x-ray imaging

Xerox PARC builds the first x-ray imager using amorphous silicon. Continuing research will result in the formation of the company dpiX, which will market the world's highest resolution active matrix, liquid crystal, flat-panel display and a digital x-ray system for medical imaging – thereby eliminating the reliance on traditional film.

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multimedia over the Internet. Xerox PARC scientists will also play a key role in co-designing the IPv6 protocols that govern and define how the Internet works, as well as help develop the HTTP-NG protocol based on Inter-language Unification (ILU) from Xerox PARC.

1997: Blue laser

Xerox becomes the first printing company to create a blue laser. The reduced wavelength of a blue laser ultimately allows much higher resolution printing than is possible with the standard red and infrared lasers.

2000: Electronic reusable paper

A thin, flexible and portable document display technology invented at Xerox PARC. It looks and feels like paper; however, it can display different text and graphics when an electric charge is applied to it.

2000 Digital Rights Management (DRM)

Xerox PARC's concepts for trusted systems and digital property rights lead to the joint venture called ContentGuard. This DRM software offers content owners greater control and flexibility over the distribution of their material. To enable authorization of content access in a universal language, Xerox PARC develops eXtensible rights Markup Language (XrML).

2001: Biomedical systems

Xerox PARC partners with The Scripps Research Institute to develop instrumentation and information systems for accelerating discovery in the life sciences. In 2002, PARC demonstrates an operational prototype of the Fiber Array Scanning Technology Cytometer for screening blood samples about 1,000 times faster than automated digital microscopy.

2002: PARC established

To broaden PARC's ability to innovate, build breakthrough technology platforms, and develop business concepts for many different organizations, PARC is established as an independent company.

2007: Powerset deal

PARC and language search company Powerset sign an exclusive deal to commercialize breakthrough technology in consumer search. After three decades of research, PARC's natural language technology becomes ready to work with.

2010: PARC spins out PowerCloud systems

Walden Venture Capital and Javelin Venture Partners join with PARC to spin-out PowerCloud Systems, focused on offering cloud-managed networking solutions for small and medium-sized businesses.

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2017: PARC spins off Metawave

PARC reveals its intention to spin off wireless technology startup, Metawave, which builds technology solutions based on engineered metamaterials and Artificial Intelligence (AI) to commercialize smart beamsteering antenna systems for autonomous vehicles and 5G markets.

2023: PARC becomes part of SRI International

Signaling a new chapter for Silicon Valley, two veteran R&D leaders are combining minds to advance and accelerate world-changing science and technology.

Additional information

FOCUS AREAS

Our work is centered around a series of Focus Areas that we believe are the future of science and technology.

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LICENSING & COMMERCIALIZATION OPPORTUNITIES

We're continually developing new technologies, many of which are available for Commercialization.

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