HP Outlines Future Vision at 40th Anniversary of HP Labs

PALO ALTO, Calif., Feb. 21, 2006 – HP today announced a year-long observation of the 40th anniversary of HP Labs, the company's central research organization, and outlined an ambitious, far-reaching vision for the future of information and communications technology.

That future could include:

- Worldwide, connected, continuous, secure computing through virtually unstaffed, automated data centers;

- Bringing the power of digital technology to commercial printing, and creating ubiquitous, low-power, low-cost, lightweight displays that could convey multimedia information in formats as small as a wrist watch or as large as wallpaper.

- Advances in computing technology that could extend Moore's Law beyond the limits of classical physics and provide a quantum leap in performance, reliability and security, vastly improving information and communications services in business, education, medicine, government and daily life.

With a theme of "Innovation That Counts: 40 Years of HP Labs," the organization will hold a series of news announcements, an analyst meeting, an event for colleagues in the scientific-academic community and other activities throughout the year.

"Working with our partners in HP's business units, HP Labs has established a great tradition of technology transfer and made significant contributions to the company's success and the industry at large," said Dick Lampman, HP senior vice president, research, and director, HP Labs. "Today, more than ever, HP Labs is closely aligned with the company's strategies to bring the best products and services to our customers."

HP Labs also will continue to investigate entirely new business opportunities for the company and conduct fundamental scientific research in computing, IT services and imaging and printing.

"Forty years ago, few imagined personal computers, the Internet, the World Wide Web and inexpensive color printers or cameras that operated without film," Lampman said. "HP Labs researchers were among those who did and who worked, in fundamental ways, to help create the world we enjoy today."

HP Labs is working on improving future information and communications technology in several major areas:

- Reinventing the Economics of IT: The long-range goal is a worldwide network of

massive, secure, energy-efficient data centers that automatically allocate resources to users, based on market demand.

"Joel Birnbaum was one of the first to articulate the vision of utility computing – where customers use only the resources they need and pay just for what they use – when he was HP Labs director in the late '80s," said John Sontag, director, data center architecture and virtualization, HP Labs. "Today, HP is a leader in the effort to make that vision a reality."

- The Future of Imaging and Printing: HP, the acknowledged world leader in home and office printing, is exploring the potential to digitize all types of publishing – from brochures to periodicals to billboards. In addition, HP Labs is working on continued improvements in digital photography, video and projection; automatic publication composition; and future display technologies.

"We're working to revolutionize the world of commercial printing with digital technology, just as we with personal printing," said John Meyer, director, Digital Printing and Imaging Lab, HP Labs. "We are also studying paper-like electronic materials for portable information devices. These kinds of materials also could work for a wall display and you could change the décor of your home as often as you liked."

- Disruptive Technologies: HP scientists are exploring the realm of quantum computing to extend advances in semiconductor technology into the future.

"The researchers in our Quantum Science Research and Information Theory organizations are making breakthroughs not only in the underlying science, but the architecture and fabrication technologies that will enable an entirely new generation of computing," said Phil Kuekes, senior scientist and computer architect, Quantum Science Research, HP. "We expect these changes to continue the tradition of 'better, faster, cheaper' for decades to come and to provide applications in the future that – just like the Internet and digital photography 40 years ago – we can only dimly imagine today."

HP Labs – worldwide reach, global contribution
In addition to the headquarters site in Palo Alto, HP Labs has facilities worldwide. The second largest site is located in Bristol, U.K., where researchers explore a wide range of fields, including utility computing, enterprise network security, modeling and analysis for IT services, the digital media platform and related technologies, mobility and display technologies.

The HP Labs India facility, located in Bangalore, is targeted at the world's emerging economies by understanding relevant social, cultural, economic and other factors that influence how technology can be put to better use.

HP Labs Israel, situated in Haifa on the campus of Technion, the country's leading technology institution, conducts research on fundamental aspects of computer science and information theory, as well as competencies for imaging and printing.

HP Labs Japan, based in Tokyo, collaborates with telecoms and network service providers to advance technologies for next-generation rich media services. Researchers also are helping HP provide comprehensive mobile solutions and personalization of mobile content.

HP's newest lab, HP Labs China, located in Beijing, works with the public and private sectors to develop future information management systems.

2/2006