

# MEXICO AND INFORMATION TECHNOLOGIES

ICT is a driving force of the Mexican economy; it generates economic benefits as an industry in its own right and fosters the development of other productive sectors, while boosting competitiveness.

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PHOTOS ARCHIVE

**I**nformation and Communications Technology (ICT) is an acronym for systems which receive, handle and process information and that facilitate communications between two or more parties. As such, it has a wider scope than telecommunications and computers, due to its basic operational principal which relies on connectivity with other media via a network. It also has a wider reach than broadcast media such as television and radio, because it not only serves as a source of information but also allows for interactive communications. The merging of these technologies has tended toward the fusing of three separate technological paths –IT solutions, broadcast media and telecommunications– into a single system that the Organisation for Economic Cooperation and Development (OECD) has dubbed with the term “network of networks.”

ICT has created many opportunities for developing nations. An industry that generates economic benefits in its own right but that also has a competitive edge: its applications extend to areas like health, politics, public administration, education and research, cultural, social and even religious activities.

In recent years, ICT has become the backbone of the global information economy, giving rise to the so-called “information society.” As such, the development of the industry is essential to achieve competitiveness.

Indeed, Mexico’s improved competitive character can be largely attributed to ICT. Other factors include less red tape associated with the creation of new companies, which, in turn, makes for a more efficient financial system and greater confidence in the banking system. Furthermore, Mexico maintains macro-economic stability indicators, which place it in a privileged position in light of the recent global economic recession.

ICT is listed as a priority in Mexico’s National Science and Technology Plan. The National Council of Science and Technology (CONACYT) is the main source of financing in this area and research is conducted by public and private universities and government research centers. Of the total amount of patents issued in Mexico, close to 10% are ICT-related. By the same token, approximately 15% of Mexico’s researchers are currently working on ICT-related projects.

The Mexican government has three ICT priorities:

- The development of the software industry
- The creation of digital supply chains
- e-governance

In order to foster the development of the software industry, in 2004 the Ministry of Economy introduced PROSOFT, a program that offers assistance in the areas of ICT services, Business Process Outsourcing (BPO), contact and call centers, embedded



software, on-demand multimedia and video games, business intelligence, information security and educational software representing areas with the highest potential. This sector is estimated to post an annual average growth of 10% by 2014, supported by R&D groups focused on the global market.

ICT is strategic to the development and implementation of state-of-the-art information and communications systems to fight organized crime. One example of that is *Plataforma México*, designed to improve organization in the area of public safety.

In Mexico, three areas of opportunity have been singled out:

- Radio Frequency Identification (RFID)
- Mobile applications
- Outsourcing of business processes (application development)

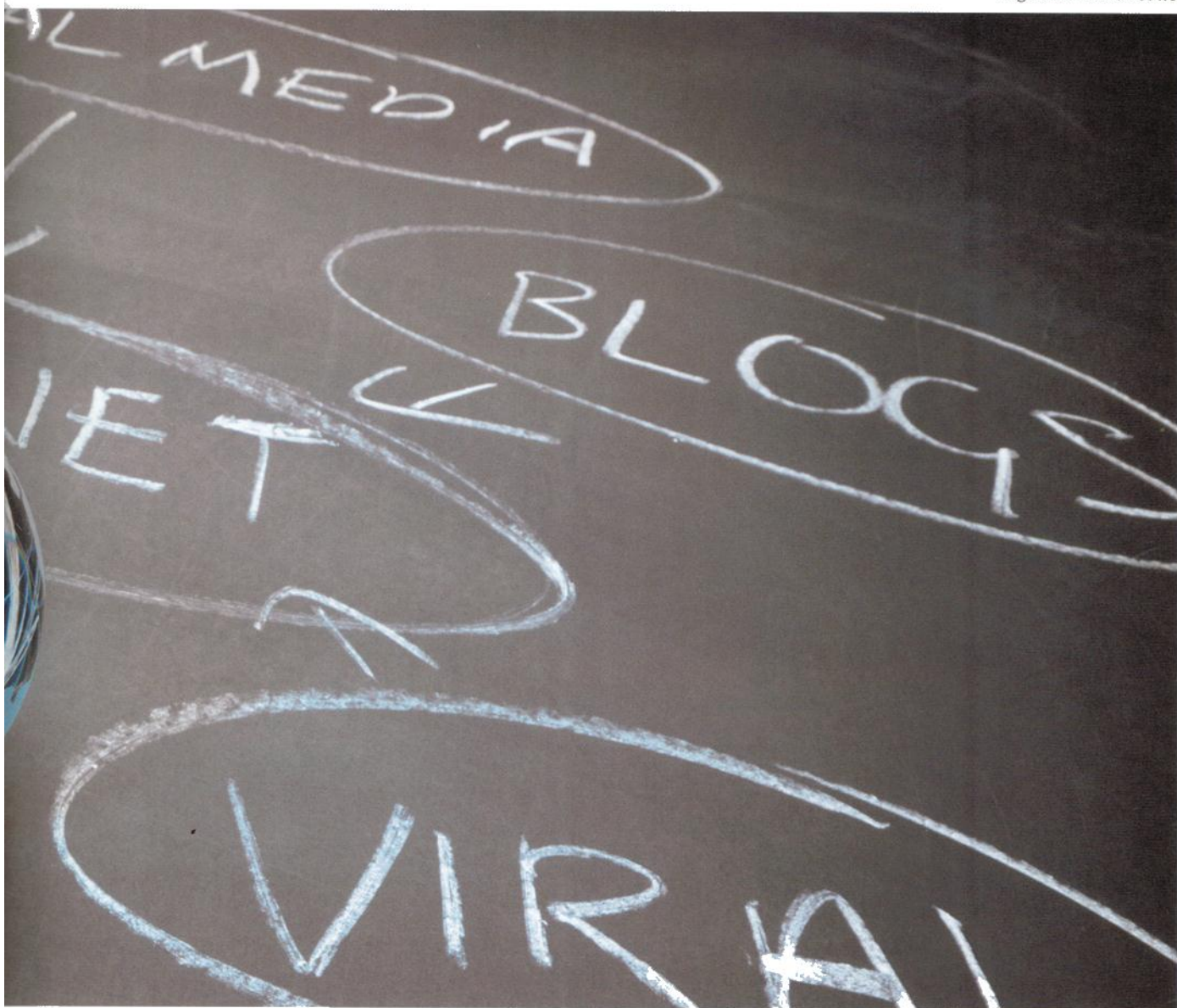
Meanwhile, the academic community has ICT researchers working in practically every field, although the most popular are:

- Artificial intelligence
- Networks
- Security and computer forensics
- Open sourcing
- Wireless communications

- Bioinformatics
- Grid computing
- Software engineering
- Visual computing and computer graphics
- e-science
- Embedded systems

Other actors have invested in the development of the ICT industry such as: the National Association of IT Higher Educational Institutions (ANIEI); Mexican Association of Information Technology Industry (AMITI); University Corporation for the Development of the Internet (CUDI); Regional Fund for Digital Innovation in Latin America and the Caribbean (FRIDA); National Science Foundation and companies like Cisco Systems, Sun Microsystems, Microsoft, Hewlett-Packard, IBM, Intel and Google, as well as those offering financing, research opportunities and training or that donate equipment and/or software.

MexicoIT seeks to position Mexico as an IT service supplier and attract investors, enjoys the support of both the public and private sectors. By the end of 2007, there were seven states and 16 companies participating in the program. The goal is to bring more states on board –many of which have ICT clusters and have expressed an



interest in joining the program— and reach out to exporters with a view to creating an extensive network of service providers.

Intended to help companies with export capacity market their ICT services abroad—namely on the US market, which is the world's largest consumer of ICT services—MexicoIT acts as a platform where members can offer and seek investment. Another objective of the program is to improve the investment grade granted by industry analysts, who evaluate the country in terms of human capital, infrastructure, company types and services. Members also stand to gain experience and have access to specialized information on the sector, its characteristics, requirements and opportunities.

According to the 2011 Information Society Indicator published by the IESE Center for Enterprise in Latin America (CELA), Mexico maintained its position as the world's fourth most important supplier of ICT services, coming in ahead of Brazil and Colombia on a 3.1% annual increase compared to the previous year.

In addition to leading imports of ICT goods to a per capita annual spending of 569 USD, Mexico was the country that reported the highest growth in Internet users in 2011—294 users per thousand, up five million from 2010.

The Mexican government has come up with a development strategy to share these breakthroughs with the rest of the economy via a “development portal.” Financing programs and tax incentives are also available, as well as encouragement to join the program and sector.

Strong, steadily increasing demand along with competitive advantages in terms of costs and skilled labor, and a public sector eager to support expansion are just some of the factors powering the development of Mexico's ICT industry. Gearing up to exploit these opportunities to the full are companies like the regional cell phone giant América Móvil, which estimates that in two or three years' time, wireless Internet services will account for one fourth of its revenues and is currently structuring its business plans accordingly.

As things stand, we can look forward to radical changes in the size and composition of Mexico's ICT industry, which is developing in leaps and bounds, creating investment opportunities on-the-go. **■**

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