Overview
Nearly a decade ago, Qatar’s leadership recognized that the future belonged to countries that could harness ICT for economic and social good. They envisioned Qatar in 2030 as an advanced society capable of sustaining its own development and providing a high standard of living for current and future generations. They understood that without a strong commitment to advancing ICT, their vision would not be realized.

Thus in 2004, the Supreme Council of Information and Communication Technology (ictQATAR) was created as the nation’s ICT policy and regulatory body, and as the government’s ICT champion.

As the world moves toward knowledge-based economies that rely on the production, distribution, and use of knowledge and information, ICT plays a fundamental role, both as an innovative economic sector and as a spur for other economic sectors. A country’s ICT sector enables economic diversification and growth, drives innovation and entrepreneurship, and creates lucrative employment opportunities, developing a talent pool of skilled knowledge workers. On a worldwide scale, ICT created approximately 5 percent of total GDP growth and represented 5.4 percent of the world’s GDP in 2008. That share could reach 8.7 percent by 2021.

Beyond important economic considerations, ICT helps address societal issues in profound ways. It improves access to education and enables lifelong learning beyond the classroom. ICT facilitates healthcare delivery, improves the efficiency and effectiveness of government operations, and helps strengthen citizen participation in government decision making. It offers greater accessibility to people with disabilities and other underrepresented populations and helps promote a nation’s cultural and religious heritage through digitization of content. And ICT enriches the quality of people’s lives by connecting them to each other, allowing for online collaboration and interaction in previously unanticipated ways.

Qatar has made significant progress toward creating an innovative and vibrant ICT sector that will secure a thriving, diversified economy and enrich the quality of life for all members of its society.
Progress and Challenges

The creation and implementation of an ICT master plan in 2005 provided the initial blueprint for moving forward. That plan, along with Qatar’s strong commitment of resources and ictQATAR’s leadership, led to remarkable progress in a relatively short period of time.

» Massive private and public investment in the ICT market has rapidly increased, to USD 2.1 billion in 2010. ICT firms see Qatar as a potential technology hub and want to invest in the state, according to numerous market research studies.

» Qatar’s telecommunications infrastructure has swiftly expanded and evolved, with the continued growth of next-generation access networks that provide ultrafast connectivity, making services more widespread and reliable. The launch of a new high-capacity communications satellite in 2013, along with a burgeoning network of submarine cables, will further increase bandwidth and speed.

» Competition created by market liberalization has already yielded tremendous benefits to consumers and businesses. Prices for mobile and fixed services have dropped, and the ICT contribution to GDP increased from 1.2 percent in 2008 to 1.6 percent in 2010.

» Government operations have been streamlined and more than 360 e-government services are already available online through a centralized portal—Hukoomi.

Numerous indicators demonstrate the strong foundation Qatar has laid for future progress.

» Qatar’s mobile penetration stands at 167 percent, one of the highest in the world. For all countries the average is 76 percent, and among developed countries the average is 116 percent.

» In 2010, 89 percent of households had a computer and 85 percent of individuals had one.

» Broadband usage has jumped from 41 percent of households in 2008 to 70 percent in 2010.

» Qatar ranks in the top quartile of all countries surveyed in the latest World Economic Forum’s Networked Readiness Index.

» The ICT market in Qatar keeps growing and is projected to expand at a double-digit compound annual growth rate.
In spite of remarkable progress, the future success and growth of ICT in Qatar depends heavily on the country’s collective ability to surmount key hurdles that currently impede the sector.

ictQATAR has identified several major challenges that Qatar must address to continue developing an innovative, inclusive, fair, and competitive ICT sector that will meet the country’s future needs.

Connectivity Issues Qatar’s telecommunications infrastructure has grown significantly, and current public and private investments to expand capacity are promising. Yet a shift to a knowledge-based economy requires a robust and ubiquitous infrastructure that enables high-speed broadband connectivity for all households and businesses. Currently broadband connectivity is not at the speeds required to meet the country’s needs. Though Qatar is leapfrogging outdated technologies, keeping pace with demand is difficult, especially as new technologies and forms of media demand greater bandwidth and more sophisticated equipment.

ICT Skills Deficits While government agencies and schools continue to make great strides in integrating ICT into the lives and education of many members of society, Qatar’s digital literacy still lags behind many other advanced nations. Because many lack the necessary digital skills and knowledge that are common among their peers in other developed nations, they are missing key opportunities to participate in the global digital economy.

Business Environment Challenges Qatar lacks the right environment to make greater strides in creating a vibrant ICT industry. Qatar needs to modernize policies and regulations to protect the interests of end users, attract further investment, and create a business model to stimulate the development of digital content, especially digital Arabic content. It also needs to support entrepreneurship to drive sustainable ICT growth. In addition, Qatar also faces some pressing social challenges: controlling rising health costs, developing more efficient public services, integrating people with disabilities, motivating its youth, and digitizing its cultural heritage. Because the ICT sector is not fully developed, Qatar is not able to fully address these issues.

Moving Forward Qatar is now at a critical juncture. If decisive action is taken and adequate resources are devoted to tackling the challenges outlined above, it has an unprecedented opportunity to accelerate its progress toward becoming a nation with a leading knowledge-based economy.
With increasing large-scale investment projects, rising government expenditure, and a population that is expected to grow steadily at an average of about 2.1 percent a year over the next five years, integrating ICT into the daily lives of everyone, and into Qatar’s economy, becomes even more crucial. And to compete on the global stage for investment, talent, jobs, and economic influence, Qatar must continue to advance the growth of the ICT sector as a major pillar of its economy and society.

The aim of Qatar’s National ICT Plan: Advancing the Digital Agenda is to continue to accelerate the existing momentum. This agenda builds on the first ICT master plan and takes into account research and analysis of Qatar’s current ICT landscape as well as regional and international benchmarks. The plan provides a roadmap for future advancement that clearly outlines Qatar’s digital goals and objectives, along with the strategies and initiatives to achieve them over the next five years. ictQATAR spearheaded this national effort, with the input of key stakeholder groups across the country.

Summary
Qatar’s Digital Agenda is a five-year plan with a vision to create a knowledge-based economy that will drive sustainable development and societal benefits for all.

By 2015, Qatar will be benefiting from ICT solutions in key aspects of its society and economy. It will also be using ICT to become further integrated into the global economy. Qatar’s plan has three desired outcomes:

» An advanced ICT sector that is the foundation for a knowledge-based economy
» The enriched lives of all members of society through ICT
» Recognition as a regional leader in Arab-originated digital content

Qatar’s five-year plan is quite ambitious and has the following measurable goals:

» Double the ICT sector’s contribution to GDP (USD 3 billion)
» Double the ICT workforce (40,000)
» Achieve ubiquitous high-speed broadband access for households and businesses (95 percent)
» Achieve mass ICT and Internet adoption by all segments of society (90 percent)
» Achieve wide accessibility and effectiveness of all key government services (160 online services)
To meet those goals, a comprehensive, strategic framework has been developed. It is organized into five strategic thrusts—the critical components needed to create a sustainable digital future. These five thrusts will enable Qatar to become a leading knowledge-based economy, and they are aligned with the government’s broader national goals as articulated in *Qatar’s National Vision 2030*, and specific programs are aligned with *Qatar’s National Development Strategy 2011-2016*.

**Improving Connectivity**
Ensuring the deployment of an advanced, secure infrastructure.

Providing access to high-speed, high-capacity infrastructure that is safe and secure is critical for national economic growth and for developing innovative products and services.

**Qatar’s Digital Agenda includes the following:**

- Build an advanced, next-generation communications infrastructure that includes a national fiber broadband network and an ambitious satellite program
- Develop and modernize policies and regulations
- Enforce the safety and security of the digital environment through a national legal and regulatory framework
- Foster competition and a sustainable ICT environment
- Incentivize the ICT industry to develop innovative products and services

**Boosting Capacity**
Enhancing digital literacy and developing the skills to enable innovation.

To derive the most from the myriad potential social and economic benefits requires a coordinated national effort encompassing outreach, training programs, and awareness campaigns.

**Included are these efforts:**

- Developing an ICT workforce with the skills and knowledge that will lead to further sector innovation
- Garnering close-to-universal adoption
- Empowering individuals to fully participate in the knowledge-based economy
- Crafting a comprehensive and targeted ICT literacy outreach, awareness, and training plan aimed at strengthening ICT skills among all members of society, including business and government employees
Fostering Economic Development  
Creating an environment for an innovative and vibrant ICT industry.

To set the foundation for a vibrant ICT industry, Qatar is deploying an advanced, secure infrastructure; developing the skills to enable innovation; developing the laws and regulations to advance ICT market development; developing tools that enable businesses to best use ICT; and driving demand for innovative applications and services.

Enhancing Public Service Delivery  
Ensuring the use of innovative applications to improve delivery of public services.

Driving and encouraging Qatar’s government and society to use ICT in sophisticated and innovative ways is essential to creating the next generation of government e-services, which in turn will enrich and further develop a broad array of public services and encourage the development of more local IT services.

Continuing programs include these efforts:

» Building a centralized government data center
» Enhancing security and authentication of digital government services
» Creating a single ICT backbone to connect all government entities

Advancing Societal Benefits  
Leveraging ICT to improve ways society and government provide education, healthcare, and services to Qatar’s people.

Qatar’s agenda recognizes the numerous societal benefits that will derive from ubiquitous ICT use.

Programs already underway address these issues:

» Health: Better health systems to widen access to medical knowledge and patient records
» Education: Modernizing learning spaces and promoting the use of ICT to enhance the learning experience
» Society: Establishing programs and research efforts to study the impact of the Internet and its governance on the progress of society

The following section outlines the Digital Agenda in greater detail, highlighting the programs and initiatives that each strategic thrust comprises.