

# ICT in the Islamic World

**Fatimetou Mint Mohamed-Saleck**  
*Nouakchott University, Mauritania*

## INTRODUCTION

A priori, the Islamic Republic of Mauritania was not prepared for the information and communication technology (ICT) revolution. This vast West African desert country, whose 2.8 million inhabitants are strongly imprinted by Islamic culture, is still firmly rooted in customs and social values that the “late and superficial” French colonization was hardly able to disrupt (Balans, 1979).

Under these conditions, one can easily understand the slow evolution of information and communication technology in the country as it appears in the Report of the ICT Thematic Group of the Poverty Reduction Strategy Paper (Cadre Stratégique de Réduction de la Pauvreté, 2000).

As a matter of fact, it was not until 1974 that the first institutional incentive for development of computer technology appeared through the creation of a computer division at the Ministry of Finances responsible for the automated management of public spending. The first PCs appeared in the mid-eighties in some administrative departments, in particular the customs department through the SYDONIA project, designed to manage customs operations and the provision of certain statistical data (Cadre Stratégique de Réduction de la Pauvreté, 2000).

In 1990, the government founded the National Data Processing Commission, a body for strategic analysis entrusted with the broad mission of designing, implementing, and monitoring the national data processing policy. The Commission also aimed to computerize some administrative departments, such as Civil Service, the Central Bank of Mauritania, or the taxation authority (Cadre Stratégique de Réduction de la Pauvreté, 2000).

In general, computer use remained very scarce for a long time throughout the Mauritanian administration. In 1999, there were 446 micro-computers, seven mini-computers, and only 20 local networks of 10 machines, which correspond to a ratio of two computers for every 100 agents. Local software production is insignificant, with only two development platforms in the private sector (Cadre Stratégique de Réduction de la Pauvreté, 2000).

Concerning the Internet, main indicators as of May 31, 2000 show an average rate of use of approximately 0.16% when one compares the total number of e-mail accounts in Mauritania to the total number of inhabitants. This rate

is 0.46% in Nouakchott, the capital city. The rate of Internet use by telephone subscribers is 20% on average and 28.9% in Nouakchott (Cadre Stratégique de Réduction de la Pauvreté, 2000).

In the field of telecommunications, it was only by the end of the 1970s that the telephone appeared in some regional capitals; as of May 2000, the urban telephone network has more than 20,000 lines (Cadre Stratégique de Réduction de la Pauvreté, 2000).

Thus, in the year 2000, the ICT sector was in its preliminary stages, marked by a lack of infrastructure, equipment, and human resources.

On the eve of the new millennium, the Mauritanian government was truly committed to mastering ICT, considering it an invaluable developmental tool for the integration of the country into the “communication arena” which constitutes the “information society” (Levy, 1997). The national strategy for the development of new technologies adopted in 2002 is attributable to a strong ambition to promote Mauritanian society and economy using ICT.

Being definitely in keeping with an e-government perspective, the strategy advocates, among other objectives, the use of information and communication technology by the administration in to improve services rendered to users in compliance with individual rights and freedoms.

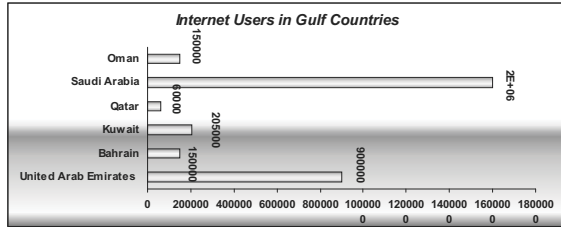
As an Islamic republic, Mauritania has witnessed specific challenges to the development of new technologies. This study will examine the moral dilemma faced by Muslim countries regarding the evolution of ICT and e-government. Thus, the experiences of Mauritania will help to paint a broad picture of how these new technologies are being implemented throughout the Muslim world.

## THE INTRODUCTION OF ICT INTO THE ISLAMIC WORLD

Strangely enough, Islam, which is often depicted as obscurantist by a generally ill-informed opinion, did not at all challenge the new information and communication technology considered as a symbol of freedom, modernity, and progress. In other words, the emergence of ICT did not stimulate a debate in the Islamic world, even if

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Figure 1. Internet use in the Arabic Gulf countries (Source: Information Society in the State of Qatar, 2003, WSIS—Geneva 2003)



historically “some sort of hesitation” was observable at first in this respect, particularly in the Arab Gulf countries. Hence, in Saudi Arabia, the government signed a memorandum of understanding in 1999 with a company for the installation of Smart Filter software, designed to prevent access to subversive sites or sites whose contents could conflict with principles Islam. In Kuwait, the department of information announced openly on its official Web site that censorship (on the Internet) was one of its prerogatives!

But in general, these hesitations have been more or less overcome, probably largely on account of the sustained infatuation of Muslim populations for the Internet, as illustrated by Figure 1.

Generally speaking, as reported by two studies sponsored by the Islamic Organization for Education, Sciences, and Culture (ISESCO); Muslim countries are actively engaged in promoting ICT, which is perceived as a factor of development (Bennani & Mrabet, 2003; N’Diaye, 2003). The ranking based on the digital access index of the International Telecommunications Union (ITU) shows that several Muslim countries are highly ranked as indicated by Table 1.

Today, it can be said that new information and communication technology is accepted in the Muslim world as supported by the declaration adopted by the Islamic Conference Organization (OCI) during its 10<sup>th</sup> Summit in Putrajaya (Malaysia, October 11-17, 2003) which states, “We acknowledge that in the knowledge based society in which we live today, Information and Communication Technology is a powerful and necessary tool of political, economic and social development ...”

In reality, it could not be otherwise because Islam, to start with, is meant to be a religion of knowledge and science. Accordingly, the first verse of the Koran glorifies knowledge in the following words, “Read in the name of your Lord! He the creator; (...) who taught man what man did not know before” (Ould Bah, 2003).

Table 1. 2003 ranking of countries according to ITU index (excerpts)

	Rank	Country	ITU Index
Excellent	1	Sweden	0.85
	11	United States	0.78
		United Arab Emirates	0.64
Good	34	Bahrain	0.60
	46	Malaysia	0.57
	48	Qatar	0.55
	49	Daressalam	0.55
	60	Kuwait	0.51
Medium	70	Turkey	0.48
	82	Saudi Arabia	0.44
	87	Iran (R.I.)	0.43
	98	Egypt	0.40
	99	Tunisia	0.41
Weak	118	Morocco	0.33
	126	Syria	0.28
	129	Pakistan	0.24
	157	Mauritania	0.14
	158	Senegal	0.14
		Côte d’Ivoire	0.13
	163	Niger	0.04
	178		

However, one must refrain from considering the Muslim world as now totally and definitively in favor of ICT. In fact, Resolution # 4 of the OCI Summit states that “rather than be an end per se, the development, assimilation, and application of information and communication technology (ICT) in the member states are the main instruments targeting the achievement of global and sustainable development and ensuring access to the information society.” The expression “rather than be an end per se” underlies a quite well thought-out reservation expressed by the Prime Minister of Malaysia, Muhammad Mahatir (2003) who said in an interview in December 2003 with the Journal *Choix*,

*the Internet does not only produce good information, but it also produces obscenities. There are those who think that they can decide for themselves whether they have moral values, but trying to instill good values in them is not the easiest thing in the world. We should try to find a means to filter obscenities. Presently, technology does not provide us with the ability to means of selectively screen access. But the time will come when software will help to eliminate obscene and morally subversive material.*

With respect to this matter, Muslim states feel a need to protect their societies against some of the material that can circulate freely on information networks, especially data that undermine order and morality. However, these

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