Technology and modernity in saudi arabia

In the modern age, where a country must keep up to date on science and technology if it is to have a hope of keeping up with the western world, Saudi Arabia is unlike many other Islamic countries. In the past 20 years alone, its leaders have undertaken an immense project of updating, or establishing programs that would enable Saudi Arabia to compete globally in the 19th and 20th century and make Saudi Arabia a country known for technological and scientific innovation.

While Saudi Arabia still lacks behind countries such as the United States and other European countries in science and technology, they have made enormous steps forward in rectifying this through the establishment of governmental programs and expansion of infrastructure in areas such as information technology, telecommunications and environmental sustainability.

Until as recently as the mid 1990's internet usage within Saudi Arabia was limited to large businesses, the government and academic or commercial areas and for the most part was not available to the average citizen. In mid 1997 Saudi Arabia announced that internet would be available locally but with many restrictions imposed upon it. These restrictions come in the form of blocked websites of all kinds in and effort by the Saudi government to restrict the flow of information that it sees unfit for the public to view.

With the permission of the Saudi government Johnathan Zittrain and Benjamin Edelman of Harvard University tested the internet access capabilities, to identify possible holes in the proxy servers used by the government to filter incoming material from outside countries. Of the 64,

000 websites tested, most of the blacklisted websites were either sexually explicit or about religion, but also sites that included topics such as women, health, drugs and pop culture.

During much of the past 20 years Saudi Arabia has also been increasing the size of their telecommunications infrastructure. The project began when a $4. 2 billion contract was awarded to AT&T in which areas such as the telephone network, satellite and coaxel cables network and cellular and wireless systems were dramatically increased to give a larger network range within the country. The Kingdoms coaxial cables have increased to 6, 000 satellite circuits and more than 3, 100 miles of coaxial cables, with more than 9, 800 lines linking 152 cities and villages to countries around the world. Saudi Arabia has two cellular systems in place, one is an analog system which was introduced in the early 1980's which currently has 30, 000 lines. The second cellular system is a GSM 900 network, which was operational by 1996 and currently serves upward of 170, 000 subscribers within the kingdom.

Saudi Arabia being a country largely covered in desert has constant concerns about its water supply, water that is needed for agriculture, the oil industry and private use. Saudi Arabia, unlike many other countries relies heavily on water desalination and fossil water as a means to satisfying their thirst. Desalination refers to the process of removing excess salt and other minerals from water to make it usable by people. The Shoaiba desalination plant on the coast of the Red Sea is responsible for providing 50% of all municipal water to the kingdom. Shoaiba utilizes a multi stage flash distillation process

that is capable of desalinating 150 million cubic meters of saline water each year.

In order to keep scientific and technological progression in Saudi Arabia to its max, the King Abdullah University of Science and Technology was opened in Thuwal in 2009. The university is an international graduate research institute with an emphasis on science and technology. KAUST as it is called offers degrees in relevant fields such as computer science, engineering sciences, environmental sciences and management and materials sciences. The research focus of the institution revolves around science and technology, specifically human needs within the two, and also social advancement and economic development. Notable social advancements include KAUST being the first mixed sex university in Saudi Arabia where women do not have to wear a hijab.

Work Cited

- " Desalination." Wikipedia. com. Web. 15 Nov. 2009. .
- " Shoaiba Desalination Plant, Saudi Arabia." Water-technology. net. 2009. Web. 14 Nov. 2009. .
- " Shoaiba power and desalination plant." Wikipedia. com. Web. 14 Nov. 2009. .
- Behery, Faisal Ahmad. " Information Technology in the Kingdon of Saudi Arabia ." American University Main Page. N. p., 18 Dec. 1998. Web. 29 Oct. 2009..
- Behery, Faisal Ahmad. " Internet Activity ." American University Home Page. N. p., 16 Dec. 1998. Web. 2 Nov. 2009..

- " Internal filtering in Saudi Arabia, 2004." OpenNet Initiative . N. p., n. d. Web. 30 Oct. 2009..

- " King Abdullah University of Science and Technology ." wikipedia. com. N. p., 2 Nov. 2009. Web. 1 Nov. 2009. .

- " Recycling ." Wikipedia. com. N. p., 12 Oct. 2009. Web. 29 Oct. 2009.

- " Reverse Osmosis ." Wikipedia. com. N. p., 12 Oct. 2009. Web. 29 Oct. 2009. .