



This paper appears in *Managing Modern Organizations Through Information Technology*, Proceedings of the 2005 Information Resources Management Association International Conference, edited by Mehdi Khosrow-Pour. Copyright 2005, Idea Group Inc.

Assessing the Impacts of Establishing an Internet Café in the Context of a Developing Nation

Sherif Kamel

Dept of Management, School of Business, Economics & Communication, The American University in Cairo,
113 Kasr El Eini St., Cairo 11511 Egypt, skamel@aucegypt.edu

ABSTRACT

Looking at developing countries, it is obvious that most of them fall behind the rest of the world in terms of development due to several reasons such as poverty, illiteracy and poor economic conditions in general. In terms of information and communication technology evolution which has been transforming the world since the early 1980s, the developing world lags behind on this front too. Citizens of developing nations can not afford to buy their own personal computers, and if they did, they can not buy additional peripherals and tools required to capitalize on the advantages that information technology can bring to individuals, organizations and the society at large. Moreover, the information and communication technology infrastructure on the ground does not enable developing countries to realize the benefits that could also be obtained through the Internet and the World Wide Web within the newly emerging digital economy. This paper reports the findings of a market study¹ that covers the perception of the Internet in general and Internet cafés in specific to the local community in Egypt. The study focused on two major research issues; the assessment of the perception of the community of the usefulness of Internet cafés in information and communication technology awareness and diffusion and the feasibility of establishing an Internet Café from an investment perspective in the context of the marketplace in Egypt.

BACKGROUND

Although there are over 3,500 Internet cafés in Europe listed online, the African continent has around 900 Internet cafés; most of which are in Egypt (mainly), Algeria and South Africa (www.cybercafes.com). It is important to note that the concept of Internet Cafés differ from one country to another, for example there are IT technology clubs that serves the same purpose as Internet Cafés but are not considered as cafés and they exceed 1000+ clubs across Egypt 26 provinces. The number of dial-up Internet access subscribers rose by 20% in the past 18 months in Africa coupled with an increase of Internet cafés in rural areas (www.itu.int). However, if we exclude South Africa and Northern Africa who occupy the biggest portion of Internet users in Africa, only 1 in 250 Africans use the Internet, compared to 1 out of every 2 in North America and Europe (www.mcit.gov.eg).

The global population of the Internet, according to Forrester Research, is estimated to be around 700 million users. Germany, the UK and Italy have the largest at-home Internet populations in Europe. Currently, 35.6 million people have net access in Germany, compared to 29 million in the UK and 22.7 million in Italy. Sweden, Hong Kong, the Netherlands and Australia have the most mature Internet markets according to Nielsen-Net ratings (www.nielsen-netratings.com). However, the United States now accounts for 29% of the global Internet population followed by Europe with 23%, Asia-Pacific with 13%, and Latin America with 2% (www.forrester.com). With respect to the Arab world, in 2004, it is estimated that the total number of Internet users is 5 million, a study that was carried out by www.ajeeb.com and sponsored by www.tejari.com and

Visa International. The study indicated that the average number of users per Internet account in most Arab countries is 3 users with the exception of Jordan that has 6 Internet users per account because of the popularity of Internet cafés and the high cost of home access and Egypt with 8 Internet users per account as many users go online at universities and Internet cafés.

Globally, the literature indicates that Internet users are going online more frequently with the United States having the highest Internet usage. Canada has the second highest Internet penetration rate with 62% of the population going online at least once a month while in South Korea has 53% of the population use the Internet once a month. Similar increases occurred in the UK, Japan, Germany, France and Ireland among other countries. As for India, school students access Internet mainly from Internet cafés. Some countries restricted Internet Cafés from accessing specific websites such as the case in China conforming to some of the local laws that prohibit access to pornographic sites. With respect to Arab countries, penetration rate is the highest and growing faster in the United Arab Emirates. The number of Internet users there increased by 57% to 660,000 in 2002 (around 25% of the total population). Bahrain has an Internet penetration rate of 16.67% followed by Qatar with 10.27%. Kuwait has 8.25%, Lebanon has 6.56%, and all other Arab countries have less than 5% of the population online. Egypt has the highest number of Internet users with 3.6 million subscribers and the highest number of Internet Cafés in the Arab region and in the African continent (www.itu.int). This figure is expected to reach 7 million users by 2007 realizing an annual growth rate that exceeds 48% (www.mcit.gov.eg). The increase in the number of Internet users could also be due to the PC market boom which increased by 31% in 2003 after several years in stagnation with more people having the infrastructure required to go online (Business Today, 2004). According to the ministry of communications and information technology, this increase is expected to continue enticing more people to be more IT literate and more online bound.

In general, Internet Cafés are becoming popular around the world for different reasons including accessing the Internet, meeting friends and exchanging knowledge, providing a mixed environment which includes a possible opportunity to learn through computing and being connected to the net while being in a friendly environment with friends and colleagues. Internet Cafés are playing an important role in Internet and information and communication technology diffusion. This boom has accelerated in Egypt in the last few years reaching over 500 Internet Cafés. However, how feasible is an Internet Café from an investment perspective and whether Internet Cafés have an effective role in diffusing information and communication technology literacy in the community needed to be studied. This research addresses these issues in a time where both the government and the private sector are exerting their efforts and allocating their resources to empower the society with emerging information and communication technology as a vehicle to support the nation's development while addressing key socioeconomic issues (www.itu.int). Therefore, this research focuses mainly on testing

the effectiveness of Internet Cafés in diffusing information and communication technology awareness among the community as well as assessing the feasibility from an investment and business perspectives of establishing Internet Café(s) in a developing context such as the case of Egypt.

The model Internet cafés usually provides state-of-the-art flat screen monitors and a credit-based or cash paying system according to the use. For example, Easy Internet café in the UK has a clear mission statement and that is to become the world's leading Internet café chain that provides the cheapest way to get online and it seems that the company is realizing its mission through its different branches and the services it offers. Easy Internet café also offers store owners a mini version of Easy Internet café in a limited space of their stores and endorse this service by promoting its effects on customer loyalty and increased store traffic. They offer store owners a way of entertaining their customers while having a low cost, staff less, automated system with vending machines so no added employees are needed, and also with a family friendly content. To enhance the management of Internet cafés and reach a high customer satisfaction rate, useful software programs are also used that are designed specifically for this service providing an integrated system for the Internet café administrator to monitor and better serve the customers through separate accounts, different languages, activities and time monitoring, orders for beverages as well as payment facilities. All these services are made electronically which definitely saves time and cost dramatically. It is clear that the business model of the Internet Café is the vital element in its success. Such model is bound to be affected by the local conditions and the economic complexion of the formula that relates to pricing, cost of infrastructure, and cost of services and awareness of the Café among the local community.

HISTORY OF THE INTERNET IN EGYPT

The Internet was introduced to Egypt in 1993 with 2000 users (Kamel, 1998a). Within the context of the market in Egypt, its use developed from being used solely by the government and academic institutions to becoming more of a standardized search and communication tool used by everyone from the government to academic institutions to individual users, to companies and other commercial organizations, to hospitals and medical centers. The Internet use is constantly being encouraged by the government and by private investors who establish their own Internet service providers. The Internet was first introduced to Egypt by the Egyptian Universities Network of the Supreme Council of Egyptian Universities. In 1994, as an attempt to diffuse the Internet usage among the society, the Cabinet of Egypt Information and Decision Support Center (IDSC) and the Regional Information Technology and Software Engineering Center (RITSEC) provided free Internet access on a trial basis to the public, private, government and non-government organizations to entice the users to venture into the new technology. This was done with the financial support of the government of Egypt, in an attempt to aid in the global exposure of the local market and to pave the way for the commercialization of the Internet services. The free access formula was accredited for contributing to the boost in the rate of growth of Internet users, especially within small and medium sized enterprises and industry and sector professionals (Kamel, 1998b).

In 1996, the government replaced its free Internet access policy with an open access policy and Internet services for the commercial domain were privatized, and 12 Internet service providers started their operation. Today, there are around 50 ISPs serving over 3.6 million Internet users (www.mcit.gov.eg). Most of the Internet usage in Egypt is for business information gathering (Loch, Straub and Kamel, 2000). It is fair to say that Egypt tops the index of bandwidth with a score of 2.11 (American Chamber of Commerce in Egypt Report, 2002). In January 2002, the government of Egypt launched a new initiative through its ministry of communications and information technology providing free nationwide access to the Internet to all citizens of the country (Kamel and Abdel Ghaffar, 2003). This has created a larger demand for connectivity and had also an impact on the streets of Egypt with the establishment of Internet cyber-cafes reflecting a sign that there is a

strong market demand for the Internet in Egypt. However, it is important to note that to-date it is not clear how the impact of the free Internet model has really affected in the growth of the number of Internet users (Palmgren, 2003).

The Internet evolution in Egypt demonstrated the active role played by the government. With the privatization of the Internet in 1996, the role of the government did not come to an end. The government still provides strong support for the ISPs in the form of upgrading the infrastructure to enable them to offer better connection speeds to their users as well as providing them with technical support in the administration of their servers. In addition to the hardware and infrastructure, the Internet market is witnessing a growth in the software market with more web programmers being trained and more web design companies being established encouraging commercial users to utilize the web as a business development engine. It is important to note that Egypt, being part of the Middle East which is dynamically developing itself, is also aggressively implementing massive information and communication technology plans to keep pace with the developments taking place worldwide. In terms of Internet use and the diffusion of information technology (both in terms of hardware and services) the rate in the Middle East is continuously rising with a projected market value of 8.9 billion US dollars expected by 2005 (www.pyramidresearch.com).

INTERNET CAFÉS IN EGYPT

Internet cafés provide a world of entertainment through personal computers connected to the World Wide Web. Customers are charged by the hour or fraction of an hour for using the Internet. A company's decision to open Internet Cafés is a response to the increased demand for Internet connections. Since from the 72 million living in Egypt, only 1.6 million own PCs, then there is a great opportunity for these Internet cafés to offer a solution to those who can not afford to have their own PCs (www.mcit.gov.eg). The great advantage is that customers do not have to buy a computer to get online. As a result, providing Internet services is very profitable since so many people are interested. Additionally, younger generations benefit from the Internet cafés in different ways including (a) studying or working with classmates using computers; (b) searching for entertainment such as chatting; (c) benefiting from the better and speedy connections since most Internet cafés use a high bandwidth connection to the Internet; and (d) getting exposed to training sessions that could enhance their computing skills.

Unfortunately, the available information on Internet cafés in Egypt was very limited. Thus, the study conducted included multiple interviews with key people who ventured with introducing the concept of Internet Cafés into Egypt. Some of the findings indicated that Internet Cafés vary in style. Some are in the form of a restaurant with computers on the side; others are Internet Cafés that offer drinks while people work using computers or Internet Cafés within a business center. Thus, design and decorations vary substantially reflecting also on the investment allocated. In 1996, the first Internet café was established, in Garden City (downtown the city of Cairo), the Café was owned by the first full-fledged private sector Internet Company, which implied that the company provided dial-up connections, leased lines, web services, training and other related services. The Café had a simple and friendly atmosphere, nicely decorated and was divided into two sections; (a) one section with computers connected to the Internet, with printing and scanning facilities; and (b) another section with a bar corner offering drinks, tea and coffee.

Soon after, other Internet Cafés were established in Egypt. During that time, the Internet in Egypt was not for free and the Cafés were used as a point of sale, where people used open Internet accounts as well as purchase devices such as headphones, microphones, notebooks, and PCs from the Internet Café. Today, after the introduction of the free Internet model, prices in Internet Cafés have dropped and competition became fierce. Lots of Internet Cafés have opened up; however their main focus remains offering games in order to maximize profits since the majority of the clients are from younger generations. Therefore, there is a need for more professional services to be offered. Moreover,

there is a need to set the framework for the viable investment that could yield dual benefit for both the provider and the beneficiary of the service.

Internet Egypt is the first Internet service provider (ISP) in Egypt to pioneer in Internet Cafés, with ten successful Cafés established to date. These Cafés provide a relaxed informal atmosphere with expert technical assistance on hand. Most of the Cafés are located in Cairo (the capital) and Alexandria (the second largest city). Internet Egypt's Cafés are connected via dedicated high-speed digital links either to their main headquarters or to one of their distribution nodes. Recently, Internet Cafés have started to be connected through Wi-Fi with a company (The WayOut) leading the effort into over 200 locations in and around the cities of Cairo and Alexandria. With respect to the experience of Internet Egypt and its Cafés they also function as outlets for all Internet Egypt services. For example, users may open or renew accounts or arrange for web development at any Café. Attractive membership schemes are also offered to regular customers, with discounts and special promotions at all outlets. They charge around 0.75 US dollars per hour, which is obviously inexpensive based on international standards although expensive in the context of Egypt, a developing nation with a per capita slightly exceeding 1000 US dollars. Internet Egypt Cafés make its customers sign a code of ethics before they get a connection. Customers thereby promise not to visit websites specializing in pornography or violence. Facilities offered in Internet Egypt's Cafés including state-of-the-art computers, printing facilities, scanning, as well as Internet tools and software, technical support provided by highly trained and qualified staff, refreshments, music of the customer's choice, signing-up for accounts as well as renewal of existing accounts among other services. It is expected that more companies will start offering the wireless connectivity in the near future which will increase competition in this domain, improve the quality and make the cost of the service affordable by a wider community.

RESEARCH METHODOLOGY

The methodology used in the research to empirically test the research questions was a field study instrumented via the use of a questionnaire and the conduct of a set of interviews. The questionnaire was distributed among Internet Cafés users focusing on seven main districts of the city of Cairo (Mohandessin, Zamalek, Nasr City, Heliopolis, Haram, Dokki and Maadi). These districts were selected because they include all the social levels in the society reflecting all income groups and they all represent some of the high density populated areas in Cairo. The sample included 450 questionnaires distributed in 84 Internet Cafés covered in this research which reflects 23% of the total number of Internet Cafés in the city of Cairo (360). Based on the fact that filling the questionnaire was done onsite together with the recipients, the response rate was 92% with 414 questionnaires properly and completely filled. The instrument used was available in both English and Arabic to overcome some one of the barriers (language proficiency).

With respect to interviews, an open-ended questions interview was developed to be used with investors and owners of Internet Cafés. The interviews also targeted managers and knowledge workers in Internet Cafés and in information and communication technology firms. The total number of interviews conducted was 48 with Internet Cafés owners, 14 with current investors and 11 managers and knowledge workers from the information and communication technology industry yielding a total of 73 interviews.

RESEARCH ANALYSIS AND FINDINGS

Preliminary research findings indicated that most Internet Cafés in Egypt did not seem to spend much on appearance and decoration or on the quality of the atmosphere provided. Some had dirty and dusty walls, cracks in the walls, dirty floors as well as torn chairs despite the fact that they are located in high class areas such as Mohandessin. Such findings reflects the owners' attitude in neglecting the fact that the atmosphere and the environment of the Internet Café are important for customers, and are considered important factors that can attract customers. Websites visited by some teenagers was also offending some of the other

customers. The fact that some of the computers available were out of order (one average 10% of the total number of PCs per Internet Café) was a disturbing figure affecting the frequent visitors of the Internet Cafés. Same applied with some Internet Cafés that had signs indicating the availability of a photocopy service that was not in reality available for various reasons. The quality, professionalism and response time of available staff was a general finding that was not highly appreciated by most Internet Café users. One of the findings also indicated that in some highly populated area, one can find up to 7 Internet Cafés within one block reflecting the lack of planning, and also a fact that can yield to a difficulty in realizing an edge over the other available competitors. Such fact is never effective. The only case that 2 Internet Cafés can open beside each other is when one has a competitive advantage over the other in terms of quality, cost, technology, or atmosphere, and wants to compete on these bases.

In that case, one can have a limited space, noisy atmosphere and a lower cost while the other is more expensive, but has a better atmosphere, higher class people, and more advanced machines. This way each Internet Café attracts different types of customers. However, the interpretation of the phenomena demonstrated in Cairo is probably generated out of mere imitation, without any proper study or planning where one probably started the idea of the business then was followed by other owners that saw an opportunity in the business ignoring the fact that this cluster may result in over saturation of customers in that area and could lead to the failure of both Internet Cafés.

Following is the findings of the research on Internet Cafés in Cairo demonstrating and covering a number of aspects including (a) infrastructure, (b) payment mechanism, (c) investment, (d) government role, (e) type of customer, (f) added-value, (g) technology acceptance, (h) customer service, (i) Internet Café selection,

In terms of infrastructure, the largest number of computers introduced in a single Internet Café was in CompuMe Internet Café (a computer mall) with 88 computers installed and connected to the Internet. For the rest of the Internet Cafés, the number range between 6 and 16 computers. In general, all machines are upgraded annually. Internet Cafés that were most commonly used for games had networks so that a group could play games together. Some had most up-to-date video cards for games. Many of the Internet Cafés used branded computers; mainly Compaq with high configuration. They also offer space for wireless Internet access that is for free. All the Internet Cafés' owners interviewed mentioned that they do regular monthly maintenance to all computers. All machines are cleaned daily from all unnecessary documents and anti-virus applications are run. Hardware maintenance costs around 16 US dollars per month per machine. Some Internet Cafés, using software applications, detects the traffic and as well as detects computer malfunction. Technical assistants are available onsite for instant fixing of problems. With respect to the Internet connection, the providers including leading companies in Egypt such as EgyNet, TE Data, LinkdotNet, GegaNet, and MenaNet with varying offers. For example, a free modem with monthly fee for 512 Kbps ADSL connection costs around 62 US dollars. Connections speeds also include 256 Kbps; however, most connection varies between 512 and 1024 Kbps; the highest is 1.5Mbps at CompuMe Internet Café.

In terms of payment mechanisms, the payment system in all of the Internet Cafés covered was based on a payment per/hour, some offered a prepaid service. Prices ranged between 0.75 and 1.25 US dollars depending on the location of the Café, quality and speed of the connection. Most Cafés offered discounts. For example, in the early mornings and late hours at night they offer the hour for half the set price. Also, they offer discounts for the user if he/she reached a certain number of hours (the minimum varies from one Café to the other). Findings indicated that 56% of the customers preferred the prepaid payment system as they spend a lot of time in the Internet Café and therefore would not mind paying in advance; in fact it would make them more comfortable and maybe give those discounts as part of packages.

In terms of investment, the research findings showed that the initial investment required to establishing an Internet café varied according to

the number of computers per Internet Café, location, size, decoration, facilities offered, and licenses. For example in expensive locations such as Zamalek and Mohandessin the investment required varies between 200000 and 250000 US dollars for the purchase of 150 square meters and around 2500 and 3000 US dollars for renting the same space per month. In terms of expenses per month it includes the monthly subscription for Internet provision (depending on the connection speed), electricity, maintenance, and monthly salaries. These items could add up to around 3750 US dollars per month (3000 US dollars for rent is included). The investment formula from a business perspective to date in Egypt leads to minimal profits as indicated by most Internet Cafés owners interviewed (this mainly depends on the fact that the concept is not yet well diffused among the society). Most Internet Cafés were reporting an average of 500 to 1500 US dollars revenues per month yielding a major loss per month for most Internet Cafés or a minimal profit for a few Internet Cafés (based on festivities and holidays). Although, the majority was losing, when we asked why they were still operating, they indicated that the loss of shutting down the Internet Café will be greater than the expenses it costs them to operate as a result of the loss of the initial investment they spent. Respectively, they were willing to take the risk of continuing in the business hoping that their position might improve which could be the case with more awareness and the creation of a critical mass of Internet Cafés users.

Based on the findings, it is clear that the main problem was the lack of a clear and well planned exit strategy. In the case of Internet Egypt (not paralleled by many), they make around 1200 US dollars in profits per month. CompuMe realizes the highest profit with a reported 250 US dollars per day yielding a total of 7750 US dollars per month which reflects around a return on investment of 20%. Most owners indicated that profits were higher a few years back when the service was first introduced. Back then, the hourly rate was 2 US dollars per hour as compared to the current 0.75 US dollars as a result of competition and the free Internet model introduced in January 2002. However, they also indicated that summer is usually better in sales since students and youth who are frequent users of Internet Cafés become more frequent visitors due to their free time. From an investment point of view at this time, they were not recommending investing in this service and most of them advised entrepreneurs not to venture into establishing Internet Cafés as they think that the supply is becoming much more than the demand until the critical mass mentioned earlier is created through national and more effective promotional campaigns.

In terms of government role, it was more of a barrier for all Internet Cafés. Owners believed that the process of establishing an Internet Café was unjustifiably very complicated due to the logistics and the amount of legal paper required (including bureaucracy, problems in getting the license and the number of signatures required to get the approval). Some of the owners spent a year before actually managing to obtain the license pushing some to open without even getting the license and taking the risk of the consequences. Additionally, government restrictions also include forbidding any kind of entertainment in Internet Cafés such as music or television except if they pay a special entertainment license for it which adds to the expenses. On a more positive note, Internet Cafés are exempted from taxes for the first 5 years of operations.

In terms of type of customers, with respect to the marital status of Internet Café users, 89% are singles because mostly they are young

(students) in the age bracket 18 to 22 years old (38%). The analysis showed that frequency of visiting Internet Cafés is inversely proportional to age. Owners claim that younger generations are the bulk of the market share and older generations are more resistant to technology adoption or they already have computers at home. The main usage is dedicated to email (82%) followed by chatting (68%). Shopping online had the smallest percentage compared to other activities (21%) due to the fact that Egyptians do not trust payment online besides the infrastructure is not complete. Only highly-educated Internet Café users were more mature in using the services provided other than games and chatting such as working, downloading work-related documents, printing, etc.

To fully understand the users of Internet Cafés' behavior, customers were divided into four categories: (a) owning a computer and being a regular customer, (b) owning a computer and being a non-regular customer, (c) not owning a computer and being a regular customer, and, (d) not owning a computer and being a non-regular customer. This categorization was made so that the study can assess the exact conditions of each group of customers and its uses of Internet Café. The results indicated the following as shown in Table 1.

As shown in the table, email is a major element in all four categories (coming in 2 of them) reflecting the fact that it is a major use in Internet Cafés. Chatting comes second featuring in three categories reflecting another mean of communication. This is followed by playing games (reflecting the younger generations representing the majority of Internet Cafés customers), followed by documents printing.

In terms of added-value, the research studied the reasons why those who have computers at home still went to Internet Cafés and what added value it brought to them. The main added value as indicated in Table 2 was network games, followed by workable computer (19%), chatting was also important (13%) where people chatting in Internet Cafés than chatting at home (need for more privacy, away from parents' supervision), try to hide from their parents the frequency at which they chat and its concurrent costs as well as to avoid keeping the phone line busy or for the availability of peripherals such as web cams. Next comes email (7%) and speed (5%).

In terms of technology acceptance, using the perceived ease of use (PEOU) and the perceived usefulness (PU) model (Davis 1985 and 1989), with respect to the Internet the findings show that it is accepted among 91% of the sample that it is useful and 81% perceive as being easy to use. However, it is important to note that the results do not reflect the perception of the community in Egypt at large because the sample was focused on the customers of Internet Cafés (implicitly indicating the perception of its usefulness). It is also important to note that the frequent users of Internet Cafés are by default more sophisticated users than others. The research also proved that the role of trust and culture are extremely important (Davis and Venkatesh, 1995). The perception of the usefulness of Internet Cafés is demonstrated through Table 3.

With respect to culture, it was important to analyze the gender distribution of the Internet Cafés customers. Findings indicated that the percentage of female customers in Internet Cafés is slightly lower than males which were a reflection of the social barriers in the society prevent females from staying out late and most customers go to Internet Cafés late in the evenings. Therefore, the percentage of female visitors was

Table 1. Categories of Internet Café Users

Own a computer + Being a regular customer 60%	Own a computer + Being a non-regular customer 25%	Not owning a computer + Being a regular customer 14%	Not owning a computer + Being a non-regular customer 1%
Play games (73%)	Check email (80%)	Chatting (75%)	Check email (80%)
Chatting (70%)	Work/research (72.5%)	Check email (70%)	Chatting (70%)
Check email (64%)	Print documents (60%)	Play games (50%)	Play games (50%)
Computer applications (15%)	Play games (22.5%)	Print documents (45%)	Print documents (40%)

Table 2. Added-Value of Internet Cafés Usage

Value Added	Percentage
Network Games	39%
Alternative workable PC	19%
Chatting	13%
Electronic mail	7%
Connection speed	5%
Socialization	4%
Fun	4%
Work	4%
News	3%
Phone bill	2%
Downloading large files	1%
Smoking	1%
Print documents and group meeting	1%

Table 3. Added-Value of Internet Cafés Usage

Technology	PU (Agree)	PEOU (Agree)
Internet	91%	81%
Email	92%	82%
Chatting	69%	80%

higher during the earlier hours of the day and in the early evening. This was a cultural element that affected the scheduling of visiting the Internet Cafés based on gender differences. Such element was only valid in lower income districts of Cairo where as in places with higher income groups (class A and B of the society) the percentage of females equaled that of males visiting the Internet Cafés irrespective the timing. It was obvious that the barrier was directly related to the location of the Internet Café which was also indirectly related to the social class in the society. For example, in some locations, gender was not even an issue which could also be attributed to the level of awareness and education in some district, not necessarily of the potential customers but probably from their parents. In conclusion, culture is a barrier especially in populated low income level districts; therefore, to increase the acceptance of Internet Café in these areas, awareness campaigns need to be launched to encourage more females to use the services provided by Internet Café (Kamel and Assem, 2003).

In terms of customer service, the findings indicated that the most important factor that would lead to customers' satisfaction and would attract them to go more often to the same Internet Café is good relationship with the staff. Additionally, customized desktops and available free personal storage space are also considered two main factors that can increase customers' loyalty. Also the research revealed that customers want more privacy, more space, smoking areas and refreshments to be served in the Internet Café. Next to that, issues such as proximity from home, comfort of seating, refreshments and the availability of a parking lot are also important.

In terms of Internet Café selection criteria, the connection speed comes first; most of them range from 512 Kbps to 1024 Kbps however it does not create a real competitive edge unless the Internet Café provides a speed higher than that of the market, such as the case of CompuMe which offers a 1.5 Mbps connection. The second criterion which is the proximity of the Internet Café to home; next comes the atmosphere, which shows to owners the importance of creating a comfortable, satisfying atmosphere to attract new customers as well as maintain

Table 4. Value of the Selection Criteria on an Internet Café

Criteria	Score
Speed of connection	4.72
Proximity to home	4.33
Atmosphere	4.16
Availability of peripherals	3.89
Technical assistance	3.73
Cost price/hour	3.66

available ones. This is followed by the availability of peripheral devices, technical assistance and price per hour. Table 4 demonstrates the importance of the selection criteria elements; all scores are out of five.

A LOOK INTO THE FUTURE

Based on the findings of the research, there is a general belief that the number of Internet Café customers will increase which was shared by 75% of the sample. There are a number of reasons that endorse this belief; a) more young people are increasingly taking the Internet Cafés as their hangout where they spend their time playing games, chatting or downloading music. There is a trend towards the Internet Cafés becoming an entertainment location; and, b) the Internet is gaining increasing importance and will continue to do so in the future based on the statistics of the last couple of years after the introduction of the free Internet model coupled with the government's effort in raising awareness and encouraging people to use the Internet. From another perspective, 78% of the sample believes that the number of Internet Cafés will increase in the future with the improvement in the information and communication technology infrastructure at large in Egypt and also to absorb the growth in Internet users.

However, some counter arguments still believe that the role of Internet Cafés will decrease in the future and that is due to a number of reasons; a) the introduction of the DSL connection in homes will represent a challenge to Internet Cafés since there will be no added value for customers to go to Internet Cafés since they can obtain the same speed at their home; b) the new ministry of communication and information technology sponsored project (Metra); computer for every home, will help middle and lower income group families have their own computers at home thus reducing their need for Internet Cafés; c) the increasing competition has led to a decrease of price per hour in Internet Cafés which led to a decrease in the profit margin which was already minimal.

It is perceived that investing in Internet Cafés would remain profitable as long as it is run efficiently and offers the customers an added value above what they can find at home (Davis 1985 and Davis and Venkatesh, 1995). The success of the Internet Cafés model relies to a large extent on the ability of the local community to accept and adopt the concept and realize its benefits and advantages. In Egypt, most of the technology-related decisions are based on reactions to other decisions taken by the competition, without a real study of actual customer needs or perceptions, which leads to the creation of a high level of risk associated. An overestimation of the level of customer acceptance of the technology can misguide decision makers to invest more than required while underestimation of the acceptance level can lead to the loss of substantial market share (Davis et al, 1989 and Doll et al, 1998). Moreover, the success of Internet Cafés will depend on the viability of attracting a regular crowd to the Café to use the service as part of the services offered. With the development of such crowd (critical mass) more users will fancy the idea of using Internet Cafés as their meeting point with their friends. Socioeconomic factors will also be a deciding factor in the business formula of the Internet Café and that will relate as well to the location of the Café and the social structure of the inhabitants of the area.

CONCLUSION

Based on the findings of the research, there are a number of elements that need to be put into consideration for the development of a successful model of an Internet Café in Egypt. One of these elements is the age group which is mainly the younger generations (mostly 18 to 22 years) and therefore Internet Cafés should be catering to the needs and requirements of such age group. Another element is the atmosphere of the Internet Café in terms of decoration, design, cleanness, organization, and the availability of different corners for different uses (games, chatting, research, etc.). Additionally, it is important to make available different types of peripheral devices such as printers, scanners, CD writers, headphones, web cameras, and microphones. One other important element is the provision of a quality service as a Café. Costing was also an important element to be able to provide an affordable service for the majority of the community. The location element was important however it was a local factor since it only affected the people living in the same neighborhood. The staff of the Internet Café in terms of technical support, customer service and professionalism is extremely important. In conclusion to develop an ideal Internet Café, investors should aim to provide optimal standards especially with the growing competition. The payment system should remain for some time based on cash until the online payment becomes mature in Egypt at large because cultural obstacles, norms and beliefs remain an important factor considered by the community.

REFERENCES

- Ajeeb.com [Website] www.ajeeb.com, last accessed 15 September 2004.
- American Chamber of Commerce in Egypt (2002) Information Technology in Egypt, Business Studies and Analysis Center, April.
- Business Today (2004) Telecoms and IT, November.
- Cyber cafés [Website] www.cybercafes.com, last accessed 17 April 2004.
- Davis F D (1985) A Technology Acceptance Model for Empirically Testing New End-user Information Systems: Theory and Results, Doctoral Dissertation, MIT Sloan School of Management, Cambridge, MA.
- Davis F D (1989) Perceived Usefulness, Perceived Ease of Use and User Acceptance of Information Technology, *MIS Quarterly* 13 (3), pp 319-339.
- Davis F D and Venkatesh V (1995) Measuring User Acceptance of Emerging Information Technologies: An Assessment of Possible Method Biases, *Proceedings of the 28th Annual Hawaii International Conference on System Sciences*, pp 729-736.
- Davis F D, Bagozzi R P and Warshaw P R (1989) User Acceptance of Computer Technology: A Comparison of Two Theoretical Models, *Management Science* 35(8), pp 982-1002.
- Doll W, Hendrickson J A and Xiaodong D (1998) Using Davis's Perceived Usefulness and Ease-of-use Instruments for Decision Making: A Confirmatory and Multi-group Invariance Analysis, *Decision Science*, 29 (4), pp. 839-869.
- Forrester Research [Website] www.forrester.com, last accessed 6 January 2005.
- ICT in Egypt [Website] International Telecommunication Union, www.itu.int, last accessed 4 January 2005.
- Kamel S and Abdel Ghaffar H (2003) Free Internet in the Lands of the Pharaohs - A Study of a developing nation on a mission to narrow its digital divide. *Proceedings of the 14th Information Resource Management Association International Conference*, Philadelphia, Pennsylvania, USA, 19-21 May 2003, pp 228-229.
- Kamel S and Assem A (2003) Assessing the Introduction of Electronic Banking in Egypt Using the Technology Acceptance Model, *Annals of Cases on Information Technology*, Hershey: Idea Group Publishing, Volume 5, pp. 1-25.
- Kamel S (1998a) Humanware Investment in Egypt, *Proceedings of the IFIP-WG9.4 Conference on Implementation and Evaluation of Information Systems in Developing Countries*, Asian Institute of Technology, Bangkok, Thailand, 18-20 February.
- Kamel S (1998b) IT Diffusion through education and training, *Proceedings of the 8th Annual BIT Conference on Business Information Management-Adaptive Futures*, Manchester, United Kingdom, 4-5 November.
- Loch K D, Straub D W and Kamel S (2000) Use of the Internet: A Study of Individuals and Organizations in the Arab World. *Proceedings of the First Annual Global Information Technology Management World Conference*, Memphis, Tennessee, USA, 11-13 June, pp 191.
- Ministry of Communications and Information Technology [Website] www.mcit.gov.eg, last accessed 20 September 2004.
- Nielsen Ratings [Website] www.nielsen-netratings.com, last accessed 2 January 2005.
- Palmgren M A (2003) Internet numbers unclear, PC sales plummet, *Business Monthly*, June.
- Pyramids Research (2001) ASP Strategies and IT Markets in the Arab Middle East. *Economist Intelligence Unit* [Website] www.pyramidresearch.com.

ENDNOTES

- ¹ This paper is based on a research study conducted in Egypt in 2004 on the feasibility of establishing an Internet Café in Egypt. The research was conducted by Adel El Senoussi, Dina Emam, Nevine Habib, Sarah Hanna, Lamis Sabrah, Nermine Zahwi.

0 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/proceeding-paper/assessing-impacts-establishing-internet-café/32568

Related Content

Authentication

Andrea Atzeniand Antonio Lioy (2015). *Encyclopedia of Information Science and Technology, Third Edition* (pp. 4239-4247).

www.irma-international.org/chapter/authentication/112866

A Survey on Supervised Convolutional Neural Network and Its Major Applications

D. T. Maneand U. V. Kulkarni (2017). *International Journal of Rough Sets and Data Analysis* (pp. 71-82).

www.irma-international.org/article/a-survey-on-supervised-convolutional-neural-network-and-its-major-applications/182292

Random Search Based Efficient Chaotic Substitution Box Design for Image Encryption

Musheer Ahmadand Zishan Ahmad (2018). *International Journal of Rough Sets and Data Analysis* (pp. 131-147).

www.irma-international.org/article/random-search-based-efficient-chaotic-substitution-box-design-for-image-encryption/197384

Customer Relationship Management and Social Media Use

Aurora Garrido Morenoand Nigel Lockett (2015). *Encyclopedia of Information Science and Technology, Third Edition* (pp. 1406-1414).

www.irma-international.org/chapter/customer-relationship-management-and-social-media-use/112541

Cognitive Radio Sensor Networks

Yasir Saleemand Mubashir Husain Rehmani (2015). *Encyclopedia of Information Science and Technology, Third Edition* (pp. 6152-6159).

www.irma-international.org/chapter/cognitive-radio-sensor-networks/113072