

Establishment and Management of Cyber Café for Economic Self Reliance in Developing Country

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Abstract: With the emergence of the internet system, different opportunities of several businesses were opened to the populace. Many at the advent of this emerging technology have taken the opportunity in establishing many businesses in which cyber café is one of the most populous. It is however observed that many of these centers pack up with short time of operation. Rather than empowering the owner financially, it however leads some into debts and financial troubles. This study proposed how a standard cyber café can be established and managed as a small scale business for profitability and productivity.

Key words: Networks, processor, bandwidth, computers, management

INTRODUCTION

The internet which is the acronym for international network is a global network of computers linked together by cables, optic fibre, telephone line and microwave and satellite link to form a large single pool of information (Edeko, 1997). It is known as a world wide communication medium which provides information pool from where people all over the world exchange, retrieve, disseminate and store information. It started in 1969 when four computers were networked together and with time the network grew into what we have today.

With the advent of this technology, people started looking for ways of exploiting the services for economic empowerment. These led to the establishment of cyber café. A cyber café could be defined as a place (room or hall) with internet connectivity where people go for internet services. These services may include browsing, sending or receiving mail and having internet calls. Cyber Café which is a product of Information Communication Technology is an awesome tool for economical empowerment and job creation if properly established (Chika *et al.*, 2005).

ESTABLISHMENT OF CYBER CAFÉ

Location: In the establishment of any business one of the major factors to be considered is the market. It must be strategically located in a place that will have enough customers for patronage. It must consider the literacy level of the environment because it is generally observed that only the literate uses cyber café. It could therefore be located in a campus environment.

Power supply: It is noted that there is consistent erratic power supply in most part of developing country and for a cyber café to operate efficiently, it needs a consistent power supply. In establishing a café therefore, power supply must not depend on supply by country power supply authority. A good 10KVA generator could be acquired at the beginning for the smooth running of the company. In addition, uninterrupted power supply UPS may be acquired for back up against breakdown in crucial cases.

Ventilation: Network equipment requires cool environment and to ensure this in a cyber café, the venue should be roomy and should have enough windows for cross ventilation. Also there must be provision for ventilation through fans and air conditionals.

NETWORK EQUIPMENTS

The efficiency of any network depends much on the network equipment used. The network equipments used must be standard ones to obtain optimum efficiency. Some of the indoor equipment needed are;

The server: The server is the backbone of the network. It is the center of the management of the network and its configuration must therefore be robust for effective functioning. The processor of the server could be Pentium IV with at least 1GHz speed. Also the random access memory could be of 512Megabyte size with a Hard disk of 80Gigabyte size. The server must also have auxiliary storage system such as CDROM drive with writer, Zip drive and Floppy disk drive.

Computers: The computers are the workstation and their configurations may determine the speed of the network. Pentium III with 233 megahertz speed and with at least 128Megabyte Random Access Memory (RAM) and 10Gigabyte Hard disk may form a good workstation.

Cabling: Cabling is the act of interconnecting the Local Area Network and may determine the functionality of any network. If good cable were not used it may lead to distortion and attenuation of the network signals. Optic fibre though costly are good network cable. Twisted pair cable could also be used.

Very Small Aperture Terminal (VSAT): VSAT are used for broadband internet access that is needed for a cyber café. The VSAT to be used for high productivity must be one that is reliable and that can provide two way service. It could be one you can down load at speed up to 400 kbps for high efficiency.

INTERNET SERVICE PROVIDER (ISP)

The ISP is the company that provides your hook up to the internet. The choice of ones ISP determines also the effectiveness and functionality of ones company. Some cyber café has packed up because of their wrong choice of ISP. Before choosing an ISP, a little up-front research can save you a lot of aggravation on the long run (Olufemi *et al.*, 2005). While choosing the company, customer service, availability, quality and responsiveness must be considered.

BANDWIDTH CONSIDERATION

The appropriate utilization of bandwidth allocation by ones ISP has a significant role to play in the success of ones business. Bandwidth must not be totally occupied to avoid bottleneck. If cyber café has few workstations in proportionality with bandwidth, the workstation will be fast and will encourage the customers, but on the other hand if the workstations are too many, the network will be slow and this will drive away the customers. Acquiring large bandwidths to accommodate many workstations is very good but the bandwidth must not be overloaded to lessen traffic congestion.

EFFECTIVE MANAGEMENT OF A CYBER CAFÉ

Many cyber café were properly established but were poorly managed leading to earlier death of such business. Some collapsed because of virus attack while other is as a result of lack of accountability of the staffs.

Security management: The security of a cyber café covers the physical, systems and the transmission security. The network equipment is to be protected against theft by providing enough security for the safety of the equipments.

In addition effective security management could be achieved by

- Deploying more and more of the existing security technology throughout every signal of the network. This will include firewalls to block access and perform application inspection, intrusion protecting system technology to provide very granular traffic inspections and identify known threats.
- The use of latest and most effective antivirus software to battle viruses. The antiviruses are to be upgraded on regular basics to be able to combat recent virus that might crash the server or any of the workstation.
- Deploying the latest and most efficient encryption software to counter eavesdropping on the network.
- Regularly strengthening the user access security on the network. Access security is enforced using passwords or some other form of identification of the user. The strength of an individual user unique password lies in its secrecy. Passwords should be given maximum lifetime, it can be a month, after which a new password is selected. The password should be revoked during long period of the absence of the user and the user should be allowed a certain number of login attempt after which the user is disabled from active list
- Occasionally employing qualified and experienced information security professional. The security expert is to regularly carry out risk analysis on the network to clearly identify the security gaps on the network

Accounting management: This is the most sensitive part of the establishment that deals directly with the goal of the company. It involves monitoring of the network, network resources and billing users equitably for network usage. Accounting management will involve:

- Having a standard method of identifying users or group of user making demands on the network resources and at what level they do so. This method should generate data needed to charge the users.
- Keeping detailed records of the cost of maintaining the network, spare hardware devices, special tools, training the technical staff, subscription fees to your ISP, power supply and the downtime of the network.

Fault management: This involves fault repairing and identifying trouble before a problem. This will take

- Having a spare part store for quick replacement of faulty hardware devices. Hardware problems accounts for 80-90% of the network problem. Such hardware store should have among other things hard disk drives, RAMS, network cards, floppy disk drives, CDROM drives and power packs.
- Having regular training for the technical staff. This will prepare them for systematic way of tracking fault on the network.
- Having special tools for fault identification and correction. This tools may includes power line tester ,for assessing the purity of AC power supply, time domain reflectometer used to check loose connections, breaks and links on the network, protocol analyzer which is used to capture, display and analyze network traffic.

CONCLUSION

It is obvious that the government of developing countries is limited In her ability to provide job for the

teaming population of our country. Proper establishment and management of cyber café is a mean of generating employment and financial empowerment. Proper establishment will include getting the best location, using good network equipments and using efficient ISP. On the other hand the management must cater for security, fault and accounting. When these are done employment will be generated, poverty will be reduced and standard of living will also improve.

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