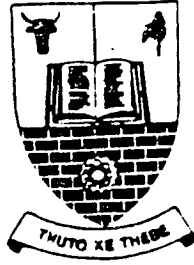


UNIVERSITY OF BOTSWANA.



DEPARTMENT OF LIBRARY & INFORMATION STUDIES

BUSINESS INFORMATION PROVISION: THE CASE OF TINET IN ZAMBIA.

By

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STATEMENT OF RESPONSIBILITY

The work contained in this dissertation was carried out by the author at the University of Botswana in 1998. It is the original work except where due reference is provided. It has never been or will ever be submitted for the award of any other University. No part of this work shall be reproduced with the knowledge of the author.

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Author's signature-----

K. Kashweka.

DEDICATION

This work is dedicated to my wife Grace for enduring my absence during the time I was doing my studies.

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ABBREVIATIONS

AISI -	Africa Information Society Initiative
AIP -	Associao Industrial Portuense
BASE -	Botswana Association of Small Enterprises
BOCCIM-	Botswana Confederation of Chambers of Commerce, Industry and Manpower
BCCI-	Botswana Chambers of Commerce and Industry
BuDs-	Business Development Services
CABECA-	Capacity Building for Electronic Communication in Africa
COMESA-	Common Market for Eastern and Southern Africa
EAOB.	Exporters Association of Botswana
ECA -	Economic Commission for Africa
FAP -	Financial Assistance Policy
ITC-	International Trade Center
IFS -	Integrated Field Services
LIAZ-	Leather Industries Association of Zambia
NAFTA-	North America Free Trade Agreement
NGOs-	Non-governmental Organizations
NGONET-	Non-governmental Organization Network
ODA -	Official Development Aid
OSIRIS-	Organized Set of Integrated Routines for Investigation of Social Science Data
PTA -	Preferential Trade Area
PADIS -	Pan-African Development Information System
RINAF-	Regional Information Networks for Africa
SABINET	– Southern Africa Bibliographic Information Network
SADC-	Southern African Development Community
SEP-	Small Scale Enterprise Promotion Limited
SEPT -	Small Enterprises Promotion Trust
SMEs -	Small and Medium Enterprises

SPSS -	Statistical Package for Social Sciences
TINET -	Trade Information Network
TPZ-	Textile Producers of Zambia
UNDP -	United Nations Development Programme
UNIDO-	United Nations Industrial Development Organization
VIS-	Village Industry Service
WWW-	World Wide Web
ZACCI-	Zambia Association of Chambers of Commerce and Industry
ZAM-	Zambia Association of Manufacturers
ZEGA-	Zambia Export Growers Association

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DEFINITIONS

Business - In broad terms business refers to the economic activity of providing goods and /or services to others for financial return (Perlick and Lesiker, 1986). The term business also refers to the activity of buying, manufacturing, service provision, hiring, letting or lending with a view to profit (Shillinglaw and Thomas, 1988). A business enterprise performs some or all of these functions as an organization entity. In this study, business is used as a generic term covering the activities of commerce and industry.

Business Information - Haythornwaite (1990) citing Vernon says that business information is the published data, facts and statistics needed for decision making in business organizations, private or public as well as in government. It includes marketing information, financial, banking and company information, rules and tax regulations, economic, commercial and trade information as well as factual information about the environment in which businesses and organizations operate.

Commerce - The term refers to trade (buying and selling) and to the organizations, which exist to conduct, facilitate and finance trade and industry (Shillinglaw and Thomas, 1988). Commerce provides the financial and professional support services needed to establish and maintain industrial production. One of its functions is to raise capital or long term investment funding, by which industrial firms acquire their necessities for production.

Industry - The term refers to enterprises primarily existing to manufacture goods or provide services. The term is usually used to denote a group of enterprises in a related field of activity, producing similar products or services, for example leather products industry or the banking or the insurance industry (Shillinglaw and Thomas, 1988).

Information network – Wesley (1990) defines an information network as an organized grouping of information centers and services for the purpose of transferring or promoting the exchange of information. On the other hand Etheridge and Simon

(1992) define an information network as a combination of information technology-based components that is designed to meet the requirements for communicating information within or between organizations. For this study, the later definition is used.

Network – The term refers to a communication medium which provides a connection between two or more users through which information may be searched, transferred or exchanged (Ashford, 1993).

Small and Medium Enterprise – There is no clear, standard definition of what actually constitutes a small medium enterprise (SME). Kalseth (1995) says that a study carried out by the International Labor Organization (ILO) found more than 50 definitions in 75 different countries. The variety of criteria applied includes: the size of the workforce or amount of capital invested, the form of management or ownership, production techniques, volume of sales, number of customers, etc. In reference to the above the Computerization Adviser of TINET said that some of the criteria used to define a small medium enterprise are very difficult to apply. So as a standard definition in the COMESA region a small medium enterprise is referred to as one owned and controlled by one person or a group of people who are directly involved in its day to day operations and employs not more than 30 employees.

ABSTRACT

This study investigated the performance of the Trade Information Network (TINET) of the Common Market for Eastern and Southern Africa (COMESA). It discussed the operations of TINET and the services which it offers to meet the information needs of the business community in Zambia, with a specific reference to Lusaka. The population for the study were large business organizations and small and medium enterprises (SMEs) involved in various business activities such as manufacturing, agriculture, wholesaling/retailing as well as service companies registered as users of TINET. It also focused on TINET members of staff and the Export Board of Zambia (EBZ), the national focal point for TINET. Although the aim of TINET is to provide information to organizations such as government institutions, intergovernmental organizations and non-governmental organizations (NGOs), the study focused only on business organizations. Unlike government institutions, intergovernmental organizations and NGOs, business organizations operate in a more competitive environment and the decisions they take can be costly for the organization if they are not based on adequate information. Business organizations therefore constitute a single group that would be expected, under normal circumstances, to be users of an information service like TINET.

Closed and open-ended questionnaires were used to collect data from business organizations. Out of 50 questionnaires, which were distributed, 30 of them were returned. Closed and open-ended questionnaires were also used to collect data from four (4) of the five (5) members of staff targeted at TINET. Data were collected from the fifth member of staff at TINET using semi-structured interviews. Data were also collected from EBZ using semi-structured interviews. Follow-ups on issues about TINET that required further clarification were made to TINET through e-mail.

The study revealed that TINET is most helpful in assisting business organizations identify market opportunities for their products and/or services. It also revealed that TINET is helping businesses through exposure of their products and identifying sources of inputs and consumer items. However, the study found that there is much to

be done if the network is to function according to the expectations of users. The research established that there are more large firms using TINET than small firms, an indication that small businesses are not benefiting from the services offered by TINET. The study identified the inadequacy of the information available to meet user needs, financial constraints, understaffing, absence of an information policy, lack of co-ordination among participating partners and inadequate publicity about the existence of TINET and its services as some of the problems affecting the operations and functions of the network. The study revealed that TINET was in the process of providing information at a fee in order to improve its operations and services.

The study concluded by recommending TINET to consider offering various types of information and a range of services if the system is to serve its clientele better. It recommends that using the funds that will be generated TINET should make its services accessible via libraries and other information centers. The study recommended that the money generated could be used to afford participating partners regular opportunity to meet, exchange information and discuss issues pertinent to the operations and functions of the network. The study recommended the need for a sensitization programme designed to motivate top-level management of government organizations to realize the importance of information and make it readily available to TINET. Finally, the study recommended that libraries, government institutions, non-governmental organizations and mass media should be utilized to propagate the existence of and the services provided by TINET.

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CHAPTER 1

INTRODUCTION

CHAPTER 1: INTRODUCTION

1.1. Background to the study

Developments in information and communications technology during the last decade have engendered social and economic transformations in the world. These developments enable people to acquire, process, store, retrieve and disseminate information in whatever form it may take, unconstrained by distance, time and volume (Adam, 1995). Podshibyakin (1996) has the same observation and he says that dramatic advances in the information industry in recent years, particularly the rapid growth in electronic networking are revolutionizing access to and delivery of knowledge resources of the world. It could be said that the engine of economic growth in the information age lies in information technology. Ke (1995) argues that with the rapid technological progress in computerization and communications, the world has become a global village where, the role played by information networks in linking people, societies, governments and nations, becomes very important.

The impact of information networking, both current and future have been and are still being documented in reports or discussed in conferences. Examples of these are publications like the report of the United States Information Infrastructure Task Force; the report of the telecommunications Council of the Japanese Ministry of Posts and Telecommunications; the European Commission Bengamman Report: Europe and the Information Society (Tocatlian, 1995). Examples of conferences are the World Telecommunications Development Conference of the International Telecommunications Union, Buenos Aires, 1994; the G-7 Conference on the

Information Society, Brussels, February 1995; the African Regional Symposium on Telematics for Development, 3-7 April, 1995 Addis Ababa and the Internet Society Conference on the Internet: Towards a Global Information Infrastructure, Montreal, June, 1995 (Chisenga 1996). As Tocatlian puts it, it is perceived that the on going information revolution will have a deeper and faster effects than any past technological advances known to man. To a large extent, the impact of electronic networking on business and commerce is already being experienced. Large multinational corporations have been using electronic facilities to conduct some of their businesses for long time now. As Chisenga (1996) puts it, information networking has accelerated the emergence of electronic commerce in which information is being transferred and distributed using digital communication networks, enabling the business community to conduct transactions electronically.

Africa as a region is entering the next century facing huge economic, social and political challenges. Paramount among these are a hostile external trade environment, a large debt burden and reduced levels of Official Development Aid (ODA). It is argued that Africa's internal and external trade is hindered by among other things poor communication systems and lack of information on procedures, import/export opportunities, markets and prices (Economic Commission for Africa [ECA], 1996). Electronic networking is one way that can assist African countries to develop. Global trade and investment are increasingly dependent on the timely flow of information. The efficient flow of information is the source for improved production and competitiveness that can help African countries tackle the prevailing economic crisis. Access to information networks can improve the position of Africa by providing data

and information to assist in strategic planning, market access and technological acquisition.

Dependency in the areas of manufacturing and trade can be reduced through on-line access to manufacturing tools and networked trade points in Africa (Adam, 1995: 300). Improved information networks can promote market integration, which in turn provides access to a consumer pool large enough to generate economies of scale thereby developing a sector that can compete on the global market. Adam (1995) argues that timely flow of money market information is one of the most crucial areas for African countries if they are to become more competitive in the global market. The argument is that information and communications technology can offer Africa a competitive edge and thereby assist the region to pay off its debts and negotiate on a firm foundation. However, this requires a well-mapped realistic vision, which integrates the developments in communication and information technologies in order to assist African countries adapting to this change.

Although information networks in sub-Saharan Africa have spread rapidly during the last decade, they have lacked proper planning and implementation. Jegede (1995: 219) makes the following observation:

While the implementation of electronic networking in many parts of the world has been systematic, well-planned and has been set up to meet specific relevant and environment-specific achievable objectives, in Africa it has been a confused and an uncoordinated experimentation in which aid agencies are

having a field day experimenting with the life and future of the continent using limited, obsolete and inadequate facilities.

The argument is that although the attempt to build information networks in Africa is well intended the international community is doing it without a clear understanding of the African environment. Attempts to implement information networks in Africa seem not to take into account the social, economic, cultural and political dimensions of African Countries. Kangulu and Wood (1995) argue that these factors have a strong bearing on the type of development information, which is produced as well as who produces and controls its accessibility.

Odedra-Straub (1995) notes that there are about 30 projects on African networking initiatives such as Regional Information Networks for Africa (RINAF), HealthNet, Capacity Building for Electronic Communication in Africa (CABECA), Non-governmental Organizations Network (NGONET) to name but a few. Many of these projects have been initiated and often funded by international agencies. Odedra-Straub argues that very few of these networks are being used for purposes which influence or enhance the users organization's or host country's development. The Common Market for Eastern and Southern Africa (COMESA) has a Trade Information Network (TINET). TINET was established to facilitate the flow of information related to trade and production development in the region. However, given the poor record of some information networks in Africa the researcher found it necessary to carry out a study on TINET so as to establish whether it was performing according to its objectives.

1.1.1. Trade Information Network (TINET)

TINET is a computerized information network of COMESA specifically designed for the exchange of data related to trade and product development in the region (COMESA, 1997). TINET was established in 1985 with the assistance of the International Trade Center. It is part of the COMESA Trade Development and Promotion Programme. The United Nations Development Programme (UNDP) funds TINET with the cost-sharing contribution from other bilateral donors. The following are the objectives:

1. Assisting in the identification of markets and products, to bring about an increased volume and value of intra-COMESA trade, as a sound basis for market integration.
2. Providing the business community and the public sector with information on intra-COMESA trade expansion opportunities.
3. Assisting enterprises through advertisement and exposure of company profile for regional dissemination by inserting them in the trader's directory.
4. Assisting manufacturers improve their capacity utilization through increased access to markets in the region.
5. Assisting trade service organizations, who wish to identify a sub-regional client base for trade financing, freight forwarding, advertising and other key trading services.
6. Assisting non-governmental and inter-governmental organizations that may want to obtain contact information for procurement of relief supplies of food, essential drugs and other required products.
7. Helping government procurement agencies that wish to diversify, expand and improve the competitiveness of their sources of supply.

The coordinating office of TINET is based at the COMESA secretariat in Lusaka, Zambia but has in each member state focal points (e.g. Export Board of Zambia, Uganda Trade Promotion Council, Zimtrade in Zimbabwe etc.) to coordinate the collection and dissemination of information. The focal points are responsible for providing the coordinating office with information about traders and products for the benefit of all member states in the region. TINET services are extended to the business community in the region through chambers of commerce, manufacturers' associations or other business representative organization acting as TINET cooperating agencies. The services offered by TINET are free to business organizations, government institutions, NGOs as well as individuals interested in trade related issues in the COMESA region.

TINET contains four databases designed to provide answers to business needs. Below is a summary of the information contained in the databases:

1. Import and export statistics for over 6,000 products traded in the region, over a period of five years by value and by country of origin and destination.
2. A list of over 5,000 importers, exporters and manufactures with contact information, by product, country and type of activity.
3. Preferential tariff rates applicable to all products traded under COMESA arrangements.
4. Country profiles for COMESA member states with information on trading practices, basic economic indicators and useful addresses.

The databases are supplemented by periodic publications of both general and product-specific traders' directories as well as supply and demand surveys and other trade

related monographs. A monthly bulletin on trade opportunities and tenders is circulated in the region through the TINET focal points.

The expected beneficiaries of TINET include:

1. Enterprises interested in initiating or expanding specific trade opportunities, market size, and counterpart trading corporations within the region. Included also are exporters and importers seeking to expand and diversify their market and identify competitive sources of supply respectively.
2. Government and corporate policy makers who are concerned with the formulation of trade strategies based on actual and potential supply and demand conditions as well as to evaluate country performance and regional benefits and /or set modalities for improvements.

1.2. Statement of the problem

Carrigan (1995) says that organizations exist because of the benefits they make possible and the benefits come as a result of the services these organizations provide. For an organization to continue existing it has to be seen performing as per expectation. TINET exists as an organization with a purpose of ensuring that users have access to information. Running an information network means a lot of commitment in terms of resources such as finance, manpower, equipment, etc. The question is how to justify the return on the magnitude of the resources that are put in the network. The return is the benefits it makes possible to users. As Carrigan puts it, the degree of benefits is measured by the extent to which the system matches the needs

and interests of the patrons as well as the level of usage. This justifies the level of investment.

Similarly Baker and Lancaster (1991) argue that the ultimate test of the quality of an information system or service is the extent and mode of its use because this reflects the purpose of its existence. TINET must be seen to be sufficiently flexible so that it can adjust to the environmental changes or it runs the risk of no longer fulfilling the needs of users and thereby becoming a liability. Adam (1995) observes that the suitability of an information network is when it can adapt to local situations and day to day needs of users. The argument is that the information disseminated should reach those who need it for problem solving. TINET is expected to assist business organizations take a leading role in the development of the region.

Zambia has embarked on a liberalization program with the aim of creating an environment for greater competition, technology transfer and easy access to foreign capital. Changes in the economic policies of Zambia also mean changes in the way organizations carry out business transactions. It also means that information needs of businesses are constantly changing. Businesses both large and small require access to timely and accurate information to compete more effectively. This can improve the position of Zambia in the market economy. SMEs, for example, have the potential to contribute to the economic development because they constitute the majority in the Zambian economy. SMEs have a spirit of entrepreneurship that engenders a culture of self-reliance, personal responsibility and the creation of employment opportunities.

TINET should be seen to assist business organizations with access to information in order for them to be in a competitive position and even to enter new business areas.

Preliminary investigations indicate that no study has been carried out to evaluate the performance of TINET since it was established by the then Preferential Trade Area (PTA) for Eastern and Southern Africa, now COMESA. A discussion with the Librarian at the Export Board of Zambia (the national focal point of TINET) revealed that TINET was not performing as per expectation, an indication that there could be a problem. It is in this context that the study was carried out.

1.3. Objectives of the study

This study sought to investigate the performance of TINET as regards the provision of information to the business community in Lusaka, Zambia.

The specific objectives of the study were:

1. To investigate the availability of resources (staff, capital, equipment, literature) or lack of them.
2. To assess the suitability of the service, literature and databases available in meeting user needs.
3. To assess the impact of the services which are provided by TINET on business performance.
4. To obtain the perceptions of users on the performance of TINET
5. To identify problems, if any, that hinder the operations of TINET
6. To suggest ways in which the services of TINET could be improved.

1.4. Research Questions

The study sought to address the following questions:

1. How does TINET disseminate information to the business community?
2. What operational problems does TINET encounter?
3. To what extent do these problems affect the performance of TINET?
4. Do business organizations frequently make use of TINET services?
5. Do the services provided by TINET have an impact on the performance of businesses?
6. Does TINET have enough resources (staff, equipment/facilities, capital, and literature) to adequately meet the users needs?

1.5. Significance of the study

The study sought to establish the achievements or failures of the information network since its establishment. The following are the benefits:

1. The study contributes towards the improvement of access to information among business organizations in the region.
2. The findings reveal the information needs of business organizations in Zambia and what needs to be done in order to meet these needs.
3. The findings provide an insight into the weaknesses and the strengths of TINET as a medium for the dissemination of information in the region.
4. The findings can be used to improve the operations of TINET.
5. The findings can be useful to persons and/or organizations interested in establishing information networks for the exchange and dissemination of information.

6. The study adds to the existing body of knowledge and raises more issues for further research.

1.6. Scope and Limitations

Due to time and financial constraints, this study was limited to a survey of business organizations in Lusaka, Zambia. Although coverage of wide population and geographic area would have been a representative of all business organizations in Zambia, nonetheless as a capital and commercial center of Zambia, Lusaka is a representative business practices and activities prevailing across Zambia. Therefore the results from this study can be used to generalize business practices in Zambia.

CHAPTER 2

LITERATURE REVIEW

CHAPTER 2: LITERATURE REVIEW

2.1. Introduction

This chapter provides an insight into studies that have been carried out by various authors. The chapter is divided into two main sections and each section has got two sub-sections. The first section deals with studies that have been carried out on business organizations and how they use and perceive information in relation to their daily operations both in the developed world and sub-Saharan Africa. The second section looks at information networks and how they are being used in providing access to business information. It deals with literature related to the developed world and sub-Saharan Africa respectively. The findings of these studies constitute the rationale for carrying out this study.

2.2. Business organizations and information in developed countries

Smith (1996) carried out a study to investigate the way small and medium enterprises use information and whether good use of such information resources was in any way related to business success. A group of small and medium sized enterprises was selected and 470 questionnaires were administered. From the response of 60 it was found that among the successful companies 75% had access to business information compared to 50% among the less successful companies. It was also discovered that companies with the highest success rating did not see the cost of information as a barrier to access information compared to companies with lower success rating. Of

importance to this study is to examine whether TINET services were in any way contributing to good performance among business organizations in Zambia.

Dixon's (1994) study investigates the demand and supply of information in the small business sector in West Lancashire in Britain. The main findings are that few small business managers recognize a need for information or appreciate its value to their activities. Generally, financial and time constraints limit the information seeking behavior of firms, explaining the general lack of awareness by small firms of the range of resources available to them. The findings also indicate the prevalent preference for local and informal sources of information. Dixon notes that although the level of services is generally high, there is room for improvement in the provision of information to small businesses. This is especially so in the marketing of services and cooperation between organizations to avoid the mismatch between the resources available and the demand for information.

Virkus and Tamre (1996) carried out a study to obtain an overall picture of the actual use and needs of business information and business information services in Estonia. The findings are that large, successful firms have more new media, information technology and business information sources at their disposal and make use of these more actively than small business enterprises. The results showed that the majority of small businesses have no knowledge of the existence of a specific kind of business information or how and where it can be acquired. In many cases they do not even know what kind of information they need. Most of the information is gathered through informal channels and it's not easy to find reliable sources. There was lack of coordinated development of business information networks. Virkus and Tamre

recommend that there was need to have a coordinated approach to the access of both national and international business information.

Arif and Meadows (1994) investigated the level of access to industrial information in Saudi Arabia in comparison to the UK. The study was done in Jeddah and Riyadh (Saudi Arabia) and the UK. The study focused on small and medium as well as large firms in both countries. Questionnaires and a series of interviews were used for data collection and later analyzed. The results indicated that information provision in Saudi Arabia might be sufficient in terms of the number and range of providers for the existing demands of industry. However, judging by the existing information demand in the UK, information provision in Saudi Arabia would need to evolve as industrial activity develops. The findings are that information requirements seem similar across the three industrial sectors, but large firms in both countries are more information conscious compared to small and medium sized firms. This shows that large companies may already be in a position to exploit new entrepreneurial information services along the lines of those in UK. The relatively small size of the industrial sector in Saudi Arabia enhances easier access to information amongst small and medium sized firms than in the UK. This is relevant as this study intended to find out whether TINET is meeting the information requirements of business organizations in Lusaka.

Michael and Bingham (1987) carried out a study to investigate the needs of British industry for European Union (EU) information and to review the adequacy of arrangements made to satisfy these needs. The study revealed that business demand for

EU information was generally low and mostly concentrated in large firms operating on a European level. The demand among large firms was of a need to monitor legislative developments in anticipation of events which might affect company profitability and prospects. Small firms on the other hand felt unaffected by EU membership and the fact that they operated on a local scale felt no need for EU information. Michael and Bingham argue that the difference in the levels of demand for information between large and small firms demonstrates the levels of awareness of EU information among these companies. The study also revealed that large companies are in a better position to exploit information from EU information providers because they have considerable in-house expertise. They also have the influence to enjoy direct contact with EU institutions and the resources to pay for the specialist services offered by private consultants and professional bodies. On the other hand small firms tend to rely on the sources they know best, even if others are more appropriate. The study revealed that EU information was readily available for those who know where to find it.

2.2.1. Business organizations and information in sub-Saharan Africa

Mchombu (1996) carried out a study to establish the information needs and seeking behavior of women engaged in small business activities in Botswana with specific reference to Gaborone. Using interviews and questionnaires data was collected from forty women who own small businesses with less than 15 employees and ten institutions, which serve women in business. The study revealed that a lot of women lack basic information on small-scale businesses and were not aware of their information needs and how information can support their business activities. The study showed that many institutions, which aim at providing services to women who owned

businesses, were not being utilized effectively due to lack of information on existing services. It was also found that the channels such as radios, newspapers, workshops and pamphlets used by the majority institutions are not adequate. The study also revealed that businesswomen find difficulties communicating their priorities to government which is unaware of their business requirements and fails to come up with ways of assisting them. Most businesswomen felt there was need for some forum that would offer them an opportunity to meet regularly in order to exchange information.

Kebonang (1997) carried out a study evaluating existing ways through which the Financial Assistance Policy (FAP) program disseminates information to small-scale enterprises in Botswana. The focus of the study was on FAP assisted small-scale business owners involved in sewing, knitting, leatherwork, metalwork and wood category. The study found that one problem facing entrepreneurs is that of inadequacy of the prevailing system of information dissemination.

It also revealed that small-scale entrepreneurs in Botswana are aware of the fact that they are operating in a competitive environment and that it is through being informed and being knowledgeable that they can compete effectively. Kebonang's study also revealed that the majority of business owners are not aware of institutions such as the Botswana Chambers of Commerce, Industry and Manpower (BOCCIM), Botswana Chambers of Commerce and Industry (BCCI), Exporters Association of Botswana (EAOB), Small Enterprises Promotion Trust (SEPT), Botswana Association of Small Enterprises (BASE) and the University of Botswana Business Clinic, an indication that valuable services of these institutions are not put to good use. The studies conducted

by Mchombu and Kebonang are important for this study because it seeks to establish how TINET is publicizing its services to the business community.

A study done by Hopwood (1989) on successful women entrepreneurs in Zambia showed that there are many factors, which hinder women's success and makes their operations difficult. Some of these are lack of trained staff, inadequate transport to move their products to markets and lack of information. Hopwood says that most of them had no idea of the environment in the market place before starting an enterprise. She notes that most of them had previously been on an informal basis in the same sector and this made them aware that a market exists for their products. She observes that the question of how to exploit that market and identify new products was not considered.

Miller and Levin (1993) carried out a study to ascertain marketing outlets of rural micro-enterprise in Zambia in order to determine and enhance market distribution and market sales. The study focused on 50 family based micro-enterprise proprietors of Kabwe and Lusaka regions of Zambia. The study revealed among other things inadequate resource support factors such as access to roads, lack of potential intrusion of government policies as well as the non-availability of communication channels, such as radios and newspapers, for economic information.

2.3. Information networks in developed countries

De carvalho, Costa, Ferreira, Fonseca and Wilson (1993) undertook a study to establish the information needs of entrepreneurs in Northern Portugal. The aim was to

use the findings of the study in the proposed establishment of a network linking the Associao Industrial Portuense (AIPortuense) and their member firms. The study established that there was a considerable need for information relevant to business in Portugal. The study revealed a considerable latent demand for information and an awareness on the part of entrepreneurs that they lacked the means to access relevant information in spite of the existence of the industrial associations which were working to satisfy their information needs. De carvalho et al (1993) concluded that the perceived need for an information network, linking the industrial associations and their members firms was well founded and that AIP and other associations should find the means to work together to develop a Network for Information Associations. This would facilitate the flow of information between members. The network will also make it possible to manage and exploit the national and international sources of information.

Farmer and Sanson (1993) examine how the Scottish Enterprise Network provides information for business in two distinctly different areas, Grampian and Ayrshire. The Enterprise Network is made of the Scottish National Enterprise, which is responsible for coordinating and providing support for the network of thirteen local enterprise companies. Among its responsibilities is also the provision of business information through different stations in the areas referred to above. The observation was that the Scottish Enterprise Network does seem to be filling gaps which previously existed in business information especially free information and advice for developing small businesses. Farmer and Sanson (1993) also argue that the arrival of the Enterprise on the business information scene makes future prospects seem brighter because the

Enterprise seems to have the resources to try out new strategies in information provision. The two also observe that as part of its portfolio of services the Enterprise demonstrates that the use of information is an important part of business planning and development.

Examining the use of on-line services among Danish small businesses Clausen (1996) says that business organizations stand to benefit from on-line information services. However, referring to small businesses he argues that many business organizations have very little time for information management and information retrieval from geographically remote services. Clausen argues that even if small businesses have some sort of computer equipment they have very little experience in information retrieval. As a result they are unable to fulfill their information needs without the assistance of some information professional. From the information provider's point of view it means that there are strong expectations from end users for new and innovative services to be put in place.

Angelides (1997) examining the use of the Internet and the World Wide Web in business says that Internet is changing the way marketing is done. He argues that Internet marketing plays a central and strategic role for business organizations to gain competitive edge and it has the potential to change the way marketing is done in business. Internet is a useful tool for a marketing strategy that guides marketers to focus on communication with customers. However, he argues that its use is likely to be effective for only particular products and particular markets. This is because there is a need for a mass marketing approach if a product has a broad based appeal, with a

limited product set, wide distribution service and seeks to appeal to a homogenous demand via a single market plan. Therefore this requires a wide range of messages to customers, thus the use of other media for marketing. Web marketing will work best by supplementing the traditional way, but should be used when appropriate with considerable thought. However, on-line marketing offers a myriad of opportunities to business organizations that are nimble enough to think in an entrepreneurial way. For this study the researcher is interested in knowing how TINET is enabling business organizations market their products.

A similar study was carried out by Cockburn and Wilson (1996) to investigate the ways in which businesses are making use of the World Wide Web (WWW). The study revealed that on-line business transaction is still very much in an early stage. Out of 300 companies surveyed, only 11.7% were engaged in on-line selling of goods or services. The study revealed that customers do not feel comfortable sending sensitive information over the Internet. The two authors argue that the capabilities that the WWW offers are yet to be fully exploited. The study also revealed that electronic mail is widely used at most of the sites and it is likely to remain one of the most important aspects of the Internet especially in relation to business use. However, the study revealed that business as whole has some way to go before true electronic commerce is achieved.

Dou (1996) discusses how some United States initiatives of using Internet for the dissemination of small business information can be adapted to help French small businesses in the southern region of the country. He notes that the creation of small

business center by using all the possibilities of the information highway appears to be a good opportunity for regional economic development because it has been proved to be effective. The observation is that an on-line information center is a good strategy to improve the development of the economic activity of small businesses. Dou argues that the Small Business Center Internet Server will present to small businesses how to use the information superhighway in their business activity. The argument is that investment in Internet support services is not only good medium to support and help small businesses, but stands as the best one to increase the international impact of local firms. He proposes the creation of a regional gateway to on-line local Internet commercial servers since several small businesses have their catalogues on the French www server. This will lead to the promotion of the regional products and know-how through catalogue databases and multimedia resources thereby bringing economic revival for the region.

Seng (1996) discusses the potential benefits of using the Internet to conduct business. He argues that Internet has quickly become an established method for connecting suppliers and customers worldwide. The Internet offers great opportunities to improve business productivity and opens up new untapped markets on a global scale. Seng observes that technology oriented companies are already successfully using the Internet as a source of market research and as a means to interact with current customers, to reach new customers and associate with others with common business interests. Seng, however notes that a more sophisticated approach to on-line commerce would require more substantial investment in planning as well as investment in time and effort.

Arlene and Motz (1996) argue that connecting to the Internet provides small companies with low cost alternative to a private internal network previously available only to large companies. The two authors argue that until recently, high-speed global data exchange was the exclusive preserve of a selected number of multinational corporations. They observe that at the moment millions of users can search for information that may reside in one or more millions of computers scattered around the world at a low cost. They give examples of companies in the United States that are using the Internet for business transactions. Some of these examples include GE Plastics, which offers 1, 500 web pages to help customers have access to information about its products, the Volvo and Alfa Romeo who are using the web to provide photos and information about new cars to customers. The observation is that the Internet offers even to small and emerging businesses the ability to reach a much larger audience at a low cost.

Nath, Akmanligil, Hjelm, Sakaguchi and Schultz (1998) carried out a study in USA on how business firms, both large and small, were using the Internet as a business tool. The study looks at the benefits of conducting electronic commerce using the Internet and the problems associated with electronic commerce on Internet. It was revealed that Internet allows business firms, both large and small, an opportunity for publicizing their products and services at minimal costs. It was further established that Internet holds the potential to increase the market share and helps expand into new markets by virtue of its global reach. However, the study revealed several impediments, which include among other things, security of the information that is put on the Internet. It

revealed that there was fear among companies of a possibility of their information or that of their customers being intercepted by anybody. Many companies expressed the fear of transmitting technological information to their competitors. The authors argue that in spite of the fact that there is considerable interest and potential in the use of Internet for business purposes, issues which hinge on the security of information requires special attention. The argument is that when embarking on electronic commerce business firms should also consider measures that have to be put in place to ensure that sensitive information does not land in wrong hands. In view of the above findings this study seeks to establish what measures TINET has put in place to ensure that the information it has about various business organization does not land in wrong hands. Protection of information from unlawful possession gives the users confidence in the information system.

2.3.1. Information networks in sub-Saharan Africa

Kangulu and Wood (1995) carried out a study in Zambia to establish knowledge and use of the Pan-African Development Information System (PADIS). The study revealed that PADIS, in its present state is not an effective mechanism for dealing with development information in Africa because it lacks proper planning and implementation of its projects. The argument is that the approach taken to implement PADIS projects failed to take into account the weak information infrastructures of most of the Economic Commission for Africa member states. The study also revealed that although PADIS was envisaged as the leader in information technology in Africa, it has concentrated on advanced telecommunications and computer systems which cannot be supported by many African countries. It also showed that nearly half of the

respondents who were at least aware of PADIS are from the University of Zambia and research institutes and a quarter from government departments. This shows that there is very little publicity to ensure that people are aware of its existence and services. For this study the researcher wants to know how TINET is making its services known to would be users. This study is also interested in finding out whether business organizations have the required information technology to access information from TINET since TINET is an electronic information network.

Chisenga (1996) reviews the implementation of the CABECA in Lesotho; a project designed to improve the flow of development information in Africa and to develop online linkages between existing information systems and networks in the region. Chisenga argues that care should be taken when selecting national focal points for projects. He argues that there is need to conduct a detailed analysis of the facilities available. While equipment may be purchased, depending on the availability of funds, the issue of skilled manpower should be taken into consideration. He observes that although the Institute of Southern African Studies (ISAS), based at the National University of Lesotho, was chosen as a national node it had no human resources to manage and operate the network. He recommends that PADIS should ensure that appropriate training programs for CABECA national node operators are carried out. This would give the people who run the system the required skills. Although the project is well intended it is likely to fail unless there is a regular project monitoring system to ensure that PADIS does not receive wrong signals regarding the success of the project.

Southern Africa Bibliographic Information Network (SABINET), perhaps the largest commercial on-line information provider in Southern Africa, provides value-added electronic access to millions of information items stored on local and international databases (SABINET, 1997). SABINET on-line provides a global search facility to various databases. It enables clients to search for and ease access any database on its system, irrespective of its location and provides delivery of the full-text on-line, via fax, mail or interlibrary loan. SABINET On-line provides information to a wide range of academic, government and business users, serving not only South African information consumers, but also those in neighboring countries such as Botswana and Namibia and other international clients. Products offered by SABINET On-line include, among other things, on-line references, abstracts and full text information, electronic document ordering and specialist consulting and support services. In this light this study seeks to establish whether TINET is offering to business organizations as compared to SABINET.

McGillivray (1993) looks at the role of InfoAccess (an electronic commercial information service based in Pretoria) in the dissemination of information in South Africa as well as in the Southern African region. She argues that developments in the world of information technology are repositioning products and services into electronic media for distribution and enabling businesses the continuing thrust to capture the end user market. She argues that although information needs of any organizations are satisfied to some extent from local or in-house sources it is important to have access to external information sources. Referring to South Africa McGillivray says that as the country re-enters the global village, organizations will need to retrieve

information pertinent to their activities and their environment. She argues that InfoAccess should be in a position to meet such demands and to make information available to organizations in South Africa and even those outside its borders.

Meson and Nadir (1995) report on the functions of the Business Development Services in South Africa (BuDs). The two authors report that BuDs was supporting the establishment of a network of Local Business Service Centers which are aimed at responding to the needs of small firms. They say that BuDs was also developing a complementary network of Manufacturing Technology Service Centers to serve the needs of small manufacturing enterprises. BuDs was also building an inter-organizational communications network so as to link centers and provide access to useful data and information. The primary objective of the electronic information and networking system is to enhance Local Business Service Centers and Manufacturing Technology Service Centers by creating an electronic based system which will facilitate both their access to information and networking amongst each other. The idea is to use the Internet as a backbone of the system.

Levin (1995) looks at the role of South Africa Non-governmental Organization Network (SANGONET) in the provision of information, training and support to individuals and organizations. SANGONET provides services aimed at supporting democratization and building capacity of organizations by facilitating the exchange of information between them. SANGONET has a web site, which forms the basis for provision of development information and makes available electronically the information, which members require and request. Levin says that a SANGONET user

survey that was carried out earlier in the year indicated that 63% of non-governmental organizations respondents use SANGONET as a primary source of information. Levin says that using the model, such as the one for SANGONET can assist in the dissemination of information necessary for development.

2.4. Summary of the Literature Review

Based on the literature review the following were identified.

1. Access to information enhances the performance of a business organization. The literature has shown that access to and good use of information is related to business success. Organizations that have easy access to information perform better than those that do not
2. Information seeking behavior of small firms differs from that of large ones. Large ones have an advantage over small ones in that large firms seem to have access to new media, information technology and business information sources. They are in a position to exploit new entrepreneurial information sources. In most cases they have a reservoir of information within the organization, that is, the knowledge and expertise of employees where they can turn to when they are under duress.
3. In most cases information systems that are established to serve business organizations do not seem to be aware of the information-seeking behavior of their clientele. This has led to services designed for the business community not being utilized.
4. Developments in information networks offer a lot of opportunities for business organizations. Information networks allow organizations easy access to information thereby contributing to the performance of businesses. Information

networks connect organizations to new customers and new markets. Although information networks offer opportunities for easy access to information, issues which hinge on the security of information need to be addressed to instill confidence in the users.

5. There are very few studies that have been conducted in Africa in the area of business information as well as information networks and how they can be used as sources of information. Most of the studies have been done in the Western World with the exception of a few in Southern Africa. There is a gap in the literature which needs to be filled, especially in the African context. This study contributes towards filling this.

CHAPTER 3

METHODOLOGY

CHAPTER 3: METHODOLOGY

3.1. Introduction

A research methodology, as articulated by Adams and Schvaneveldt (1985), is an application of scientific procedures towards acquiring answers to a wide variety of research questions. As More (1983) puts it, a methodology comprises of a set of techniques through which researchers approach and carry out an inquiry. Different approaches use different methods for collecting data. The strategy is to adopt the method appropriate to the research which is to be undertaken. This study aimed at establishing the performance of TINET in providing information to the business community in Zambia with specific reference to Lusaka. A survey method was chosen for this study

3.1.1. Survey methodology

A survey methodology involves the collection of information on a wide range of cases, each case being investigated only on a particular aspect under consideration. Powell (1991) says that the basic assumption of survey research is that, by carefully following certain scientific procedures, one can make inferences about a large group of elements by studying a relatively small number selected from a large group. The strength of survey methodology is on answering questions of fact and in assessing the distribution of the characteristics of the population. As Bell (1993) puts it, the aim is to obtain information from a representative selection of the population and from that sample be able to present the findings as being representative of the population as a whole. Thus, survey methodology can save time and money without sacrificing efficiency, accuracy

and information adequacy in the research process. Against this background the research survey was chosen as it was found suitable for this study.

3.1.2. Research Instruments

Research instruments are data collection techniques such as questionnaires, interviews and observations. For this research, questionnaires and interviews were used for gathering data because they are suitable for the type of data (qualitative and quantitative) that was required for the study. Structured and unstructured questionnaires were used for collecting data from business organizations registered as users of TINET and from TINET members of staff. Structured and unstructured questions were necessary in order to obtain additional and relevant information from the respondents. Questionnaires were found suitable for this study because they are flexible and can be used to gather information on almost any topic from large or small numbers of people. Questionnaires allow large amounts of data to be collected in a relatively short period of time and they are usually inexpensive to administer. They guarantee anonymity thereby encouraging frank answers from the respondents. The fact that questionnaires do have disadvantages in that they do not allow the respondent to quantify answers to ambiguous questions was noted. They are also subject to bias and late responses or no responses at all. Care was taken to ensure that the questions used were specific and easy to understand.

Interviews were used to collect data from the Computerization Adviser of TINET and from the Librarian at EBZ. Interviews were necessary in order to supplement the responses from the questionnaires. Interviews provide an opportunity to obtain

qualified answers from the respondents by probing and prompting. The interviewer can ask the respondent to explain in detail and to ensure that the respondent has considered all possibilities when replying to the question. Interviews make it possible to collect more complex information, where necessary, qualifying answers and generally obtaining results with greater depth. However, the fact that interviews have disadvantages was noted. The information collected is usually difficult to analyze. There is also the problem of ensuring a high degree of consistency. In order to overcome the above problems care was taken to ensure that the questions used were clear and unambiguous. Semi-structured interviews were preferred as opposed to the unstructured ones. This is because semi-structured interviews provide much more guided scope for discussion and recording of respondents' opinions and views. In addition they ensure consistency and speed up the interview and thereby reduce on the time required for the interview. The data collected through semi-structured interviews are easy to analyze. Semi-structured interviews are also easy to administer because one cannot be easily carried away by the discussion thereby losing sight of issues at hand.

3.1.3. Population of the study

The study population was made up of business organizations registered as members of TINET in Lusaka, TINET members of staff, as well as the Librarian at EBZ. TINET has six (6) members of staff and five (5) were targeted. The sixth member of staff was on leave. The librarian at EBZ was included because EBZ is an access point for users interested in getting information from TINET and co-ordinates the activities of the network at national level. Although the focal points of TINET in Zambia are Zambia Association of Chambers of Commerce and Industry (ZACCI) and EBZ the study only

included EBZ because the officer in-charge of TINET's activities at ZACCI was not available at the time of collecting data. The users of the system were included because their perception provides a good yardstick of performance measurement. They are the beneficiaries of the system and therefore are in a better position to judge its performance. Although TINET is designed to provide information to public institutions, non-governmental organizations (NGOs), intergovernmental organization and the business community, the study only focused on business organizations. This is because business firms need access to information to compete effectively as opposed to the public sector or non-profit making organizations. Business firms need access to accurate, timely and adequate information because the decisions they take can be costly to the survival of an organization if based on wrong information. On the other hand most public institutions are a monopoly and their services are subsidized through government revenues. This means that access to information does not affect their operations as compared to private businesses. Zambia has liberalized its economy. This means that business organizations are operating in a more competitive environment than before and therefore access to information about the environment is very important if organizations are to stay in business.

Business organizations were divided into two main groups, i.e. SMEs and large firms. This division was necessary because information needs of organizations differ in terms of size and the level of operation. Large organizations are more information conscious than small ones because they regard it as critical for the survival of their operations. This explains why large business firms employ various methods such as market research, the use of information brokers and sometimes put in place information

systems that enables them ease access to information. Small firms on the other hand rely mostly on informal means for their information requirements and sometimes may not even be aware of the information sources near them. Within each group business organizations were further divided according to the type of business activity they were engaged in. Large business organizations were divided as follows: manufacturers, agriculturists, wholesalers/retailers and service companies. SMEs were also divided as follows: manufactures and agriculturists.

3.1.4. Sampling Procedure

At the time of the research there were 195 businesses registered as users of TINET in Zambia. Eighty-seven (87) of them were Lusaka based. Out of 87 business organizations in Lusaka, 50 were targeted for this study. Fifty (50) was chosen as a sample population because it was found large enough to provide the researcher with the required number of respondents that would provide the needed data for the study to come up with concrete and conclusive results. The respondents were drawn from organizations involved in various business activities as indicated above (in 3.1.3). Of the 87 businesses 72(82.8%) were large business firms. The majority 52(72%) of the respondents from large business organizations were in the production sector (manufacturers and agriculturists). In order to achieve a degree of representation from the manufacturing and agricultural large business firms, a proportional stratified sampling procedure was used to select the required number of respondents from each group. There were 30(57.7%) manufacturers and 22(42.3%) agriculturists adding up to 52 the number of large business firms in the production sector. Since the respondents were in two groups a number representing 30% was drawn from each group i.e. 9 from

manufacturers and 6 from agriculturists, adding up to 15. The sample population was selected on the basis of every third business organization from each group. There was no sampling for wholesalers/retailers, service companies and SMEs. This is because their number was small as compared to the above where sampling was done, therefore the whole population (13 wholesalers/retailers, 7 services companies and 15 SMEs adding up to 35) was included in the study.

3.1.5.Data Collection

Data was collected from the respondents using closed and open-ended questionnaires and interviews. Questionnaires were used to collect information from business organizations and from TINET members of staff. The questionnaires were delivered in person by the researcher. Where the targeted respondents were not available at the time of delivering the questionnaires verbal instructions were left with whoever received the questionnaires to ensure they reached the intended persons. Follow-ups were also made where possible to confirm whether the targeted respondents had received the questionnaires. The respondents were given two weeks in which to complete the questionnaires. The researcher collected the questionnaires to ensure that there was adequate response. Structured and semi-structured interviews were used to collect data from the Computerization Adviser of TINET and from the Librarian at EBZ. Questions for the interviews were given to respondents three days in advance to allow them read through. E-mail was used to make follow-ups on issues, which needed further clarification from the Computerization Adviser.

3.1.6. Data Analysis

The basic purpose of data analysis is to summarize observations or data in such a manner that they provide answers to research questions. For this study the idea was to compare the views of the respondents in order to come up with a broader perspective on the operations of and services offered by TINET.

There are a number of statistical software packages such as Microsoft Excel, Organized Set of Integrated Routines for Investigation of Social Science Data (OSIRIS) and Statistical Package for Social Sciences (SPSS) which are widely used for data analysis. For this study, SPSS was chosen because it offers a comprehensive solution for reporting, modeling, and analysis of data (Powell, 1991). The software is also user friendly. The data obtained were analyzed using simple descriptive statistics like charts and tables to determine tendencies in response patterns. Responses from open-ended questions where respondents were allowed to make their own comments and give their suggestions were treated to content analysis method.

CHAPTER 4

RESEARCH FINDINGS AND DISCUSSION

CHAPTER 4: RESEARCH FINDINGS AND DISCUSSION

1. Introduction

This chapter is divided into three parts. The first part provides background information about the type of business organizations that make use of TINET. It also provides information about their areas of business operations. The second part of this chapter looks at the extent to which the respondents are aware of other information sources other than TINET and to establish whether these sources are reliable. The idea behind this is to highlight some of the information needs of business organizations which TINET does not cater for. This also helps to understand the extent to which respondents make use of TINET. The third part of this chapter provides an insight into the services offered by TINET and the perception of the users concerning the services.

Data were collected from the respondents through close and open-ended questionnaires and semi-structured interviews. Two sets of questionnaires were used. One set was distributed to business organizations registered as users of TINET and the other to TINET members of staff. Afterwards, an interview was held with the Computerization Adviser at TINET to supplement the data collected from other TINET members of staff through questionnaires. Follow-ups on issues that required further clarification were made to the Computerization Adviser. Such follow-ups were made through e-mail. All follow-ups were directed at the Computerization Adviser because he is the longest serving member of staff at TINET. This makes him conversant with the operations of the system at TINET. He has worked for TINET for over six (6) years. Interviews were also used to collect data from the Librarian at Export Board of Zambia (EBZ), the national focal point of TINET. No follow-ups were made to the Librarian at EBZ because the information obtained from him during the interview was adequate.

4.1.1. Background Information

The respondents were drawn from both SMEs and large business organizations involved in various business activities. The type of business organization ranged from

producers (manufacturers, agriculturists), wholesalers/retailers and service companies. Out of the 50 questionnaires that were distributed to business firms 30 were returned representing a response rate of 60%. Four (4) questionnaires were distributed to TINET members namely the Associate Expert, the Trade Information Adviser, the Information Assistant and the Data Entry Operator. All the four (4) questionnaires were returned. The response rate from business organizations is shown in table 1 below.

Table 1: response rate by type of business

Type of business	Questionnaires distributed	Response rate	Percentage
Manufacturer	18	10	55.5%
Agriculturist	12	7	58.3%
Wholesalers/retailer	13	9	69.2%
Services company	7	4	57.1%
Total	50	30	60%

Table 2 below illustrates that the majority 24(80%) users of TINET are those business organizations involved in the export of products and/or services and only 6(20%) are importers. The table also indicates that all the 8 respondents from SMEs said that they were exporters. SMEs can potentially use the network for identification of markets since they are members of TINET. Importing items requires foreign currency as compared to exporting. The study has revealed that 75% of SMEs (as will be seen later) are not aware of available sources of funding. This means that it is easy for them to export than import. Exporting is selling while importing is buying. The table also indicates that 16 of the respondents from large firms said that they were exporters and 6 said they were importers. This can be interpreted to mean that large business firms use TINET to identify markets for their products and/or services as well as source of information for either consumer items or for sources of information on the supply of raw material

Table 2: Area of business transaction

Count Row Pct	SMEs	LBOs	Row Total
Export	8 33.3%	16 66.7%	24 80%
Import	0	6 100%	6 20%
Total	8 26.7%	22 73.3%	30 100%

As can be seen from table 3 the study focused on business managers, business owners and business partners. The table indicates that the majority 22(73.3%) of the respondents were managers, followed by business owners with 5(16.7%) and business partners with 3(10%). The table also illustrates that the respondents from large business organizations were managers and respondents from the SMEs were either owners or partners in the businesses they were running. These are decision-makers. Information is the raw material for managerial work. It is the input for decision making in management. This makes them suitable candidates for this study. The decision which managers, business owners or business partners take determines the performance of the businesses they run.

Managers coordinate the activities of the business organizations they run. For them to be in a position to coordinate the activities of these firms they have to contend with the information landscape in which they operate. This information landscape comprises of customers, competitors, market trends, suppliers, political and social economic conditions and any other matter which is of concern to them. This means that for a business firm to succeed, its managers must recognize forces in the external environment, comprehend their interrelationships and understand their impacts on their businesses. This requires access to information from external sources, which relates to factors about the present and predicted state of the environment in which

business organizations operate. The researcher is of the understanding that the responses of managers, business owners and business partners in this case provides a reflection of their knowledge of the environment in which they operate and also their perceptions of the information services offered by TINET

Table 3: Status of the respondents

Count Row Pct	SMEs	LBOs	Row Total
Business Owner	5 100%	0	5 61.7%
Manager	0	22 100%	22 73.3%
Business Partner	3 100%	0	3 100%
Column Total	8 26.7%	22 73.3%	30 100%

4.2. Sources of Business Information

The study sought to establish where the respondents obtain the information which they require in the day to day operations of their businesses. Against this background the respondents were asked to state the sources of information for their daily business operations. The sources ranged from friends, customers, suppliers, newspapers, magazines, EBZ, ZACCI, Zambia Association of Manufactures (ZAM), Commodity Exchange Center and Agricultural Market Information Center. Among SMEs the common sources were friends, colleagues, customers and suppliers while newspapers and magazines were common among large firms. The sources of information indicated by most SMEs, tells their information-seeking behavior as revealed by other studies. Virkus and Tamre's (1996) study revealed that most of the information for SMEs is gathered through informal channels such as suppliers, customers, friends, colleagues and relatives.

The respondents were also asked to state the reliability of their sources of information. Table 4 indicates that 17(58.6%) found their sources to be reliable while 12 (41.4%) said that the sources were slightly reliable and one did not respond to this question.

Table 4: Reliability of sources of information

Count Row Pct	SMEs	LBOs	Row Total
Reliable	5 29.4%	12 70.6%	17 58.6%
Slightly Reliable	3 25%	9 75%	12 41.4%
Not reliable	0	0	0
Column Total	8 27.6%	21 72.4%	29 100%

However, out of the 17 respondents who said that their sources were reliable 70.6% were from large business organizations as opposed to 29.4% from SMEs. Although the above shows that large businesses have more reliable sources (informal channels) of business information than SMEs business information is more likely to be reliable in formal sources. So this could mean that large business firms might not rely much on the information provided by TINET for their business operations. The above also indicates the information hazard faced by SMEs which they recognize and which may be addressed by SMEs.

4.2.1. Membership of Business Associations

Respondents were asked whether they belonged to any business association. The idea was to establish the extent to which business firms were making use of any services which business associations could be offering. As shown in table 5, 16(55.2%) indicated that they were members of some business associations while 13(44.8%) said that they did not belong to any informal or formal business association. One respondent did not answer this question. Out of 16 of the respondents who said they

were members of some business associations 13(81.3%) were from large business organizations and three 3(18.7. %) were from SMEs. It could be said in developing countries like Zambia the ability of majority SMEs belonging to trade associations can be inhibited by among other things, the cost of becoming members and lack of human resources. As a result a number of SMEs are not benefiting from the services of trade associations. As Michael and Bingham (1987) put it, trade associations represent the interests of their members and can provide advisory and inquiry services on matters concerning their members' interests. They can also keep them informed of developments which might affect their business operations and performance by means of publications and/or direct correspondence through meetings and seminars. This makes business associations sources of information.

Table 5: Membership of business association

Count	SMEs	LBOs	Row
Row Pct			Total
Yes	3	13	16
	18.7%	81.3%	55.2%
No	5	8	13
	38.5%	61.55	44.8%
Column	8	21	29
Total	27.65	72.4%	100%

When asked to indicate business associations to which they were members the following were stated: ZACCI, ZAM, Zambia Export Growers Association (ZEGA), Textile Producers of Zambia (TPZ), Leather Industries Association of Zambia (LIAZ) and Zambia Association of High Valued Crops.

The respondents were asked to indicate whether being members of a business association had helped improve the performance of their businesses. Out of the 16, 10(62.5%) respondents indicated that by belonging to business associations they were kept up to date on issues such as government policies towards the private sector and

business trends at international level. They argued that through the associations they were able to find sources of funding. Five of the respondents indicated that it was through business associations that they channeled their views to government on policies which they felt were not favorable to the survival of their businesses.

4.2.2. Information on Credit Facilities

All organizations require resources to produce a product or service that succeeds in the marketplace. The availability of funds is very important because this can significantly affect the production, quality and timeliness of organizations' product or service. Lack of sufficient information on the availability of credit facilities can be a hindrance to an organization that may want to expand its operations or carry out other activities to compete effectively in the marketplace. The availability of financial resources is critical to the operations of any business organization. Businesses that wish to compete should be aware of alternative sources of finance. Failure to do so may affect the performance of the business in a competitive environment.

Responding to the question of credit schemes the majority 22(72.3%) of the respondents said that they were aware of the availability of credit schemes, while 8(26.7%) said that they were not aware of the availability of credit facilities.

Table 6: Knowledge of credit facilities

Count Row Pct	SMEs	LBOs	Row Total
Informed	2 9.1%	20 90.9%	22 73.3%
Not well informed	6 75%	2 25%	8 26.7%
Column Total	8 26.7%	22 73.3%	30 100%

The high number of respondents being aware of the availability of credit schemes may be attributed to the fact that most of the respondents are from big business organizations. Table 6 below indicates that 75% of the respondents among SMEs were not aware of the availability of credit schemes as compared to 90.9% from large business firms. About 91% of large business organizations are aware of the availability of credit facilities. This affirms their information seeking efficiency and consciousness as compared to SMEs. This, therefore, means that SMEs need alternative sources of reliable financial information.

As Cressy and Cowling (1996) put it, small businesses often fail to spend time becoming aware of alternative sources of finance. The problems of small firms not being aware of available financial sources also confirms Dixon's (1994) study which revealed that there was a general lack of awareness by small firms of the range of resources, including financial, available to them. There are a number of credit facilities designed to help SMEs. For example the Small Enterprises Development Fund coordinated by the Ministry of Commerce, Trade and Industry and the Export Development Program. The Export Development Program which has been running since 1993 is supported by the EU. Therefore SMEs in Zambia are missing opportunities to have access to financial resources which can help them enhance the operations of their business due to their unsatisfactory information-seeking behavior. Donor agencies such as the United Nations Industrial Development Organization (UNIDO) and the EU also offer facilities designed to assist SMEs through COMESA under the industry support initiative programs. TINET should find a way of ensuring that information on available credit schemes is available small firms. This would enhance the operations of SMEs and therefore contribute to economic development and empowerment.

4.2.3. International quality standards

The standard of any product or service is very important if such a product or service is to compete effectively. Customers expect products or services to meet some acceptable measure of quality before they can decide whether to buy or not to buy. In the market economy where competition is high, the standard of products or services determines

the performance and survival of any business organization. This means that access to information on international quality standards on goods and services is critical particularly for exporters.

The response rate of the respondents as far as the knowledge of international quality standards on goods and services is concerned indicates that 19(79.2%) were aware of the standard required of their products and 5(20.8%) were not (see table 7). Six (6) of the respondents did not answer the question on standards. This could have been attributed to the type of business they were involved in. For example, service organizations might have felt that they had nothing to do with standards. The researcher's view here is that people tend to associate standards more with products than services. However, things are changing with the introduction of ISO 9000 by the International Standards Organization. ISO 9000 requires that organizations of all types abide by the stipulated quality standards on goods and services. The table also illustrates that large business firms are more informed on the standards required of their products than the SMEs. Out of the 19 respondents who said they were knowledgeable of the standards required of their goods 16(84. 2%) were from large firms while 3(15. 8%) were from SMEs.

Table 7: Knowledge of standards

Count Row Pct	SMEs	LBOs	Row Total
Yes	3 15. 8%	16 84. 2%	19 79. 2%
No	5 100%	0	5 20. 8%
Column Total	8 33. 3%	16 66.7%	24 100%

When asked to state their source of information on the standards of goods the respondents indicated that they get information on standards of products from EBZ and Zambia Bureau of Standards. Again here there are several issues at play. In the first place, a good number of these companies are exporters. This means that before they could even decide what to export and where to export they must have acquired information on the standards required of their products on the international scene. The above findings indicate that the majority depend mainly on EBZ and Zambia Bureau of Standards for their information requirements on the standards of products required by their customers. By not providing information on standards TINET is denying its users access to information which is very important to the survival of their businesses. There is need for TINET to offer information on standards if it is to perform according to aspiration of users.

4.3. Services Offered by TINET

Information was sought on the type of services offered by TINET to its users. The objective was to establish whether TINET had the required services designed to meet demands for of any type of information: 1) the information identified and requested by the user. 2) Information which may be relevant to the user though not requested for.

It was revealed that TINET provides a current awareness service to users. A monthly bulletin on trade opportunities and tenders is circulated throughout the region through the focal points. The current awareness service was also revealed by the four TINET members of staff in the questionnaires. However, it was revealed in the interview with the Librarian at EBZ that unless the user made an effort of visiting EBZ the information was unlikely to reach the intended target. It was also established from the questionnaires to TINET members of staff that TINET provides full text information to its users. This is provided to the users either online or otherwise depending on whether the user has access to information technology facilities. The respondents from TINET also said that TINET assists enterprises that may be interested in installing computerized databases. The other is an advisory service to enterprises on trade conditions and investment opportunities in the COMESA region.

However, this study has established that TINET does not offer services such as references (online or otherwise), abstracts and online search facilities from various databases. The researcher is of the view that by not offering some of these services TINET is limiting its capacity to provide to its users a wide range of services. TINET should exploit the links that it has (through COMESA) with other trade-related organizations to offer a wide range of services. An example of some of the links, which could be exploited, is that of the United Nations Industrial Development Organization: Industrial Development Abstracts Database. TINET can also explore the possibilities of providing Selective Dissemination of Information (SDI) by packaging selected information and making organizations cognizant of its availability at TINET. This would help users keep abreast of developments in their area of business activity.

Information was sought on the extent to which the respondents made use of TINET. The members of staff at TINET were asked to state how many requests they receive in a given week. It was revealed that TINET receives between 40 and 60 requests per week. The number of requests indicated here represents the requests, which TINET receives from various users (public institutions, business organisations, non-profit making organisations, etc). This number is small considering that it includes even those users not registered as members and it also includes all the requests received in the whole country. In order to have a clear picture about the extent to which the services offered by TINET were utilised the respondents were asked to state how often they made use of TINET. The majority 18(60%) of the respondents said that they use TINET occasionally. This seems to indicate that although the respondents were registered as users, the services offered by TINET are not utilised effectively. This could also mean that the respondents have other sources of information, which could be more reliable and/or convenient for them.

In the previous section (4.2) the respondents were asked to state where they get information they require for their business operations. One of the sources of information indicated is EBZ, which is very instrumental in providing information to business organisations particularly on export transactions. The functions of EBZ include among other things advising exporters on potential and existing markets, trade

information, on quality supply, export regulations, export incentives and available technical advice. It should also be noted that a good number of the users of TINET came to learn of TINET through EBZ. From the above it could be said that EBZ can have an influence on the extent to which business organisations make use of TINET particularly if TINET does not satisfy their information needs.

The researcher is of the view that utilization of TINET services may also depend on, among other things how an organization accesses the information from TINET. Those with access to information technology find it easy to use the services offered by TINET as compared to those who have to access the information by visiting (as will be seen later) TINET offices depending on the availability of transport and the urgency with which they need information.

4.3.1. Publicity Effectiveness

According to responses provided by TINET members of staff it was revealed that TINET was publicized through meetings/workshops, newsletters, trade fairs and Internet. In order to establish the effectiveness of the means by which TINET is publicized information was sought on how users came to learn of the existence of TINET. Table 8 indicates that, majority 11(36.7%) of the respondents came to learn of TINET through friends, followed by 8(26.7%) through Internet and then 6(20%) through other sources such as EBZ, ZACCI, ZAM and trade fairs. Those who learnt of TINET through meetings/workshops were 5(16.7%). The table also indicates that out of 8 respondents from SMEs the majority (5) came to learn of TINET through friends, two (2) through other sources such EBZ and business associations and one respondent came to learn of TINET through meetings/workshops. The table indicates that no respondent from SMEs came to know about TINET through Internet.

Table 8: How respondents came to learn of TINET

Count Row Pct	SMEs	LBOs	Row Total
mtngs/work shops	1 20%	4 80%	5 16.7%
Friends	5 45.5%	6 54.5%	11 36.7%
Internet		8 100%	26.7%
Other	2 33.3%	4 66.7%	6 20%
Column Total	8 26.7%	22 73.3%	30 100%

This indicates that although Internet is a good tool for publicizing TINET and its services only those with access to Internet know about it, in this case large business firms. On the other hand the majority (8) of the respondents from large business organizations came to learn of TINET through Internet followed by 6 through friends and 4 through meetings/workshops and other sources respectively.

The above scenario seems to indicate that few respondents learn of TINET through meeting/workshops, newsletters/brochures, trade fairs and Internet, the means through which TINET was publicized. The responses from the users indicates that the means through which TINET was publicized is not effective. For example trade fairs, though good, have disadvantages. In the first place trade fairs are held once in a while and not a good number of business organizations have the opportunity to attend especially among SMEs. On the other hand meetings/workshops unless held regularly and well publicized, business firms may not know them. Although Internet is a good medium for publicizing the services of an organization it may not be of great help to those who have no access to it. As could be seen from the table above none of the respondents from SMEs came to know about TINET through Internet, an indication that such users

do not have access to information technology. Therefore it would be more effective if a wide range of publicity media such as radio, television, newspapers were to be used to publicize TINET and its services.

Responding to the question of whether the business community in Zambia (Lusaka) was well informed about services offered by TINET, the Computerization Adviser said that Zambia was one of the COMESA member states that makes best use of the services that TINET offers. He said that Zambia has the advantage of having the database of TINET being based at the COMESA secretariat in Lusaka. This gives business organizations in Lusaka an opportunity to come to TINET straight away. He, however, acknowledged that a lot has to be done as regards the number of business organizations that make use of the services. He noted that there is need for more publicity and promotion programs designed to let the expected beneficiaries or users aware of TINET and the benefits they would get by utilizing the services it offers. The Computerization Adviser could not state what was to be done to publicize TINET. This lack of publicity at TINET echoes Kangulu and Wood's (1995) study which revealed that little publicity contributes to lack of awareness of the existence of networks like PADIS and its services among would be users. The Librarian at EBZ was also of the view that TINET had not done much to publicize its services to the business community. This means that there is need for TINET to come up with a strategy to promote its services.

4.3.2. Information on Sources of Supply of Inputs

Inputs are very important in any business if there is to be continuity in production. For this reason respondents were asked to state where they obtained information on sources of supply of materials that were used in their businesses. The idea behind this question was to establish whether the respondents were using TINET as a source of information for the supply of materials that they used in their business operations. Among the objectives of TINET is to assist business firms to identify sources of supply of inputs. But from the responses received, it seems to indicate that TINET is rarely used as a source of information for the supply of inputs. They indicated

newspapers, suppliers, customers, colleagues, and institutions such as the Commodity Exchange Center as well as Agricultural Market Information Center as sources of information on the supply of raw materials.

The respondents were asked to state whether their sources of information on the supply of raw materials were reliable. Table 9 shows that 9(45%) perceive their sources as reliable, while 11(55%) said that their sources were slightly reliable. The remaining 10 did not respond to this question. This may be because of the type the business some of the respondents are involved in. One would not expect service companies to be very concerned about inputs particularly if involved in consultancy work where the supply of materials is not anything to worry about. The table also shows that large business firms have more reliable sources of supply of inputs as compared to SMEs. The number (6) of respondents from SMEs who said their sources were slightly reliable is bigger than that of the respondents from large business organizations who were of the view that their sources were slightly reliable (5).

Table 9: Reliability of sources of inputs

Count Row Pct	SMEs	LBOs	Row Total
Reliable	2 22. 2%	7 77. 8%	9 45%
Slightly Reliable	6 54. 5%	5 45. 5%	11 55%
Column Total	8 40%	12 45. 5%	20 100%

4.3.3. Information on Market Opportunities

Customers purchase an organization's products or services. They are most vital to organizations. Their decision to buy or not to buy an organizations output directly determines the company's sales revenues and ultimately its survival. This requires information about their current and possible future needs.

Table 10: Knowledge of market opportunities

Count Row Pct	SMEs	LBOs	Row Total
Highly informed	1 33.3%	2 66.7%	3 10%
Informed	6 24%	19 76%	25 83.3%
Not well informed	1 50%	1 50%	2 6.7%
Column Total	8 26.7%	22 73.3%	30 100%

The respondents were asked to state whether they were aware of the market opportunities available in their area of business. Table 10 shows that 3(10%) out of 30 respondents said that they were highly informed of the market opportunities in their area of business and 25(83.3%) said that they were informed. Only 2(6.7) indicated that they were not well informed of the available markets in their area of business operation. Out of the 25 respondents who indicated that they were aware of the available market opportunities, 19 (76%) were from large business organizations and 6(24%) were from SMEs.

The higher percentage of respondents from large business firms who said that they were informed on available market opportunities seem to indicate that large firms are more informed of their customers' needs than SMEs. This illustrates differences in the information-seeking behavior between large and small business firms.

The idea behind asking the respondents about their knowledge of available market opportunities was to establish the extent to which TINET was assisting business firms

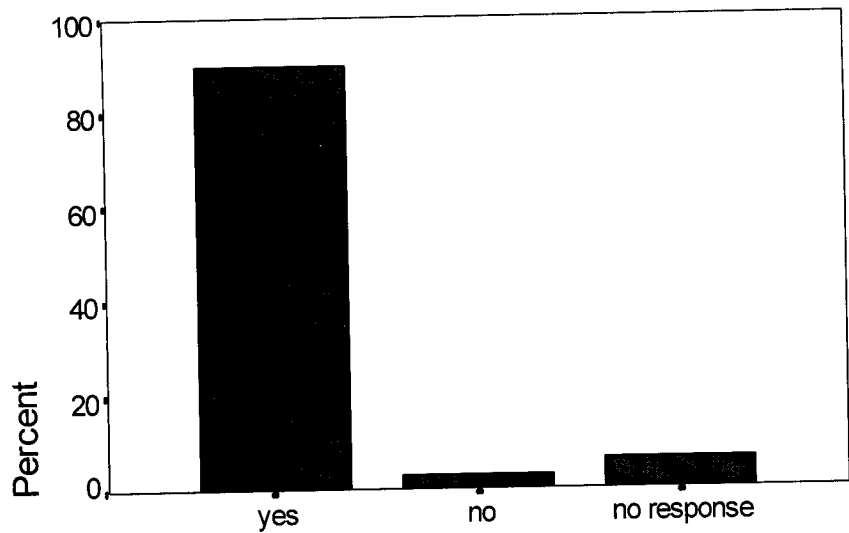
find markets for their products. The respondents were further asked to state where they obtained information on available market opportunities. The main sources, which the respondents stated, were EBZ, ZACCI, ZEGA, ZAM and TINET. This was the first time TINET was mentioned as a source of information. This could be attributed to the fact the majority of respondents were exporters. This is also an indication that TINET is used by business organizations mainly for identifying market opportunities for their products.

4.3.4. Information on Competitors

Donnelly, Gibson and Ivancevich (1992) argue that competitors are organizations' opponents, the companies against which the organization competes for customers and required resources in the external environment. In order to succeed, an organization requires access to information about its competitors so as to maintain or advance the company's position in the marketplace. As Duncan (1992) puts it, no trade can occur in the absence of solid, accurate and timely information about trading partners. This means that business organizations need to have a comprehensive knowledge of the state of the market, which includes among other things, information about competitors to be in a position to take the right decision.

Respondents were asked if they were aware of the competition in their area of business. Chart 1 illustrates that 26(87%) of respondents said that they were aware of the competition they faced in their businesses while 3(10%) said that they were not aware of the competition that was in their area business. Only 1(3%) did not respond to this question.

Chart 1: Knowledge of competitors



TINET has a database, which contains information on business organizations. The database has information on the products which businesses deal in and the country where these business firms are located as well as the type of business activity they are engaged in. TINET also has the COMESA Trader’s Directory as well as links to online external directory through the COMESA web site. These provide a good source of information about an organization’s competitors. However, 62% of the respondents do not use TINET as a source of information about their competitors. This means they are missing valuable information that can help enhance their business performance.

Table 11: TINET as a source of competitor information

Count Row Pct	SMEs	LBOs	Row Total
Yes	3 27.3%	8 72.7%	11 37.9%
No	5 27.8%	13 72.2%	18 62.1%
Column Total	8 27.6%	21 72.4%	29 100%

Table 11 illustrates that out of 29 respondents who answered this question only 11(37.9%) said that they use TINET as a source of information about their competitors and 18 (62.1%) said that they don't use TINET as a source of information about their competitors. This seems to indicate that users have other sources of information as indicated in the previous section (4.2). The researcher is of the understanding that the use of TINET as a source of information about competitors among business organizations could be influenced by the availability of other sources of information on the same.

4.3.5. Information on Tariffs

This study revealed that the majority 25(83%) are aware of the tax regulations in the business environment. This research also revealed that the majority (80%) of the respondents were exporters. This means that business firms are aware of tax they are required to pay for their products in foreign markets. This may also be interpreted to mean that importers are aware of the tax they are required to pay for goods that they bring in the country. Getting to know of tax regulations requires access to information on tariffs that are applicable in areas where one wishes to conduct his/her business. Tax (tariff) levied by a foreign government on imported goods is a common barrier in export or import business. Governments often seek to restrict imports of certain goods that compete with host country businesses. The tariffs raise the import's sales price, which provides domestic competitors with a price edge. So access to information on tax rules and regulations pertaining to foreign trade is very important for any business organization that is interested in international trade.

The respondents were asked to state whether the information, which TINET has on tariffs, was adequate. Table 12 below illustrates that out of 30 respondents, 18(60%) were of the view that the information provided by TINET on tariffs was not adequate while 12(40%) said that the information which TINET offers on tariffs was adequate. The table also indicates that a number (5) of the respondents from the SMEs were of the view that the information which is provided by TINET on tariffs was adequate and only three (3) said it was not adequate. On the other hand the majority (15) of the respondents from large business organizations were of the view that the information

which TINET offers on tariffs was not adequate. This is because they are the bigger players in international trade.

Table 12: Adequacy of information on tariffs

Count Row Pct	SMEs	LBOs	Row Total
Adequate	5 41.7%	7 58.3%	12 40%
Not adequate	3 16.7%	15 83.3%	18 60%
Column Total	8 26.7%	22 73.3%	30 100%

The fact that the majority 18(60%) of the respondents were of the view that the information which TINET has on tariffs was not adequate could be attributed to the fact that the database that TINET has on tariffs contains only tariffs applicable to products traded under COMESA arrangement in the region. Large business organizations are likely to be trading beyond COMESA. Therefore, business firms whose trade interests go beyond the COMESA region may find such information inadequate. It is therefore important for TINET to provide information on tariffs applicable to other regions of the world to enable traders be cognizant of what to expect if they were to consider exporting to such regions. Most countries in the COMESA region deal in similar products. This reduces the demand for such products at regional level. Therefore exporters would like to look for markets beyond COMESA. TINET has links (through COMESA) to regional bodies such as the EU and Southern African Development Community (SADC) and this is an advantage, which could be exploited for the benefit of its clientele. This, therefore, means that TINET should not restrict itself to providing information on tariffs that are applicable to COMESA region only.

4.3.6. Acquisition of Literature.

Responding to the question of how information is collected, the four (4) respondents from TINET said that TINET has a network of counterparts (national focal points) in all COMESA member states responsible for collecting information. In order to have good representation on how the information is collected and the capacity of focal points in collecting information an interview was carried out at EBZ a national focal point of TINET in Zambia.

In an interview with the Librarian at EBZ, it was revealed that TINET sends forms, which have specific details required from companies, to focal points. The forms are then distributed to companies using the addresses that appear in the telephone directory and/or using the addresses that appear in the register of EBZ in case of companies that are registered members of EBZ.

When asked about the reliability of the addresses that appear in the telephone directory, the librarian said that they were not reliable. He argued that the telephone directory is only updated annually and sometimes not every address in it is updated. So there is a possibility of sending the forms using the addresses which are no longer in use. It was revealed that even where the addresses were correct getting back the forms was not easy. The problems which focal points face in collecting information from business organizations could be attributed to the fact that some business organizations are not aware of TINET and its objectives. Business firms are usually not comfortable giving out information which they feel is sensitive unless they are assured of its security and the benefits they are likely to get in return. Business organizations tend to control the content of information, which go out of the organization. The researcher is of the opinion that the forms used to collect information from business organizations are distributed without explaining why businesses have to submit the information they are asked and what the information is to be used for and benefits to them. This agrees with the study carried out by Nath et al. (1998) which revealed that although information networks allow business firms an opportunity for better business performance there are fears among business firms of information landing in wrong hands. In his e-mail reply on the question of security of information the

Computerization Adviser at TINET said a security mechanism has been integrated in the system that can easily detect any unauthorized access into the databases. So unless business firms are aware of such measures they may not be willing to give out information.

When asked about the method used to collect information from various government ministries/departments, institutions and agencies, the Librarian said that the institutions are usually requested to send the information required of them to EBZ who will later send it to TINET. He, however, revealed that in most cases it required visiting such institutions otherwise it might take quite some time to receive the information. This could be attributed to the absence of an information policy. The Computerization Adviser, in his e-mail reply to the question of whether TINET has an information policy, indicated that TINET does not have an information policy regarding the acquisition and dissemination of information. Although government organizations produce a lot of information, it is not readily available. Governments control and regulate information through legislative measures such as censorship, legal deposit and copyright acts and is able to restrict the use and flow of information (Shillinglaw and Thomas, 1988). Government policies and procedural manuals often impose restrictive "secrete" classification systems on most organizational information. This makes it difficult to have access to information from government institutions. Therefore there is need for TINET to come up with an information policy that will make it easy to acquire information required to meet the needs of users.

The Librarian revealed that EBZ had inadequate facilities and was understaffed. His views were that TINET should come up with a system designed to support the operations of focal points financially or otherwise if they were to be in a position to carry out their responsibilities effectively. In view of the above it would be better for TINET to come up with a strategy to assist focal points operate effectively. Since national nodes are access point for users wishing to get information from TINET they should be allowed to charge users for services offered and retain a certain percentage of the money raised and use it to improve their operations. This could also assist them employ better qualified staff and buy equipment.

4.3.7. Availability of Literature.

An information network accomplishes its role as an information communication agency only to the extent of the capacity of the literature available to meet the needs of its users. It was revealed in an interview with the Computerization Adviser that TINET had enough information that was required to meet the needs of its users. The literature is collected from various businesses and government institutions in all member states through the national focal points. Apart from this TINET has access to COMESA online trade directories plus other useful links that COMESA has with other regional bodies around the world such as the EU and SADC. The Computerization Adviser also said that TINET has links to external online trade directories and external trade related organizations such as the Trade Point Development Center and the World Trade Organization through the COMESA web site.

Responding to the question on the sources of literature for TINET the four respondents indicated in the questionnaires that the sources of information for TINET were business enterprises, business associations and government ministries and departments. The researcher's observation here is that TINET does not consider conferences, seminars, workshops, trade fairs, exhibitions, etc., as a source of information. But it is at such fora that important issues are discussed most of which could be very important because they have a bearing on the survival of the business sector in the region.

TINET does not seem to make use of the information that is generated by COMESA. The responses from TINET on the question of source of literature for TINET did not indicate COMESA as a source of information. But COMESA has a number of projects on its programs, which are very important to business organizations. For example, COMESA has on its programs industry support initiatives. One of such is intended to facilitate easier exchange of goods and services in the region by harmonizing standards, quality control procedures, certification schemes, technical regulation and other related activities which constitute barriers to trade (COMESA, 1998). Information on issues of that nature could be made available to business organizations

so that they are aware of the trends in the environment in which they operate. COMESA is the mother organization whose main objective is to promote trade and economic integration. Therefore any projects that are on COMESA's agenda are important to any business organization.

Large firms may be aware of such projects due to the fact that a good number of them might have the means to access information from the COMESA web site. This may not be the case with small firms. Michael and Bingham's (1987) study revealed that large firms were better placed to exploit information from European Union (EU) information providers. This is because large business firms have considerable in-house expertise and the influence to enjoy direct contact with EU institutions as opposed to small firms who tend to rely on sources they know best even if others are more appropriate. The author is of the view that TINET does not collect information generated by COMESA because COMESA has a Conference and Documentation Unit. This unit is responsible for documenting all the information generated by COMESA through seminars, workshops, meetings, etc. However, even if this is the case there is need for TINET to ensure that the information generated by COMESA is available to its users. TINET can produce abstracts of such documents and make them accessible both electronically and in hard copy. Such measures can enable even SMEs have access to information which they may not access electronically and thereby make a positive impact on their operations and contribute effectively to development.

Accessibility of information

Information must be accessible in order to be used. Alter (1996) says that the availability of information is the extent to which the necessary information exists in an information system and can be accessed effectively by those who need it. As Atherton (1977) puts it, access to precise and reliable information can help to minimize the wastage of resources. Any barriers to the access of information may result in poor communication and information flow, causing problems for the user.

Table 13: How TINET is accessed

Count Row Pct	SMEs	LBOs	Row Total
Visiting	7 46.6%	8 53.3%	15 50%
Fax	0	5 100%	5 16.7%
E-mail	0	4 100%	4 13.3%
Internet	1 16.6%	5 83.3%	6 20%
Column Total	8 26.7%	22 73.3%	30 100%

On the question of accessibility 22(73.3%) respondents said that the information that TINET offers was accessible, while 8(26.7%) indicated that the information was not easily accessible. The respondents were asked to state how the information provided by TINET was accessed. The table above illustrates that 15(50%) of the respondents access information from TINET by visiting, 6(20%) by Internet, 5(16.7%) by fax and 4(13.3%) by electronic mail. The table also indicates that only one SMEs respondent said he/she accesses information from TINET through Internet. The table shows that 7 (87.5%) of SMEs access TINET by visiting. The above stated means of accessing the information from TINET were also confirmed by the answers provided by TINET members of staff in the questionnaires. The four (4) respondents indicated that the requests from users are received by personal visits, fax, e-mail and Internet.

The reason why some of the users found it difficult to access the information from TINET could be due to the fact that half 15(50%) of the respondents access the information through physical means. This may be difficult for those who are far from TINET location. This also means that the majority of users do not have access to information technologies or online systems. The researcher is of the view that although

Internet offers great opportunities to improve business activities and open up new untapped markets by enabling businesses easy access to information, the situation in developing countries is far from ideal. As Seng (1996) puts it, online commerce requires substantial investment in information technology. These costs can be formidable in developing countries.

Currency of Information

While information has multiple uses and cannot be depleted, it can become obsolete or its usefulness can be diminished if it is out dated. Information offered to the user must have the most up to date data elements. Having access to current information is very important if a business organization is to survive.

Responding to the question on the currency of information, TINET members of staff indicated that the information available on importers, exporters and their products are up to date and that it is updated every month. They also indicated that the information TINET has on tariff rates for the region was up to date. They further stated that the database on market opportunities is updated on a daily basis while the database with information on each COMESA state showing basic economic indicators and major trade flows is updated on a monthly basis.

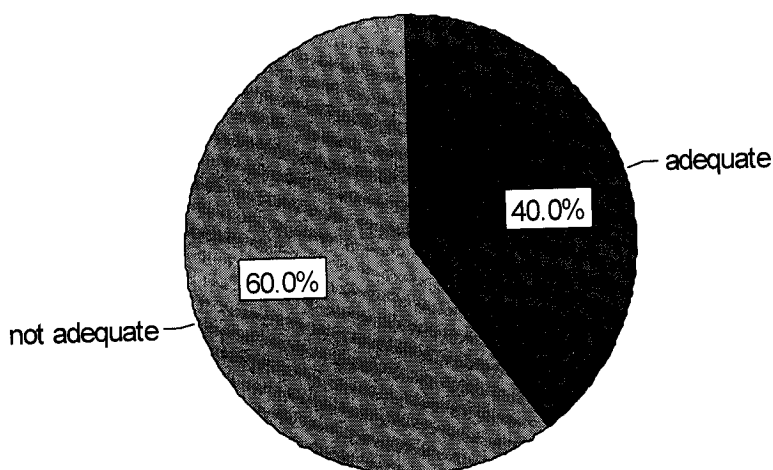
In order to have a balanced representation on the currency of the information provided by TINET, information was sought from the users. The majority 20(66.7%) of the respondents said that the information was up to date, but 10(33.7%) said the information was not up to date. The researcher is of the view that although updating the databases might not be a problem because the system is fully computerized, the strategy used to collect information, as revealed earlier in this study, does not seem to be effective in ensuring that the information is up to date. The study has revealed that focal points encounter problems in collecting information from companies as well as governments institutions. One of the problems is that government institutions do not submit the information required from them in time. Focal points also find it difficult to make follow-ups to government institutions because they are understaffed.

Adequacy of information

In an interview with the Computerization Adviser it revealed that TINET had enough literature to meet the needs of users. However, this does not seem to be in line with the views of the users. Chart 2 below shows that out of 30 respondents, 18(60%) were of the view that the information provided by TINET was not adequate in meeting their information needs and 12 (40%) were of the view that it was adequate.

The questions of accessibility and currency could be linked to the adequacy of information. Unless the information is adequate its application to a particular problem may be difficult. The information should be enough to enable one carry out a decision. The inadequacy of the literature available in meeting the needs of users could also explain why most of the respondents indicated that they made use of TINET occasionally (refer to page 44).

Chart 2: Adequacy of information



The reasons why 60% of the respondents found the information offered by TINET to be inadequate, although it was up to date and accessible, could be due to the fact that TINET has restricted itself to providing information only in four areas. TINET offers information mainly on market and investment opportunities, tariff rates, country profiles and traders and their products in the COMESA region. Business organizations need a lot of information in addition to what TINET currently offers such as sources of

available credit facilities, information on technical advice and trends in international trade. So TINET should provide different types of information to match the various information needs of business organizations.

4.3.8. Equipment/Facilities.

Information handling encompasses the organization, storage and retrieval of documents and information. Information providers are expected to provide information not only to users capable of visiting them but also to those who are unable to visit them. With developments in information and communication technology it means that it is now easy to acquire, process, store, retrieve and disseminate information in whatever format it may take, unconstrained by distance, time and volume. This requires adequate information handling equipment/facilities to help improve and increase the quality as well as the reliability of information required by the users.

The answers of the respondents from TINET regarding the issue of equipment/facilities revealed that TINET had no problem with equipment/facilities. The researcher's perspective here is that although the coordinating office may not have any problems as far as equipment/facilities were concerned the problems of focal points in this regard can affect the operations of TINET. An information network operates in the same way as a partnership, with different levels of participation that may exist depending on the position of the network. The central office is the coordinator of the focal points at regional level as is the case with TINET. Each focal point is linked not only to the coordinating office but also to the other focal points. Each focal point also co-ordinates the activities in its country. As Lelo (1992) puts it, to function properly it requires that partners of the network use procedures, regulations and the same kind of equipment in order to facilitate communication and exchange of data. In an interview with the Librarian at EBZ it was established that the equipment which EBZ had was not adequate. This made it difficult for EBZ to attend to users' inquiries and users have to be referred to TINET most of the time. This means that unless focal points have adequate equipment there is likely to be poor communication and exchange of information

The respondents at TINET were asked to state how facilities such as e-mail and Internet are used. What came out was that Internet was used to collect as well as sending data to and from focal points. Internet was also used to identify new market opportunities for business enterprises involved in exports. E-mail was used to communicate with TINET focal points as well as answering requests from users. It was also used for in-house communication. It was revealed in the questionnaires that CD-ROM facilities are used to read high volume data, and to store data. However, the researcher's observation is that Internet was not being fully utilized. Internet could be utilized to access different types of information contained in electronic databases for the users. The fact that TINET has links to a number of trade-related web sites is an advantage, which could be exploited thereby providing to users a wide range of services. Information could also be made available to users via institutions such as the Agricultural Market Information Center and Zambia Library Service (ZLS). Internet Servers could be established in such institutions to enable users who cannot access information from TINET electronically have access to information.

4.3.9. Human Resources

The advance of information technology and the broadening of information work at the moment are demanding a much wider range of knowledge and experience among information providers than say 20 years ago. The information transfer process is now requiring the development of a wide range of skills if an information network is to be effective in delivering the services. Umbima (1982) argues that despite increased automation, the human resource remains an indispensable part of an information service. The human resource can be a major source of information especially in cases where there is a shortage or absence of information materials. Above all, planning, organizing and managing information resources can never be left to machines alone.

The members of staff at TINET were asked to state their level of educational attainment. Three indicated that they had University education and one had college education. They were further asked to describe their qualification. Of the university graduates one was an electronic networking specialist and the other two were

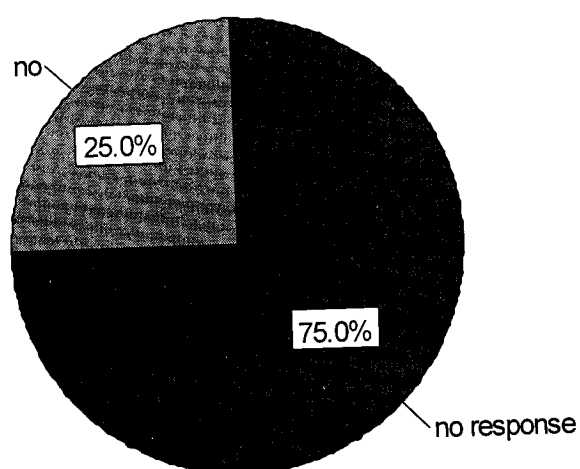
information specialists. The fourth one with college education had a diploma in computer studies. The respondents also indicated that they have adequate skills for them to carry out their duties. However, they said that TINET was understaffed. This made it difficult for them to carry out their duties effectively because there was too much work for them. This situation confirms Chisenga's (1996) observation that in Africa the question of human resources seems to affect the implementation of most information networks.

In response to the problem of staffing, the Computerization Adviser said that they were working on a restructuring program that will help overcome such problems. He said that plans were underway to engage some commercial information providers who will carry out some of the work on behalf of TINET at a fee in all the COMESA countries where staffing problems were experienced. This will also enable TINET to recruit adequate staff and therefore improve the operations of and services offered by the system.

4.3.10. Financial Resources

The operations of any organization are dependant on among other things the availability of financial resources. On the question of funds, only one out of four (4) of the respondents from TINET said that TINET had financial problems thereby making it very difficult to carry out its functions. Three (3) of the respondents did not answer this question (see chart 3). This could be attributed to the fact that some of the respondents are expatriates. They are seconded to TINET by the International Trade Center (ITC). Therefore it was uncomfortable for them to say that TINET was not adequately funded or that it was adequately funded because ITC and other donors agencies support the network.

Chart 3: Availability of funds



When asked about what was being done about the problem of funding, the Computerization Adviser said that they were working on a restructuring program that will ensure that TINET was self-sustainable. He said that TINET should be in a position to generate its own funds. He observed that TINET was being funded by donor agencies and this will one day come to an end and therefore ways of generating income have to be devised.

The Computerization Adviser revealed that TINET was in the process of providing some of the services on a fee to finance its activities as a way of dealing with diminishing funding prospects. He revealed that currently TINET services were free, but will be charged for on a cost-recovery basis starting from 1999. Only the Traders Directory was on sale at US\$30 to market-test the commercialization concept. He also revealed that two methods of charging for information products were to be used. Such methods were annual subscription for online information plus CD-ROM searching, directory and network installations and individual purchases of selected information products and services such as electronic document delivery, bibliographies and current awareness services.

In an interview the Computerization Adviser revealed that there was no support coming from COMESA. He said that TINET is a brainchild of the International Trade Center. All the activities of TINET were supported by donor agencies. The researcher

is of the opinion that there is too much dependence on donor aid on the part of TINET and this is not good for TINET because once donors withdraw the system may collapse. Kangulu and Wood (1995) argue that many information networks in Africa have failed due to lack of financial support attributed to among other things failure by participating institutions to build up their own financial capacity for such information networks. This confirms Chisenga's (1996) observation on PADIS projects. In reference to the CABECA project in Lesotho, he says that the financial support provided by PADIS to information network projects tends to be limited only to national nodes (focal points) and nodes that have no sufficient local inputs, tend to suffer.

The researcher's perception is that although information networks offer great promise for developing countries, the effort to employ these techniques successfully is hampered in a number of ways including inadequate financial resources. Although equipment prices continue to decline, acquisition of such equipment represents a substantial commitment of scarce foreign exchange, which is a difficult choice to make when other immediate priorities, such as health care and food are vying for the same resources.

4.4. Coordination

As already mentioned in this study, an information network functions in the same way as a partnership. In order for an information network to function effectively there is need for co-ordination among participating partners. This makes it easy for the network to satisfy the needs of users. Against this background the Computerization Adviser of TINET was asked whether TINET organizes meetings/workshops where they meet Officers in charge of focal point to discuss issues pertaining to the operations and functions of the network and the needs of the business community. It was revealed that TINET was not doing well in that direction. Ideally meetings were suppose to be held on an annual basis but this had not been possible due limited funds. He did not even seem to know when the last one was held.

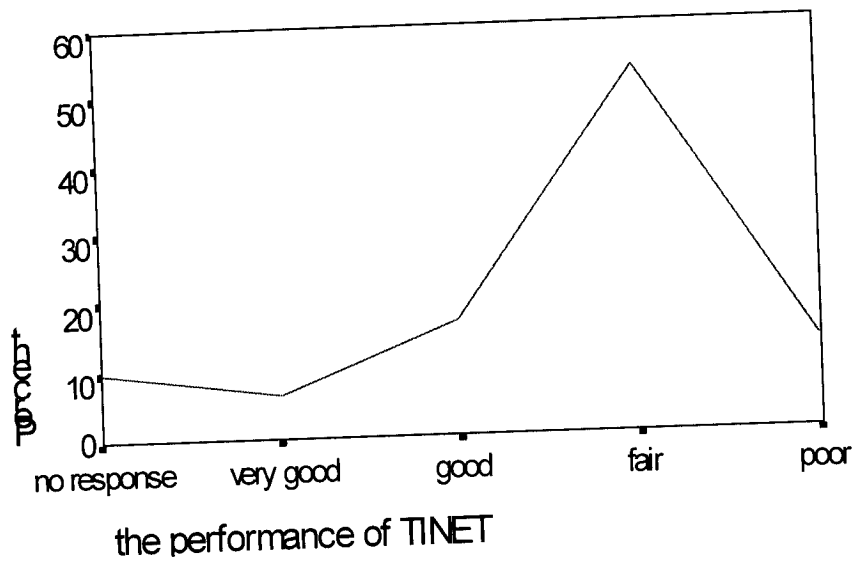
In order to obtain a balanced view on the issue of coordination among partners the views of the Librarian at EBZ were sought. It was revealed that they do have meetings/workshops organized by TINET where they discuss issues regarding the operations of TINET but they are not regular. The last meeting was held in 1995 in Harare, Zimbabwe. He said that TINET concentrates more on buyer/seller meetings. The researcher's observation is that focal points of TINET seem to exist in isolation. Because of this isolation it can be very difficult for management at TINET to know the problems which focal points face. Organizing such gatherings requires money. However, with the commercialization in the pipeline TINET should put such a forum in place. This would bring about close coordination and cooperation which is necessary in order to strengthen the network particularly before all go electronic.

4.5. Perceptions on TINET's Performance

When asked to describe the performance of TINET since its establishment, the Computerization Adviser at TINET said that TINET had performed well except in the early days of its existence when things were difficult. He said that by then most COMESA states had not liberalized their economies. This made it difficult for business firms to participate effectively in trade. This situation had changed because companies now need information in order to compete effectively on the international market. He said that many companies need information about markets for their products/services, investment opportunities, about their competitors and supply of raw materials.

To some extent the above statements seem to agree with the sentiments of the users. The respondents were asked to rate the performance of TINET in meeting their information requirements. Chart 4 below illustrates that 16(59.3%) were of the view that the performance of TINET was fair, 5(18.5%) said that the performance was good, 2(7.4%) said it was very good and 4(14.8%) said it was poor. Ten (10) respondents did not answer this question. The fact that the majority rated the performance of TINET as fair suggests that there is a lot which needs to be done if the network is to meet the needs of users.

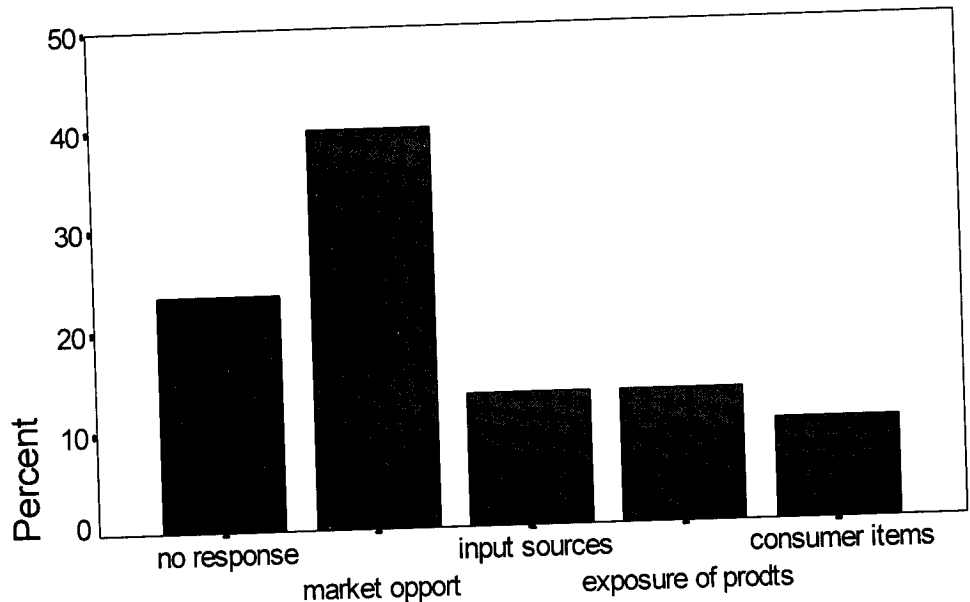
Chart 4: The performance of TINET



The respondents were asked to state whether the services that were offered by TINET were helping their businesses perform better. The majority 23(82.1%) were of the view that the services offered by TINET had helped their business perform better. However, 7(23%) felt that the services offered by TINET had not helped them at all.

Information was sought to find out in which areas the services offered by TINET were helpful. As could be seen from chart 5, 12(40%) of the respondents said the services offered by TINET were most helpful in finding markets for their products/services. This was followed by 4(13.3%) who indicated that the services were helpful in locating sources of supply of materials they used in their businesses and those who benefited by having their products and services exposed to external markets respectively. The other 3(10%) respondents said that through TINET they were in a position to get sources of supply for consumer items. The high response rate from those who said that TINET services were helpful in identifying market opportunities for their products and services seem to explain why the majority users of TINET are exporters. Seven (7) of the respondents did not answer this question. This seems to indicate that the services offered by TINET have not helped them in any way.

Chart 5: Areas where TINET services were helpful



The seven respondents who did not respond to the question of which areas were TINET’s services helpful to them could be linked to 7(23%) respondents (refer to page 66) who indicated that they had not benefited from the services provided by TINET. This explains why 7 of the respondents did not answer the question of whether the services provided by TINET had helped them in any way.

4.6. Desired Improvements

The suggestions and views of the users are very important because they help an organization realize its weaknesses and seek better ways in order to improve its performance. The respondents were asked to suggest ways in which the services of TINET could be improved to ensure that it meets their information needs. Out of 30 respondents 20 (66.7%) were of the feeling that TINET could do better if it were to provide information on foreign trade regulations and tariff rates of other foreign markets apart from those of COMESA. One of the respondents said that there are projects that come from donor organizations designed to support various business sectors, which pass unnoticed because information is not passed on to the expected beneficiaries. This respondent gave an example of the “UNIDO Business Start-Up Products” which are designed to provide among other things technical assistance to

small businesses. This respondent indicated that he/she came to learn of this through a friend.

The above seems to indicate that there is need for TINET to provide different types of information which the business community requires. Five of the respondents indicated that TINET should publicize itself if many business organizations were to benefit from the services it offers. The five respondents further suggested that TINET should be publicizing the buyer/seller meetings that it organizes so as to give many businesses an opportunity to know how they can benefit from the services of TINET. Their views were that television and radio were a good communication media, which TINET should use to reach out to many business organizations.

4.7. Summary of Research Findings

The study surveyed business organizations registered as users of TINET. It also investigated the operations of and services offered by TINET. Based on completed questionnaires and interviews conducted, the findings of this study indicate that information services provided by TINET are assisting business organizations in Zambia perform better. The study reveals that 59.3% of users felt that the performance of TINET in providing the business community with information they require was fair. However, rating the performance of TINET as fair indicates that the network has not done much. This, therefore, means that there is a lot of work to be done. The performance of TINET is hindered by many factors, which include among other things the inadequacy of the literature (information) available to meet users' needs. The study has revealed that the information contained in TINET databases (list of traders and their business products, tariff rates for products traded under COMESA arrangement, basic economic indicators for each COMESA member state and investment opportunities in the region) is inadequate in meeting the needs of business organizations.

The study revealed that TINET does not make use of other available information sources such as the information generated by COMESA through its institutions and as

result it does not meet the information needs of its users. The services such as current awareness, advisory services and assisting enterprises install computerized databases, which TINET offers to users, are not enough. The study has revealed that the means (meetings/workshops, newsletters, brochures, trade fairs and Internet) through which the existence of TINET and the services offered is publicized are not ineffective. This has resulted in few business organizations making use of the services TINET provides. The study has also shown that TINET is facing financial problems because donor funding is diminishing, an indication that there is too much dependence on donor funding and this has affected its staffing levels and operations. The study has shown that TINET has no information policy to facilitate easy acquisitions of information. There is also lack of coordination among the participating partners of the information network and focal points seem to exist in isolation and as a result management at TINET is not well informed of the problems which focal points encounter.

In a nutshell, TINET as an information network can erase the traditional geographical market limitations and thereby assist businesses compete effectively in the international market. However, this may not be fully realized as long as the issues raised in this study are not addressed. The following chapter provides recommendations which require consideration if TINET is to perform to the expectations of the users

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

The findings of this research have been based on business information provision by TINET in Zambia. This study sought to evaluate TINET's performance in its pursuit to provide information to the business community in Zambia. In order to come up with concrete and conclusive results, an extensive literature review was carried out. The literature was divided into two parts. The first part covered the role of information in business. The second part looked at the role that information networks play in enabling businesses have easy access to information. The literature was on studies carried out in developed countries as well as in Sub-Saharan Africa. This chapter brings out issues that have been raised in the study and recommends measures that require attention if TINET is to perform according to aspirations of the beneficiaries.

5.2. The Performance of TINET

The study revealed that services offered by TINET were most helpful in finding markets for the products/services of users. It also revealed that TINET was assisting businesses through exposure of their products and services, identifying sources of inputs and consumer items. At least 82% of the respondents said that the services offered by TINET had helped their businesses perform better. The study found that about 60% of the respondents felt that the performance of TINET in meeting their information needs was fair. However, rating the performance of TINET suggests that there is much to be done in order for the network to fully achieve the objectives for which it was established. The study showed that a large number of TINET users are large business organizations. Very few SMEs are aware of the services offered by

TINET, and therefore are not benefiting from its services. SMEs are denied an opportunity to participate and contribute effectively to the economic development of Zambia. Zambia has embarked on a liberalization program aimed at improving the economy. Liberalization is seen as a way of creating a conducive environment for greater competition, technology transfer and easy access to foreign capital among business organizations in order to expand their operations. This can only be achieved by allowing all business organizations in the country access to information. SMEs are the means to empower the wider community to contribute to the development of Zambia. Therefore, the performance of TINET in this regard is not impressive. Some of the factors contributing to TINET's poor performance are outlined below.

5.3. The Availability of Resources

The study investigated the accessibility, currency and adequacy of the information offered by TINET to users. About 73% of the respondents indicated that the information, which TINET offered, was accessible. The study also revealed that, 67% of the respondents were of the view that the information was current. However, on the question of adequacy the study established that 60% of the respondents felt that the information offered by TINET was inadequate in terms of meeting their information needs. The inadequacy of the information is attributed to among other things, the failure by TINET to make use of the information generated by COMESA as well as its inability to exploit the Internet to access information that may be available from commercial databases. TINET has failed to take advantage of the links that it has with trade related organizations to provide information that would meet the requirements of its clientele whose business interests extend beyond COMESA markets.

In light of the above it is recommended that, where possible, TINET should consider other information sources. TINET should make available to the users the information produced by COMESA and its institutions as well as other regional bodies such as SADC and EU. Although TINET was facing financial problems, the links which it has (through COMESA) with other trade-related organizations, should be exploited for the benefit of users whose market needs extend beyond COMESA. Information could be acquired even on an exchange basis. The researcher is aware of an agreement between COMESA and the Center for the Development Industry, an institution for the EU based in Brussels, Belgium. The cooperation agreement cover among other things, the promotion of partnership between COMESA and EU industrialists in order to help COMESA carry out studies, organize joint missions and seminars as well as the exchange of information on regional projects. Agreements of the above nature can enhance TINET's ability to acquire enough information for its users. While it is understood that TINET is specifically designed for the exchange of data related to trade and production development in the COMESA region, information on export regulations, foreign trade regulations, standards in international trade, trade conventions etc. is critical for the survival of business in the region. This study revealed that 80% of the users of TINET are exporters. International forces apply when business organizations rely on foreign markets for the sale of their products and/ or services. Organizations confront entirely new sets of circumstances and environmental forces. Therefore decisions to do business in regions outside COMESA present significant challenges to organizations because managers have to learn to operate in an environment where some of the rules of business are different from those applicable in

the COMESA region. This requires access to information about such an environment for organizations to compete effectively. This means that TINET should not limit itself to providing information that is contained in its databases and which is available within the COMESA region only.

The study established that TINET was facing financial problems due to the fact that donor funding was diminishing. The problem of funding is attributed to among other things, too much dependence on donor funding on the part of TINET. TINET has failed to build up its own financial capacity in order to support its operations. This has affected the operations of the information network. The problem of funds has also affected the staffing level of TINET making its operation very difficult. In an attempt to lessen the problems of funding and staffing, TINET is considering providing its services at a fee. Commercialization (providing services at a fee) will also improve on the quality of information and services. Thus it is hoped that TINET will generate enough money to employ adequately qualified staff and buy equipment.

While commercialization is a good idea, it is recommended that TINET should encourage organizations that it will sub-contract to provide a wide range of services to its users. Through sub-contracted organizations TINET should offer information products and services which users will be interested in paying for such as on-line references, abstracts, electronic document ordering as well as search facilities to enable clients have easy access to information that may be contained in commercial databases in the COMESA region or overseas. The current awareness service "PEIPLINE" which TINET offers on trade opportunities and tenders in the region should also be

electronically accessible to ensure that the business community have access to such information when it is still current. This monthly bulletin on trade opportunities could also be made available to the business community through organizations such as Zambia Investment Center, Zambia Privatization Agency and the Lusaka Stock Exchange, which are constantly in touch with the business community.

The study established that focal points are understaffed and have inadequate equipment and this affects their operations. Since TINET is considering offering its services at a fee it is important for TINET to work out a strategy that would strengthen the capacity of focal points to enable them carry out their duties effectively. It is recommended that TINET should consider allowing focal points to retain a certain percentage of the money raised from the services offered or through subscriptions. Such money can be used to buy the required equipment and employ adequate qualified staff. The officers carrying out the activities of the network at focal points can also receive an allowance. By allowing them to retain a certain amount of money and receive an inducement allowance to the officers in-charge of the network operations at national level, focal points can be motivated to work hard and therefore improve the operations and the services of TINET. Focal points can also be very instrumental in promoting the services of TINET at national level and even reach out to micro businesses at community level and contribute effectively to the development of Zambia and/or respective COMESA member states.

In order to ensure that business organizations have access to information TINET may consider working hand in hand with institutions like the Agricultural Market

Information Center. The center can also be a good access point for users to pay for services as well access information from TINET particularly those in the agricultural sector. The Center is in constant contact with agriculturists looking for information on agricultural requirements. Money generated could be used to acquire the necessary equipment in order to connect such information centers to TINET so as to facilitate ease access to information among users, particularly SMEs who do not have access to online systems.

5.4. The Acquisition of Literature

The study revealed that TINET collects information through a network of counterparts (national focal points). The information is collected using some forms, which are distributed to business companies with the hope that they will send back the forms after the required details have been filled in. However, it has been revealed that it is not easy to collect information through this process either because the addresses used are no longer in use or because business firms do not see the need to do so.

In light of the above, it is recommended that TINET should come up with a programme designed to educate the business community on the objectives of the information network and the benefits that TINET services would provide to the community. Business organizations do not feel comfortable giving out information which they feel is sensitive unless they are assured of its security and the benefits that they may get in return. The study by Nath et al (1998) revealed that although information networks, particularly Internet, offer opportunities for business firms to perform better, there are fears among companies on the possibility of their data or

customers data being intercepted by anybody. The researcher is of the view that part of the problem lies in the fact that TINET requests for information from business houses without explaining to them what TINET will do with the information. TINET should make use of fora like seminars, conferences, the radio, television, etc, to make businesses aware of its objectives and the benefits they would get by having access to information offered by TINET. Such fora could also be used to explain to businesses the security of the information and measures in place to ensure that there is no unlawful access to the information in the system. This can bring about confidence on the part of users in the system and in the services of the network.

The study found that counterparts e.g. EBZ also encounter problems in collecting information from government ministries/departments. Government institutions generate a lot of information, which is very important to business. However, government institutions are protective of their information and as a result a lot of effort is directed to promote secrecy and censorship rather than improving the accessibility of information. Tiamiyu (1993) observes that the blanket use of the "secrete" tag for all data/information, whether actually sensitive or not, poses problems for the efficient flow and utilization of information available from government institutions.

Against this background it is recommended that TINET should come up with a sensitization programme designed to motivate top-level management of government organizations to make the information easily available to TINET. TINET should find a way of lobbying for support from COMESA particularly where funding is concerned if such a programme is to achieve its objectives. COMESA has on its objectives the

promotion of information exchange among member states in order to promote trade, increase production and achieve market integration. One way in which COMESA can achieve the above objective is by enabling TINET to perform its role effectively. Top-level public servants and heads of government institutions should be sensitized to make them realize the importance of information not only in business and development of individual countries but also of the region as a whole. This will also help solve the problem of information inadequacy expressed by users in this study. Additionally TINET should be prepared to pay for some of the information from organizations willing to provide such information at a fee. Most government institutions in Zambia are encouraged to raise their own income so as to sustain their operations. Therefore, by offering to buy some of the information where possible would enable TINET acquire up to date, timely and adequate information for users.

5.5.Coordination and Collaboration

The study established that lack of coordination among the partners or focal points and the coordinating office affect the operations of the network. The study showed that the participating partners operate in isolation. Meetings are scarcely organized between the central office and the national nodes. As a result the central office is not well informed about the problems which affect the operation of the information network at the national level.

In light of the above, it is recommended that a forum be put in place for the purpose of providing participating partners with a regular opportunity to meet, exchange information and discuss issues pertaining to the operations and functions of the

network and needs of the business community. Meetings need to be held regularly and they should be able to provide a focus for coordination and cooperation among partners of the information network. Better coordination between partners of the network is necessary in order to create a framework within which participating partners can operate and to ensure that the information needs of the business community are addressed. The focal points seem to exist in isolation and their closer collaboration would strengthen the system and would make it easy for the business community to have access to information. It is also recommended that TINET should work hand in hand with various sectors or sections of COMESA such as commerce and industry, agriculture and food security, trade and customs and finance. This will enable TINET to be aware of various activities, which COMESA is undertaking. For example under the agriculture and food security sector, COMESA has programs such as the establishment of a marketing and research information network on oil crops, the promotion of regional co-operation in the development of institutional credit and savings facilities for the fisheries industry, the establishment of a regional center for fisheries research and management as well as the establishment of a COMESA Food and Agricultural Trade Promotion Unit (COMESA, 1998). Information about such projects is very important and could be made available to users through collaboration with various sectors of COMESA. This will enable business firms monitor events of interest to them in the region.

COMESA has a Conference and Documentation Unit. This unit has a lot of information generated by COMESA through workshops, meetings, seminars and conferences. Documents from such fora form another important source of information

which may be difficult to locate elsewhere because they are not often published through the conventional book trade. TINET should ensure that users have access to such information. In this case it would be better to merge TINET with the Conference and Documentation Unit. It is therefore recommended that TINET should come up with a proposal which could be tabled before COMESA giving reasons why merging of the two information units is necessary. Merging will provide users with first hand information on the various activities, which COMESA is undertaking. This can also reduce on the costs of having two information units operate independently and streamline the services offered by TINET.

The study established that TINET has (through COMESA) links with other trade-related organizations such as SADC and EU. While such links are important, TINET should also consider establishing relationships with other trade information networks. There are a number of trade information networks around the world. Examples of these are Singapore's Tradenet, California Commercenet and Central Canada Tradenet from which TINET can learn through collaboration. There are also other trade information networks which are affiliated to regional bodies like the European Union (EU), North Atlantic Free Trade Agreement (NAFTA), Asia Pacific Economic Cooperation (APEC). An example of such trade information networks is NAFTANET which is designed to facilitate the exchange of information among the business community in NAFTA member countries, i.e. Canada, United States of America and Mexico. Collaboration with other trade information networks will enable TINET to learn a lot issues pertaining to effective management of networks and possibly adopt some of the strategies which have enabled such networks operate

effectively for the benefit of its users. This would put TINET in a better position as a medium for the exchange of information among the business community in the COMESA region. Further more establishing links with the above trade networks can also enable TINET provide to its users current information on prevailing market forces in other parts of the world and therefore assist businesses perform better.

5.6. Promotion Effectiveness

The study established that little publicity has contributed to lack of awareness of the existence of TINET and its services among the expected beneficiaries. The current means (Internet, meetings/workshops, trade fairs, newsletters and brochures) through which the existence of TINET and its services are publicized are not effective enough. Meetings/workshops and trade fairs are usually attended by a few businesses whereas newsletters and brochures are distributed through two outlets i.e. EBZ and ZACCI. The brochures and newsletters do not reach the intended beneficiaries. The study revealed that the highest response rate (37%) is from the respondents who learnt of TINET through friends. This seems to explain why the number of business organizations registered as users of the network is small. Out of 87 businesses registered as users of TINET in Lusaka, only 15 are SMEs, an indication that there is lack of awareness of the existence of TINET on the part of small business firms as compared to large ones. This suggests that TINET is not doing enough to publicize itself and therefore not benefiting small firms.

It is therefore recommended that TINET should come up with a strategy designed to promote its services at regional, national and local levels. TINET should establish a

section, which will be in charge of propagating the existence of and the services provided by the information network. This propagation should be done through the mass media (radio, television and newspapers). Since TINET has financial problems it can seek the assistance of business organization (in terms of funding) in order to undertake such a task. Some agreement could be reached where businesses willing to help TINET publicize its services could benefit by marketing their products through TINET. The section should pay particular attention to the promotion of information products and services of TINET. It is not enough to make the information available, but it should be actively publicized if the commercialization process, which TINET intends to undertake, is to succeed. TINET, through such a section, would make use of any existing information infrastructure to publicize the products and services it can offer the business community. In this way many businesses will be cognizant of TINET's services.

It is further recommended that brochures and newsletters should be made available to the business community through libraries and government institutions such as the Zambia Investment Center, Zambia Privatization Agency, Lusaka Stock Exchange, Small Scale Enterprises Development Board, etc., who are continuously in contact with the business community. It is also recommended that brochures and newsletters should be made available to SMEs through non-governmental organizations (NGOs) working with SMEs. NGOs have made particular contributions to development through their involvement with the community. There are a number of NGOs working with SMEs such as the Village Industry Service (VIS), Small Scale Enterprises Promotion Limited (SEP), Care International Zambia Limited and the Irish Aid. This

would help increase the number of small firms making use of the services offered by TINET.

5.6. Recommendations for further Research

This study was limited to business organizations in Lusaka. It should also be noted that the coordinating office of TINET and the national focal points of Zambia are based in Lusaka. This can have an influence on use of TINET by the business community in Lusaka as compared to those in other parts of the country. It is therefore necessary to carry out a study that would cover at least four other towns in Zambia. This would provide a broad perspective on the performance of TINET as regards the provision of information to the business community in Zambia. Such a study would reveal whether the findings of the present research were peculiar to Lusaka or not. Additionally, since TINET as an information network of COMESA is designed for the exchange of information related to trade and production development in the region it would be more appropriate to conduct studies in other COMESA member states. Such studies would establish whether the findings of this research could be replicated in other COMESA member states.

The study established that TINET was in the process of commercializing its services in order to improve operations. Although the idea is well intended, it is premature for TINET to implement such an initiative without adequate knowledge of its client's readiness and ability to pay for information. The researcher is aware of organizations like EBZ who are offering information services at a fee through annual subscriptions but the membership does not exceed 200. TINET is a computerized information

network and therefore the cost of accessing information via a network may be beyond the reach of many businesses particularly among SMEs. It is, therefore, recommended that a study be carried out in order to establish the readiness and ability of the majority business organizations especially SMEs to pay for information.

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APPENDIXES

Appendix A

UNIVERSITY OF BOTSWANA

DEPARTMENT OF LIBRARY & INFORMATION STUDIES

Questionnaire for business organizations registered as users of the Trade Information Network (TINET).

This questionnaire is designed to obtain your views, comments and suggestions regarding the operations and services provided by the Trade Information Network of the Common Market for Eastern and Southern Africa. Please give your answers by ticking in the boxes provided and filling in the blank spaces.

BACKGROUND INFORMATION

Q1. Which of the following best describes your position in the business organization you are in?

Manager []

Business owner []

Business partner []

Q2. To which of the following categories does your company belong?

Large business organization []

Small and medium enterprises []

Q3. Which of the following best describes the type of business organization you are in?

Manufacturing []

Agricultural []

Wholesaling/retailing []

Service company []

Q4. Which of the following is your area of business transaction?

Export []

Import []

SOURCES OF BUSINESS INFORMATION

Q5. What are your main sources of business information?-----

Q6. How reliable are the above sources?

Very reliable []

Reliable []

Slightly reliable []

Not reliable []

Q7. Are you a member of any business association where you share ideas on matters that affect your area of business operation?

Yes []

No []

Q8. If yes, which one(s)?-----

Q9. Has the above improved the performance of your business?

Yes []

No []

Q10. If yes, how?-----

Q11. How informed are you on the availability of credit schemes?

Highly informed []

Just informed []

Not well informed []

Q12. Are you aware of the international quality standards required on the production of goods and services?

Yes []

No []

Q13. If yes, what are your sources of information?-----

SERVICES OFFERED BY TINET

Q14. How did you learn of TINET?

Radio/newspaper []

Meetings/workshops []

Friends []

Internet []

Other (specify)-----

Q15. How often do you make use of the services offered by TINET

Very often []

Often []

Occasionally []

Q16. Where do you get information on sources of supply of inputs that you use in your
business?-----

Q18. How do you rate your sources?

Very reliable []

Reliable []

Slightly reliable []

Not reliable []

Q19. Is there competition in your line of business?

Yes []

No []

Q20. What are your sources of information about your competitors-----

Q21. How well informed are you on the needs of the customers (markets) that you serve?

Highly informed []

Informed []

Not well informed []

Q22. Do you use TINET as a source of information on market opportunities?

Yes []

No []

Q23. How well informed are you on tariffs applicable in your area of business transaction?

Highly informed []

Just informed []

Not well informed []

Q24. How adequate would you say is the information provided by TINET on tariffs applicable in your area of business transaction?

Very adequate []

Adequate []

Not adequate []

Q25. How accessible is the information provided by TINET?

Highly accessible []

Accessible []

Not easily accessible []

Q26. How do you access information from TINET?

Personal visits []

Fax []

E-mail []

Internet []

Other (Specify)-----

Q27. How up to date would you say is the information from TINET?

Very up to date []

Up to date []

Not up to date []

Q28. How adequate would you say is the information you get from TINET?

Very adequate []

Adequate []

Not adequate []

Q29. In your opinion would you say the services offered by TINET have helped your business perform better?

Yes []

No []

Q30. If yes, in what areas would you say the services offered by TINET have been helpful?

Market opportunities []

Input sources []

Exposure of products/services []

Sourcing for consumer items []

Other (specify)-----

Q31. How would you rate the performance of TINET in meeting your information needs?

Very good []

Good []

Fair []

Poor []

Q32. What do you suggest should be done in order to improve the services offered by TINET? -----

Appendix B

UNIVERSITY OF BOTSWANA

DEPARTMENT OF LIBRARY & INFORMATION STUDIES

Questionnaire for TINET members of staff

PERSONAL DETAILS

1.Designation-----

2.What is the highest level of your educational attainment?

University []

College []

O level []

3.Have undertaken training in relation to your work?

Yes []

No []

4.If yes, explain briefly-----

5.If no, does this affect your work performance in any? Please explain briefly-----

6. How many years have you been working with TINET?

0-3 []

4-6 []

7-10 []

More than 10 (specify)-----

SERVICES PROVIDED BY TINET

8. Which of the following services does TINET offer?

- Referral services []
- Inquiry services []
- Abstracts []
- Full text information []
- Other (specify)-----

9. Do you offer any special consulting and support services?

- Yes []
- No []

10. If yes, explain briefly-----

11. How many requests do you receive per week?

- 1-19 []
- 20-39 []
- 40-60 []
- More than 60 (specify)-----

12. How do you receive the requests from the users?

- Personal visits []
- Fax []
- E-mail []
- Internet []
- Other (specify)-----

13. How do you publicize the services that TINET offers?

- Meetings/workshops []
- Newsletters/brochures []
- Radio/newspaper []
- Internet []
- Other (specify)-----

TINET INPUT.

14. Where does the literature for TINET come from?

Government ministries/departments []

Business enterprises []

Business associations []

Conferences []

Other (specify)-----

15. Do you have a strategy for collecting information?

Yes []

No []

16. If yes, explain briefly-----

17. Would say the information you have on importers and exporters is up to date?

Yes []

No []

20. If yes, when was it last up dated?-----

21. How often do you up date your database on market opportunities in the COMESA region?

Weekly []

Fortnightly []

Monthly []

Other (specify)-----

22. How often do you up date country profiles on each COMESA member state?

Daily []

Weekly []

Monthly []

Annually []

Other (specify)-----

EQUIPMENT

23. In your view would you say TINET has adequate equipment/facilities to operate effectively?

Yes []

No []

24. If no, how does this affect the operations of TINET?-----

25. State how the following facilities are used if available?

a) Internet-----

b) E-mail-----

c) CD-ROM-----

FUNDS

26. In your view would you say TINET is adequately funded?

Yes []

No []

27. If no, how does this affect the operations of TINET?-----

STAFFING

28. In your view would you say TINET is adequately staffed?

Yes []

No []

29.If no, would you say this affects the operations of TINET in some way? Please explain

briefly-----

Appendix C

UNIVERSITY OF BOTSWANA DEPARTMENT OF LIBRARY & INFORMATION STUDIES

Questions for an interview with the Computerization Advisor at TINET.

Q1. What is your designation?-----

--

Q2. For how long have you been working for TINET?-----

--

Q3. How would you describe the performance of TINET since its establishment?-----

Q4. Would you say TINET is meeting the needs of its users, if so justify how? -----

---- Q 5. Would you say TINET has the required information to meet the needs of its users, if so explain briefly?-----

Q6. If not, what is the problem?-----

Q7. Would you say the business community in Lusaka (Zambia) well informed of the services which TINET offers, if yes explain briefly and if not why?-----

Q8. What problems do encounter, if any, and how do they affect the operations of TINET?-----

Q9. If any what are you doing to redress the situation?-----

Q10. What support does TINET receive from COMESA?-----

Q11. How would you describe the performance of TINET’s national focal points in carrying out the responsibilities placed on them?-----

Q12. Do you organize any meetings/workshops where you meet national focal points coordinators to discuss issues pertaining to the activities of TINET and to know the problems that they face, if so when was the last one held?-----

Appendix D

UNIVERSITY OF BOTSWANA

DEPARTMENT OF LIBRARY & INFORMATION STUDIES

Questions for an interview with the Librarian at Export Board of Zambia (EBZ)

Q1. What role do you play as a national focal point in Zambia?-----

Q2. How do you collect the information from business organizations?-----

Q3. How do you identify the business organizations where you collect information?-----

Q4. Would you say you face problems in getting information from business organizations if you do, what problems do you encounter-----

Q5. Apart from business organizations what other organizations do you obtain the information which TINET requires?-----

Q6. If you collect information from other institutions apart from businesses what problems do you encounter if any and how do manage to collect the information needed by TINET?-----

Q7. Would you say EBZ has problems which hampers its functions as a focal point of TINET and if so, what kind of problems are they and how do they affect your operations as a focal point of TINET ?-----

Q8. If EBZ has problems what do you think should be done to redress the situation?-----

Q9. Do you usually have meetings/workshops organized by TINET where you discuss issues pertinent to the operations and functions of TINET and information needs of the business community in Zambia, if you do when was the last meeting/workshop held and where was it held-----

Q10. Do you think the business community in Lusaka or Zambia in general is well informed about TINET, if not what do you think is the root cause of the problem?-----
