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Published by: **Institute for Development Policy and Management**
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With support from: Building Digital Opportunities (BDO) Programme
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Photographs Supplied by: The New Vision Printing and Publishing Company Ltd.
P.O.Box 9815, Kampala.
Tel: 337000.
Fax: 235843, Kampala, Website:http//www.newvision.co.ug

This handbook can be used together with **'eCommerce for Small Enterprise Development – a Handbook for Entrepreneurs in Uganda',** which has been designed specifically for use by small business owners and employees.

View/Download both handbooks from:
http://www.ecomm4dev.org/

Also View/Download additional handbooks concerning ICTs and Enterprise Development at:
http://www.fituganda.com, or http://www.man.ac.uk/idpm/ictsme.htm

Note: 1 US Dollar = 1,900.00 Uganda Shillings (February 4, 2004)

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How to use this Manual

This handbook is for micro and small-scale enterprise (MSE) support agencies based in Uganda. The handbook is designed for agencies that are new to eCommerce and have little knowledge of what is involved, as well as for agencies that are already using information and communication technologies (ICTs) – including computers, email, the Internet and mobile phones.

The objectives of the handbook are as follows:

1. To outline some basic information about eCommerce including the benefits and risks for agencies and clients (Section A).
2. To present an overview of eCommerce in Uganda (Section B).
3. To illustrate an eCommerce adoption model for MSEs (Section C).
4. To review current practice in Uganda for eCommerce support for MSEs, and outline an approach to enterprise needs analysis for eCommerce (Section D).
5. To encourage a strategic approach to eCommerce support by agencies (Section E).
6. To provide information about different aspects of eCommerce (Section F).
7. To point toward further information and support for eCommerce in Uganda and overseas (Section G&H).

The first thing you should do is read through **Section A & B** to learn more about eCommerce, then look at **Section C** to gauge how far your clients have climbed the 'eCommerce ladder'. Next look at **Section D** that focuses on client support. Section D1 outlines different approaches to eCommerce support for MSEs and Section D2 presents agency case study examples, illustrating current practice in Uganda. Section D3 outlines a client-centred approach for improving your agency's analysis of eCommerce needs for MSEs – concentrating on three areas – information needs, value chain analysis and resources.

Then move on to **Section E. E1-E4** provides guidelines for developing an agency strategy towards eCommerce support for MSEs – focusing on business integration, sustainability, user involvement, a step-by-step approach to scaling up activities and how best to choose eCommerce facilitators. Additionally, **Section E5** suggests areas where agencies can actively lobby government to further assist with the development of eCommerce for MSEs in Uganda.

Finally, look at **Section F** that provides information on various aspects of 'best practice' in eCommerce, and **Section G & H,** which provide sources of further information and support for eCommerce in Uganda and from overseas.

A. Introduction

Uganda has about 800,000 competitive micro and small-scale enterprises (MSEs). The MSE sector in Uganda is active and dynamic, but largely informal. It is a significant source of employment and incomes in urban and rural areas. The non-formal sector employs about 90% of the non-farm economically active population and contributes about 20% to GDP. Such business enterprises in Uganda need to compete more effectively in order to boost domestic economic activity and contribute toward increasing Uganda's export earnings, whilst at the same time increasing incomes and contributing to poverty reduction on a sustainable basis.

eCommerce is emerging as a new way of helping business enterprises to compete. At present, most enterprises in Uganda lack the knowledge of how investment in eCommerce could benefit their businesses and help them develop that competitive edge. The lack of opportunities afforded to MSEs in Uganda also results from lack of access to the technical and communication infrastructure.

Business support agencies can play a key role in helping enterprises to bridge these gaps. Agencies can also look beyond the technology, and understand how real commercial benefits can flow to individual enterprises and sectors from investment in eCommerce methods and technologies.

This handbook will help your agency understand more about the opportunities and threats associated with eCommerce, as well as the strengths and weaknesses of your agency and your clients when considering using eCommerce.

A1. What is eCommerce?

eCommerce involves the sale or purchase of goods and services by businesses, individuals, governments or other organisations and is conducted over computer networks – often making use of the Internet, email or mobile phones.

eCommerce can assist the production, advertisement, sale and distribution of products and services via telecommunication networks. The devices that facilitate performance of eCommerce are called Information and Communication Technologies (ICTs). These include existing technologies like landline telephones and faxes, but principally new technologies and devices, such as mobile telephones, computer-based email and Internet services.

But, **eCommerce** is not just about using new technologies. eCommerce will also help support profitable business relationships and assist entrepreneurs to more effectively manage and run their businesses. This will involve creating more effective external communications with customers, clients, collaborators and suppliers, as well as improving internal business efficiency.

eCommerce Networks: eCommerce may involve selling directly from businesses to consumers (B2C). For example, a number of craft producers and tourism enterprises in Uganda have already found some success dealing directly with their customers through eCommerce channels.

eCommerce can also be conducted directly between businesses (B2B). This is where eCommerce is growing most rapidly. These include eCommerce Portals that operate as Electronic **Marketplaces** (e.g. www.exposureafrica.com) or as **Auction Sites** (e.g., http://www.vba-aalmseer.nl/- the world's largest fresh cut-flower auction site). Benefits of these eMarketplaces can include reduced costs, better research and quicker transactions for buyers. Rewards for sellers include improved customer service levels and cheaper exposure to customers.

There is also Business-to-Government (B2G) eCommerce that refers to the growth in supply of goods and services for online government procurement – not a growth area yet in Uganda.

A2. How Big is eCommerce? – Africa in Context

At the present time, the total eCommerce activity for Africa is negligible. However, the predicted growth rate is high, rising from US$0.5 Billion transacted in 2002 to a forecasted US$6.9 Billion transacted in 2006. This clearly represents a large amount of potential business for African small business (source: eCommerce and Development Report, UNCTAD, 2002).

eCommerce in Africa is likely to be concentrated – both geographically and according to sector. South Africa will see the greatest proportion of eCommerce activity and sectors where the impact of eCommerce will be greatest will be exports – including the export of primary products, manufactured goods, agricultural and horticultural products and business services – as well as the tourist sector.

Another indicator of potential eCommerce activity is Internet use. Use of the Internet in Africa has experienced considerably faster growth compared with growth in eCommerce. Table 1 puts Africa in global context. Regional comparisons demonstrate that there is still a substantial negative infrastructure gap between Africa and other parts of the developing world. For the most part, in Africa, Internet connections are confined to urban centres.

Table 1: Regional Comparisons in the Growth in the Internet 2000 to 2002

	Internet Users by Region (Thousands)			% Change	
Region	2002	2001	2000	2000-2001	2001-2002
Africa	7943	6510	4559	42.8	22
Latin America	35459	26163	17673	48.0	35.5
North America	170200	156823	136971	14.5	8.5
Asia	201079	150472	109257	37.7	33.6
Oceania	10500	9141	8248	10.8	14.9
Europe	166387	143915	110824	29.9	15.6
World	591567	493024	387531	27.2	20.0

Source: International Telecommunications Union (2003)

The potential for Africa – including Uganda – remains large but the constraints are significant and African enterprises considering eCommerce should also be made aware of the limitations of eCommerce as a means to conduct business – due to the lack of a level playing field in relation to speed, stability and cost of Internet access in comparison with other parts of the developing and developed world.

A3. What is Driving eCommerce for MSEs?

The need for micro and small-scale enterprises to consider adopting eCommerce is driven by global, and regional business trends. These relate to markets, costs, new technologies and political factors: As follows:

- Cost competition and the need to compete in export-led sectors including tourism.
- Adaptation to rapid market changes that are impacting on export-led and domestic markets.
- Globalisation of the production and supply of goods and services – and the need to integrate MSEs more effectively into global supply chains.
- Increased customer expectations and consumer power – buyers expecting to be able to access web-based information about products and services, for example.
- Adaptation to new technologies – an overall need for technological upgrading.

- Greater role for information in business and the need to access, process and communicate it – in relation to international standards and quality requirements, for example.
- Government deregulation and liberalisation – lowering costs of access.
- Bilateral and multilateral trade agreements – opening up markets to developing country producers.
- Adaptation to higher quality standards such as ISO9000 – ICTs are acting as an enabler in this area.
- The 'me too' attitude – the lure of the latest technological gizmo or gadget.

It is important that enterprises – and the agencies that endeavour to support them – understand the driving forces for eCommerce. For example, many sector-based B2B marketplaces do not necessarily use the Internet as a medium – but commonly use private networks or auction sites where access is restricted – such as for agricultural and horticultural products. In order for enterprises in developing countries to participate in these marketplaces it would first be necessary to gain market entry to these supply chains, and to understand how they operate.

Other areas of growth include financial and business services (including on-line teleservices and outsourcing) and travel and tourism – sectors that will also require individual analysis to assess market entry requirements. It is important, therefore, to understand what is driving eCommerce on a sector-by-sector basis.

A4. What are the Benefits of eCommerce?

eCommerce can give a competitive advantage: helping consolidate the market position of an enterprise whilst opening up new business opportunities with the potential to improve profit margins. These benefits of eCommerce can arise in the following way:

Cost Benefits

- Transaction costs: costs associated with conducting transactions can be reduced.
- Costs of materials: more Internet based information may afford a wider choice of suppliers and more competitive prices.
- Marketing and distribution costs: publishing a brochure online enables an unlimited number of people to access it, also allowing regular update.

Market Benefits

- Brand awareness: offering new avenues of promotion for products and services.
- Customer loyalty: can be strengthened through more effective two-way communication.
- Market awareness: an enterprise can become more aware of market competition, and more aware of market changes.
- Global reach: if the enterprise is looking toward the global marketplace, a web presence can be appropriately designed for the target market.

Competitiveness and Collaboration Benefits

- Reliability: eCommerce can offer a reliable, cost effective means of doing business.
- Automation: suppliers and customers, if they wish, can access a 24/7 sales service – particularly important when trading through time zones.
- Specialisation: eCommerce can help enterprises focus their activities – making it easier to build relationships with other enterprises and communicate their needs to a wider audience - including support agencies.

Many of these benefits can be gained through relatively modest investments in new technology and systems. Greater benefits may be felt as the enterprise moves up the eCommerce adoption ladder (see: Section C1). It is important to realise, however, that the benefits outlined are not exclusively tied to eCommerce. For example, market benefits may be achieved more effectively through better business networking and the building of personal business relationships, rather than through use of the Internet. This emphasises the importance of adopting an approach towards eCommerce that puts business objectives first, rather than believing that technology alone can deliver the benefits described above.

A5. What are the Risks of going into eCommerce?

There are great potential benefits, but there are also pitfalls of going into eCommerce. They are the financial costs, the business 'opportunity costs' and the dangers of failure. These are detailed below. It will be important for your agency to identify the pitfalls and help minimise the risks for clients.

eCommerce will bring extra costs as well as cost savings! Developing eCommerce for a business will almost certainly bring an increase in costs before such time that either savings due to greater efficiency or increased revenue become evident. It is likely that eCommerce activity will need to run in parallel with more traditional business methods. For example, an enterprise will need to continue to produce paper-based marketing material (brochures, stationery, leaflets, etc) as well as building up a web presence. Taken overall, the costs associated with eCommerce (see Advice Sheet 9) are unlikely to be

justified without significant increases in revenue.

eCommerce may divert attention away from 'more important' offline activities! It is important that online and offline efforts are not in competition with each other within a business. In fact, for most MSEs, off-line activities (such as face-to-face meetings) will remain far more important than online communication. In the long term, risks can be minimised through effective integration of online and offline activities – using eCommerce to complement existing business processes and building new skills. In the short and medium term, there is a risk that a business owner could lose sight of his/her true business needs if eCommerce is oversold.

An eCommerce venture may well fail completely! Any new business venture is likely to fail. As the .Com boom, and subsequent bust, has demonstrated, eCommerce ventures are probably more likely to fail than conventional businesses. This emphasises the importance for small businesses of not throwing all their eggs in the eCommerce basket. Failure can be avoided in one of two ways. First, by deciding not to adopt eCommerce at all. Second, by taking a step-by-step approach that minimises risk – such as suggested in this handbook.

However, there are also risks of ignoring e-commerce! Technology and innovation are often described as the catalyst for change. Ignoring new technology may have significant implications for the ways business is done in the future. For example, having no web site, or a badly designed or marketed website, may put a business at a disadvantage as compared with competitors. Unsuitable or inadequate technology can mean that your clients are without the communications systems that they will need to compete effectively.

A6. What are the Agency Benefits and Risks?

As an agency supporting MSEs you are primarily concerned with the eCommerce benefits and risks for your clients. However, you should also consider the benefits and risks for your agency in supporting eCommerce activities and in developing your own capacities for eCommerce.

The message for agencies is essentially the same as for the enterprises you support. Technology should be an enabler and not a driver for the realisation of benefits, and risks need to be assessed in terms of actual costs, opportunity costs and the dangers of failure. The benefits for your agency of actively supporting eCommerce will involve building capacity in four areas:

- Improving your own knowledge concerning eCommerce.
- Using eCommerce to improve your own processes – new and better ways of doing things.
- Involving people – encouraging and providing new skills and capacities for your staff.
- Using technology efficiently and effectively.

Your support strategies for MSEs will provide the principal benefits of eCommerce. However, eCommerce can also improve the agency's ability to advocate on behalf of clients. This may involve using eCommerce technologies to solicit funds and to interact more effectively with donors or other governmental and non-governmental organisations.

Benefits of eCommerce for Agencies:

- Improving information/knowledge capacity – eCommerce will support marketing, communication and branding of your agency's activities. It will help you access, process and disseminate increased amounts of information and build your knowledge base.
- Improving technical capacity – building your internal technical capacity will make you less reliant on external infrastructure access and technical support.
- Improving human capacity – eCommerce will improve business and organisational skills as well as technical skills. Additionally, the motivation and confidence of your staff can be enhanced.
- Improving processes of activity – both efficiency and effectiveness can be improved across a wide range of activities – particularly internal and external communications.

Risks of eCommerce for Agencies:

- Costs factors – there is likely to be a high cost of initial investment in time, money and skills.
- Information and communication factors – are you able to handle increased amounts and complexity of information (information overload)? Are you able to use information effectively and ensure data reliability? Is there a danger you may neglect personal face-to-face communication channels – which may be the most relevant to your clients?
- Sustainability factors – initial investment may be forthcoming from donors, but is it sustainable in terms of recurrent costs, required staffing and skills, maintenance and upkeep? Additionally, what opportunity costs may arise due to time and efforts spent on eCommerce activities?

B. eCommerce in Uganda

B1. Uganda's eCommerce Infrastructure

Uganda's information and communication infrastructure has experienced rapid growth in the past 5 years following deregulation and the establishment of a competitive environment for telecommunications provision. Both fixed line and mobile networks have experienced a 3-fold increase in users. Uganda's Internet market continues to grow in terms of both penetration and access. There is also increased growth in investment in the telecommunications sector that amounted to Ush115 Billion in 2000/2001, an increase of over 30 percent from the previous year. Investment in the sector is currently predominantly driven by the private sector that contributes over 90% of total sector investment. Some further positive developments in Uganda include:

- Increased competition in the Internet sector as the UCC (Uganda Communications Commission) licensed more Internet Service Providers (ISPs) that translated into a reduction of both subscription/monthly and installation fees from an average of US$60 and US$45 in 1998 to an average of US$30 and US$25 currently.
- In terms of Internet penetration, UCC estimates that there are over 6500 plus business and household addresses subscribing to ISPs.
- The number of Internet Cafes has increased from an estimated 20 in 2000/2001 to over 50 – mainly concentrated in Kampala and its suburbs. Access charges in Internet cafes have also gone down from USH300 per minute to a range of USH50-15 per minute.
- There has also been rapid growth of ICT services and outsourcing in Uganda.

However, Table 2 (overleaf) suggests that Uganda is still lagging behind comparable economies – and trading partners – in East Africa – whilst South Africa clearly has a considerable advantage in terms of infrastructure. This is particularly the case with regard to the gap between urban and rural areas. It is also the case that many of those with fixed lines in their homes are also mobile owners, and almost all are concentrated in the urban centres. It is estimated the only 1 million of Uganda's 22 million population has ready access to telecommunication networks (Source: Musubire, 2002).

Although access to telecommunications has expanded rapidly in Uganda, much of this growth has been due to mobile cellular networks that are not yet suited to Internet applications for small enterprise.

Table 2. eCommerce Network Access – Regional Comparisons (2001/02)

	Uganda	Kenya	Tanz	RSA
GDP Per capita ($US)	317	347	244	2,979
Population (millions)	20.55	29.01	32.1	44.31
Telephone mainlines per 1000 population (main city)	37	78	31	n/a
Telephone mainlines per 1000 population (countrywide)	3	10	5	114
Mobile phones per 100 population	8	4	5	190
Internet Hosts per 10,000 population	18.01	65.21	32.75	549.38

Source: International Telecommunications Union (2003)

B2. Uganda's eCommerce Market

Uganda is essentially an agricultural economy. Agricultural exports contribute approximately 44% to GDP, and coffee exports alone make up 50% of total exports. Other major traditional exports are cotton, tea and tobacco. Non-traditional exports include fruits, vegetables, chillies and cooking oil, fish and fish products. A range of other manufactured goods are exported mostly to other African countries. Tourism and some business services are also important earners of foreign exchange.

Table 3. Uganda and its Main Trading Partners

	Uganda	Kenya	Tanz	RSA	SSA	EEC	US	ROW
Population (millions)	20.55	29.01	32.1	44.31				
GDP Per capita ($US)	317	347	244	2,979				
Exports to (millions $US)	-	1	5	3	22	187	29	82
Imports from (millions $US)	-	350	25	50	431	181	29	169

Source: African Development Indicators: World Bank (2002)

Table 3 shows the direction and volume of imports and exports (2001/2002) with Uganda's main trading partners. The figures indicate a high proportion of exports to the areas of the world where eCommerce is growing fastest – the EEC and the United States.

There are no reliable figures on the extent of eCommerce activity in Uganda. Anecdotal evidence suggests that eCommerce in Uganda has already facilitated improvement in trade in some instances and provided improved market information enabling individuals and enterprises to make better decisions about trade – what to produce and how to produce it. There are also examples of commodity exchange systems where buyers and sellers can communicate online but exchange monies offline. Businesses in Uganda are using the Internet for advertising their products or services and then using phone, fax or email to make orders and bank transfers for payment. In Uganda, therefore, eCommerce is opening up the market, making it more transparent, and facilitating buying and selling of goods where the actual transaction occurs off-line.

For more detailed local and worldwide market information concerning Uganda's export areas visit the following websites:
http://www.ugandaexportsonline.com/
http://www.p-maps.org/pmaps/index.php

B3. Assessing eReadiness for Uganda MSEs

Assessing eReadiness means finding out how ready MSEs are to engage in eCommerce. A conventional approach to eReadiness tends to emphasise the importance of the technical and regulatory infrastructure. However, for Uganda, eReadiness needs to be assessed from a wider perspective – gauging the potential of enterprises and sectors to respond to eCommerce challenges – *given the infrastructural, institutional and regulatory environment within which they are currently operating.* A number of assessment tools have been developed that adopt this approach – see, for example:
www.bridges.org/ereadiness

An eReadiness analysis for MSEs should emphasise educational factors including awareness and skills. It should take a business-led approach taking into account business cost factors (transport, delivery, and other overheads) and socio-cultural factors that influence technology's diffusion and use, as well as sound analysis of the market – including value chains and market conditions.

It is also important to take a sector-based approach. Because the impact of eCommerce is so diverse, analysis should be carried out on a sector-by-sector basis. The greatest long term potential for eCommerce in Uganda remains both the traditional and non-traditional export sectors that are dominated largely by perishable commodity exports (see: Enterprise Case Study 4). The area of greatest immediate impact is likely to be the tourist market and a number of niche or specialised markets for associated products such as arts and crafts (see: Enterprise Case Studies 2&3). A third area of potential growth

is service exports – such as offline teleservices where a small number of businesses are already making an impact in Uganda (see: Enterprise Case study 5). There is also potential to benefit from eCommerce technologies in the domestic market as already proven in growth areas such as the value-added services built upon mobile communications (see: Enterprise Case Study 1). All the Enterprise Case studies can be found in Section C1.

B4. Local Policies and Programmes

ICT policy falls under the Government of Uganda Medium Term Competitive Strategy (2000-2005) the aim of which is to create an enabling business environment for the private sector to compete, to boost domestic economic activity and increase Uganda's exports – increasing incomes and contributing to poverty reduction on a sustainable basis. One of the top five priorities is to improve the business environment for micro and small-scale enterprise.

Sector specific government policies include a sound structure for policy formulation, dialogue and support for private sector umbrella organisations such as USSIA, UMA, PSF UNCC&I and MFF. For government, ICT Infrastructure development is a key component of support for enterprises, as well as information dissemination and development of businesses support services – many of which should become vehicles to support eCommerce awareness.

The scope of current awareness raising activities covers information as a resource for development and the ICT sector – emphasising ebusiness, software development and manufacturing applications. An ICT policy framework was agreed in 2002 – involving the Directorate of Information in the President's Office, and the Ministry of Works, Housing and Communications. However, since information and communication cut across many sectors, the implementation of the policy will involve various ministries, district and local authorities, development partners, NGOs, as well as the private sector. A number of associated initiatives are also underway:

The Institute of Computer Science, Makerere University (infodev-funded) is creating multi-sectoral evaluation of Developing Information and Infrastructure Agenda for Uganda Project (DIIAUP) – essentially a coordination project.

There is also a Uganda Development Gateway Project underway that provides a web-based portal for information sharing by all stakeholders in government and non-government development initiatives – including a planned facility for an eCommerce platform. see: http://www.udg.or.ug/

In this respect, government is positively supporting the information, technology and communication requirements for eCommerce.

B5. eCommerce SWOT Analysis for Uganda

Strengths: These indicate the areas where drivers and enablers are strong in the country, and/or where constraints are being overcome. • De-regulated telecommunications environment – leading to rapid growth in ICT digital networks. • Growing IT services sector • Growing pool of skilled IT enthusiasts in the business sector • Labour cost advantages • Good English language proficiency • Supportive government policies – such as through removal of VAT from ICT equipment.	**Weaknesses:** These indicate areas where constraints are still strong in the country and/or where drivers and enablers are weak. • Lack of rural connectivity - teledensity is still less that 1 countrywide. • Costs of access are still high in comparison with other countries. • Despite infrastructure improvements, connectivity still slow and unreliable for the majority. • Minimal domestic demand for eCommerce due to predominantly rural-based agricultural economy and poor connectivity. • Lack of eCommerce awareness and skills within wider small enterprise sector. • Many large and medium scale industries still backward and state controlled. • Lack of secure server networks for credit card and other transactions. • Illiteracy rates still high. • Lack of agencies promoting eCommerce for MSEs.
Opportunities: local, regional and global opportunities that are/may be presented to e-commerce-enabled small enterprises. • Use of eCommerce to facilitate traditional and non-traditional exports to developed countries. • Use of eCommerce to promote and facilitate tourism in Uganda • Use of eCommerce to expand business service sector – such as through on/off-line teleservices and outsourcing. • Domestic use of eCommerce utilising mobile networks and communications (mCommerce).	**Threats:** risks that are specific to this country; external threats (e.g. competition or penetration from outside firms). • Competition (e.g., in regional traditional and non-traditional agricultural exports and tourism sector and global in teleservices) • Threats from RSA/Kenya firms that are eCommerce enabled (although this also represents an opportunity for technology/skills transfer)

C. Ugandan Enterprise on the Road to eCommerce

This section outlines the steps to eCommerce describing the differing stages of eCommerce development – presenting 5 local enterprise case studies (thumbnail sketches) that highlight an eCommerce application for each stage. The case studies show how enterprises are benefiting from eCommerce by illustrating practical examples. More detailed versions of these case studies can be found at:
http://www.ecomm4dev.org/

C1. Moving up the eCommerce ladder

The 'steps' model can help you understand the different types of eCommerce business applications you may encounter. It may also help you to identify the types of assistance you may provide to MSEs.

Step 1: Start out with simple messaging using mobile communications

Currently 'wireless' communications – including short messaging services (SMS) – provide a cheaper and more widely available option for enterprises in Uganda. Mobile phones offer a number of key advantages over fixed line communications for small businesses, such as instant communications with customers and suppliers – even when on the move. They also provide greater connectivity and network coverage than landlines – users can be instantly connected by text messages and mobile chat – a powerful marketing and advertising tool. These new information services – such as value added text messaging – have been a growth area in Uganda for some time.

Sending a Text Message

Case Study 1: Sedu Welding and Fabrication Co

A micro enterprise run by a 27-year-old male entrepreneur producing fabricated metal products, located in Nakawa with 2 employees. There has been tremendous impact on the business since the business owner acquired a mobile phone. Using the phone has tremendously cut down transport costs and given access to a wider market. The phone has helped him forge a personal relationship with clients for repeat orders. The entrepreneur has built his phone into his marketing strategy – giving out his contact telephone number whenever he can.

A welder and a mobile telephone

Inside an internet cafe

Step 2. Email messaging – a powerful business communication tool
You can send or receive emails from a computer terminal either located on your business premises or by using an Internet café or Tele-centre. Email is a cheap, quick and reliable way to exchange business information with customers, suppliers, and business contacts who are also connected to email. A variety of information can be sent – not just messages, but documents, photographs, drawings, or any other computer data file (see Advice Sheet 2 for more information on email).

Case Study 2: Nabiganza Estates
A small crafts enterprise located in Entebbe with a shop in Kampala serving both home (75% of turnover) and export markets (25%) with 5 women employees. The entrepreneur has made many contacts when travelling abroad to attend exhibitions that she follows up through email. A number of these have become customers. The business is using email – via the Internet – to target the export market.

Step 3. Web Publishing – to reach a wider customer base
Web publishing can be used to make available company information – for example using an online company brochure. In its simplest form it may consist of a 3-4 page website giving a basic company profile, some information about products and services, and contact information. In a more advanced form it may include an online catalogue – an online version of a conventional catalogue that can be easily updated. Even a simple web presence will give you the ability to access a wide – potentially global market, with 24/7 accessibility and easy updating of content (see Advice Sheet 4 for more information on creating websites).

A Global Village with eCommerce

Case Study 3: Sesse Island Beach Hotel
A tourist facility located at Buggala Island on lake Victoria about 2-3-hrs drive from Kampala, employing 20, and achieving a 60-80% occupancy rate per year. A web site represented an obvious marketing route for a tourism enterprise. Most overseas tourists, and their agents, make extensive use of eCommerce – via websites and e-mail. A website facility was introduced to the enterprise principally to attract more overseas customers (local customers generally book by phone or fax). The enterprise has made use of an overseas specialist travel planning company based in Switzerland for the design of their web site.

Step 4. Web Interacting – to improve relationships with customers
Web interaction will allow customers more scope to browse through images, descriptions and specifications relating to products and services. It may allow them to submit email enquiry forms, to order online, to use online services or to use a shopping cart facility and order confirmation – that can be paid for and fulfilled offline. Interaction over the web can improve customer service and response to customer queries.

Case Study 4: Star Café Company Limited
This enterprise adds value to Uganda's coffee through roasting, blending and packaging coffee products – serving predominantly the home market. Located in Kampala with 15 male and female employees. An interactive website was launched in 2002 to help access the export market. Through the website, Star Café has become better known and many contacts have been made. The website has already demonstrated that it is a cost effective way to reach out to the export market.

Step 5. Web Transacting
This can be termed as having a full eCommerce capability that covers the whole transaction process from the placing of an order to online payment for goods and services via secure networks. For B2C eCommerce this will likely involve making use of secure credit card payments systems, and for B2B eCommerce will involve payment through secure banking systems.

Case Study 5: Cayman Consults
A small accounting enterprise that provides bookkeeping services to MSEs for the local and export markets. Located in Kampala with 25 male and female employees. The process of electronic bookkeeping involves a client sending bookkeeping information (receipts, invoices, statements and expenses) to a company in Canada (Wall Associates), which are scanned and posted to a server. At Cayman Consults, bookkeepers log onto the Wall Associates server (which is password protected) and they are able to process the client's books and generate reports for them. Payments are partly processed online, but actual fund payments are made by bank transfers (offline). Working with the client's server is advantageous in that Cayman doesn't have to invest in robust software and the necessary security. All that is taken care of by the client.

Step 6. Web integrating
eCommerce may also take on a wider role within a business – linking business processes electronically – often termed eBusiness. eBusiness provides an electronic platform that links the front office (e.g., customer-facing processes such as sales and marketing) to the back office (e.g., internal processes such as accounts, inventory control, purchasing and human resources). EBusiness links internal systems with external networks – via the Internet. This stage often describes a business as becoming fully e-enabled. Integrating systems can make it easier to do business, encourages customer loyalty and repeat business.

A Scanner

D. eCommerce Support

For enterprises seeking to climb the steps to eCommerce it will as important to understand their own business strengths and weaknesses, as it will be to understand the opportunities presented by new technologies. Your agency will need to have a clear understanding of the business environment in order to assess the type of eCommerce support that will be most appropriate for your client enterprises.

This section provides a model of the different types of support that are being provided to MSEs, and presents 5 Case Study examples of support currently on offer in Uganda. It then suggests how your agency might go about improving the analysis of enterprise support needs for eCommerce.

D1. An Agency eCommerce Support Categories Model

1. No support
There may be a case for offering no eCommerce support to clients or members. It may be for any of the following reasons:

- The enterprise may not fulfil your particular criteria for offering support.
- The enterprise may already be operating eCommerce successfully.
- You may want to refer the enterprise to a different agency or facilitator.
- The enterprise may not yet be ready for eCommerce.

2. Awareness Raising
Most enterprises in Uganda are at the stage of eCommerce development where awareness raising is likely to be of greatest benefit. Awareness raising should seek to develop a business-led approach that examines the potential costs and benefits of eCommerce in relation to overall business goals and strategies, and in the full knowledge of the commercial realities of the market.

Awareness raising for eCommerce should not, in the first instance, seek to stimulate the use of ICTs, but should examine the actual information and communication needs of the enterprise. Awareness can be created through the use of case studies and with reference to current best practice for enterprise development more generally. Awareness raising methods may include manuals such as this one, workshops, award schemes or possibly web-based material – although the ability of your target audience to access web-based material must be gauged.

3. Training
It is unlikely that your agency will provide dedicated training courses for eCommerce. It is preferable that training for eCommerce is integrated with existing training courses and programmes in order that eCommerce strategies can be seen in the context of the wider solutions to business problems. For specific eCommerce skills (such as use of email, for example) it would be preferable to work through private sector training agencies.

Awareness raising strategies should also be fully integrated into 'training of trainers' for small enterprise development programmes. This handbook could provide a useful conduit for that purpose.

4. Business Support Package
Agencies that already run business support packages – dealing with training, finance and advice – will need to integrate eCommerce support into these wider programmes. In fact, this integrated approach is a preferable option. Customised support for eCommerce, however, may be preferable when focused on individual enterprises or sectors where specific eCommerce needs have been carefully identified.

5. Trading Portal
The most direct form of eCommerce intervention for an agency would be through the provision of a trading portal or some other form of web-based marketing or information assistance for client enterprises. Many agencies, of course, already act as market facilitators providing marketing assistance and often purchasing and reselling goods and services on behalf of client enterprises. The use of a trading portal can be seen as an extension of this, and there may be benefits for agencies in developing their own eCommerce capacities. However, web-based approaches need to be considered on a strict cost/benefit basis in comparison with other more traditional avenues of marketing and trading. In addition, such investments should take full account of the requirements for a needs-based approach set out in Section D3.

Rather than setting up their own web-based marketing, agencies should first consider the following approaches.

- Facilitating access to existing portals.
- Working through and coordinating with other web-based facilitators.
- Helping clients work through trusted third parties and other private sector trade facilitators (Table 6 provides a list of possible eCommerce facilitators).

The following case studies provide examples of current practice in Uganda for eCommerce support to MSEs. Each of the case studies provides examples of one or more of the eCommerce support categories outlined above.

D2. Examples of eCommerce Support for Small Enterprise

Case Study A: Business Uganda Development Scheme (BUDS-SSE)

Located in Kampala with 6 F/T workers, and co-funded by the European Union with an annual budget of 700,000 euros. Established in 2000 by the Private Sector Foundation Uganda (PSFU) through its business development scheme.
http://www.psfuganda.org/ buds@imul.com

Aims
The project supports acquisition of technical skills through training programmes for personnel to increase the capacity and performance of small enterprises in the private sector. By the end of year 2002, BUDS-SSE had over 300 beneficiaries. BUDS-SSE supports a grant of 50% reimbursement of total costs incurred in undertaking eligible activities for the acquisition of technical skills, and through the provision of a business diagnostic.

ICT Resources
ICT resources include a LAN with Internet presence and email. They are in the process of developing a Website that will include a facility for on-line preliminary applications. BUDS-SSE makes use of the Internet for business information, donor correspondence and dissemination of information.

Support for eCommerce
Assistance has included setting up websites, Internet marketing, paying for computer training for business packages such as for bookkeeping, ICT outsourcing and market access. They concentrate on awareness raising and technical skills acquisition. The agency assesses the eCommerce needs of its beneficiaries within the overall business proposals they present. This is usually followed by a diagnostic evaluation of the enterprise to determine what kind of support can be provided. They have supported Cayman consult (Enterprise Case Study 5) and assisted staff at Mucolex – a micro-enterprise that exports mushrooms – through training in Internet use and computer packages. BUDS-SSE have encountered eCommerce challenges relating to initial costs and infrastructure access, low business analysis capacities of MSEs, lack of appreciation of BDS (Business Development Services), and the fact that most businesses use phone and fax and are reluctant to advance beyond that stage.

Reflections on Best Practice
If the kind of assistance that is appropriate is beyond an agency's mandate, BUDS-SSE provides linkages to other support agencies or BDS providers – for example, through micro-finance institutions. However, there is lack of agencies providing assistance for access to ICT infrastructure. BUDS-SSE prioritises training as the first step to eCommerce. Secondly, they recommend the type of eCommerce applications that may be appropriate according to enterprise needs. For example, it does not make sense to recommend the purchase of a computer and Internet connection without first ensuring quality, quantities and delivery mechanisms (fulfilment) for products and services. It is essential, therefore, that a business should be helped to understand its own requirements to effectively utilise eCommerce.

Participants in ICT trainig

Using the internet

Case Study B: Enterprise Uganda.

Funded through the Ministry of Finance Planning and Economic Development. Established in 2002 and located in Kampala. The agency was established under the framework of the UNDP's Enterprise Africa Regional Initiative. www.empretec.net/DITE/EMPRETC/ECUganda.nsf.

Aims:
The mission of Enterprise Uganda is to develop a new generation of dynamic Ugandan entrepreneurs by actively providing support to MSEs, to enhance their productivity, growth and competitiveness. The agency is partly commercial because the beneficiaries part-pay for support offered. Emphasis is given to existing enterprises with growth potential. Special attention is given to women entrepreneurs who are expected to constitute at least 40% of direct beneficiaries. In the 1st year, Enterprise Uganda had over 182 beneficiaries.

ICT Resources
The agency has four permanent qualified staff including an information technology officer. All four are qualified and trained to offer the courses that the agency offers. Enterprise Uganda has networked computers, all connected to the Internet. The agency is preparing to have a dedicated website this year. Applications for support can be made on line. The agency uses email a lot to communicate between clients and donors.

Support for eCommerce
Agency support takes the form of awareness raising and training in the use of ICTs. Enterprise Uganda is currently integrating ICT training modules from the UNDP training for trainers programme. It also hopes to become the agent for TATA, an agency in India that promotes ICT packages for MSEs. They also hope to use their Website to disseminate information about business services. The agency promotes the use of email for communication. The agency was involved in the promotion of Cayman Consult where they assisted it organising its training manual for online data entrants. Enterprise Uganda has also encountered eCommerce challenges relating to communication, language and literacy barriers. Most agency clients are found in rural areas with no Internet access. It has also been the case that tailored support cannot easily be replicated for other enterprises. There is also an inability to provide investment funds for infrastructure improvements suited to MSEs.

Reflections On Best Practice.
Prior research is essential for the assessment of eCommerce needs, addressing such areas as awareness, current usage, access to infrastructure and the constraints faced. It is important that projects are piloted initially. MSEs need to be encouraged to use eCommerce primarily for linking to markets and organising their supply chains for particular products or services. This should be followed by a campaign to sensitise and train MSEs to use eCommerce technologies – emphasising the demonstration of benefits. Because of low capacities and the lack of infrastructure for eCommerce, the emphasis should be on building capacity for eCommerce through training, demonstrating and awareness raising, and the need to make communication easier between the agency and the client – which is already improving through the use of email and mobile communications.

Case Study C: Makerere University Small Business Centre.

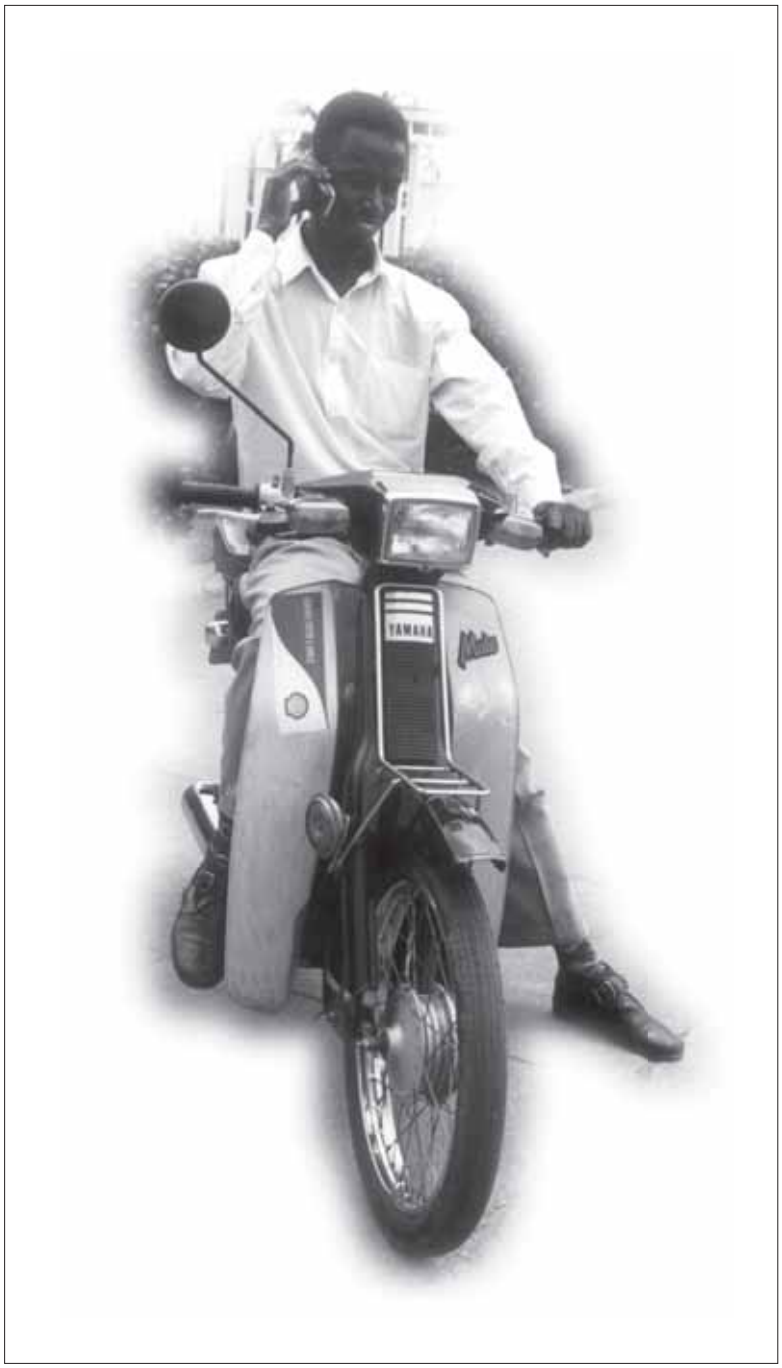
Established in 1998, located in Kampala at the Makerere University Business School with 3 permanent staff and 15 part-time facilitators.
www.mubs.ac.ug

Aims
The agency's mission and goals are to promote an enterprise culture and support the creation and development of small businesses in Uganda. It is a commercial government agency that supports both male and female clients. It targets registered enterprises and students. The main support offered is training to MSE owners and college students. Courses offered include: bookkeeping and customer care, business start-up, retail management, project planning, entrepreneurship skill development, management, taxation for small scale business development, costing and pricing. These are taught both in a local language (Luganda) and English. Two weeks after graduating from the course, the staffs at the centre carry out follow-ups to clients either by telephone or visit their business premises.

ICT Resources
The centre mainly uses the phone and post-mail to communicate with the clients. Not many clients can be reached using the Internet because most clients do not use the Internet. They use email for correspondence with donors and other departments and agencies.

Support for eCommerce
At the centre, ICTs are promoted to stimulate business relations and enhance business growth and development especially through market access. Therefore, they are keen to raise awareness about advantages of use of ICTs. Makerere University Business School has a computer lab that serves all its 1000 and above students. It has about 30 computers all connected to the Internet. Business owner students are able to pick up some knowledge of ICTs during their courses. There are already examples of businesses that are performing better than they did before they had taken the courses. MUBS have also encountered eCommerce challenges for MSEs relating to lack of awareness among the private sector about the importance of training. The academic environment intimidates some entrepreneurs and due to the low fees that need to be charged the centre is faced with financial constraints.

Reflections On Best Practice
Assessing eCommerce related needs requires carrying out research on the advantages and disadvantages, and use of cost benefit analysis for enterprises using eCommerce. Effective steps in eCommerce use can be best achieved through sensitisation and training. The sensitisation and training should start with agencies that work closely with MSEs, helping to filter down knowledge and skills to the MSE sector. Use of a website can boost awareness about the opportunities and programmes. However, the impact is debatable since most of the target group cannot access the Internet. The utilisation of email and phones could lead to timely follow-up of clients especially those that are in the rural areas, hence building a stronger relationship between client and agency.



Mobile phone as a means of communication

Case Study D: The Nakaseke Multipurpose Community Telecentre

Funded through UNESCO, IDRC and ITU. Located 64 km from Kampala in Nakaseke sub-county, Luweero District. The agency employs 6 staff, five of which are women. www.nakaseke.or.ug

Aims

It is a part of a series of pilot initiatives to introduce, test, disseminate and assess the impact and viability of multipurpose community telecentres (MCT) in Africa to provide affordable access for rural communities and provide basic telephone communication and computing facilities. The MCT aims to serve the entire community of Nakaseke sub-county (now including Kasangombe sub-county). Specific target groups were identified, each with their specific information and communication needs. These included small business people. The general form of assistance provided to MSEs includes provision of business market information and basic ICT links to suppliers – through telephony, email and Internet links. The clients pay for the services.

ICT Resources

Staff are equipped to provide basic ICT applications training to MSEs. Further, the MCT has the necessary ICT equipment to provide its services. With the community FM radio the MCT will commence radio browsing to provide repackaged information to listeners straight from the Internet.

Support for eCommerce

Nakaseke emphasises the re-packaging of information in local languages using a voice activated interactive CD-ROM that allows for audio-visual interface between software and users. Moreover, this has a web browsing quality that orients users to Internet use. Nakaseke have also encountered eCommerce challenges for MSEs relating to the lack of technical support and skills in rural areas, inadequate technical and information infrastructure in rural areas, language and literacy barriers, lack of affordability for majority of clientele and the inability of MCT to charge commercial rates for services.

Reflections on Best practice

Having the MCT integrated within the framework of local government provides an opportunity for funding and information input from the extension and community development departments. The networks and partnerships created with CSOs and donor agencies also provide the MCT with opportunities for e-contacts, e-content, and capacity building. There is an opportunity for enhanced ICT supported community level learning provided by educational institutions located in rural communities. For instance, a PTC or secondary school or vocational institution in any village provides a perfect forum for basing an MCT that will have a strong component of community learning – providing sustainable models of provision. The MCT is a perfect instrument for developing community tourism in the area providing an on-line presence through a website. Support for eCommerce should be institutionalised and it shouldn't be reliant on donors. Support should be given in such a way to increase competencies for entrepreneurship and sustainable development of ICT applications.

Case Study E: Uganda Business Information Network (UBIN).

Funded through UNIDO. Located in Kampala with 8 employees, with 7 regional centres located in 7 Districts –Masaka, Mbarara, Fortportal, Mubende, Lira, Mbale and Mityana. www.unido.org

Aims
Supports the private sector (especially MSEs) to have better access to markets, finance, new technology and better management to increase performance, growth and profitability.

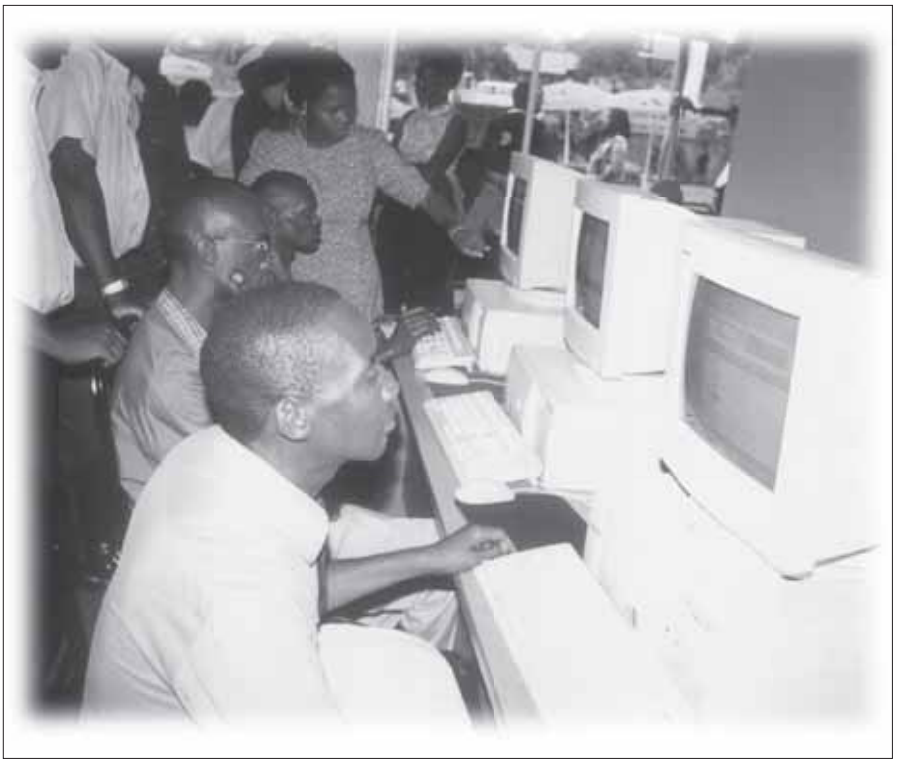
The market scope is currently restricted to MSEs in urban Kampala, but will eventually cover rural Uganda upon setting up a working relationship with district-based Private Sector Promotion Centres. UNIDO overall has over 1000 beneficiaries in Uganda of which 50 are supported in the area of ICTs (including medium scale).

ICT Resources
UBINet prizes itself on having technically competent personnel. It refers to its personnel as techno-commercial professionals with specialised knowledge and skills to perform their duties. All its regional offices have been fitted with ICTs for quicker and easier communication. It carries out most transactions and correspondence online. Since most of the regional offices were fitted with email connections, productivity has gone higher and feedback has greatly improved. The country office is in the process of developing their own website.

Support for eCommerce
UBINet is building an electronic network to provide business development information and resources – initially in Kampala – as part of its remit to support eReadiness among MSEs and building the country's eCommerce capacity. UBIN uses its basic web presence and access to online business-to-business contacts to market products, to search for new markets and provide technical support to MSEs. Currently, the majority of activities involve business-to-business brokering and developing ICT based solutions for enterprises. Challenges to eCommerce remain, including: the high costs of setting up infrastructure since the agency needs to expand services to a higher percentage of beneficiaries; knowledge gaps between end users and service enablers; lack of national eReadiness – Uganda's cash-based economy is yet to adopt the credit card system and electronic funds transactions.

Reflections on Best Practice
UBINet aim at developing packages around the products and services they are promoting. Government support for the spread of ICTs creates great opportunities. They realised that there was a lot of information among government institutions on the Internet that was valuable and beneficial but not accessible to the beneficiaries. Agencies should advocate for more investment in ICT infrastructure by both the private and public sectors, and the creation of a conducive investment climate for the sector by developing proactive and easy to implement transparent laws and regulations focusing on eCommerce transactions. Agencies should carry out assessments of

the gaps and determine areas where resources should be focused. For the success of programmes, agencies should carry out awareness drives and sensitisations about their activities.



Communicating via e-mail

D3.Analysing Enterprise Support Needs

Section D1 has suggested five forms of intervention that may be adopted by agencies to assist enterprises with eCommerce. These include the option to decide that eCommerce is not relevant for many enterprises. The case studies also emphasise other factors to take into account when planning interventions – such as gender sensitivity and the particular needs of rural enterprises.

Agencies, however, need to answer two fundamental questions:

- First, how do you go about analysing the specific eCommerce-related needs of enterprises (i.e. what questions do you ask your clients)?
- Second, when you have asked those questions, what kind of answers do you get, and what type of support interventions do you then provide?

1. Identifying Information and Communication Needs

You should start by identifying the Information and Communication Needs of the enterprise. This should consider the sources, channels and content of business information. The best approach is to start from the customer (or market) and work backwards. This requires a market-focus – on factors external to the enterprise.

Customers and Markets: you should ask your clients the following types of questions:

- How do you currently conduct business with your customers?
- In which areas do you interact directly with customers (e.g., sales, billing, delivery, after-sales, etc)?
- What type of information do you collect about your customers – how effectively is that information used at present?
- How do you receive information about follow-up orders, new customers or new business opportunities?

Suppliers and Collaborators: you should ask your clients the following types of questions:

- What particular constraints to you face in accessing enterprise inputs (finance, materials, skills)?
- How do you access/receive information about these inputs?
- How do you communicate with your suppliers?
- How do you cooperate with other enterprises/agencies to access/ receive information about inputs?

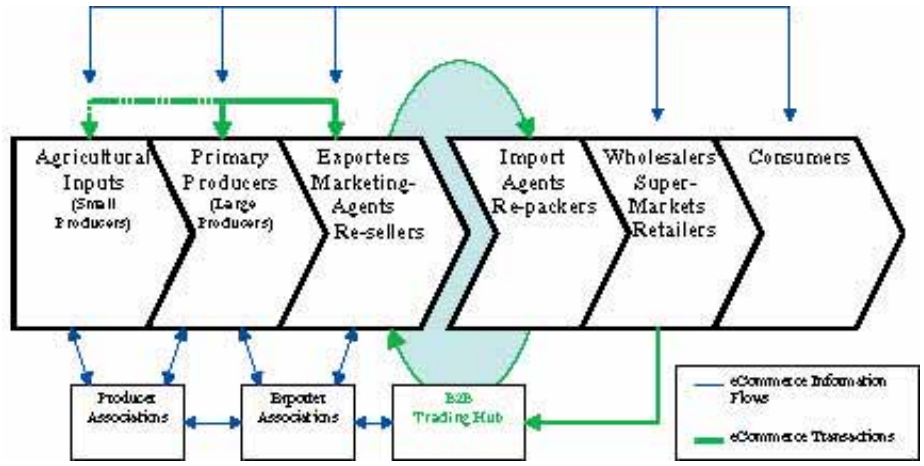
The objective of this approach is to encourage the entrepreneur to identify requirements according to the quality of information they are currently receiving, and identify the particular strengths and weaknesses associated with their current information sources and communication channels. An assessment of information needs should involve listening to the entrepreneur and encouraging them to participate, whilst also bringing an independent understanding of challenges facing the enterprise.

A second complementary approach – again concentrating on external factors – is to examine the needs of the enterprise in relation to the value/supply chain within which it operates.

2. Understanding the Value/Supply Chain

The value chain describes the main activities necessary to move from the initial production of goods and/or services by an enterprise to their final purchase and consumption by customers or consumers. These activities are typically carried out along a supply (value) chain that involves adding complementary inputs concerning, for example: quality and standards compliance, transport and logistics, packaging and re-packaging, marketing and re-selling. A typical value/supply chain for agricultural/horticultural products is outlined below.

Typical Supply Chain for Agricultural/horticultural Products



The value chain: you would ask your clients the following types of questions.

- Which activity(s) does the enterprise carry out itself and which are carried out by others (suppliers, partners, agents, etc)?
- What are the primary existing marketing channels - either controlled by the enterprise or by others (e.g., agents, re-sellers)?
- How does your location benefit (or restrict) integration into your value chain?
- Describe the relationships the enterprise has with external partners (e.g., training, support, exclusivity agreements, etc)?

By understanding the value chain it becomes possible to identify areas where more value can be added (or leveraged) for the enterprise through the use of eCommerce. By identifying his/her own position in the value chain, the entrepreneur can become more aware of the business opportunities that may arise due to eCommerce, or the market factors that may constrain eCommerce.

A third complementary approach is to focus on internal capabilities and resources of the enterprise.

3: Enterprise Resources for eCommerce

The level of available resources (financial, technical, human and time) will determine whether or not an enterprise can successfully adopt eCommerce. Here it is important to assess both the business and ICT-related resources. The ability of an enterprise to apply ICTs to business problems is more important than whether or not they have access to ICT facilities. It is important, therefore, to ask questions about how the enterprise is using eCommerce, or how they intend to use it, for the benefit of their business, and what demands this will place on available resources.

Enterprise Resources: you would ask your clients the following types of questions.

- How are you currently using ICTs to benefit your business?
- How do you think your business can be improved through use of eCommerce technologies (a web-presence for example)?
- What extra costs do you think your business will incur if you opt for eCommerce?
- How will eCommerce help you develop your skills? Which skills do you think will be important?

Assessment of enterprise resources should adopt a 'costs and benefits' approach. The entrepreneur should be encouraged to identify the costs and benefits associated with expending resources on eCommerce. This should emphasise the importance of considering direct costs, opportunity costs and risks of failure (see Section A5). It will also help identify areas of need that can be most cost-effectively addressed. The approach of most clients to eCommerce is likely to be a compromise between the plans the enterprise wishes to execute and the available resources for investment.

Thus, your agency's approach to the raising of awareness and the sensitisation of clients should be enterprise-centred and entrepreneur-led.

E. Agency Strategy on eCommerce

This section includes guidance on decision-making about support for eCommerce: a brief guide to strategic planning about e-commerce support, including key issues and recommendations.

E1. Agency Strategy for MSEs: A Business-led Approach

Most MSEs in Uganda will not be able to jump straight into eCommerce due to a wide range of financial, human and infrastructure constraints. For most enterprises in Uganda, eCommerce, should be viewed as a step-by-step process of technological upgrading and business development that will require changes in skills, management practices and attitudes.

Table 4. Business Goals and Strategies

Possible Business Goals	Business Strategies you could adopt	Business Tools you could use
Increase revenue from existing customers.	Help build repeat orders. Develop customer loyalty.	Increased advertising & promotion. Better communication. Better customer service.
Locate new customers in existing or new markets.	Expand domestic markets. Explore export markets.	Better market information. Attendance at trade shows. Better cross-border business networking.
Diversify products and services.	Development of new products or services.	Market research. Use of consultants and/or technical assistance.
Increase competitiveness through product/ service innovation.	Undertake product or process improvements. Technology upgrading. New production or service technology.	Branding. Improved design and packaging. Standards compliance. Employee involvement.
Increase competitiveness through cost reduction.	Internal/external business efficiency improvements.	Better purchasing. Workforce/resource planning. Training and skills development.

For this reason, eCommerce should be integrated into overall business goals and strategy. The target market of the enterprise should, therefore, shape your approach to assisting with eCommerce – whether to advise enterprises to adopt eCommerce, and if so, to what extent and in what way. Table 4 can assist you to identify business goals together with your clients, and help you to consider potential strategies and tools to achieve those goals.

ECommerce can be used in many ways to improve existing practical business tools or to introduce new methods and ideas leading to improved communication, better customer service, creative marketing initiatives, improved trading relationships or reduced costs. An integrated approach to eCommerce should emphasise the following:

- The target market – should shape business planning – and whether or not an enterprise should adopt eCommerce.
- Business planning – eCommerce plans should not be separated from wider business plans.
- Involvement and feedback – from customers, suppliers and staff. They will be able to indicate areas which eCommerce can improve, and may indicate the best way to implement any new ideas.
- Cost benefit analysis – make sure the costs of eCommerce can be justified by the benefits.
- New technologies – their role should be assessed only after clear business objectives are established.
- Effective integration – online and off-line activities need to complement each other – to increase revenue and bring cost savings.

Agency strategy should particularly emphasise the involvement and feedback from the customers, suppliers and staff of your clients – collectively known as the eCommerce users. They will often be in the best position to indicate areas where eCommerce can bring improvements and benefits for your clients, and they may be able indicate the best way to implement any new ideas.

E2. Understanding eCommerce Users

eCommerce 'users' are those people, enterprises or organisations that are likely to interact with your clients via eCommerce. eCommerce solutions for your clients should be driven by users – by the external business relationships and networks that are important to the enterprise – primarily customers and those involved in the enterprise supply chain. These networks and relationships can be usefully classified as follows:

- **Target Audience:** The Internet represents an enormous global audience. An enterprise will be competing with many other enterprises to reach its target audience, offering similar products and services via the web. This highlights the importance of product/service differentiation and careful targeting. Solutions should be tailored to small, easily identifiable groups. Solutions should be designed around user needs after consultation with potential users

(primarily existing or potential customers or key actors in the supply chain) to make sure the correct needs are identified.

- **Existing Customers:** eCommerce allows an enterprise to communicate and interact with customers in a far more productive way than ever before. Solutions can focus on developing and nurturing individual relationships with existing customers. For example, data can be gathered on customer preferences – the ways they prefer to purchase and the specification of products and services. This data can then be collated and analysed to show buying trends.

- **Potential Customers:** eCommerce via the Internet, can make your clients' businesses known to vast numbers of potential customers. For example, careful marketing of a web site (see Advice Sheet 5) can increase 'traffic' or 'hits' from the right kind of potential customers. Maintaining this marketing activity will ensure that the right people know how to find your client enterprises.

- **Suppliers:** Sourcing enterprise inputs (or information about inputs) online can be cheaper than offline. It is far easier to compare costs and availability. An enterprise can get full details of products and services at the touch of a computer key. Once a trading relationship with a supplier has been forged online, order status can be monitored and stock availability and delivery times can be checked, often without time-consuming phone calls.

- **Partners and Collaborators:** Your clients' collaborators and business partners, such as distributors or agents, are a key part of their supply chain. eCommerce will allow enterprises to establish regular and speedy contact with their primary actors in the supply chain and wider business networks (see Advice Sheet 6).

- **Enterprise Employees:** Computers can liberate staff rather than constrain them. eCommerce can help automate some routine administrative and communication tasks, leaving employees to carry out more satisfying and cost-effective work such as attending directly to customer service.

E3. Determining eCommerce Entry Points

This involves deciding what form of eCommerce is most suitable for client enterprises according to the steps model (see Section C1). In short, as an outside agency, you shouldn't make this decision, but you should encourage clients to take full account of the requirements of user groups. The way in which users are driving eCommerce will determine the ways in which eCommerce can assist the client. The key entry points for Internet-based eCommerce in Uganda are:

- **Step 2: Communicating Electronically:** Electronic forms of communication such as mobile communications and email offer a low-cost, convenient way to connect more effectively with users (see Advice Sheet 2).

- **Step 3: Web publishing:** An online brochure, for example, offers ease of updating information and inclusion of graphics makes this a cost-effective way to provide information to users (see Advice Sheet 4).

- **Step 4: Web interacting:** Creates involvement of users by encouraging two-way communication, asking and answering questions, learning about user needs and tailoring communications (see Advice Sheets 4&5).

The needs of users should determine the eCommerce entry point for the enterprise. Consideration should be given to how both online (eCommerce) and offline (non-eCommerce) solutions can be effectively combined to suit user – principally customer – needs.

However, resource constraints for most enterprises will almost certainly mean that eCommerce solutions will need to be prioritised. When setting priorities it will be important to consider the time frame within which the enterprise expects to achieve real benefits from eCommerce, for example:

- Some eCommerce solutions (such as email) are likely to bring immediate and significant benefits to a business.
- Web Transacting may bring some commercial advantage, but with high immediate costs and only marginal overall business benefits.
- Entry into eCommerce may produce benefits but not always in relation to key business goals/strategies.

It is unlikely in Uganda that clients will move immediately to Web transacting or Web integration and it would be important that enterprises move successfully up the preceding steps beforehand.

The following (Table 5) is a guide to which of the eCommerce 'steps' would be the most appropriate entry point for an enterprise. It considers 'the requirements of users' that are driving eCommerce, the 'benefits' that could be achieved for a business, and the potential 'costs' involved.

Table 5. Steps to eCommerce – what kind of eCommerce?

Steps to eCommerce	Users Group Drivers	Benefits	Costs	Overall Impact
Step 6: Web Integration	Requirements of main customers and suppliers	Merging online and offline processes. Reductions in operating costs. Better relationships with customers and suppliers	Financial costs of investment in technology, systems and services are very high	Very high costs, but potential high benefits
Step 5: Web Transacting	Primarily by requirements of Customer	Speed and convenience, but overall limited benefits – only a requirement if offline transactions not processed effectively	High costs of investment in necessary systems and secure network requirements	Relatively low benefits, but high costs
Step 4: Web Interacting	Requirements of customers suppliers, collaborators and support agencies	Better business communications Better marketing Better knowledge of market Better knowledge of customers	Moderate costs of investment in web-based technologies and network access	High benefits with relatively moderate costs
Step 3: Web Publishing	Requirements of customers and the marketplace	Better marketing Better branding Easily updated Well presented	Moderate investment costs	Moderate benefits and relatively moderate costs
Step 2: Email Messaging	Requirements of customers, suppliers, collaborators, support agencies and employees	Considerably improved business communications Prompt and clear document transfer	Moderate investment costs	Very high benefits and moderate costs
Step1: Simple Messaging	Requirements of customers suppliers, collaborators support agencies and employees	Considerably improved business communications	Low investment costs	Potentially high benefits and relatively low costs

E4. Other Issues for Agencies

Sustainability

Financial sustainability will be a key success factor for any eCommerce project – the ability to recover investment costs and to be able to replace, update and maintain ICT equipment on a recurrent basis. Other sustainability factors will also be important, and will depend on the skills and good business sense of your clients as well as their financial resources. These will include:

- Technical factors – to make the correct choice of technology, and to be able to gain access to the local network infrastructure.
- Content factors – to make effective use of information generated through eCommerce and to build knowledge of the eCommerce market. Continuous updating of business information will be required (such as through the regular updating of a website).
- Social factors – to use eCommerce effectively to build networks of contacts and build social capital for the business.
- Business factors – to base eCommerce plans around a sustainable business model, and produce tangible commercial benefits – either through increased revenues and/or reduced costs.
- Human factors – to acquire the skills and training for effective implementation of ICTs, and to keep ICTs running, but also to plan future changes to the resources – to be able to adapt skills to new opportunities and changing market conditions.

Scaling up

For business support agencies, scaling up eCommerce may involve two concerns.

- Firstly, helping individual enterprises to climb the eCommerce ladder, employing the type of business-led approach outlined in Sections E1-E3 of this handbook.
- Secondly, by helping to replicate successful use of eCommerce through the transfer of skills and know-how between enterprises.

Successful scaling up of eCommerce activities should also be based on the sustainability factors outlined above, and carried out with reference to the eCommerce best practice guidelines presented in Section F.

Enterprises should be encouraged to take small steps initially into eCommerce by starting at the bottom of the ladder and working their way up. Piloting and market testing of business solutions involving eCommerce will be important in this respect. As indicated in section E2, this can be best achieved by involving users, and obtaining feedback, at an early stage. Replicating success and transferring lessons between enterprises, or between sectors, presents greater challenges to agencies. Both enterprises and sectors tend to exhibit very different characteristics and ways of doing business. Hence, it is not always possible to transfer eCommerce solutions directly from one to the other. The generic best practices (i.e., to be business-led, to involve

users, to consider both costs and benefits, etc) can be universally applied. However, solutions involving specific applications of eCommerce should be developed by the enterprises themselves in collaboration with facilitators that are likely to be most effective. Table 6 (overleaf) outlines both the strengths and weaknesses of potential eCommerce facilitators and provides some local examples.

For enterprise development agencies, the scaling up of eCommerce interventions need not involve large (and expensive) expansion of their own eCommerce activities. It is more likely to involve the building of effective partnerships with other more established eCommerce facilitators. Agencies should also seek to build a strong sense of ownership and commitment amongst client enterprises over any scaling up activities.

It is important, therefore, that your agency has clear vision (a strategic plan) towards scaling up eCommerce, and you are able to decentralise or disburse the implementation processes by making your approach client-led. It is likely that this will be achieved most effectively through building partnerships either with the private sector or other – possibly more experienced – eCommerce facilitators.

Enterprise support agencies should, however, have a strong role to play at the piloting and market testing stages of eCommerce projects, and with regard to subsequent monitoring and evaluation. Enterprise support agencies should also play a key role in the dissemination of information and knowledge concerning best practice and lessons learned.

Table 6. eCommerce Facilitators – Strengths and Weaknesses

Facilitator	Role	Strengths	Weaknesses
Sector-based Agents/ Brokers (Commission-based) Example: http://africanlion.com/ - specialising in coffee exports.	Offer web-based marketing activities. Able to accept and place orders, skilled at information brokering. Logistics and supply chain management.	Good market proximity, market experience and knowledge. Market access.	Tend to create dependency relationships with suppliers and tie in producers to sole purchasing agreements. Likely low returns.
Resellers	Only purchase and resell. Able to accept and place orders. Information brokering.	Quick route to market. More flexibility for producers in the market.	Less security in the market. Price sensitive.
eCommerce-based Trading Hubs or Portals (Commission-based) Example: www.expocraftsafrica.co.ug - specialising in crafts.	Solely Web-based marketing activities. Accept and place orders. Internet transactions and electronic banking.	Wider market access.	Creates dis-intermediation. Lack of personal market relationships and contacts.
Industry Organisations Example: http://www.uganda.co.ug/uma - Uganda Manufacturers Association	Subscription-based. Can provide market coordination and information brokering services.	Able to advocate on behalf of producers.	Limited access to market. Lack of market proximity.
Fair Trade organisations Example: http://www.catgen.org/ - PEOPLink fair trade portal	Provide market outlets based on fair trade principles. Most offer web-based services and marketing.	Assistance with quality control and product/service development. Special assistance to women producers. Better returns.	Tend to lose market share to commercial importers/agents. Narrow market that can be seasonal (high demand at Xmas, for example).
NGOs/Business support organisations Example: http://www.ceewawires.org/ - Centre for Economic Empowerment of Women	Providers of advice, training and some marketing assistance.	Possible sources of finance or subsidy. Local access to resources.	Probably lack of market access, knowledge or proximity.
ISPs or IT consultants Example: http://www.afsat.com - An Internet Service Provider in Kampala.	Offer access to networks, web development services and possibly business advice.	Able to offer local technical support.	May have technical expertise, but not knowledge of the market within which you are operating.

E5. What Should Agencies Be Lobbying Government For?

Awareness building at all levels
Awareness of the opportunities and benefits of eCommerce needs to be built amongst all groups – not just MSEs. These include Government institutions and policy makers, the business community and consumers/citizens. Greater awareness will help create greater demand for eCommerce services in the domestic economy. Government can act as an important champion of eCommerce through 'eGovernment' initiatives that improve linkages between the public and private sectors.

Education and training
Government also plays a key role in promoting eCommerce through the education system – through basic computer education and encouraging investment to keep pace with the changing educational requirements for ICTs. Vocational training also needs to be expanded – that provides enterprises and consumers with the necessary skills to make effective use of eCommerce. More specialist ICT skills are also required – those which assist customisation of IT to local needs, such as through the development of open source software.

Sector support and trade facilitation
Policies should be encouraged that target specific sectors – most importantly the domestic ICT services sector. eCommerce should be mainstreamed within sectors of the economy that exhibit comparative advantage – such as tourism and major export sectors. Specific measures may include financial incentives and the lowering import tariffs on ICT equipment.

Access to infrastructure
Government should continue to promote telecommunications sector reform in the interests of the business sector and of consumers. Emphasise low cost solutions that suit MSEs, and the promotion of cost-sharing/intermediated access models to ICTs (e.g., Telecentres). Encourage collaboration between local agencies, schools, local government and donors to achieve economies of scale, and extend access into rural and underserved areas.

Legal and regulatory issues
Legal and regulatory reform to remove barriers, promote competition and build necessary trust. Policy implementation should move toward the accommodation of eCommerce within existing legal and regulatory frameworks and to build in new requirements concerning electronic transactions, signatures, data protection, intellectual property rights (IPRs) and data security issues. Government should encourage the financial and banking sector to fully implement the necessary changes that will enable electronic transactions and credit card payments.

F. eCommerce Best Practice Guides

Advice Sheet 1: Getting Connected and Making a Start

Getting connected: Connecting to the Internet is a fairly simple process. You will need:

A computer: New computers range from Ush700,000 to as much as Ush3,000,000 depending upon the type of computer, the software installed, where one buys the computer and the warranty given. Most computer points in Uganda also sell second hand-reconditioned computers that range between Ush250,000 - 600,000.

An example of a company that mainly deals in second hand computers is *Uganda Affordable Computers* located in at Plot 34, Bukoto Street, Kamwokya. It receives second hand computers as donations from a number of countries mainly in Scandinavia. It mainly targets women's groups and women entrepreneurs. Purchasers have to indicate how they are to be used to improve their lives and they are allowed to pay in instalments depending upon the earning capacity of the business.

Computers can be purchased in Uganda using hire purchase (paying by instalments), deferred payment and discounts for cash are available. Some charitable organisations and NGOs offer computers as gifts to schools and enterprises that cannot afford the purchase price.

You will also need a **telephone line and a modem.** A computer you buy may or may not have a modem fitted. Thus you should always ask whether this is available. You will also need Internet browser software which may well have been preloaded into your computer when you purchased it, but make sure when purchasing your computer you ask if it has this software.

Finally you will need to link your computer with a local **Internet Service Provider (ISP).** There are numerous ISPs in Uganda mostly located in and around Kampala and other urban centres. Most ISPs provide 24-hour access through a dedicated dial up number and will charge a monthly fee. Make sure you shop around for an ISP (a list is provided in Section E of this handbook)

Starting to use the Internet:

- Take a course or make use of (recent) guides.
- Start using email to communicate and check your email every day.
- Investigate local business web sites and web sites of companies in your business sector.
- Use search, and search engine facilities, and investigate any business portals that cater for your business sector.

If you do not have your own computer and connection, make use of the almost 50 **Internet Cafes in Uganda.** Most of these are located in Kampala City, where any individual who cannot afford to own, but needs to use the Internet, can have access. The average charge in these cafes ranges from

Ush25-50 per minute. More details concerning the possible costs associated with developing Web-based eCommerce in Uganda are contained in Advice Sheet 9.

Advice Sheet 2: Using Electronic Mail (email)

Electronic mail (email) is the exchange of messages between computers offering considerable advantages over letter-post and, increasingly, over fax communication.

It provides the cheapest, quickest and most reliable way to exchange business information with customers, suppliers, etc. who are also connected to email.

Emailing requires a computer with Internet access. Furthermore you need some client email software such as Microsoft Outlook, or Lotus Notes. The easiest way to use email is to go to a website that offers free email facilities, such as Yahoo or Hotmail. Emails arrive almost instantly through the telephone network. You can send 'attachments' with your email. These may be computer files of any kind (documents, photos, sound-clips, or even video clips).

Some advantages of email for business are:

- It allows a variety of information to be sent – not just messages, but also documents, photographs, drawings, or any other computer data file.
- Messages can easily be recorded, to keep a record of correspondence.
- Messages can easily be organised, e.g. by building up an address book.
- Messages can be protected from outside view.
- Messages can easily be sent to multiple recipients (such as all of your customers).
- Services can be accessed by the entrepreneur whilst on the move and away from the office.

The main barriers to using email at present are:

- The investment costs (the total cost of computer/modem ownership).
- The running costs (network access).
- The relatively few businesses in developing countries able to send and receive emails (although the number is growing rapidly).

In order to use email, enterprises need access to an Internet-linked computer. Owning this is costly, but email services can also be accessed from shared facilities such as Internet Cafes and Telecentres.

If you are an exporter or you are regularly communicating with email-linked customers, suppliers and other business contacts within the region or worldwide (such as in the tourist sector), then email is by far the cheapest and

A computer

Take a course

quickest means of communication. It will increasingly be an essential tool for your export business.

Advice Sheet 3: eCommerce Skills

When adopting eCommerce, basic business skills remain unchanged – what we might call the business fundamentals – summarised as follows:

- A well thought out business plan and marketing plan.
- The ability to make yourself known and network effectively.
- To produce the right product/service and the right price in the right place at the right time.
- To know your customer and meet their expectations.
- To pay your bills and get paid on time.
- To be flexible and plan for the future.

eCommerce can help to support these fundamental skills. For example, through capturing customer information and making it easier to segment your market or market directly to your customers possibly using email or web-based methods.

eCommerce will also open up your business to **new skills and ideas** including the following:

- **Data Base Management.** Collecting information on web site visitors – usually customers or potential customers. Information can be used to target marketing efforts and improve customer service as well as forecast future trends in customer behaviour.
- **Improving Business Processes.** This is a way of analysing the different tasks within an enterprise to identify better ways of achieving greater efficiencies. Restructuring your business whilst making use of eCommerce, may assist your long-term survival and growth.
- **Managing Knowledge.** More effective management of information and knowledge within your business can bring benefits. eCommerce will help you to improve your skills in this area.

The Internet will also help you do **Web-based Market Research.** By conducting investigation into market trends and customer requirements, enterprises can develop innovative strategies to compete. The Internet can be used to learn more about customers, industries, products and services and market trends. You can collect information from the people who visit your website. Customer feedback provides a valuable insight into future needs and purchasing behaviour.

The Internet also has specific resources that will assist market research in relation to product development, business planning, eBusiness development and marketing. These can be accessed via a number of the web sites listed in Section F2.

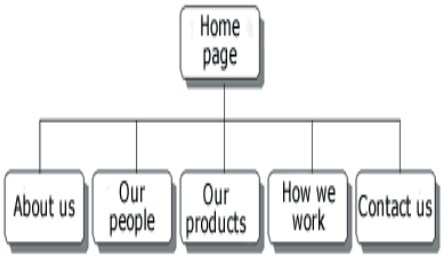
A computer linked to the internet

A landline telephone

For those further advanced in eCommerce, the Internet may also help you with more advanced skills such as **Enterprise Resource Planning (ERP) and Materials Requirements Planning (MRP).** Both use ICTs to automate core business functions. MRP is similar to ERP but is substantially cheaper to install and is more suitable for SMEs. It requires computerisation of many aspects of the business including accounts, inventory, and purchasing. Benefits focus on reduced inventory costs, better stock control, ordering and order fulfilment.

Advice Sheet 4: Web Development

Websites can be static or dynamic. Dynamic websites create pages in response to visitor requests. E.g., the http://www.amazon.com/ site builds its pages according to the types of books that interest specific visitors from information stored in a database – a database driven web site.



A simple static web site can be designed using HTML and image files such as JPEG's or GIFs. It will typically link a home page to other pages containing information on the enterprise (see diagram above). The website may include a shopping cart where customers can purchase products online with their credit card or where off-line payment methods are outlined. To create a dynamic information-driven website, a database is integrated into the site and information can be displayed when someone requests it. The advantage is that the database can be updated and changed regularly. The database serving the website may consist of client information, such as account details and sales history and can be stored on standard software packages such as Microsoft Access.

Up-dating your website: To update a dynamic website you have three options:

- Agree an annual fee with your web developer for a set number of changes.
- Make the required changes yourself – requiring specific skills.
- Build an update facility into your website design.

The preferred (and cheapest) option is for an employee – using a username and password – to be able to add, modify or delete information on the website using the web browser.

Basic Web Design Tips:

- Pages must display or downloaded quickly. If a website is downloaded too slowly the customer may be lost to a competitor's site.
- Images (photographs and graphics) need more time to download than text, so use a small number of images, repeat the same few illustrations or logo throughout the site, or install a button on the web page, to allow the customer to access a text only version.
- Short paragraphs and sentences are the norm when writing for the Web.
- Customers need to locate information easily. Visitors to web sites tend to scan pages rather than read the entire text, so signpost the information with clear headings.
- Information on the site needs to be organised and easy to find. Links and buttons, which take the visitor to different places on the site, should be labelled.
- Some buttons need to be on all pages, such as: Home, Sitemap, Contact Us and Search. Important information should be easily navigable.
- Web sites also require tailoring for your customers. Customers want to buy products that are described in their own language, priced in their local currency, and supported by people they can communicate with.

A typical web page

Advice Sheet 5: Online Promotion

The Internet provides an additional (and complementary) means of marketing your products and building your enterprise profile. You should consider use of the Internet alongside other media like telephone (such as a help line) radio and print. A web site will not provide a solution to all your marketing problems but it may become as necessary as other forms of media – particularly if your competitors also have web sites.

To be effective, web sites need to attract the right customers. A high proportion of people who visit a web site find it through a search engine or directory. These services present important marketing opportunities. Search engines generate lists of URLs in response to particular queries entered by the potential customer. The sites most likely to be visited are those at the top of the list. Web pages, therefore, need to be designed so that they're located high on lists produced in response to relevant keywords. Your web presence can particularly assist in the following two ways:

- **Branding:** Customers tend to stick with tried and trusted brands rather than risk buying an unknown brand. An online brand will be an extension of your offline brand. Your web site needs to integrate your brand into the customer experience of visiting the site. The brand (e.g., Amazon.com) should be associated with an easy to use website that offers high value in terms of information and services, has a trustworthy reputation, and is visually appealing.

- **Personalisation:** Customer information (names, addresses and registration details) can be used to track preferences and tailor the contents of your web site to suit individual tastes. For example, your site can suggest products that a particular customer might be interested in, based on his or her purchasing history or the pages they have already viewed.

The most useful methods of direct promotion to customers are:

- **Email marketing:** Email is likely to be the most cost effective way to market your business. You should add a signature file to all emails. This is the same as using headed paper or attaching a business card. Most email software enables this to be done easily.

- **Testimonials:** These are genuine comments that satisfied customers have made about your products or services. Effective use of testimonials builds credibility and makes customers feel more secure – especially for online purchasing. Effective testimonials will be unedited, genuine, freely given, used with the author's permission and accompanied by the author's name and location.

Other online marketing methods include:

- **Viral marketing** – using your email contact list to spread your details through your contacts lists – by giving an incentive to pass on the

message.
- **Banner ads** – adverts that appear on web pages.
- **Reciprocal links** – links other sites to provide an easy way for a customer to travel from a related site to the enterprise site, and vice versa.

Advice Sheet 6: Networking and Communities on the Internet:

By networking we mean connecting computers in order to share information. A network allows a small enterprise to share hardware (printer or a phone line) and software (an accounts package or email). The network may be extended internally to include local offices through an **Intranet** or externally to key customers and suppliers forming an **Extranet.**

Networking a small enterprise would involve linking PCs, printers, fax machine, scanners and phone connections. A common language or protocol known as TCP/IP allows computers, software and other hardware devices to communicate with each other. (SMTP and POP – commonly used for transmitting and receiving emails – are part of the TCP/IP protocol). These protocols allow different systems to share data and communicate with each other regardless of the type of operating system or computer used.

For larger networks you will need networking software such as Microsoft's NT or Novell NetWare. This software will set up one of your PCs to act as the main server that will hold the enterprise database and act as the central point sending (to a printer, for example) and receiving data/information.

Key Benefits of Networking

- Information is shared quickly and efficiently.
- Hardware devices (e.g., printers) are better utilised by sharing with other colleagues.
- Access to information such as stock and accounts anytime of day from any location.
- Suppliers and customers can be included in the network and efficiencies achieved as a result.
- Communication within the enterprise improves overall.

Better communication can also be facilitated through networking over the Internet and Web. For example, **Online communities** can open up interaction between enterprises and customers and boost other marketing efforts. Networking avenues include:

- **Enewsletters:** They allow enterprises to send regular, targeted stories and messages to people who have invited them to do so – a form of advertising.

- **Email discussion forums:** People can subscribe and then send emails that will be automatically forwarded to all other subscribers. People seeking information can post emails to the forum, and those who

are able to give advice reply. These are good for accessing technical advice and for stimulating new ideas.

- **Bulletin boards:** These allow subscribers' emails to be posted in a central location. Unlike email discussion forums, subscribers do not receive any emails; they have to visit the bulletin board to see what people are saying. These can be used in online auctions and for accessing invitations to tender.

Advice Sheet 7: Contracting Out Web Services

The decision whether to buy in web services or to develop your website in-house will largely depend upon budgetary constraints. As well as the necessary financial resources (see: Advice Sheet 9) you should also make sure that you have the experience and know-how to do the job and a clear understanding of your business goals and strategy.

When involving outsiders, it will be necessary to inform them of your requirements. This will also provide a useful checklist for future reference when the project is up and running. Also, pay attention to the back-up service on offer, together with contractual terms and conditions of your potential web-developer.

The core ingredient for any website is content. The presentation and content should be worked out between you and your developer – taking into account the needs of your customers. The developer should have a clear understanding of your requirements. You could use the following requirements checklist:

- A description of the business sector and a short outline concerning any important issues specific to that industry.
- How important will the Internet be to the enterprise's future?
- The objectives for the site. These should be concise and realistic.
- The target audience for the site.
- Who is going to develop the content?
- Will a writer/content editor be required to develop and structure content?
- What will the customer to be able to do on the site? Will the web site facilitate on-line transactions, reply forms, search queries, etc.
- Will your enterprise require mailing lists and bulletin boards?
- What will be the time frame for construction of the web site?
- How will web content be updated?

You will also need to consider who is going to host the site – **Web Site Hosting.** This provides the necessary hardware and software to store the site and allows access via telephone or other connections. All websites require hosting, that typically includes: a one-off fee to a hosting company plus an annual subscription and (if required) credit card authorisation costs. These payments may be dependent on the expected number of visitors (traffic) to

the site. When choosing a host, reliability is as important as speed. Downtime – time when your website is not accessible due to maintenance or some system failure of the host – can be expensive for a small enterprise.

Some website design companies offer turnkey solutions – **All In One Packages.** These are useful for enterprises with no programming or computing background. They eliminate the need to find specialists supplying different Internet services. There are increasingly low cost or in some cases free packaged software solutions on offer.

Advice Sheet 8: Order Fulfilment and Logistics

Order or service delivery tends to be an area of weakness for many eCommerce ventures – depending, as it does, on the existing transport and supply infrastructure (the 'bricks' rather than the 'clicks'). Poor delivery damages customer loyalty and the enterprise reputation if not handled well. eCommerce needs good logistics, therefore, which deals with getting the correct goods to the right place at the right time, in the right condition with the minimum of cost.

Some products or services are delivered more easily than others. Books and other forms of media are frequently purchased online due to their suitability for shipping through the post or via couriers. Remember, when a customer buys on-line they tend to expect a better standard of service.

Ask yourself the following questions:

- How are you going to distribute the goods or services to your customer?
- What are the delivery options and their associated costs?
- How can you improve your response and delivery times?
- How dependent are you on the ability of others in your supply chain to respond to customer needs?
- Do you have a strategy for customer dissatisfaction or returns?
- Are you aware of your own limitations and those of your supply chain?

The use of the Internet will be more important if you are conducting B2B eCommerce. As trade between businesses increasingly moves online, so the processes and services that support this trade, such as logistics and document management, also move online. Involvement in B2B eCommerce can help small enterprises maximise both internal and external efficiencies (e.g., filling excess transport capacity). Electronic networks may also open up new ways of managing the supply chain (e.g., cutting down on paper work and speeding up communications), allowing streamlining of business operations, reducing costs and improving efficiency.

Some Tips for Improved Order Fulfilment

- **Keep the customer informed** – probably via email – this is vitally

important. This may include: confirming the sale, the expected delivery date and follow-ups to check delivery has been completed. Effective communication will help establish a relationship of trust with your customers. With eCommerce, many of these functions can be automated using off the shelf software.

- **Establish personal contact** – this should not be neglected – by telephone or in person if local. This is especially important when customers have problems or complaints. Customer service help lines should emphasise human interaction rather than recorded messages.

Advice Sheet 9: Costs of Web-based eCommerce

The basic cost components (outlined in Advice Sheet 1) for Web-based eCommerce include a Computer (PC or similar), an internal/external modem plus an Internet connection via a landline: A suitable computer should include the necessary software packages that may be off-the-shelf or free software options.

In Uganda an Internet connection can be achieved in a number of ways:

Most popular are Dial-up Internet Services (recommended for light users) using normal telephone lines through an ISP via a modem. The modem is usually internally placed in the computer. Your local landline provider will charge for every minute you are connected. There is also an annual charge for dial-up Internet services – approximately US$30 per month or US$250 per year and in addition a set up fee of US$25 is charged especially for those clients without internal modems.

In some areas it is also possible to connect to broadband. It offers 24-hour Internet access and no telephone lines are needed, but at a very high cost (from US$540 annually for the lowest bandwidth (16kbps) to US$24, 300 per year for the highest bandwidth (512 kbps) in addition to an installation fee of US$200 charged).

Other Options and Additional Costs:

For enterprises that cannot afford their own computer and dial-up connection – cost saving options include:

- Accessing the Freenet that the Uganda telecom offers where one does not have to pay an ISP to access a dial up connection.
- Accessing an Internet café for those clients that cannot afford their own computers. Access costs for Internet cafes are very low. They are Ush25 per minute and most have improved their speed and service recently.

Additional costs for web development may include: Website domain registration (registration of the name of your website), hosting and design and search engine subscriptions. For full eCommerce, other costs may include

shopping cart facilities and databases used to store and manipulate customer or sales information. In Uganda, registration of the domain costs an average of US$60 for 2 years. Hosting and maintaining the website will depend on the complexity of the website. A simple website requires at least 15-50 Mega Bytes (MB) and costs between US$20 and US$30 per month. The more the MB the more it costs, but the more easily accessed it will be.

Designing a website costs approximately US$150 per page for a simple website with few graphics. The cost of a full website ranges from US$500-US$900 for a relatively simple website. However, the price is not fixed – it depends on the designer and complexity of the site required. Thus to have a website up and running would require an initial cost of US$600-1200 and subsequent costs of US$30 per month for hosting and maintenance. Web Maintenance and Updating: Updating costs should be taken into account at the design and development stage. It is possible to train a staff member to look after the web site or sign a contract with the web development company.

Advice Sheet 10: Some Legal/regulatory Issues

The Internet presents new legal/regulatory challenges. The global nature of electronic communications requires a global view of the legal implications. Legal issues and risks will become more severe as you climb the eCommerce ladder. A marketing type website will offer fewer challenges than a fully interactive eCommerce portal. Of critical importance is the location and nature of the target audience and the laws that are likely to apply in the user's country.

Some of the key issues are specified below. These will need investigating further in relation to what are the local requirements and concerns.

- **Terms and conditions of use.** These should be legally incorporated into the relationship between the website and the user. Electronic contracts have legal validity. Acceptance of a contract should be recorded in an acceptable manner giving the time and date of each customer's acceptance (payment, of course, may be made offline in the usual manner). It is possible for users to 'click' acceptance of terms and conditions of use when they enter a website.

- **Intellectual Property Rights (IPRs).** The ease with which electronic content can be copied and reproduced raises a multitude of IPR issues. It is often not clear who owns the intellectual property in a website – particularly when using outside developers or all in one packages.

- **Hyperlinking. T**his encourages users to move to and from other websites. In all cases the consent of a third party website owner should be obtained, or it may be possible to examine the terms and conditions of the other site you wish to link to – via the Internet.

- **Data Protection:** A database of customers, subscribers or members constitutes a significant enterprise asset that should be protected. In the absence of a framework of law covering these issues, it is up to the enterprise to ensure that its own data is protected.

- **Consumer Protection:** There is a growing body of law that offers protection to consumers in their day-to-day transactions and requires the disclosure of certain information to consumers. In practical terms, website operators should ensure that the fundamental ingredients of a contract (e.g., offer and acceptance) are appropriately dealt with on their websites. Certain prior information such as the identity of the supplier, price of the goods, delivery costs, delivery arrangements and cooling-off periods should also be provided on-screen prior to the submission of an online order.

- **Overseas Jurisdictions:** Small enterprises are not in a position to be able to obtain legal advice on the jurisdictions in which their website is accessible. Insofar as it is possible therefore, website operators should seek to ensure that the laws and jurisdiction of their country of establishment apply to the website. Therefore, you should check the rules of the country where your web site is hosted.

Advice Sheet 11: Web Security

Protecting information from unauthorised access is a critical Internet issue. It is also the case that the collection, storage and distribution of information via the Internet is increasingly governed by legal regulation.

The following points are an explanation of some basic security measures that can be installed in your computer or built into your website:

- **Authentication:** A common security measure that requests the user to login authorisation details before allowing access to restricted areas of a website. These details usually include a username and a password.

- **Email Security:** It is possible to protect your email messages from snoopers, and ensure that email conversations remain private. One method is Public Key Encryption (PKE). This technology transmits email messages in a code or cipher, before they're sent, and decodes them at the other end, making it possible for the recipient to read them. An Encryption facility should be available as part of your email software (e.g., on MS Outlook Express).

- **Firewalls:** These are security systems that protect the information contained in your computer system from outside hackers. Firewalls are particularly useful for protecting a business network that sends and receives emails, transfers data over the Internet or connects with outside computers.

- **Digital Certificates:** A digital certificate is confirmation by a respected third party that the client company is legitimate and can guarantee security of a financial transaction. When a customer goes online and decides to buy something the web browser checks to see if a web site has a digital certificate. If the required confirmation is detected, the vendor's site server is accepted and the visitor is able to shop with peace of mind.

- **Digital Signatures:** A combination of services that allows you to electronically sign a document and affords the recipient the opportunity to authenticate the signature.

Another security problem is **Viruses**: Computer Viruses are passed from computer to computer via Internet downloads, email attachments, shared disks, and shared files. Caution should be exercised when exchanging information between computers and downloading from the Internet. Reputable suppliers of anti-virus software are Symantec or McAfee.

More advanced security measures become necessary when transactions are conducted over the Internet such as through the use of Credit Cards: These include **Public Key Infrastructure (PKI) and Secure Sockets Layer (SSL):** These are methods of encryption whereby the recipient of a ciphered message unlocks the code by applying a mathematical key to it. In addition to standard authentication procedures, SSL uses encryption coding to lock in client information and is the industry standard where online credit card transactions occur.

G. Finding eCommerce Support in Uganda

Professional advice will be important for success. There are many potential sources of help with your eCommerce plans. These include many of the eCommerce facilitating organisations outlined in section C3. It will also be important to talk to others who have taken the eCommerce route.

G1. Uanda-based Organisations

BUDS-SSE provides a 50% grant from the EU for the provision of training – including training in use of ICTs. BUDS-SSE is located at PSF, Plot 43 Nakasero Hill Road, Kampala. Contact: Mr. Robert Kukyu,
Mobile: 077404636
Tel: 230956,230985,342163
Email: robkyu@yahoo.com.
http://www.psfuganda.com

Centre for Economic Empowerment of Women in Africa (CEWA) acts as an information point for women entrepreneurs – especially in rural areas. They provide a website linked to service providers such as micro credit providers or marketing agencies. CEEWA is located on Lumumba avenue , P. O. Box 9063 Kampala.
Tel: 077 420376
http://www.ceewawires.org/

Exposure Africa provides a marketing platform and information centre for local crafts producers. The centre has a Website that is uses as a showcase for its members' products. The centre is located at Plot 15, Buganda Road, Kampala.
Tel: 041 348283, 077406874
http://www.expocraftsafrca.co.ug

Uganda Commodity Exchange is intending to provide brokerage for agricultural produce both domestically and internationally. UCE is located at the Cooperative Alliance Building, Nkrumah Road, Kampala.

Uganda Manufacturers Association (UMA) have an Information Centre at the UMA show ground where members can benefit from the use of the Internet. UMA is located at Lugogo Show Grounds, Jinja Road, Kampala.
Tel: 220831, 221034, Fax. 220285
http://www.uganda.co.ug/uma

Rank Consult Ltd. Consultancy services for MSEs. Kampala.
Mobile: 077454974
Tel: 346458, Fax 235655
Email: wasukira@afsat.com
http://www.rankconsult.co.ug

Uganda Export Promotions Board provides services for SMEs that are involved in non-traditional exports, including website development, email and training. They are located at Plot 22, Entebbe Road, Conrad Plaza, 5th Floor.

Mobile: 077586107
Tel: 230233/250
http://www.ugandaexportsonline.com

Uganda ICT Outsourcing Association provides a one-stop centre for clients overseas seeking to outsource services from Uganda. It is located at Blacklines House, Colville Street, Garden Suite B, Kampala.
Tel: 075646653
Email: vmusubire@hotmail.com
http://www.ml2000.co.ug.

UBIN (funded by UNIDO) provides subsidised services for SMEs. They are setting up an eCommerce-trading portal. UBIN will use its basic web presence and access to online business-to-business contacts to market products and provide technical support to MSEs. UBIN is located at the Coffee House, 1st Floor, Jinja Road, Kampala.

G2. Internet Service Providers (ISPs)

1.Africa On Line. 5th Floor – Commercial Plaza, Plot 7 Kampala Road, P.O. Box 29331
Kampala-Uganda.
Tel: +256-41-258143. Fax: +256-41-258144
Email: info@africaonline.co.ug
Web: www.africaonline.co.ug

2.Bushnet Limited. Plot 999 Baka Close, Tank Hill, P.O. Box 22849
Kampala-Uganda.
Tel: +256-41-267561. Fax: +256-41-269634. Cell: +256-75-711622
Email: info@bUshnet.net
Web: www.bUshnet.net

3.Datanet.Com. Plot 5 Kimathi Avenue, P.O. Box 7507, Kampala.
Tel: +256-41-347080/1, 347247/8/9. Fax: +256-41-347071
Web: www.ntp1.com

4.Dehezi International Limited. 1st Floor Commercial Plaza, P.O. Box 16186, Kampala. Tel: +256-41-259211. Fax: +256-41-236395.
Email: dehezi@sanytel.com

5. E-Tech Uganda Limited. P.O. Box 8711, Kampala-Uganda. 6th Floor, Workers House, Plot 1, Pilkington Road.
Tel: +256-41-236308. Fax: +256-78-260621
Web: www.etechug.com
Email: info@etechuganda.com

6.Infocom. General Manager, Kampala.
Tel: +256-41-342681. Fax: +256-41-342192
Email: sales@infocom.co.ug
Web: www.infocom.co.ug

7.MTN (Uganda) Limited. 22 Hannington Road, P.O. Box 24624, Kampala-Uganda.
Tel: +256-41-212333. Fax: +256-41-341976
Email: mtn@mtn.co.ug
Web: www.mtn.co.ug, www.mtnconnect.co.ug

8.One2Net. 7th Floor, Workers House, P.O. Box 26411, Kampala-Uganda.
Tel: 256-41 345466, Fax: 256-41-345468.
Email: info@one2net.co.ug

9.SpaceNet International, 4th Floor, Diamond Trust, P.O. Box 28685, Kampala.
Tel: +256-41-255300, 255293. Fax: +256-41-345546.
Email: sales@spacenetuganda.com
Web: www.spacenetuganda.com

10.Uganda Telecom Limited (UTL). P.O. Box 7171, Kampala-Uganda.
Tel: +256-41-347401, 258855/6, 256151. Fax: +256-41-345907, 231110. Telex: 61027 "POSTEL" UG. Telegraphic Address: "POSTGEN" Kampala.
Email: utl@utl.co.ug
Web: www.utl.co.ug

11.Wilken Afsat Communications (U) Limited. Ground Floor, Communications House, Plot 1, Colville Street, P.O. Box 25745, Kampala.
Tel: +256-41-343780, 343334. Fax: +256-41-343334
Email: afsatug@afsat.com
Web: http://www.afsat.com

G3. Some Internet Cafes in Kampala

1. Cyber Click
P.O Box 4277,
Kampala,Uganda
Tel: 077629467
Uganda House, Kampala
Email: joyhuguru@yahoo.com

H. Understanding More About eCommerce

H1. Glossary/Jargonbuster

Browsers
A browser is software that allows your computer to access and display web pages. E.g., Microsoft Internet Explorer and Netscape Navigator.

Communications
Every network requires some medium or connection to transport information from one point to the next – that connection may be physical such as twisted pair or coaxial cable, or wireless such as mobile, microwave, radio or satellite.

Domain names (e.g., www.amazon.com)
A domain name is the address at which a web site is located on the Internet. Each web site has a unique domain name. An example is .com the most globally recognised, and the most suitable if wishing to trade abroad.

Digital
Describes the way in which data is transmitted – as 1s/0s – by computers and modern phone lines and mobile phones.

Directory
A collection of computer files stored in one place.

EDI
Electronic Data Interchange: computer-to-computer exchange of electronic documents for business.

Email
The transfer of messages between computers.

File
When work is done on a computer and then stored on a disk, the result is a called a file.

GSM
Global System for Mobile communications: a digital phone network standard.

Home Page
The first page you see when you connect to a Web site on the Internet.

HTML
HyperText Markup Language: a computer language used to create Web pages.

Hyperlink
A connection linking different Web pages via the Internet.

ICT
Information and Communication Technology: electronic means of handling digital data.

Internet
World-wide communication system – a network of networks – that connects computers and allows them to exchange data.

ISP
Internet Service Provider: a company that provides you with access to the Internet.

Modem
Modulator/demodulator: a device that allows computer signals to be transmitted over analogue phone lines.

Network
Computers joined together so that they can communicate with each other. A local area network (LAN) covers a single building; a wide area network (WAN) covers a broader area, typically linking computers in different towns or countries.

Protocol
In a network, information is sent or passed down the connection from one device to another in packets or blocks of information. This whole process of sending blocks of information in packets is controlled by network protocols (e.g., TCP/IP).

Search Engines
Search engines are tools that enable people to search the Internet's pages for specific information or websites. 'Google' is among the most popular.

Software
The instructions that make a computer work. A particular set of instructions that performs a function is called a program. If offered for general sale, this is proprietary software; if produced for a single, specific customer, this is custom software.

Traffic
The number of visitors a web site receives is known as its traffic.

Web Directories
Directories perform a similar task to search engines in that they hunt for information on web sites. Among the most popular directories is Yahoo.

World-Wide Web (WWW)
A collection of linked documents (pages) connected via the Internet. The pages can hold words, pictures, sound and video.

Web Sites
Collections of pages created and maintained by a company, organisation, or individual. The sites found on the 'Net' are accessible from any Internet enabled computer in the world and constitute a new communicative medium.

H2. Further Information – Web-based Sources

A selection of online information about eCommerce for enterprise development from overseas sources.

http://www.agriwatch.com/ Agriwatch is an Indian information portal and agriculture e-marketplace. The site offers the latest news and market updates, research reports and directory enquiries.

http://www.catgen.org/ CatGen is free B2B and B2C e-commerce catalogue software offered by the NGO PEOPLink for SMEs. SMEs can choose to open different accounts. Services cost between US$10 and US$50. There is an email-help line as well as language options and examples of catalogues by SMEs in developing countries.

http://www.ecomlink.org/ Ecomlink is a knowledge-management gateway supporting enterprises in developing countries in the establishment of eCommerce and eBusiness.

http://ecommerce.internet.com/ eCommerce-Guide.com aims to be the best source for independent, up-to-date information on e-commerce. There are daily news, editorials, product descriptions, an e-commerce event scheduler, and lots more.

http://www.g77tin.org/ The TIn Portal is a South-South initiative by Chambers of Commerce in the G7 States. It provides business information on 133 countries and publishes offers for eCommerce training and services as well as serving as a database for B2B-contacts between SMEs in developing countries. Follow the "Training resources" link to download e-Commerce training material.

http://hotwired.lycos.com/webmonkey/e-business/ Web Monkey offers concrete procedure descriptions ("how-to"-listings) with practical hints for the establishment of your own website.

www.iicd.org The International Institute for Communication and Development is involved in training/education-based projects. In Uganda they partner with Makerere University, ISOC, Rank Consult, Uganda On-line, Uganda Communications Institute and others.

http://www.itu.int/ITU-D/e-strategy/ecdc/ This project of the ITU presents publications and recommendations of the ITU plus information and certification for eCommerce activities.

http://www.itu.int/ti/casestudies The Internet in an African LDC: Uganda Case Study, International Telecommunication Union (ITU), Jan 2001.

http://www.line56.com/ Line 56 is a source for global information on eCommerce technology and strategy. You can find information on every part of eCommerce and eBusiness and the company profiles are worth reading.

http://africa.oneworld.net/article/archive/4002 Oneworld (Africa) is an online resource that will take you through the entire cycle of building a website – and is specifically targeted at SMEs in developing countries.

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