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This handbook can be used together with '**eCommerce for Small Enterprise Development – a Handbook for Enterprise Support Agencies in Uganda**', which has been designed specifically for use by agencies that are assisting micro and small-scale enterprises with eCommerce.

**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 Handbook

This handbook is for micro and small-scale enterprises (MSEs) based in Uganda. The handbook is designed for those who are new to eCommerce and have little knowledge of what is involved and for enterprises that are already using information and communication technologies (ICTs) in their businesses – including computers, email and mobile phones.

The objectives of the handbook are as follows:

- Outline some basic information about eCommerce including the benefits and the pitfalls (Section A).
- Present some local case studies showing how eCommerce has been used in practice (Section B).
- Help you make decisions about eCommerce for your business (Section C).
- Provide information about different aspects of eCommerce (Section D).
- Direct you toward further information and support for eCommerce in Uganda and overseas (Sections E&F).

First, read through **Section A** to learn more about eCommerce. Then look at **Section B** and decide where you are on the 'eCommerce ladder'. You can then look through Case Studies of Uganda enterprises using eCommerce.

**Section C** will help you to find out if your enterprise is ready for eCommerce. **Section C1** asks you to think about your business goals and strategies and carry out an analysis of your own enterprise. The analysis focuses on your potential for 'Web-based eCommerce' and examines your markets, your customers, your products and services, your location, your skills, technology and finances.

You will then need to decide what level and type of eCommerce will suit you. **Section C2** will help you do this by suggesting some of the costs and benefits for each 'step to eCommerce' and the overall likely impact of eCommerce on your business.

A final decision you will have to make concerns whether you should develop eCommerce yourself or whether you should work through an 'eCommerce facilitator'. **Section C3** outlines some strengths and weaknesses of a range of 'eCommerce facilitators' you may wish to trade with or consider for support.

Finally, look at **Section D** which provides information on various aspects of 'best practice' in eCommerce, and **Sections E&F** which provide sources of further information and support for eCommerce in Uganda and 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. MSEs employ about 90% of the non-farm economically active population and contribute about 20% to the GDP (Gross Domestic Product) of Uganda.

Such business enterprises need to compete more effectively in order to survive in an increasingly competitive market. In this way MSEs can boost domestic economic activity and contribute toward increasing Uganda's export earnings, whilst at the same time increasing incomes on a sustainable basis.

**eCommerce** is emerging as a new way of improving such business enterprises – as well as other institutions and organisations. But at present, most enterprises in Uganda lack the knowledge of how investment in eCommerce could benefit their businesses and help them develop that competitive advantage.

This manual will help you to understand more about eCommerce and the advantages and disadvantages of eCommerce. It will help you to decide if you need eCommerce in your business, and the type of eCommerce that can benefit your business.

### 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, 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 you to more effectively manage and run your business enterprise. This will involve creating more effective external communications with customers, clients, collaborators and suppliers, as well as improving internal business efficiency.

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## eCommerce Networks

eCommerce may involve selling directly to consumers (B2C eCommerce). For example, a number of craft producers and tourism enterprises in Uganda have already found some success dealing directly with customers (see, for example, Case Study 4 in this handbook).

eCommerce can also be conducted directly between businesses (B2B eCommerce). This is where eCommerce is growing most rapidly through Electronic Marketplaces (e.g. [www.exposureafrica.com](http://www.exposureafrica.com)) and via Auction Sites (e.g., [www.vba-aalsmeer.nl](http://www.vba-aalsmeer.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 consumers. There is also B2G (Business-to-Government) 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 Can eCommerce Help Improve your Business?

eCommerce can give your enterprise a competitive advantage. It can help strengthen your market position and open up new business opportunities with the potential to improve profits. Benefits of eCommerce can arise in the following ways:

### Cost Benefits

- **Reduced travel costs:** by using a mobile phone, e-mail and other ICTs to substitute for journeys.
- **Reduced cost of materials:** more information means better choice of suppliers and more competitive prices.
- **Reduced marketing and distribution costs:** for example, publishing a brochure online can reach an unlimited number of potential export customers and allow regular update.

### Market Benefits

- **More brand awareness:** offering new avenues of promotion for products and services.
- **Increased customer loyalty:** customers will keep coming back due to more effective two-way communication.
- **Increased market awareness:** you can become more aware of competition within your market and more aware of market changes.
- **Global reach:** a web presence can be appropriately designed for the target market/country.

### Competitiveness and Collaboration Benefits

- **Increased Efficiency:** eCommerce can offer a reliable, cost effective means of doing business that speeds up transactions.

- **Increased Automation:** suppliers and customers, if they wish, can access a 24hour/7day sales service – particularly important when trading through time zones.
- **Specialisation:** eCommerce will help you to focus your activities – making it easier to build relationships with other enterprises and communicate your needs to support agencies.

### **Some Evidence of Benefits from a Neighbouring Country**

A study carried out in Kenya amongst MSEs in the garments sector illustrates a range of benefits gained from eCommerce. Of the 12 firms surveyed, 4 indicated that they had changed to more competitive suppliers due to new contacts made through eCommerce. 3 increased their number of international suppliers and customers, and 5 had seen increased revenues and profits due to eCommerce. All of the surveyed firms were using Web-based applications and email and had been successful in accessing general information about input markets, product markets; specific information about customers and suppliers and were regularly accepting and placing orders from international clients (Source: Kinyanjui and McCormick, Aug 2002). <http://www.gapresearch.org>

There are also other benefits of eCommerce for your business. A website can convey an innovative and modern image for a small enterprise. Wider benefits may arise from more advantageous relationships with market facilitators or 'middlemen'. Employee commitment and skills can also be improved by their involvement in eCommerce activities.

### **A3. eCommerce Pitfalls: Things to watch out for**

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:

- eCommerce will bring extra costs as well as cost savings. The start-up costs (initial investment in a computer/network connection, etc) will be high and there will be additional running costs (refer to Advice Sheet 9).
- eCommerce activity will need to run in parallel with existing business methods. For example, you will need to continue to produce paper-based marketing material (brochures, stationery, leaflets, etc) as well as build up your web presence. This will duplicate some activities adding to overall costs.
- eCommerce may divert attention away from 'more important' offline activities. It is important that on-line and off-line 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 and personal networking) will remain far more important than on-line

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communication.

- An eCommerce venture may well fail completely like any new business venture. This highlights the importance for small businesses of not throwing all their eggs into the eCommerce basket.

**However, there are also risks of ignoring eCommerce!** Technology and innovation can bring positive changes to your business – which can improve the way you do business in the future. The risks of not effectively embracing technology may be felt throughout your business in years to come. For example:

- Having no web site, or a badly designed or marketed website, may put your business at a disadvantage as compared with your competitors, particularly if you are an exporter or a tourism business.
- Unsuitable or inadequate technology can mean that your enterprise is without the communications systems that it needs to compete efficiently.
- Increasingly, enterprises that lack a customer and sales database may find it difficult to carry out the regular and effective direct marketing and communication that competitors conduct, and which customers expect.

#### **A4. What you need to do for eCommerce**

You may already be engaging in eCommerce – by using a mobile phone, for example. However, you may not yet have caught up with more recent technological changes that involve use of the Internet, or you may feel you are simply not interested at the moment.

Your business may not be able to afford even a telephone connection (fixed line or mobile) or there may be a lack of network coverage in your locality. If this is the case you could try contacting Business Support Agencies or Business Telecentres in your locality (see Section E in the back of this handbook for details). You could also think about sharing the costs of a telephone connection with other businesses close to yours.

**But don't forget** – personal face-to-face contact is still the most important method of business communication – particularly with your customers. There are still many effective ways to build your business communications that don't involve modern technology, such as:

- **Building a good reputation** for your business. This will help to spread information about your business through word-of-mouth.
- **A professional image** will help to promote your business. The use of a printed business card, a letterhead and a logo, or signboard outside your business premises will help in this respect.
- **Advertising your business.** The use of printed leaflets, posters, cards in shops or adverts in local/national papers, will reach a wide customer base.

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The use of eCommerce technologies will help you build on these good business practices: For example, using the Internet (or a mobile phone) to promote your business; to take or give orders; or to communicate with your customers at a cheap rate via email.

**The basic requirements to get started are as follows:**

- **A computer.**
- **A landline telephone.**
- **A modem.** This device converts digital information from computers into electronic signals that can be transmitted over telephone lines.
- **Internet Browser Software** – which usually comes installed already but make sure when purchasing your computer you ask if it has this software.
- **The services of an Internet Service Provider (ISP).** A list of these is provided at the end of this handbook together with their addresses.
- **An email address** in order that local, regional, and especially, international customers can communicate with you.

See the Advice Sheets at the back of this handbook for more details of all these requirements.



A Computer



## B. Ugandan Enterprise on the Road to eCommerce

This section outlines the ‘steps to eCommerce’ describing the differing stages of eCommerce development – presenting 6 Local Enterprise Case Studies that highlight eCommerce applications for each stage. The case studies show how enterprises are benefiting from eCommerce, as well as some of the pitfalls. Which step of the eCommerce ladder are you on? Read through the case studies. You may identify an enterprise that is at a similar stage to your own.

### B1. 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 type of assistance you may require.



#### Step 1. 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 – are already a growth area in Uganda (Case Study 2 outlines some benefits of mobile communications).



Sending a Text Message

### **Step 2. Email Messaging**

You can send or receive emails from a computer terminal either located on your business premises or via a facilitator (such as an Internet Café or Telecentre). 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 and refer to Case Studies 1&3).

### **Step 3. Web Publishing**

Web publishing can be used to make information available – by using an on-line brochure, for example. Its simplest form may consist of a 3-4 page website giving a basic business profile, some information about products and services, and contact information – physical and postal address, telephone and fax, and email contact. In a more advanced form it may include an online catalogue – an online version of a conventional catalogue (see Advice Sheet 4 for more information on creating websites and refer to Case Studies 4&5).

### **Step 4. Web Interacting**

Web interaction will allow customers (for example) more scope to browse through images, descriptions and specifications relating to your 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 could be paid for and fulfilled (delivered) offline. Interaction over the web can improve customer service and response to customer queries (refer to Case Studies 5&6 for examples of Ugandan enterprises making use of web interaction).

### **Step 5. Web Transacting**

This can be termed as having a full e-commerce 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 involve making use of secure credit card payments systems, and for B2B eCommerce will involve payment through secure banking systems. At present these are not fully available options in Uganda, and would require that you work through an overseas facilitator.

### **Step 6. Web Integrating**

Web integration provides an electronic platform that links customer-facing processes such as sales and marketing with internal processes such as accounts, inventory control and purchasing. This is often called eBusiness. eBusiness links internal systems with external networks (customers, suppliers and collaborators) – via the Internet. This stage often describes a business as becoming fully eEnabled. As yet, this step has not been reached by enterprises in Uganda.

### **Case Study 1: Mukono Women's Aids Task Force (MWATF)**

**MWATF is a self-help enterprise producing tree seedlings, vegetables and metallic stoves, employing 60 Women, with a turnover of Ush 6,800,000. It serves the home market only. The vegetables are perishable so they only harvest when they can be sure of the market. They are contactable by email at: [MWATF@yahoo.com](mailto:MWATF@yahoo.com)**

**ICT Resources:** The enterprise has no direct access to ICTs and uses a Community Telecentre that is located 2km away from their premises. They regularly use the Telecentre landline phone that charges them Ush500 per minute. They also use the email service to correspond and communicate with agencies in Kampala and abroad. They usually use the email services twice a week (costing Ush50 per minute). Since the connections are slow it can take up to 20 minutes to complete their communication.



Public Pay Phone

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**eCommerce Benefits:**

- The telephone service is used to ascertain the market for their produce before they harvest or take their produce to market.
- The phone has saved both time and money – giving rise to better prices.
- With the Internet, they have been able to establish contacts with a number of new organisations and individuals who have subsequently offered assistance.

**eCommerce Challenges:**

- Inadequate facilities: computers are too few and too slow. There are only two computers at the Telecentre, which serves many people in the community.
- High costs of access: slow up and down load speeds also brings high costs.

**eCommerce Support:** MWATF has received support from the Telecentre which has offered computer training to the staff and some members at a subsidised rate. They have also assisted with training of the staff, and demonstrated how the Internet can be used to search for information. The Telecentre also passes on messages to MWATF. Hence the Telecentre is an important point of contact for the organisation.

**Lessons Learned:** When using the Telecentre users are encouraged to have letters typed beforehand and then just copied to send. This costs less compared with composing a letter on-line. It is also important to use the telephone effectively to find out about the market or the prices before setting off to market – this is especially valuable if the market is far from the locality. The enterprise intends to install a phone at their premises that can be used by its members at a cheaper rate.

**Case Study 2: Sedu Welding and Fabrication Co**

**A micro enterprise run by a single entrepreneur producing fabricated metal products – windows, doorframes and beds with 2 employees, and a turnover of about Ush50,000-100,000 per month. The enterprise sells to local markets and serves many sectors including the construction sector, supplying windows and doorframes, and rural schools and hospitals supplying beds. The enterprise mainly sells to individual consumers and schools.**

**ICT resources:** The enterprise has a mobile phone, which cost the owner Ush150,000 and requires a monthly fee of at least Ush8,000 of airtime to operate on the UTL network. This enterprise has no financial support and depends solely on income generated and savings. Other costs are high – electricity charges go up to Ush600,000 per month and rent that is Ush200,000 per month.



A mobile phone

**eCommerce Benefits:**

- The use of a mobile phone has greatly improved business by enabling constant access to customers.
- 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 enterprise has built use of the phone into its marketing strategy by distributing the phone number whenever possible via business cards and displaying it on finished products.

**eCommerce Challenges:**

The business owner regards other ICTs (such as computers) as too expensive to use. Besides he does not know how to use them. He prefers to spend his resources on a cell phone as he could not risk being without one in his business.

**eCommerce Support:** The enterprise has not received any support from any agency and the entrepreneur does not seem comfortable joining business associations. Many of his colleagues pay membership to associations or join credit unions but have not gained much for their businesses. Hence, he prefers to be self-reliant.

**Lessons Learned:** The phone should be available for use at all times of the day. Hence, it is advisable to join networks that do not charge a service fee. It is important, therefore, to compare the packages that phone companies are offering in order to minimize costs and select a service that will meet your needs. Unfortunately he lost most of the numbers of his customers and contacts when his mobile phone was stolen – this reinforces the importance of keeping back-up records also.



A Boda boda cyclist uses a mobile phone

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### Case Study 3: Nabiganza Estates

**A small crafts enterprise producing woodcarvings, basketry, ceramics and textiles crafts with 5 women employees and a turnover of Ush10,000,000. It supplies 75% of its output to the home market, with the remainder supplied to the export market – including tourists coming to Uganda. The enterprise plans to expand further into the higher value added tourism market in the future. The enterprise mainly sells to individual customers, but they also sell in larger quantities to traders. Contactable at: [lydiasekindi@utlonline.co.ug](mailto:lydiasekindi@utlonline.co.ug)**

**ICT Resources:** The business owner has a mobile phone – her main means of contact to suppliers and customers. The business owner also keeps a computer at home on which she keeps her accounts and correspondence for her business. She intends to install a dial-up Internet connection if affordable. The enterprise owner relies completely on her own financial resources.

**eCommerce Benefits:**

- The telephones (both mobile and landline) remain the most important communication tool by easing access to traders and potential new customers – as well as some suppliers.
- 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 owner hopes to use the Internet and email to target the export market.

**eCommerce Challenges:**

- Local competition in Kampala.
- Insufficient funds to pay for ICTs.
- Most of her suppliers are very small and found in remote areas – most do not have phones or email.

**eCommerce Support:** The business subscribes to Exposure Africa that provides group-marketing opportunities. Thus far, Exposure Africa only exposes the activities of small producers, and is not yet an interactive eCommerce platform. However, through Exposure Africa, she has been able to attend a course on eCommerce in the Netherlands. Being a member of other organisations (UWEA and USSIA) has helped her to get training, meet other producers, acquire skills in product development and attend exhibitions.

**Lessons Learned:** This entrepreneur has benefited from seeking support and actively participating in business organisations. According to the business owner, government should be doing more to create awareness of eCommerce in small enterprises, and the support that is available. More people should be educated about simple things like the use of phones and how they can improve their businesses.



Using the internet



A Global Village with eCommerce



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## Case Study 4: Sesse Island Beach Hotel

**A tourist facility located on Buggala Island on Lake Victoria, employing 20, and achieving a 60-80% occupancy rate per year. The enterprise mainly targets the tourism market with overseas and local customers split 50/50. Competition in the tourist market is stiff. Business is conducted with individuals, businesses, and tour and travel agents. Their website address is:**

**[www.sseseislandsbeachhotel.com](http://www.sseseislandsbeachhotel.com)**

**ICT Resources:** The business has a phone/fax, a computer that was acquired in 1992, and a laptop computer that was acquired in 2002. They have landline phones and mobile phones. The MTN network has helped make communication much easier for this isolated enterprise.

### **eCommerce Benefits:**

- The enterprise has benefited from eCommerce, principally through use of email, with better client contact and increased occupancy.
- Mobile phone networks have greatly increased communication and accessibility with the enterprise, which is on an island about 2-3 hours from the mainland.
- Although the enterprise has experienced difficulties with its web development, it hopes to turn a new chapter by shifting its web site from a local host to an overseas specialist travel planning company based in Switzerland.

### **eCommerce Challenges:**

- Costs and the difficulties of realising the benefits.
- Limited knowledge about eCommerce.
- Connection problems in a remote area.

**eCommerce Support:** The enterprise received the most valuable support from the travel planner in Switzerland which aims to promote their business abroad especially via the Internet – by making their web presence more user friendly and informative.

**Lessons Learned:** A small enterprise new to eCommerce should carry out research among different users of websites and service providers to determine true costs and benefits. A website is a reflection on the enterprise itself – particularly to potential overseas visitors. Therefore, it is important that a website does not disappoint or frustrate visitors. The website publisher should be able to provide support and advice to the client about the operations of the website – they should be a specialist in the market that the enterprise is serving – in this case the tourist market.

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## Case Study 5: Star Café Company Limited

**This enterprise roasts, blends and packages coffee products and has 15 employees. The customer base is large since coffee is sold all over Uganda – including rural areas. The enterprise supplies businesses, traders, supermarkets, restaurants, shops, and offices. 99% of the market is the home market. However the enterprise is planning to target the export market, and is currently seeking to be certified by a recognised quality assurance body. Their website address is: [starcafe@infocom.co.ug](mailto:starcafe@infocom.co.ug) and [www.starcafe.co.ug](http://www.starcafe.co.ug)**

**ICT Resources:** The enterprise has access to two computers that were acquired in 2001/2002. It has a fax and phones (both fixed line and the mobile). The computers are, however, not internally networked.

### **eCommerce Benefits:**

- 70% of the supermarkets and hotels in Uganda that the enterprise supplies have email even though most local customers tend to use the telephone to place orders. email is a key tool to create personalised relationships with the clients through faster communication links.
- Star Café has become better known and many new business contacts have been made through the website and email.
- The website has already demonstrated that it is a cost effective way to reach out to the export market. They estimate the costs for a network connection and designing and hosting the website to be about US\$2500 per year.
- The enterprise also uses email for most business correspondence – this has proved to be a more efficient and cost-effective way of communication.

### **eCommerce Challenges:**

- Service breakdowns and slow dial-up Internet connections.
- High investment costs for the ICT technologies.
- Lack of sufficient know how of their use and development in the future.
- Logistical requirements for the delivery of physical goods.

**eCommerce Support:** The enterprise has not received any support in the area of eCommerce. The company had its own in-house strategies to finance these ideas. The general manager indicated that once the benefits seem to justify the costs then an idea is considered.

**Lessons Learned:** Enterprises should apply strict cost/benefit analysis and determine if they really need the technology. Requirements need to be specified carefully and enterprises should shop around for different ways of solving problems in a cost effective manner.

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## Case Study 6: Cayman Consults

**A small accounting enterprise that provides bookkeeping services to MSEs for the local and export markets. It has 25 male and female employees and a turnover of US\$10,000 (2001/2002). They offer training to data entrants who wish to engage in bookkeeping work for North American firms. Cayman Consults is planning to expand in both local and export markets – to provide both on-line and physical data entry and bookkeeping services for MSEs and public departments. Cayman Consults key partner is Wall Associates (Canada) who developed the system software for outsourcing. Cayman Consults interacts with Wall Associates on a daily basis taking advantage of the time difference between North America and Uganda. Contactable at: [www.cayman-consults.com](http://www.cayman-consults.com)**

ICT resources: UIA provided Cayman Consults with a grant that was used to acquire 15 computers, all networked, and 3 months Internet subscription that costs \$600 per month. This consumed about Ush22 million (US\$12,000).

### **eCommerce Benefits:**

- Use of eCommerce has enabled Cayman to expand and offer its bookkeeping services in the export market in addition to its local clientele.
- Working with the client's server is advantageous in that Cayman doesn't have to invest in robust software and the necessary security. That is the responsibility of the client.

### **eCommerce Challenges:**

- Online outsourcing division may face competition from firms in India.
- Lack of investment capital meeting recurrent costs like computer maintenance and a high speed Internet connection.
- Costly training for employees.
- Lack of a secure system – that would increase the amount of work that can be handled.

**eCommerce Support:** Wall associates (their partner) carries out promotional activities for Cayman Consults in the export market. The ICT Outsourcing Association has also provided considerable support.

**Lessons Learned:** Before linking up with Wall Associates, Cayman had little investment in equipment and human resources. They relied on themselves and their own qualifications and experience. They have continued to develop their human resources and ICT skills as a key part of their strategy. According to Cayman Consults this has been fundamental in their growth.



Developing Human Resource and ICT

## C. Are you Ready for Web-based eCommerce?

Before making a decision about what type of eCommerce to adopt – and whether you are ready for Web-based eCommerce – you should ensure that:

- You have clearly defined your business goals and strategies.
- You intend to use eCommerce in creative ways to improve existing business tools and capabilities.
- You are able to successfully balance your existing offline activities and new online 'eCommerce' activities.
- You have a realistic and achievable plan for realising real benefits.

Planning for eCommerce: Planning for eCommerce involves setting business goals, developing business strategies to achieve those goals, and making use of practical business tools. Table 1 can assist you to identify your business goals and help you to consider potential strategies and tools to achieve those goals.

**Table 1. Business Goals and Strategies**

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

eCommerce technologies can help bring improvement to all of the business tool examples listed in Table 1 – particularly those that involve better communications – using email or mobile phones, for example.

It will also be important that you are able to prioritise your actions in order that you can use eCommerce to produce benefits in the areas that are most important to your business. For example, if your main strategy is to build repeat orders then efficient and effective communications with your existing local customers will be paramount. Here, effective use of mobile communications rather than Web-based eCommerce should probably be prioritised, so that you can always be in touch with all your customers and they can also leave messages for you.

### C1. How to Analyse your Enterprise

The use of Web-based eCommerce is likely to affect all aspects of your business. Therefore, it is very important for you to analyse all aspects of your business before you make any decisions regarding eCommerce. Go through the following sets of questions and note down some responses that apply to your business. Then read the comments alongside the questions to gain some feedback.

<u>First, you should consider your Market</u>	
<b>Are your main competitors marketing or selling similar products or services over the Internet?</b>	<b>Feedback:</b> If you answered predominantly 'Yes' then you need to consider whether you are ahead, on a par, or behind in comparison with your competitors, customers and suppliers, in using the Internet and eCommerce. If you answered predominantly 'No' then Web-based eCommerce may not be a priority for you.
<b>Do your main customers or suppliers have access to the internet or are they seeking to use eCommerce?</b>	

<u>... and then your proximity to the Market</u>	
<b>Where are your main customers and suppliers located?</b>	<b>Feedback:</b> If your customers or suppliers are located outside of Uganda, and you are located in Kampala, then you have high potential for Web-based eCommerce. If your customers or suppliers are located in Uganda and you are located in a rural area, then you may want to consider using a mobile phone or gaining access to a telecentre to use email.
<b>Where are your business premises located?</b>	

... what about the <u>Products and Services</u> you offer	
<b>Do your products or services have broad or specialised (niche) market appeal?</b>	<b>Feedback:</b> More specialised products or services are more suited to Internet marketing or selling. Conversely, if your products or services are serving saturated markets where there are large numbers of competitors then your potential for Web-based eCommerce may be lower. If you are unsure about the suitability of your products then you need to do some additional market research.
<b>Are your products or services suitable for marketing or selling over the Internet?</b>	
<b>Can your products or services be delivered electronically?</b>	

... pay special attention to your <u>Existing Customers</u>	
<b>Are your customers 'other businesses' or 'final consumers'?</b>	<b>Feedback:</b> If your customers are large or medium-scale businesses operating in high potential sectors or if they are consumers with high disposable incomes then you have high potential for eCommerce. If your customers are low-income consumers or small and medium-scale enterprises operating in low potential sectors then you may have lower potential for eCommerce. If you are unsure then you need to do some additional market research concerning your customers.
<b>Are your business customers small or large – enterprises or organisations?</b>	
<b>Are your customers operating in sectors that have high or low potential for eCommerce?</b>	
<b>If you sell to final consumers, do they tend to have 'high' disposable incomes or 'low'?</b>	

... next consider <u>your Business</u>	
<b>Is your enterprise new or well established?</b>	<b>Feedback:</b> The size and the growth-rate of your enterprise are not as important as your market, your products and the nature of your customers for determining your potential. However, larger well-established businesses are likely to have greater available resources for investment in Web-based eCommerce. On the other hand, if you have a greater number of employees then climbing the steps to eCommerce may present greater challenges in terms of transforming skills and attitudes across your workforce. Smaller enterprises employing 2-5 persons may find it easier to adapt, although it is likely that available financial resources will be lower.
<b>How many employees does your enterprise have?</b>	
<b>Is your enterprise growing, contracting or reasonably stable?</b>	
<b>What was the turnover of your enterprise in the last financial year?</b>	

... your <u>Access to ICTs</u>	
<b>Do you currently have access to email or the Internet on your business premises or via a third party?</b>	<b>Feedback:</b> If you are already a computer/ email or Internet user and those facilities are accessible on your business premises, you have greater potential to climb the steps to eCommerce. If you have yet to develop ICTs within your enterprise then you need to consider carefully the issues covered in this handbook and decide what type of ICTs would be most beneficial.
<b>Does your enterprise currently have a website?</b>	
<b>Are your internal IT systems networked?</b>	
<b>To what extent are your business processes (customer database, accounts, invoicing, purchasing, etc) computerised?</b>	

... your <u>ICT and Business Skills</u>	
<b>Are you an ICT enthusiast and do you have ICT skills?</b>	<b>Feedback:</b> Enthusiasm (commitment and leadership) is probably the most important skill you can bring to any eCommerce initiative. It will also be necessary to develop the technical and business skills to successfully implement the technology and the innovations that will lead to new ways of doing business. If you already have ICT skills and experience this will greatly increase your potential for eCommerce. However, good business skills are likely to be more important than your technical skills – the ability to recognise how new technology can be used both wisely and cost effectively.
<b>Are your employees familiar with ICTs and what is their level of ICT skills?</b>	
<b>Do you have ICT support available 'in-house' or do you depend upon external maintenance and development of your ICTs?</b>	



... your <u>Business Environment</u>	
<b>Are local telecommunication services provided to suit eCommerce?</b>	Feedback: The ability of your enterprise to climb the steps to eCommerce will not only depend upon your own skills, but also upon the level of support, and the constraints, that exist locally. An increased level of awareness of these 'e-readiness' issues will help you understand the constraints under which your enterprise is likely to be operating.
<b>How advanced is Uganda regarding the legal, regulatory and banking requirements for eCommerce e.g., secure payments?</b>	
<b>To what extent can transport and delivery systems meet the needs of potential eCommerce customers?</b>	
... And most importantly <u>your Finances</u>	
<b>How financially stable is your business?</b>	<b>Feedback:</b> It is necessary that you have access to financial resources to make your initial investment, but you also need to be able to generate sufficient revenue to sustain your eCommerce activities in the years ahead. A lot will depend on your business continuing to thrive and grow. It is important that eCommerce can contribute to grow revenue (and profits) whilst not imposing a heavy burden on your cash flow or threatening your financial stability. Ideally, the financial benefits will need to exceed the financial costs significantly.
<b>What investment resources do you have available?</b>	
<b>Are you aware of the total likely financial cost (investment &amp; recurrent costs) of eCommerce?</b>	
<b>Have you weighed the costs against the benefits?</b>	

After analysing your own situation, you may decide not to adopt web-based eCommerce and instead concentrate on other aspects of business development or make better use of cheaper communication technologies – such as mobile phones, or you may decide to make use of facilities provided by others (Internet cafes or telecentres) rather than invest your own resources in new ICTs.

Careful analysis of the factors outlined will help you understand your own strengths and weaknesses for eCommerce. If you do consider web-based eCommerce to be an essential part of your business plan, then take a step-by-step approach that avoids the pitfalls. Take note of the following tips:

- Your target market should shape your business planning – whether or not to adopt eCommerce.
- Make use of effective business analysis and planning. Remember, your eCommerce plans cannot be separated from your business plans.
- Your available resources will also influence your plan. Make sure the costs can be justified by the benefits.
- Encourage involvement and feedback from your 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.
- The role of new technologies should be assessed only after clear business objectives are established.
- Try and achieve effective integration of on-line and off-line activities – to create cost savings.

**In essence – think about your business before you think about the technology!**



Inside an Internet cafe

## C2. What Kind of eCommerce?

For those who want to get into eCommerce, the following chart is a guide to which of the eCommerce steps would be most appropriate

**Table 2. Steps to eCommerce – what kind of eCommerce?**

<b>Steps to eCommerce</b>	<b>Market Drivers</b>	<b>Considerably improved business communications</b>	<b>Costs</b>	<b>Overall Impact</b>
<b>Step 6: Web Integration</b>	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
<b>Step 5: Web Transacting</b>	Primarily by requirements of customers	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
<b>Step 4: Web Interacting</b>	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
<b>Step 3: Web Publishing</b>	Requirements of customers and the marketplace	Better marketing Better branding Easily updated Well presented	Moderate investment costs	Moderate benefits and relatively moderate costs
<b>Step 2: Email Messaging</b>	Requirements of customers, suppliers, collaborators, support agencies and employees	Considerably improved business Communications Prompt and clear	Moderate investment costs	Very high benefits and moderate costs
<b>Step 1: Simple Messaging</b>	Requirements of customers suppliers, collaborators support agencies and employees	Considerably improved business communications	Low investment costs	Potentially high benefits and relatively low costs

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### **C3. eCommerce Facilitators**

A wide range of facilitating organisations can offer you different types of eCommerce support. This support may range from business advice to web development or market access. Different facilitators can play different roles depending upon your eCommerce requirements. A full list of support organisations in Uganda and overseas can be found in **Sections F and G** of this handbook.

When seeking out eCommerce assistance you should try to choose a facilitating organisation that is actively involved with your target market and in tune with your business requirements – as well as your technical requirements.

For MSEs in Uganda, facilitating organisations fall into several categories. As follows:

#### **Sector-based Agents/Brokers/Resellers**

Example: <http://africanlion.com/> - specialising in coffee exports.

These offer web-based marketing activities and tend to be commission-based. They are able to accept and place orders and they are skilled at information brokering, logistics and supply chain management. They may also offer Internet transactions and electronic banking.

#### **eCommerce-based Trading Hubs or Portals**

Example: [www.expocraftsafrica.co.ug](http://www.expocraftsafrica.co.ug) - specialising in crafts.

These are also commission-based, but offer solely Web-based marketing activities. They are able to accept and place orders, and will be more likely to offer Internet transactions and electronic banking.

#### **Industry Organisations/Business Associations**

Example: <http://www.uganda.co.ug/uma> - Uganda Manufacturers Association

These are usually membership-based (requiring payment of subscriptions). They probably will not have expertise in eCommerce, but can often provide market coordination and information brokering services.

#### **Fair Trade Organisations**

Example: <http://www.catgen.org/> - PEOPLink fair trade portal

They provide market outlets based on fair trade principles. Most offer web-based services and marketing, and some offer a full transaction-based eCommerce service.

#### **NGOs/Business Support Organisations or Telecentres**

Example: <http://www.ceewawires.org/> - Centre for Economic Empowerment of Women

Providers of advice, training and some marketing assistance. They are not likely to have expertise in eCommerce, but may be able to offer advice and assistance.

**ISPs/IT Consultants:**

Example: <http://www.afsat.com> - An Internet Service Provider in Kampala.  
They can offer access to networks, Web development services and possibly eCommerce advice and strategy planning.

You should consider the strengths and weaknesses of any organisation that you consider for support – whether or not the organisation can meet your own needs – particularly for fee-paying services.

**Table 3. eCommerce Facilitators – Strengths and Weaknesses**

<b>Facilitating Organisation</b>	<b>Possible Strengths</b>	<b>Possible Weaknesses</b>
<b>Sector-based Agents/Brokers</b>	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
<b>Resellers</b>	Quick route to market More flexibility for producers in the market	Less security in the market. Price sensitive. Only purchase and resell
<b>eCommerce-based Trading Hubs or Portals</b>	Wider market access	Lack of personal market relationships and contacts
<b>Industry Organisations</b>	Able to advocate on behalf of producers	Limited access to market Lack of market proximity
<b>Fair Trade Organisations</b>	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)
<b>NGOs/Business Support Organisations</b>	Possible sources of finance or subsidy. Local access to resources	Little market access, knowledge or proximity
<b>ISPs IT Consultants</b>	Able to offer local technical support	May have technical expertise, but probably little knowledge of the market within which you are operating

## D. 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 installments depending upon the earning capacity of the business.

Computers can be purchased in Uganda using hire purchase (paying by installments), 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.



Take a course

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



A computer connected to the Internet



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### 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.

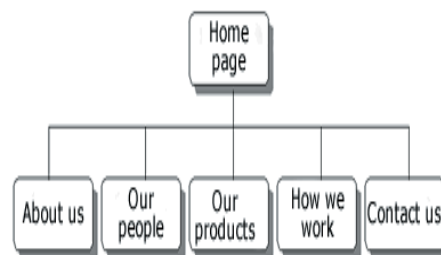
The Internet also has specific resources that will assist market research in relation to product development, business planning, eBusiness development and marketing. These can be accessed via a number of the web sites listed in Section F2.

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 fulfillment.

#### **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

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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 labeled.
- 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.



An typical webpage

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## 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

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- 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, **On-line 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

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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 be able to do on the site? Will the web site facilitate online 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

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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 Fulfillment**

- **Keep the customer informed** – probably via email – this is vitally important. This may include: confirming the sale, the expected

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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 the 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



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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 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.** This 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.

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- **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.

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- **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.

## E. 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.

### E 1. Uganda-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 (CEEWA)** 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 used as a showcase for its members' products. The centre is located at Plot 15, Buganda Road, Kampala.  
Tel: 041 348283, 077406874  
<http://www.expocraftsafrica.co.ug>

**Rank Consult Ltd.** Consultancy services for MSEs. Kampala.  
Mobile: 077454974  
Tel: 346458, Fax 235655  
Email: [wasukira@afsat.com](mailto:wasukira@afsat.com)  
<http://www.rankconsult.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, 1<sup>st</sup> Floor, Jinja Road, Kampala.

**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.

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**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, 5<sup>th</sup> 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](mailto:vmusubire@hotmail.com)  
<http://www.ml2000.co.ug>.

**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>

## **E2. Internet Service Providers (ISPs)**

**1. Africa On Line.** 5<sup>th</sup> Floor – Commercial Plaza, Plot 7 Kampala Road, P.O. Box 29331 Kampala-Uganda.  
Tel: +256-41-258143. 031211200 Fax: +256-41-258144  
Email: [awere@africaonline.com](mailto:awere@africaonline.com)  
Web: [www.africaonline.co.ug](http://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](mailto:info@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](http://www.ntp1.com)

**4. Dehezi International Limited.** 1<sup>st</sup> Floor Commercial Plaza, P.O. Box 16186, Kampala. Tel: +256-41-259211. Fax: +256-41-236395.  
Web: [www.dehezi.net](http://www.dehezi.net)  
Email: [dehezi@sanyutel.com](mailto:dehezi@sanyutel.com)

**5. E-Tech Uganda Limited.** P.O. Box 8711, Kampala-Uganda. 6<sup>th</sup> Floor, Workers House, Plot 1, Pilkington Road.  
Tel: +256-41-236308. Fax: +256-78-260621  
Web: [www.etechug.com](http://www.etechug.com)  
Email: [info@etechuganda.com](mailto:info@etechuganda.com)

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**6.Infocom.** General Manager, Plot No. 2, Clement Hill Road, P.O. Box 8373, Kampala-Uganda.  
Tel: +256-41-342681. Fax: +256-41-342192  
Email: [gm@infocom.co.ug](mailto:gm@infocom.co.ug)  
Web: [www.imul.com](http://www.imul.com)

**8.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](mailto:mtn@mtn.co.ug)  
Web: [www.mtn.co.ug](http://www.mtn.co.ug), [www.mtnconnect.co.ug](http://www.mtnconnect.co.ug)

**9.One2Net.** 7<sup>th</sup> Floor, Workers House, P.O. Box 26411, Kampala-Uganda.  
Tel: 256-41 345466, Fax: 256-41-345468.  
Email: [info@one2net.co.ug](mailto:info@one2net.co.ug)

**10.SpaceNet International,** 4<sup>th</sup> Floor, Diamond Trust, P.O. Box 28685 Kampala-Uganda.  
Tel: +256-41-255300, 255293. Fax: +256-41-345546.  
Email: [sales@spacenetuganda.com](mailto:sales@spacenetuganda.com)  
Web: [www.spacenetuganda.com](http://www.spacenetuganda.com)

**11.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](mailto:utl@utl.co.ug)  
Web: [www.utl.co.ug](http://www.utl.co.ug)

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

### **E3. Some Internet Cafes in Kampala**

**1. Cyber Click**  
P.O Box 4277,  
Kampala, Uganda.  
Tel: 077629467  
Uganda House, Kampala  
Email: [joyhuguru@yahoo.com](mailto:joyhuguru@yahoo.com)

## F. Understanding More About eCommerce

### F1. 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 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.

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**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.



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## 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.

## F2. 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](http://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.

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<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.

### **Help Us Improve This Handbook: ecomm4dev: Ent: Version 1**

Please help us to improve this handbook by providing feedback:

1. Please tell us which parts of the handbook we should keep for the next version, because you found them useful.
  
2. Please tell us which parts of the handbook we could remove for the next version, because you did not find them useful.
  
3. Please tell us which new topics we should add to the next version, because they were missing from this version.

Please return this form:

- By post to: Richard Duncombe/Richard Heeks, IDPM, University of Manchester, Precinct Centre, Manchester, M13 9QH, UK
- By fax to: +44-161-273-8829
- By email to: [richard.duncombe@man.ac.uk](mailto:richard.duncombe@man.ac.uk)

Please include your name and address if you wish to be sent any future versions of this handbook.