

**SRI LANKA BUSINESS DEVELOPMENT CENTRE**



**SURVEY ON E-COMMERCE IMPLEMENTATION  
IN THE SME SECTOR OF SRI LANKA**

**CONDUCTED BY THE SLBDC  
FOR THE ASIA FOUNDATION**

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## Executive Summary

The Asia Foundation was interested in gaining a better understanding of “e-commerce readiness” in Asia, and specifically in Sri Lanka, in terms of the capacity of Sri Lankan firms to participate in emerging web-based global supply networks. With a view to instigate a broad dialogue on these issues, the Foundation assigned the Sri Lanka Business Development Centre (SLBDC) to carry out a research study on the opportunities and challenges faced by the Sri Lankan Small and Medium Size Enterprises (SMEs) in adapting e-commerce into their daily business routines.

The Sri Lanka Business Development Centre (SLBDC) is a private, non-profit, non-stock, service organization established in 1984 with technical and financial assistance provided by USAID under the Private Enterprise Promotion Project (PEPP) to develop, strengthen and stimulate business and industry in Sri Lanka. Since 1996, SLBDC has a strategic alliance with the Ceylon Chamber of Commerce, the premier Chamber of Commerce in the country.

SLBDC using its in-depth experience in carrying out research studies of this nature has successfully completed the assignment entrusted to them. The publication of this survey report is the final deliverable of the research project.

### Survey Sample

Eighty SMEs from various business sectors of the country were selected. The sample was spread among the major business cities in the country and represented both young and old enterprises. SLBDC was careful to segregate the survey sample into four types, successful users, unsuccessful users, prospective users and non-users so that the real life experiences of each category could be analyzed and reported.

### E-Commerce / Internet Implementations in Sri Lanka

The researchers identified that the following Ecommerce / Internet implementations were being used by the SMEs of Sri Lanka with varying degrees of success.

- (a) E-mail and net-meeting applications
- (b) Web sites maintenance
- (c) Procurements on the Net
- (d) Web based sale of goods and services
- (e) Wireless Application Protocol (WAP) implementations
- (f) Trade research
- (g) Internet banking

The survey instrument was focused on identifying the operational realities of the above applications. The primary findings are listed below briefly for those who want to apprehend the ground situation quickly.

### **E-mail and Net Meeting Applications**

83% of the respondents use Internet for business work. E-mail is the widely used Internet application among the respondents. All of them use e-mail on a daily basis.

Out of the 17% who do not have Internet facilities at present about half intend to obtain Internet facilities within 12 months.

Hardly any organization uses Net Meeting as a business tool to improve business to business (B2B) communication. A few individuals within the organizations surveyed by us use Net Meeting but that also randomly for non-commercial purposes.

### **Web Sites Maintenance**

34 respondents out of 80 organizations surveyed by us had web presence.

35% (12 companies) of the above had their own web sites while 61% (21 companies) used the services of web hosting companies. 3% (1 company) used a freelance designer for the hosting of the site.

97% (33 companies) used the web site to promote the company to potential customers while 3% (1 company) used it for collecting visitor information for market intelligence.

The most prominent driving force identified by the respondents for using a web presence was the "unlimited exposure to the global marketplace" (33%) while "direct interface with customers" was cited by 22% of the respondents. "Low advertising cost" and "prestige" was next with both voting 13%. "Personalized customer care" voted 10% and 9% of the respondents had other reasons for having a web site.

Cost of developing a web site averaged below Rs 100,000/- (about USD 1,000/-) while maintenance cost per annum averaged below Rs 50,000/- (about USD 500/-).

None of the respondents was monitoring the visitor profiles to the web site and nobody had a clue about the number of hits per month on the web site.

### **Procurements on the Net**

About 10% of the Internet users purchase goods over the Internet. The merchandise mostly comprises of books, software, spare parts and IT related equipment.

Payments are made usually by the credit card.

A notable trend was that the companies always go for a known trade name to purchase instead of searching the net for cheaper alternatives. This may be because the concept of buying on the Net is still naïve to Sri Lankan SMEs.

### **Web based sale of goods and services**

The level of penetration of the web based selling is very much limited.

Very few companies surveyed by us had used the services of a web portal for selling their goods and services.

The portals were local establishments. None had used a strong dot.com company for this service.

The portal took the responsibility of forwarding trade enquires to the company.

The success stories were nil.

### **Wireless Application Protocol (WAP) implementations**

The mobile phone companies have been promoting WAP applications for quite sometime now.

The available applications include exchange rates, cricket scores, horoscope, stock market, flight information, etc. The most favorite is the cricket scores.

The business volumes on WAP implementations are low.

The reasons for low volumes are the lack of proper equipment, lack of customer awareness and attitude, etc.

The phone companies see that the high promotional and operational cost as the main barrier to enhance this service.

### **Trade research**

The SMEs use the Internet extensively for trade research.

Like in any other country, Sri Lankans use the maximum potential of the Internet to absorb the technical know-how from the outside world.

Almost 100% of the SMEs who used the Internet at the time of our survey reported that they were using the Net for at least one of the following

- Free downloading of device drivers from the OEMs
- Free evaluation software downloads
- Obtaining technical documentation / research papers
- User manuals and sales catalogues
- Getting competitor information
- Getting trade know-how and new ideas

## **Internet banking**

Sampath and HSBC are the main bankers used by the Sri Lankan SMEs for Internet banking.

The reasons for using them were convenience, proven security, less conflicts (words from a respondent), economical operation, etc.

The normal Internet banking operations were balance verification, requesting statements, transferring funds between accounts, paying bills, requesting cheque books, etc.

The length of period of use averaged to about 1 year.

Almost all respondents agreed that Internet banking once implemented with proper security precautions would benefit the customer providing state-of-the-art technology at a touch of a button.

The major advantage being the rapid response and dynamic operation without having to waste time in the traffic jams.

However, several respondents stated that they did not wish to go for Internet banking for some time since they were worried about the security aspects. It was strange that even a prominent software company in the country had the same view.

## **Practical problems on adapting e-commerce for day-to-day business activities**

- High cost of computer equipment
- High Initial set-up costs
- Cost of telephone connections and charges
- Monthly Internet subscription rates
- Financial constraints
- Constraints in using credit cards
- Insufficient access speed – Outside Colombo
- Insufficient bandwidth – Outside Colombo
- Lack of IT skills among employees
- Lack of IT strategy within management ranks
- Poor English language skills among staff

## **Legal concerns on e-commerce adaptation**

There is no law governing E-Commerce at present. Normal trade laws prevail over all business transactions carried out in Sri Lanka.

All payments to foreign companies on account of on-line purchases are covered by the Central Bank and Exchange Control Department's regulations regarding foreign exchange and third party payments.

Items shipped by the foreign companies on account of the on-line purchases are subjected to the Customs Duty, GST, etc as usual before clearance.

## Key Findings of the Survey

### Positive

- ❖ The level of service provided by the local ISPs is satisfactory though the slow response times / transmission interruptions prevail due to poor infrastructure facilities within the telecom industry.
- ❖ Trade research on the Net is very well established in Sri Lanka.
- ❖ Development and running cost of Internet applications are comparatively cheap in Sri Lanka though some SMEs expressed the view that it was expensive.

### Negative

- ❖ The SMEs are not geared up to take up ECommerce as a serious business concept.
- ❖ Overall lack of knowledge and awareness about the benefits of E-Commerce among the management of the SMEs.
- ❖ Limited employee exposure to the information technology products.
- ❖ Poor English knowledge of the management and the staff is an acute operational problem when using ICT products and training on them.
- ❖ Web based selling of goods is not practically successful at present.
- ❖ Web based selling of services (particularly hotel reservations) is yet to get recognition. This will probably catch up with the expected upward thrust of the tourism industry.
- ❖ Internet banking and using web portals are not well rooted in Sri Lanka at the SME level.
- ❖ Infrastructure facilities are not adequate for high volume e-commerce applications. Especially the non-availability (or non functionality) of communication facilities (bandwidth problems, etc) was cited by almost all respondents at the detailed level analysis.
- ❖ On-line payments remain an obstacle to carry out purchases since credit card payments are governed by the credit card limit. Normal credit card limit in Sri Lanka is between USD 500/- and USD 1,000/- and therefore it is difficult to purchase high value items or purchase in bulk for re-sale.

## Chapter One – Introduction

### 1.1 Objectives of the Survey

The following are the declared objectives of the survey.

- 1.1.1 Analyze the extent to which the business community in Sri Lanka utilizes the World Wide Web (www) to source markets for its inputs.
- 1.1.2 Ascertain the perceptions of the business community regarding adaptation of the way they do business presently to accommodate advances in information technology and the opportunities presented by the Internet.
- 1.1.3 Review existing examples of companies that have succeeded in using the Internet to sell or source products.
- 1.1.4 Understand why companies those are receptive to transforming their traditional relationships in order to participate more effectively in emerging web-based supply networks have not succeeded in doing so.
- 1.1.5 Identify certain business sectors or industries that may have the potential to transform themselves to be able to participate in web-based supply networks.

### 1.2 Acknowledgements

We acknowledge the valuable comments and viewpoints expressed by the following personnel of the Asia Foundation in successfully completing the survey.

Ms Erin T Weiser,  
Assistant Director,  
Economic Reform & Development (USA),

Mr Roderick Brazier,  
Director,  
Economic Program (Indonesia)

Ms Dinesha de Silva,  
Assistant Representative (Sri Lanka)

### 1.3 Participants

The following personnel participated in the survey at decision-making levels.

Ms Rohanthi Perera  
Executive Director  
Sri Lanka Business Development Centre

Mr Udayana Seneviratna  
Manager Corporate and Public Affairs  
Sri Lanka Business Development Centre

Mr Keerthi Gunasekera  
International IT Consultant

Mr Charaka Senarathna  
IT Consultant

### 1.4 Survey Methodology

The survey was conducted in four stages as described below.

#### 1.4.1 Stage One – Planning

- ❖ Formation of the study group inclusive of consultants, statisticians, enumerators and field investigators for conducting the survey.
- ❖ Selection of the survey sample consisting 80 small to medium enterprises from all major cities in Sri Lanka.
- ❖ Designing of the survey instrument to cover the objectives of the survey and important aspects of e-commerce.
- ❖ Training the relevant staff for effectively conducting the survey.

#### 1.4.2 Stage Two – Data Collection

- ❖ Conducted field interviews in all major business cities of Sri Lanka, viz. Colombo, Kandy, Kurunegala and Galle using the survey instrument.
- ❖ Conducted specific research work on a few selected companies to know their perception on e-commerce and to use their business profiles as “case studies”.

### **1.4.3 Stage Three – Data Analysis and Presentation**

At the stage three, the responses gathered from the sample group were logically and statistically analyzed and the key findings, trends and behavior patterns were identified.

A presentation that

- (a) discussed E-commerce concepts in brief,
- (b) reported on the level of E-Commerce adaptation by Sri Lankan SMEs,
- (c) examined the E-Commerce usage patterns of Sri Lankan SMEs,
- (d) provided insight into the practical problems encountered by the SMEs,

was produced using the information gathered from the survey.

We made initial recommendations in this presentation for encouraging SMEs to use E-Commerce as an effective business tool.

The presentation was demonstrated to Ms Erin T Weiser, Assistant Director, Economic Reform & Development (USA), Mr Roderick Brazier, Director, Economic Program (Indonesia) and Ms Dinesha de Silva, Assistant Representative (Sri Lanka) of the Asia Foundation on 02-05-2002 at the Sri Lanka Business Development Centre. The comments made by them were noted and used to improve the activities of the next stage.

### **1.4.4 Stage Four – Finalization / Confirmation of the Findings and the Preparation of the Final Report**

A focus group of 20 companies was selected for further study and analysis. This included a few large companies in order to have a better understanding of the on-going business activities related to e-commerce.

The findings of this detailed analysis were reviewed, compared and merged with the results of the stage three.

Discussions with telecom operators such as Sri Lanka Telecom and Hutchison Telecom were useful to gain a first hand knowledge on the available infrastructure facilities and problems and bottlenecks encountered in improving the existing facilities.

This report is the culmination of our research activities where we attempt to present a generalized business scenario on e-commerce within the SME sector in Sri Lanka.

## 1.5 Survey Sample Composition and Analysis

### 1.5.1 Survey Sample Selection Criteria

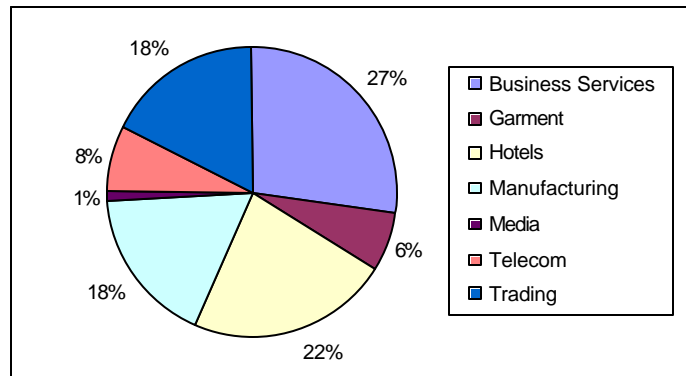
- ❖ A mix of businesses representing major business segments of Sri Lanka and located in major cities in the island.
- ❖ A mix of businesses from the old and the young enterprises.
- ❖ A mix of businesses having varied capital strengths.
- ❖ A mix of businesses having different levels of IT resources.
- ❖ A mix of businesses having different levels of exposure to e-commerce.

### 1.5.2 Survey Sample Composition – Business Sectorwise

The composition of the survey sample analyzed into business sectors is given below.

Business Services	22
Garments Manufacturers	5
Hotels	18
Manufacturing Companies	14
Media Organizations	1
Telecom Organizations	6
Trading Companies	14
Total	80

The above composition could be graphically depicted as follows.

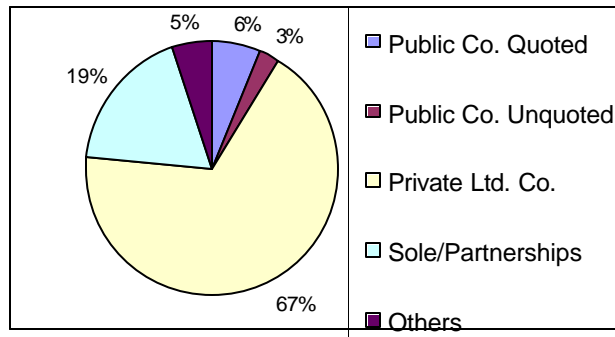


### 1.5.3 Survey Sample Composition – Ownership Data

The composition of the survey sample analyzed into type of ownership is given below.

Public Quoted Companies	5
Public Unquoted Companies	2
Private Limited Companies	54
Sole/Partnerships	15
Others	4
 Total	 80

The above composition could be graphically depicted as follows.

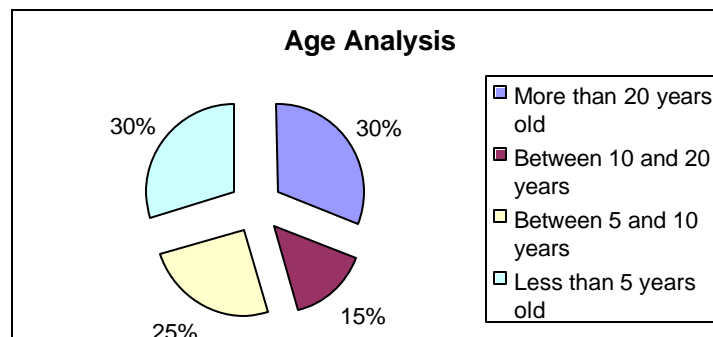


### 1.5.4 Survey Sample Composition – Age of the Organization

The composition of the survey sample analyzed into the age of the organization is given below.

More than 20 years old	31%
Between 10 and 20 years	15%
Between 5 and 10 years	24%
Less than 5 years old	30%
 Total	 100%

The above composition could be graphically depicted as follows.

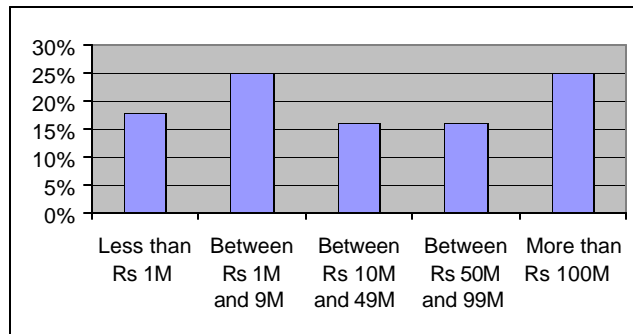


### 1.5.5 Survey Sample Composition – Paid Up Capital

The composition of the survey sample analyzed into the age of the organization is given below.

Less than Rs. 1 Million	18%
Between Rs. 1 Million and Rs. 9 Million	25%
Between Rs. 10 Million and Rs. 49 Million	16%
Between Rs. 50 Million and Rs. 99 Million	16%
More than Rs. 100 Million	25%
 Total	 100%

The above composition could be graphically depicted as follows.

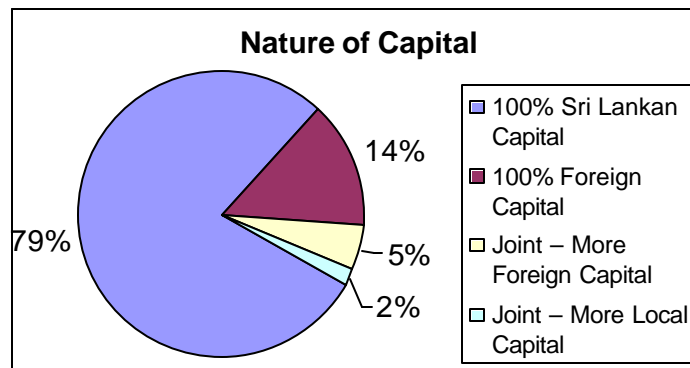


### 1.5.6 Survey Sample Composition – Type of Capital Local/Foreign

The composition of the survey sample analyzed into the type of Capital Local/Foreign is given below.

100% Sri Lankan Capital	79%
100% Foreign Capital	14%
Joint – More Foreign Capital	5%
Joint – More Local Capital	2%
 Total	 100%

The above composition could be graphically depicted as follows.



## 1.6 Defining E-commerce

1.6.1 Commerce is the exchange of products and/or services for a payment. This essentially identifies buyers (those who want to buy products and/or services for money) and sellers (those who want to sell products and/or services for money). The payment is made at the time of purchase (cash sale) or later on, in the case of a credit sale. The buyers and sellers communicate/negotiate either face-to-face or using conventional methods such as written quotations, faxes, etc. These commercial activities have the following inherent disadvantages that make the transaction processes lengthy, expensive and cumbersome.

- (a) Language barriers
- (b) Geographical barriers
- (c) Transportation barriers
- (d) Legal barriers
- (e) Time barriers
- (f) And more

1.6.2 Advent of the Internet based E-commerce (Electronic Commerce) encompassed a wide range of technologies and connections between groups, offering a long range of definitions for consideration.

E-commerce has become a cliché in it's own right. Newspapers, magazines, billboards, books, just about any media engine, have been rushing to use the prefix 'e' of electronic. Defining 'e' -commerce is therefore no easy task. The broad definition offered by the UK Department of Trade and Industry (DTI) for electronic commerce (or e-commerce) is as follows.

**“ Electronic commerce is the exchange of information across electronic networks at any stage in the supply chain, whether within an organization, between business and consumers or between public and private sectors, whether paid or unpaid” - (Cabinet Office, 1999)**

1.6.3 Key e-commerce connections are defined in most business documentations according to the groups they impact or involve.

- **Business-to-Business** or '**B2B**' e-commerce is a business-only transaction or information exchange between two or more organizations, between a product manufacturer and the product distributor for instance.

It refers to all forms of wholesale commercial transactions conducted over an exclusive or open computer-mediated network but the payment and ultimate delivery of the goods or services may be conducted on or off-line.

- **Business-to-Consumer** or '**B2C**' gains more media exposure than B2B, and is thus better understood by the general public. Amazon.com is a high profile example of the retail function B2C companies offer consumers. Incorporated into this definition is the full set of interactions companies offer via their sales or promotional (home) web sites.

It refers to all forms of retail commercial transactions occurring over an open network that includes on-line selling of goods and services directly to the customers.

1.6.4 Other definitions pertinent to this report include,

- **Dematerialization**, a term used to describe the disappearance of many physical, tangible aspects of business which have been replaced by a digital equivalent (e.g. Paper)
- **E-tailing**, a shorten version of 'electronic retailing' or commerce.

1.6.5 Benefits of E-Commerce

- E-commerce has the ability to take your business worldwide using rich IT capabilities of the Internet and working with global currencies, secured payment methods, etc bypassing the cultural and geographical barriers, etc pertinent to conventional commerce activities ( refer 1.6.1 ).
- You can close more business deals rapidly enhancing business output and saving time and money for both the buyers and sellers since e-commerce allows you to interact dynamically and to make decisions on-line.
- You could assist customers by answering their questions in real time and solving their problems then and there thus improving the customer confidence and loyalty towards your organization.
- You can conduct e-meetings with co-workers and business partners regardless of location, saving travel costs.
- You can streamline and connect processes like product discovery, negotiation, ordering, transaction fulfillment, delivery, inventory and accounting irrespective of the physical location of the resource.
- It is easy to create value around the business transactions by offering enhanced order features such as order status verification, back orders information, immediate re-orders, etc
- Doors of your shop are wide open to your customers from all over the world, 24hours X 7 days a week since there are no time boundaries for work on the Internet.
- Integrated e-commerce solutions allow you to despatch your merchandise with speed and accuracy to your customers and to carry out backend tasks such as inventory management and accounting with ease.
- You can monitor customer preferences and behavioural patterns with much accuracy and develop your marketing and sales strategies to suit your requirements. This will result in less inventory management costs and obsolete stocks.
- You can support your customers by listing useful links on your web site (sort of trade referencing) so that your customers may develop a brand loyalty with you.
- You can incorporate search features in your web site that allows multiple searches so that your customers will benefit by always coming to your site.

## Chapter Two – Sri Lankan Scenario

### 2.1 Sri Lankan Political Scenario

#### 2.1.1 History

Sri Lanka is an ancient land with highly developed prehistoric human settlements. It is one of the few countries of the world that has a written history of more than 2500 years. Recorded history begins from about the 4th century BC when people settled down in Anuradhapura. The King of Anuradhapura embraced Buddhism in 427 BC. Invasions from South India continued and in the 11th Century AD, after repeated threats from South India, the Sinhalese Kingdom moved its capital to Polonnaruwa and then southwards. This resulted in the abandonment of the highly developed tank (reservoir) irrigated rice cultivation system, which the Sinhalese had developed and resulted in the decline of the Sri Lankan agrarian economy. The remains of the civilization from 500 BC to 1300 AD are the spirit and inspiration of the people of Sri Lanka.

In 1505 the Portuguese captured the coastal belt and ruled it until the Dutch ousted them in 1658. The Dutch were displaced by the British in 1796. The British captured the Kandyan Kingdom in the Central Hills and brought the entire country under their rule in 1815 and unified the administration in 1833. A Legislative Council was established in the same year to administer the country. The Governor presided at the Legislative Council meetings and the key officials of the Government were appointed members. Unofficial members representing the different communities were also appointed. But they enjoyed no power. The first phase of Sri Lanka's independence struggle was to pressurize the British to increase the number of unofficial members and to give them power. Then they asked for elected representation and finally for independence.

Sri Lanka attained independence from the colonial rulers on 4th February 1948 but still legally functioned as a British colony named Ceylon. It became a Republic on 22nd May 1972 under the leadership of Ms Sirimawo Bandaranayake, the world's first woman Prime Minister.

The constitution was further modified in 1982 with the appointment of an Executive President who has wide-ranging powers over the other state machinery and people.

Sri Lanka has been fortunate enough to be a democracy since independence though there were several threats to democracy from the extremist elements.

### 2.1.2 Present State of Affairs

The country has an Executive President elected by the people. The president appoints the Cabinet of Ministers. The president also appoints the Chief Justice. The judiciary is independent and there is a legislative parliament whose members are appointed by the people. The appointment of members of parliament is based on a proportional representation system.

There are nine Provincial Councils whose members are also appointed by the people. The provincial council system was brought about as a remedy to the ongoing ethnic problems but has not served much purpose either to solve ethnic problems or to improve the sluggish economy.

### 2.1.3 Ethnic War and Peace Efforts

The country is engaged in a bloody ethnic war since 1983. The LTTE, a well known terrorist organization that even banned in USA, Canada, UK and India, has been demanding a separate state consisting more than 66% of the land mass for the minority Tamils of Sri Lankan origin who represent about 10% of the total population. More than 60,000 lives have been lost and about half a million people have been displaced from their original habitats.

The war efforts of the government have been futile mainly due to the support LTTE gets from various external elements and due to its own inefficient security machinery.

Present Prime Minister Ranil Wickremasinghe has been able to negotiate a cessation of hostilities with the LTTE after coming into power and has been able to hold it successfully for over hundred days.

The whole world is now waiting to see the outcome of the proposed peace talks to be held in Thailand.

The Prime Minister is in the view that the country should take the path to peace though it is very difficult. The same view is shared by many Sri Lankans as evidenced by the recent elections to the local government bodies.

## 2.2 Sri Lankan Business Scenario

### 2.2.1 Business in the Yesteryears

Sri Lanka has a very well established and deep-rooted private sector. The British planters brought in the commercial thinking and working procedures into Sri Lanka during the occupation period for the sake of improving coffee and subsequently tea plantations.

Successive governments except during the seven years regime of the United Front government have been encouraging the development of the private sector identifying it as the prime contributor to the growth of the national economy.

With the introduction of the free economy by the government of Mr J R Jayawadena there has been a positive growth in the foreign direct investment into the country. Establishment of export processing zones (EPZs) under the patronage of the Board of Investment (BOI) allowing investors special incentives including tax concessions had a huge impact in the national economy tremendously increasing the employment opportunities for the rural youth.

The other positive contributor to the national economy has been the foreign employment sector. More than a million Sri Lankans are employed overseas, especially in the Middle Eastern countries and in countries such as Italy and Japan remitting a huge amount to the coffers of the government as foreign exchange.

The devastating attack on the Airport and the power crisis that compelled the government to cut power for more than eight hours a day had direct impacts on the growth of the national economy.

### 2.2.2 Present Business Climate

At present the business houses (non arms dealers) are shedding ashes from the ethnic war and breathing again during the cease-fire that has lasted 100 days by now.

Tourist arrivals have picked up and the stock exchange indices are gradually rising.

However the government is at a bankrupt situation where public debt has risen to unprecedented levels due to excessive war expenditure.

The SMEs are grumbling that there are no government projects coming up at all within their reach. Therefore maintaining the businesses and paying routine bills have become a terrible problem for them.

Those who were engaged in exporting trade also have experienced a slow down due to worldwide economic epidemics spread due to the 11<sup>th</sup> September attacks in the USA.

Another problem is that due to budgetary restrictions imposed on the government departments they have been unable to settle the invoices of their suppliers, some pending over 18 months. This has further aggravated the plight of the SMEs who normally operate on very limited working capitals.

## **2.3 Sri Lankan IT Scenario**

### **2.3.1 Public Sector**

The development of IT in the public sector has been hindered by the lack of funds. However, due to generous grants from the donor countries and with the help of the World Bank, IMF, etc, the public sector has initiated many IT projects and implemented them to a satisfactory level during the past ten years.

The eradication of the millennium bug from the computer systems in the public sector is a good example for the capability of this sector. There were no major incidents reported from the public sector due to Y2K bug.

### **2.3.2 Private Sector**

Private sector of Sri Lanka has reaped the maximum benefits from the information technology revolution. Almost all private sector banks of Sri Lanka are now fully computerized and offer their customers various on-line services.

All popular IT brands are well represented in Sri Lanka at present and 100% of the business houses as well as a majority of the medium sized companies use information technology for their day to day business and record keeping functions.

The Colombo Stock Exchange (CSE) is also fully computerized and bidding could be done on-line.

### **2.3.3 Laws on Information Technology**

The government is planning to enact laws on information technology crimes in July 2002 to deter the misuse of IT related products and services, the Ministry of Economic Reform, Science and Technology has announced. It also intends to enhance the existing laws on intellectual property by mid-2003.

The ministry said it also plans to enact laws to facilitate all forms of electronic commercial transactions (e-commerce) this year and introduce voluntary guidelines to fulfill the requirements imposed by the European community data protection directive by mid-2003.

### **2.3.4 Training on Information Technology**

Sri Lankan families have a deep thrust for knowledge acquisition and the children are sent to tuition colleges and IT education centres at very early ages. The business of IT training is blooming. All popular IT training houses of India (such as NIIT) have established branches in Sri Lanka.

In addition, all universities offer bachelors degrees in Information Technology while the University of Colombo has a postgraduate degree program for IT. There are no higher research degrees offered by any of the universities at present.

### **2.3.5 Exporting IT Products**

There are a few software houses exporting IT products to the USA and Europe, the most successful being VirtUSA (formerly known as e-Runway), while some prominent international software houses have established their development centers in Sri Lanka.

However the Sri Lankan companies face severe competition from neighboring India who dominates the world market for offshore development.

## **2.4 Sri Lankan E-Commerce Scenario**

### **2.4.1 Internet Service Providers (ISPs)**

There are several licensed Internet Service Providers in the country. The most prominent ones are the Sri Lanka Telecom, Suntel, Lanka Online, Eureka, Itmin, Lanka Com Services and Dialog. In addition, there are more than twenty software companies providing web based software solutions.

The level of service provided by the ISPs is considered as average by many SMEs mainly because of the fact that the telecom infrastructure of the country is not up-to-date.

ISDN and Packet Switching Networks are available but not yet widespread. Recently Sri Lanka Telecom commissioned a state-of-the-art fiber optics backbone between Colombo and Kandy but the results not yet obvious.

### **2.4.2 Web Portals**

A considerable number of web portals are operating in the country. Almost all ISPs carry out this business as well.

The same companies have web malls on their sites.

### **2.4.3 Cyber Cafes**

It is quite interesting to know that most major cities in the Western Province has cyber cafés now. The rates are very moderate and mainly undergraduates and school children, etc are seen using them to surf the Net.

### **2.4.4 E-Learning**

There have been some positive activities in E-Learning in Sri Lanka during the recent past. There is a trend among the students who cannot afford to travel abroad for higher studies due to financial constraints to register themselves for e-learning courses. This saves both time and money since learning schedules (rather than teaching classes) could be tailored to suit the individual's preference. Students are free to work during the daytime and to learn during the evenings.

The first ever Internet virtual campus and the e-learning centre in Sri Lanka was inaugurated by the Minister of Mass Media at the Singapore Informatics, Colombo recently. It was reported that there were around 1000 courses available for skills development, business and IT fields and students could undertake these studies through e-learning centres in their hometowns.

#### 2.4.5 E-Governance

Though not related to e-commerce directly, Sri Lankan government is on its way to establish e-governance entities.

For example, a new company could be incorporated within 24 hours over the Internet by submitting applications over the Net. ([www.drc.gov.lk](http://www.drc.gov.lk)). Another example is the issuance of a passport within one day using the Internet Applications ([www.immigration.gov.lk](http://www.immigration.gov.lk))

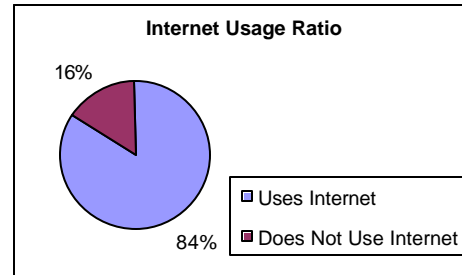
## Chapter Three – Internet Usage

### 3.1 Current Usage Patterns

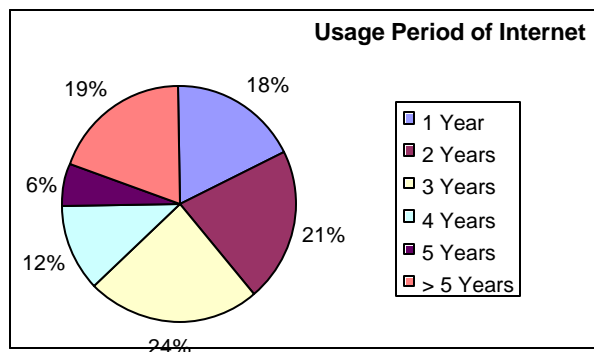
#### 3.1.1 The Use of Internet

- ❖ The use of Internet is widespread among Sri Lankan enterprises. The survey result given below shows that about 84% of SMEs using Internet for business purposes.

	Response	%
Uses Internet	67	84%
Does Not Use Internet	13	16%
Totals	80	100%



- ❖ Out of the 67 companies that use the Internet for business purposes 63% have been using the Internet for less than 3 years while only 19% have been using the Internet for more than 5 years. It reveals that the Internet use has become popular during the last three years of time.



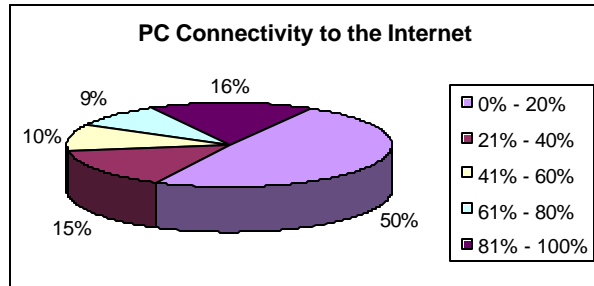
Length	Response	%
1 Year	12	18%
2 Years	14	21%
3 Years	16	24%
4 Years	8	12%
5 Years	4	6%
> 5 Years	13	19%
Totals	67	100%

- ❖ 50% of the respondents having Internet access stated that the level of PC connectivity to the Internet is between 0 – 20%, 15% stated that the connectivity ratio is between 21% - 40%, 10% stated that the ratio is between 41% - 60%, 9% had a ratio between 61% - 80% and finally 16% of the respondents had a very high connectivity ratio of 81% to 100%.

% of PCs Connected to the Internet	Response	%
0% - 20%	33	50%
21% - 40%	10	15%
41% - 60%	7	10%
61% - 80%	6	9%
81% - 100%	11	16%
Totals	67	100%

This result indicates that the companies tend to limit the access to the Internet to a selected set of employees rather than making use of the Internet for business development.

It can be assumed that the companies adopt this usage pattern to contain the operational cost.

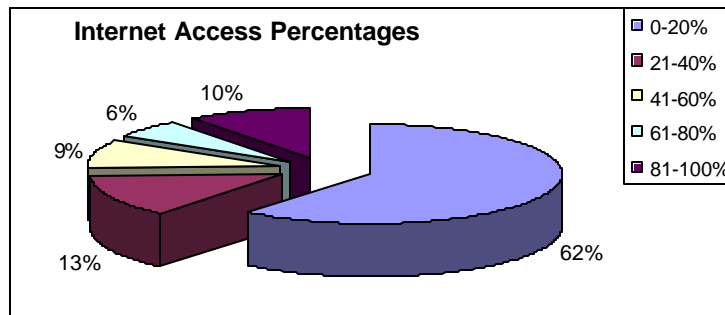


- ❖ 62% of the respondents having Internet access stated that the level of Employee Access to the Internet is between 0 – 20%, 13% stated that the connectivity ratio is between 21% - 40%, 9% stated that the ratio is between 41% - 60%, 6% had a ratio between 61% - 80% and finally 10% of the respondents had a very high connectivity ratio of 81% to 100%.

This result indicates that in most of the cases only a selected few of a company have the access to the Internet with the exception of hi-tech companies where a high percentage of employees has access.

This result matches with the previous one where we inquired about the PC connectivity to the Internet.

% of Employees Having Internet Access	Response	%
0 - 20%	41	62%
21 - 40%	9	13%
41 - 60%	6	9%
61 - 80%	4	6%
81 - 100%	7	10%
Totals	67	100%



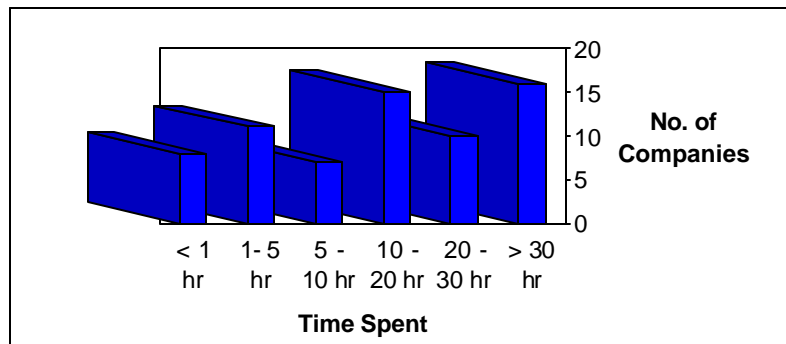
- ❖ Next we inquired about the time spent by the companies on the Internet in a given month. The respondents came up with a startling news. Though they had the facilities to access the Internet, very few of them actually used it as a business tool as indicated by the usage pattern given in the table to the left.

Time Spent	Response	%
< 1 hr	8	12%
1- 5 hr	11	16%
5 - 10 hr	7	10%
10 - 20 hr	15	22%
20 - 30 hr	10	15%
> 30 hr	16	25%
Totals	67	100%

About 75% use the Internet for less than one hour per day while 25% of the respondents use it for more than one hour.

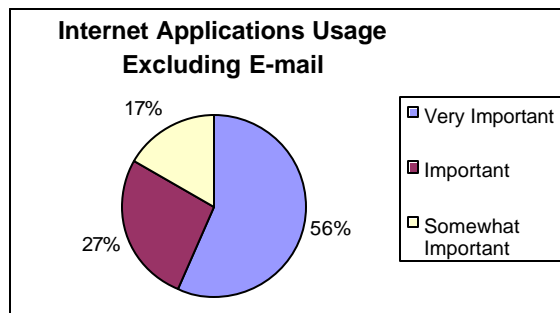
It can be assumed that the low usage pattern of the Internet is due to the reasons such as,

- The staff is preoccupied with other tasks.
- Management does not encourage the use of the Internet other than for viewing and sending e-mail.
- There are no time consuming Internet applications such as e-commerce applications installed at the SMEs.
- The SMEs do not consider the usage of Internet applications as important to their business success.



- ❖ To validate the reason (d) of the above, we inquired about the importance the SMEs place on the use of Internet applications.

A clear majority (56%) accepted that it is very important for their businesses to use Internet. This excludes the reason (d) given above for the low usage pattern of the Internet.

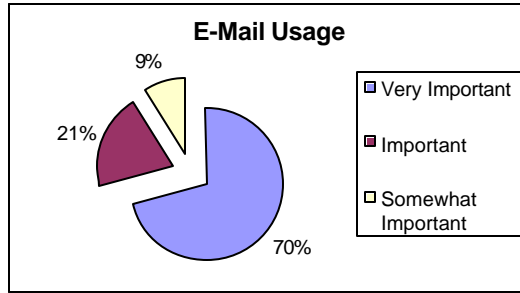


### 3.1.2 The use of E-Mail

- ❖ Out of the 67 Internet users responded to our survey 72% believe that the e-mail is a very important tool for their business success. Only 7% believe that the e-mail is somewhat important and nobody believed that the e-mail is not important or indifferent to their business success.

Perception	Response	%
Very Important	48	72%
Important	14	21%
Somewhat Important	5	7%
Totals	67	100%

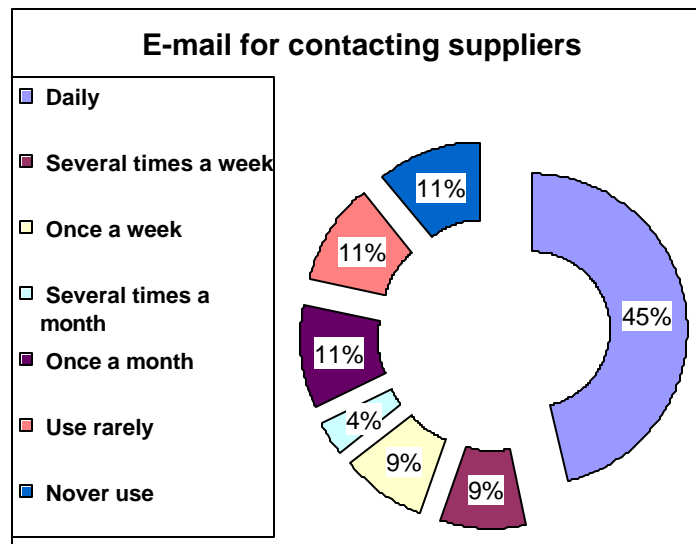
This is an encouraging result since it shows that the SMEs now have understood the importance of the modern IT assisted business tools to better their business performance though they do not effectively use them due to other reasons.



- ❖ The response from the SMEs on the use of e-mail to communicate with the suppliers was as follows.

Frequency	Response	%
Daily	26	46%
Several times a week	5	9%
Once a week	5	9%
Several times a month	2	3%
Once a month	6	11%
Use rarely	6	11%
Never use	6	11%
Totals	56	

The main finding is that the SMEs use the E-mail for contacting suppliers very frequently, about 63% doing so at least once a week and 46% on a daily basis.

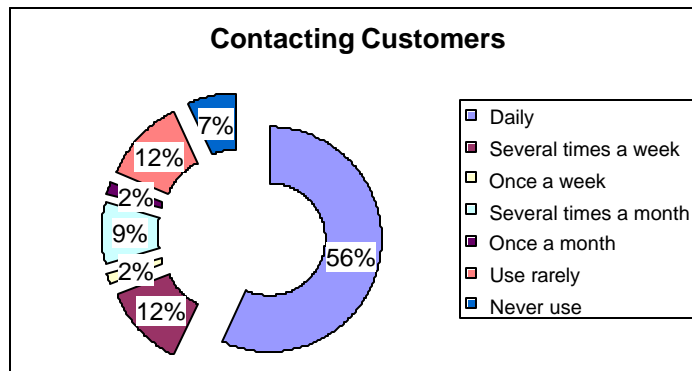


- ❖ The response from the SMEs on the usage of E-mail for communicating with customers is also a positive result as depicted below.

70% of the SMEs who responded to our enquiry communicate with the customers over the Internet at least once a week and 56% doing so on a daily basis.

This finding matches with the response summary for the previous question where we inquired about contacting the suppliers.

Frequency	Response	%
Daily	33	56%
Several times a week	7	12%
Once a week	1	2%
Several times a month	5	9%
Once a month	1	2%
Use rarely	7	12%
Never use	4	7%
Totals	58	100%



### 3.1.3 The Use of Net Meeting

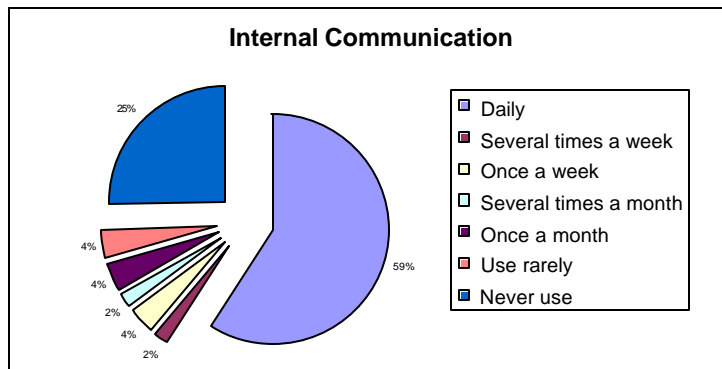
Our research indicated that the Net Meeting as a business tool is not used by the SMEs at present. Only several individuals within the organizations surveyed by us use Net Meeting, that also randomly, for non-commercial purposes.

This may be because of the slow exposure of the management to the latest IT trends and business tools available in the marketplace today.

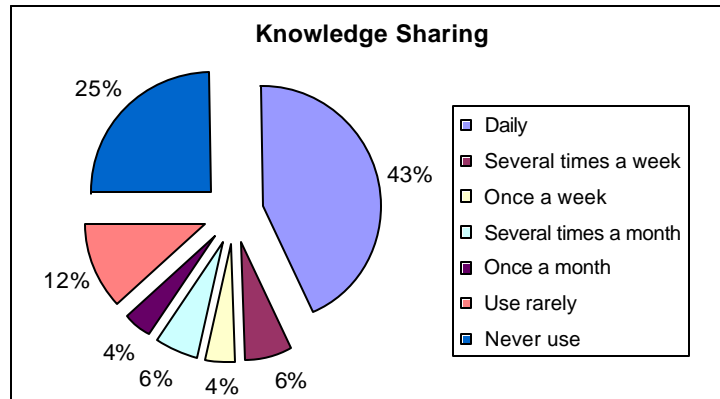
However, people use the Internet and in some cases Intranets to communicate with colleagues and share business knowledge and information to enhance competitive advantage of the businesses as given below.

Internal Communication			Knowledge Sharing		
Frequency	Response	%	Frequency	Response	%
Daily	30	59%	Daily	22	43%
Several times a week	1	2%	Several times a week	3	6%
Once a week	2	4%	Once a week	2	4%
Several times a month	1	2%	Several times a month	3	6%
Once a month	2	4%	Once a month	2	4%
Use rarely	2	4%	Use rarely	6	12%
Never use	13	25%	Never use	13	25%
Totals	51	100%	Totals	51	100%

The analysis of the above result indicates that nearly 41% of the Internet/Intranet users do not use it for internal communication on a daily basis and probably use the good old telephone for this purpose.



When it comes to knowledge sharing over the Internet, the result is more downward and nearly 57% do not use Internet/Intranet for knowledge sharing on a daily basis.



The reasons for the non-usage of Internet/Intranets for the internal communication and knowledge sharing purposes may be the following.

- Work ethics where personal attachments are strong and discussions are held face to face.
- Poor response times in the Internet/Intranets so that people prefer to use alternative modes of communication that are faster.
- Cost considerations.
- Sense of security.

### 3.1.4 The Use of Internet for Trade Research

- ❖ The SMEs use the Internet extensively for trade research.
- ❖ Like in any other country Sri Lankans use the maximum potential of the Internet to absorb the technical know-how.
- ❖ Almost 100% of the SMEs who used the Internet at the time of our survey reported that they were using the Net for at least one of the following.
  - Free downloading of device drivers from the OEMs
  - Free evaluation software downloads
  - Obtaining technical documentation / research papers
  - User manuals and sales catalogues
  - Getting competitor information
  - Getting trade know-how and new ideas
- ❖ Frequency of use varied considerably probably due to the fact that we selected the survey sample from varied business segments.

The companies engaged in software and IT related businesses reported the highest frequency of use where as garments sector reported the lowest frequency of trade research on the Internet.

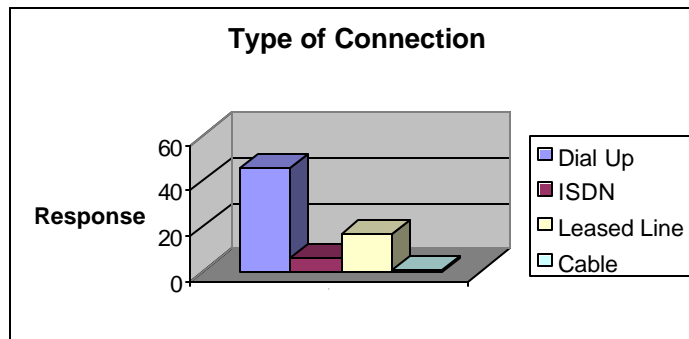
### 3.2 Infrastructure

#### 3.2.1 Type of Connection

We inquired from the Internet users of our survey sample about the types of Internet connections that they use at present. Multiple answers were possible for this question and the results were as follows.

The majority (66%) of the connections were dial up connections while 24% of them were leased lines. ISDN penetration was very low polling only 9%.

Type of Connection	Response	%
Dial Up	46	66%
ISDN	6	9%
Leased Line	17	24%
Cable	1	1%
Totals	70	100%



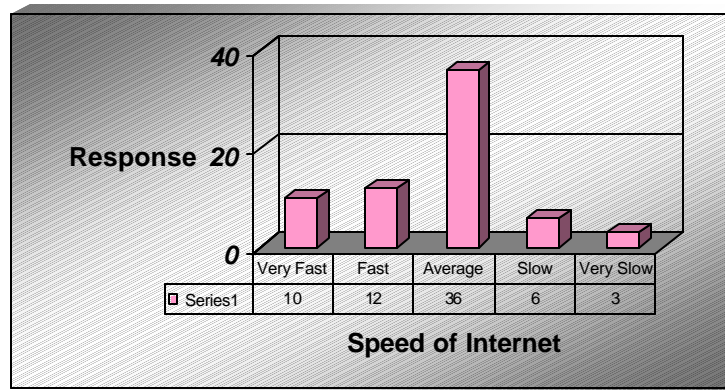
It is evident from the high percentage of dial up connections that the SME sector is not practicing e-commerce for selling items over the net where dedicated lines are required to serve the e-commerce traffic.

### 3.2.2 Speed of the Internet Connection

We attempted to enumerate the average speeds received from each type of connection but failed since the respondents did not have any clear idea on the real throughput of the lines.

However, they responded to a general speed evaluation question and the results of which are presented below.

Speed of Internet Connection	Response	%
Very Fast	10	15%
Fast	12	18%
Average	36	54%
Slow	6	9%
Very Slow	3	4%
<b>Total</b>	<b>67</b>	<b>100%</b>



The above result identifies that a clear majority of the cases (54%) consider the speed of their Internet connection to be average.

Only 13% of the respondents are unhappy about their Internet connections declaring them as slow or very slow.

The experience of the researchers also match with the above result but there are frustrating peak hours also where ISPs are overburdened with connections and the web speeds coming to a near halt. Things should improve with the infrastructure improvements proposed by the main telecom operators in the country, Sri Lanka Telecom and the Suntel.

### 3.3 Cost Factor

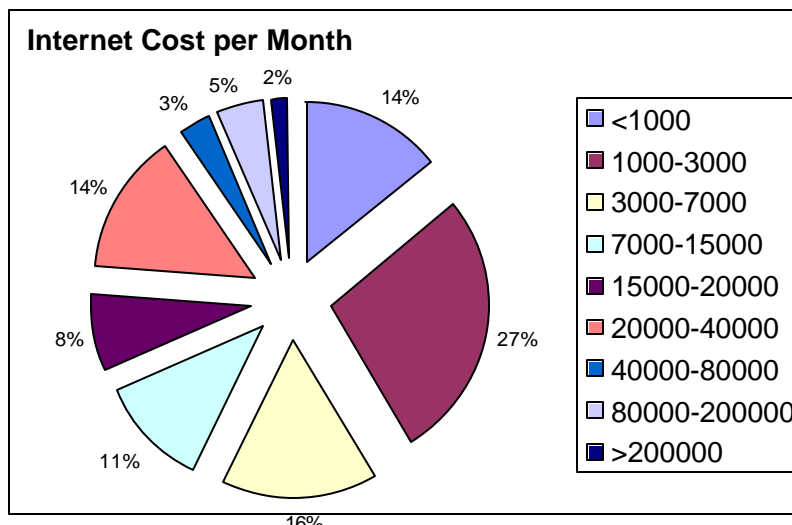
We asked the respondents who use the Internet at present to indicate the cost of using the Internet in a given month (excluding the telephone charges) to get an overall indication of the cost factor.

The following feedback was received.

Cost per Month Rs.	Response	%
<1000	9	14%
1000-3000	17	27%
3000-7000	10	16%
7000-15000	7	11%
15000-20000	5	8%
20000-40000	9	14%
40000-80000	2	3%
80000-200000	3	5%
>200000	1	2%
Totals	63	100%

41% of the respondents spend less than Rs 3000/- on the Internet. Observing the present rates of charges made by the ISPs this type of expenditure is sufficient only to use the Internet for e-mailing and for using it randomly for trade research on the Net.

This confirms the assumption we deduced at the end of section 3.2.1 where the preferred type of connection was found to be dial-up.



### 3.4 Performance

#### 3.4.1 ISP Performance Rating

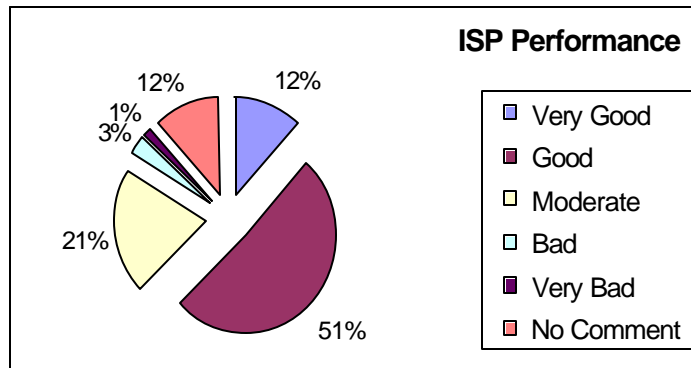
We asked the respondents to tell us the performance rating they give to the ISP of their choice.

The results were a tribute to the pioneering efforts of the ISPs of Sri Lanka considering the numerous bureaucratic, infrastructural, economical and political limitations and problems encountered by the business houses of the country.

Performance Rating	Response	%
Very Good	8	12%
Good	34	51%
Moderate	14	21%
Bad	2	3%
Very Bad	1	1%
No Comment	8	12%
Totals	67	100%

A clear majority of 84% declared that the services provided by their ISPs are acceptable to them while 63% rating them as very good or good.

Some 8 respondents were undecided on the rating of the ISP performance but only 3 respondents rated the ISP performance as bad or very bad.



### 3.4.2 Reasons for selecting a particular ISP

We asked the respondents to write down the reasons for selecting their ISP against the competition and the most prominent reasons recorded by them (in their own words) were the following.

- ❖ Providing higher bandwidth
- ❖ Speed
- ❖ Pioneers
- ❖ Price/Performance benefit
- ❖ Most popular company
- ❖ Provides quality service
- ❖ Fast and reliable
- ❖ Better service
- ❖ Convenience
- ❖ Robust and stable
- ❖ Low cost and more e-mail accounts
- ❖ Reputation and reliability

In summary, it was noted that the SMEs look for a better service at a reasonable cost.

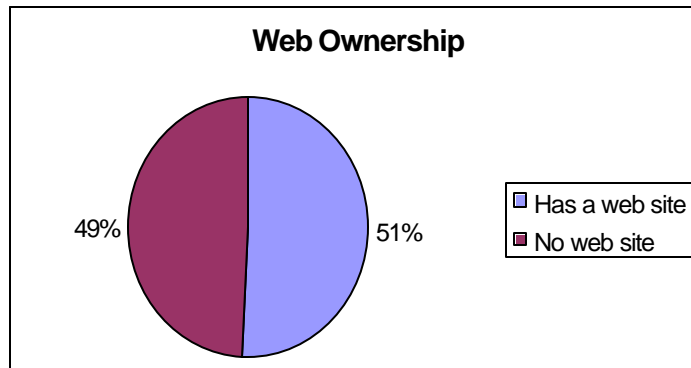
## Chapter Four – Web Sites Maintenance

### 4.1 Ownership Data & Driving Forces

#### 4.1.1 Web Sites Ownership Density

There were 67 respondents who had access to the Internet and 34 (51%) of them had their own web sites. The result could be depicted as follows.

Web Ownership	Response	%
Has a web site	34	51%
No web site	33	49%
Total	67	100%



#### 4.1.2 Driving Forces

The driving forces that led to the decision to set up a web site were reviewed with the respondents who participated in the survey. The summary of responses is as follows. Please note that there is a possibility for multiple responses and therefore the total does not tally with the number of respondents.

Driving Force	Count	%
Global exposure	23	33%
Direct interface with customers	15	22%
Low advertising cost	9	13%
Prestige	9	13%
Personalized customer care	7	10%
Other reasons	6	9%
Totals	69	100%

### 4.1.3 Primary Purpose of the Site

The question, “What is the primary purpose of your site” was asked from the 34 companies who told that they were maintaining company web sites. The responses are summarized as follows.

Primary Purpose	Response	%
Promote company to potential customers	33	97%
Collect visitor information for database	1	3%
Sell goods over the internet	0	0%
Total	34	100%

An overwhelming 97% told that the primary purpose of their web site was to promote the company to potential customers.

The bad news is that none of the respondents use the company web site for selling goods over the Internet. That means Sri Lankan SMEs have to go a long way before effectively engaging in on-line selling of goods.

However, there are hotels that perform room reservations on-line with limited success.

## 4.2 Site Development

### 4.2.1 Site Developer

The inquiry into the developer of the web site delivered the expected result. Normally the SMEs rely on a web hosting company to design, develop and host their web site since they do not have necessary expertise to carry on in-house development.

Only the firms operating in the IT sector and a few financially strong companies had developed their own web sites.

The survey results are given below.

Developer	Response	%
Web Hosting Company	21	62%
In-House Development	12	35%
Free Lance Developer	1	3%
Total	34	100%

#### 4.2.2 Site Manager

The enquiry into the management of the web site has provided the following result.

Web Manager	Response	%
Web Hosting Company	16	47%
In House Management	16	47%
Free Lance Manager	2	6%
Total	34	100%

It indicates that some SMEs have taken over the management of their own web sites though they were developed by the hosting companies.

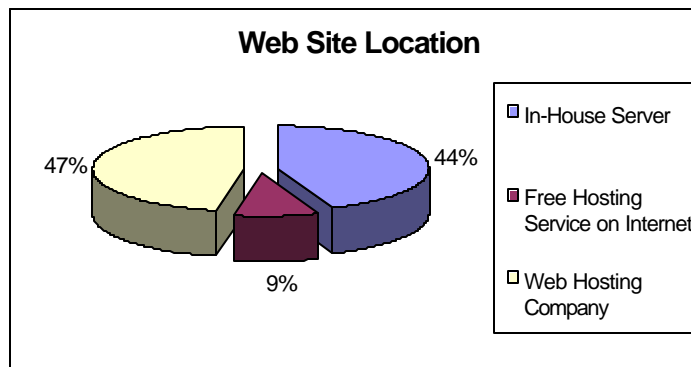
### 4.3 Operational Considerations

#### 4.3.1 Location of the Site

Location of the web site is an important issue since it relates to the security of the information maintained in the site.

The survey team recorded the following findings.

Location	Response	%
In-House Server	15	44%
Free Hosting Service on Internet	3	9%
Web Hosting Company	16	47%
Totals	34	100%



### 4.3.2 Frequency of Maintenance

It is very much required to maintain a website in order to provide up-to-date information to the visitors and to ensure that the site operates as expected by the owner.

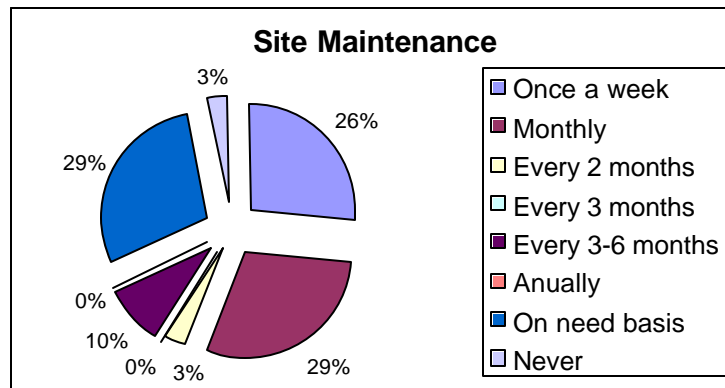
Proper operation of the web with accurate information makes random visitors to the site get attracted and become regular visitors. This in turn improves the image of the company and helps to better the business prospects offered by the site.

Normal maintenance tasks include the following.

- ❖ Review and clearance of system logs maintained by the site.
- ❖ Move news items to the site.
- ❖ Move pictures/images to the site as required.

Our inquiry into this aspect of the web sites operation produced the following results.

Maintenance	Response	%
Once a week	9	26%
Monthly	10	29%
Every 2 months	1	3%
Every 3 months	0	0%
Every 3-6 months	3	10%
Annually	0	0%
On need basis	10	29%
Never	1	3%
Totals	34	100%



It is observed that most of the SMEs (55%) maintain the sites monthly or a weekly basis while a considerable percentage of 29% maintain the sites on need basis. Poor maintenance records were reported only from 5 sites representing 16% of the population.

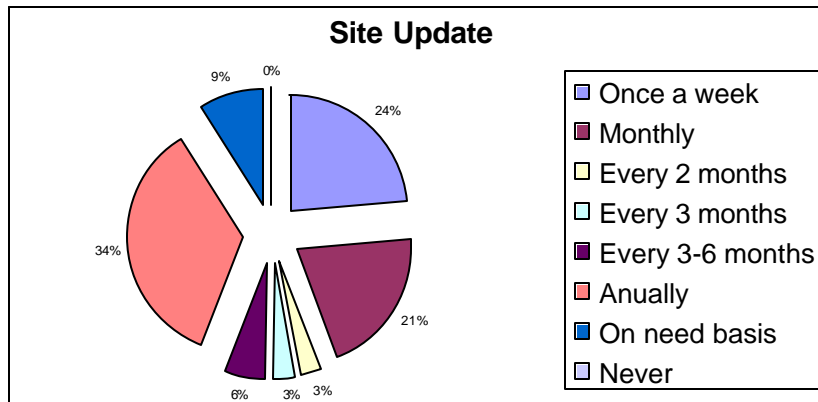
### 4.3.2 Frequency of Updates

It is always necessary to update the web sites making them attractive to the visitor by changing site maps and introducing special web operation tools that come into the marketplace as soon as they become popular.

This aspect of web sites operation is vital to capture a substantial market share where the competition is becoming tougher everyday.

Our inquiry produced the following results.

Site Updates	Response	%
Once a week	8	24%
Monthly	7	21%
Every 2 months	1	3%
Every 3 months	1	3%
Every 3-6 months	2	6%
Annually	12	34%
On need basis	3	9%
Never	0	0%
Totals	34	100%



The first line of the results produced above looks rather doubtful since it may not be possible for an SME to update a web site once a week. This may be due to a misinterpretation of the question being asked.

Other than that 21% of the respondents have state that they carry out the updates monthly and 34% have most correctly informed that they carry out site updates annually while 9% of the respondents do it on need basis.

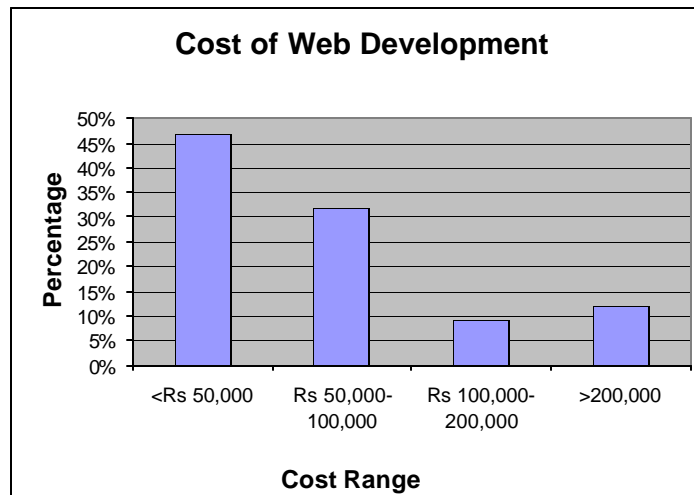
## 4.4 Cost/Benefit Analysis

### 4.4.1 Cost of Development of Web Sites

Cost of development is a matter of prime concern to anybody who is interested in investing in a web site of his own.

Our survey produced the following results.

Development Cost	Response	%
<Rs 50,000	16	47%
Rs 50,000-100,000	11	32%
Rs 100,000-200,000	3	9%
>Rs 200,000	4	12%
Totals	34	100%



A very positive finding of this survey is evident from the above results. Nearly half of the web sites (47%) developed by the SMEs have been developed under Rs. 50,000/- (about USD 500/-) and the next 32% of the web sites were developed at a cost between Rs 50,000/- and Rs 100,000/- (between USD 500/- and USD 1000/-).

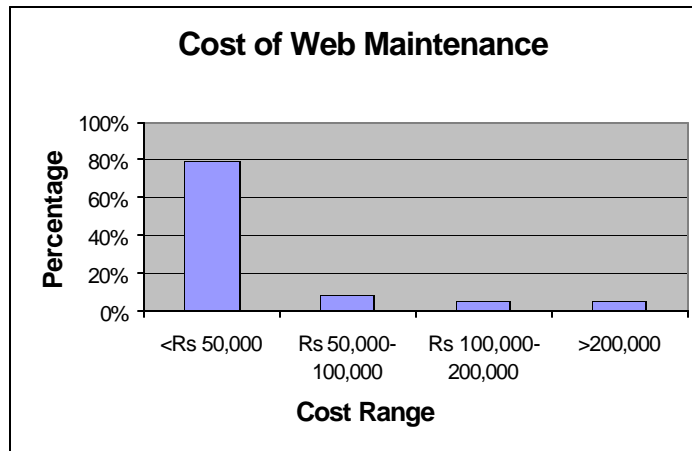
In other words, getting into web based operations is not a major problem for any SME since the cost of development is at the very low end compared to the development costs in USA and Europe.

#### 4.4.2 Cost of Maintenance of Web Sites

Annual cost of maintenance of the web site was our next question. The results are summarized as follows.

Maintenance Cost	Response	%
<Rs 50,000	27	79%
Rs 50,000-100,000	3	9%
Rs 100,000-200,000	2	6%
>200,000	2	6%
Total	34	100%

The above result could be depicted as follows.



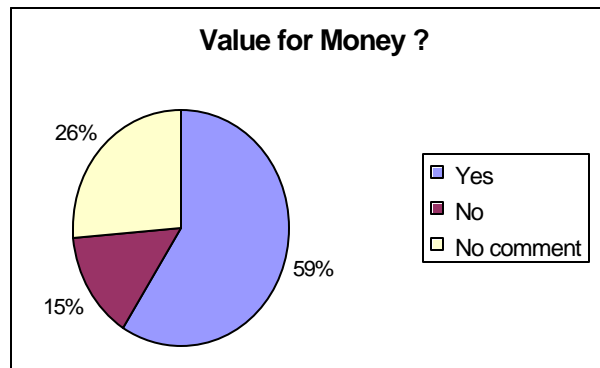
The above result reiterates the finding we made in the previous section (4.4.1)

It is obvious that the annual cost of maintaining a web site is below Rs. 50,000/- (about USD 500/-) that averages to about Rs. 4,200/- per month. This expenditure is within the reach of any SME in the country.

#### 4.4.3 Value for Money Consideration

We asked the specific question “Is the website worth the money and time that it requires” from the companies that were having their own web sites. The following are the answers we received.

Value for Money?	Response	%
Yes	20	59%
No	5	15%
No Comment	9	26%
Total	34	100%



This response indicates that a clear majority of the SMEs are happy with the web sites that they are running. The SMEs who are happy about the outcome had given the following reasons for commenting their sites as useful.

- (a) Can contact the prospective customers immediately.
- (b) Can get more information about suppliers and customers.
- (c) Creates goodwill and prestige.
- (d) Global exposure and rapid response.
- (e) Collection of important information.
- (f) Business promotion.
- (g) Generation of new businesses to the company.

It was important to find out why there were 15% of the companies hosting own web sites do not get value for their money and time. The responses were weak and vague but we summarized them as follows.

- (a) Poor performance of the hosting company.
- (b) Higher charges but no business.
- (c) Loading times are long.
- (d) Poor design of the web site.

However there is a considerable percentage of people who do not want to comment on the issue, may be due to business reasons.

#### 4.4.4 Importance of the Site

We asked the SMEs to rate the importance of the web sites to the operation of their companies in terms of Promotion, Sales and Procurement. The outcome was as follows.

##### Promotion of the Company

Rating	Response	%
Very Important	24	70%
Important	8	24%
Somewhat Important	2	6%
Indifferent	0	0
Not Important	0	0
No Comment	0	0
Totals	34	100%

##### Sales of the Company

Rating	Response	%
Very Important	10	29%
Important	4	12%
Somewhat Important	3	9%
Indifferent	2	6%
Not Important	2	6%
No Comment	13	38%
Totals	34	100%

##### Procurement of the Company

Rating	Response	%
Very Important	9	26%
Important	5	15%
Somewhat Important	3	9%
Indifferent	2	6%
Not Important	1	3%
No Comment	14	41%
Totals	34	100%

The above results indicate the following thinking patterns of the SMEs.

- (a) Promotion of the Company or the trade names is of paramount importance to them rather than engaging in e-commerce activities. This explains why the 94% of them voted the web site as “very important” or “important” for the Promotion of the Company.
- (b) Most of them are uncertain about the use of Internet for sales and procurement purposes. The 38% “No Comment” voting for the sales and 41% “No Comment” voting for the procurement indicate this situation.
- (c) They place less emphasize on sales and procurement over the Net mainly because they are still happy and content with the traditional ways of sales and procurement though they now maintain their own web sites.

#### **4.4.5 Number of Visitors to the Site**

- ❖ The visitor profiles have not been used by Sri Lankan SMEs to enhance their marketing strategies.
- ❖ Very few even knew that how many hits they had on their web sites in a month.
- ❖ They were also clueless about the time spent by the visitors on their web sites.
- ❖ It seems that the general operating technique at present is to get a web hosting company to design the web site and host it, and depend on them to feed back the trade enquiry information to the SME.
- ❖ When asked for the above lack of control over the visitor profiles the following interesting information emerged.
  - (h) The web hosting companies do not provide proper information about the number of hits and always exaggerate in order to retain the SME accounts with them.
  - (i) The actual number of trade inquiries is very low and they are not bothered to follow up.
  - (j) There is no proper delegation of responsibility to the individuals of the SME staff and nobody wants to do nobody's work.

## Chapter Five – E-Commerce Adaptation

### 5.1 Selling Goods and Services

#### 5.1.1 Number of Salesmen on the Net

We asked the question “Have you ever used the Internet to sell goods or services?” from the 34 SMEs who had their own web sites. The answers are given below.

Web Based Selling?	Response	%
Yes	10	30%
No	24	70%
Totals	34	100%

The above result shows a very poor scenario on the implementation of the e-commerce in Sri Lanka. When the total survey sample of 80 SMEs considered, the positive reply weakens further to 12.5%.

#### 5.1.2 Sales Methods

The sales methods were mainly twofold. Number One is selling through one's own web site while the other is selling one's goods and services through a portal. The responses we gathered and subsequently refined display the following scenario.

Sales Method	Response	%
Own Web Site	7	70%
Through Portal	3	30%
Total	10	100%

#### 5.1.3 Payment Methods

The payment methods available for on-line transactions are similar to any other business transaction.

They are cash/cheque payment (subsequently), bank transfer, credit card, phone banking, etc.

Our survey sample was not using all the above options for collecting the sales proceeds.

The following is the summarized response to this query.

Type of Payment	Response	%
Cash	2	20%
Transfer	2	20%
Credit Card	6	60%
Total	10	100%

The above result shows that the most preferred method of collecting payments is the credit card.

#### 5.1.4 Sales Volumes

The 10 SMEs who declared that they were into e-business sales were requested to identify their e-sales volumes as a percentage of their overall sales volumes for a month.

The result was as expected.

Sales Percentage	Response	%
1% - 10%	7	70%
11% - 20%	0	0%
21% - 30%	3	30%
Totals	10	100%

About 70% of the respondents said it was between 1% to 10% while 30% of the respondents were doing well with sales percentages between 21% and 30%. These figures seem to be correct given the low e-commerce implementation prevalent in the country at present.

#### 5.1.4 Sales Forecast

The SMEs were asked to forecast the sales behavior for the coming months on their e-commerce applications.

They were unanimous about the future sales trend telling that the sales will increase in the coming months.

Sales Forecast	Response	%
Sales will increase	10	100%
Sales will decrease	0	0%
Sales will remain static	0	0%
Totals	10	100%

This confidence displayed by the SMEs operating the e-commerce sites is a very encouraging factor for the others who want to establish similar ventures.

## 5.2 Buying Goods and Services

### 5.2.1 Purchase Patterns

We reviewed the e-commerce purchase patterns of the companies participating in the survey and came up with the following results.

Purchase Task	Response	%
Seek information on companies	7	19%
View goods on the Net	6	16%
Place orders on-line	11	30%
Pay on-line	8	22%
Place order by e-mail	5	13%
Totals	37	100%

The above result indicates that the SMEs do not hesitate to purchase items over the Internet.

The majority of the items purchased over the Internet are books, software, spare parts and IT equipment, etc. Normally SMEs prefer to buy from known trade names rather than surfing the Net for bargains.

### 5.2.2 Buying Frequency

We asked the question “How often do you purchase items over the Internet?” and the response was as follows.

Frequency	Response	%
Daily	2	8%
Weekly	4	18%
Fortnightly	1	4%
Monthly	3	12%
Quarterly	4	17%
Annually	1	4%
Rarely	9	37%
Total	24	100%

About 42% of the buyers purchase items over the Internet at least once a month meanwhile 37% purchase very seldomly. It must be noted that there are 67 companies in our survey sample having Internet facilities and the non-responsive element in this query is substantial (43 out of 67) amounting to 64%.

### 5.2.3 Purchase Volumes

The purchase volumes declared by the respondents are given below. Some of the respondents have not given out the purchase volumes though they have stated that they use the Internet for purchases.

Purchase Volume per Month	Response	%
< Rs10,000/-	7	41%
Rs 10,000/- - 50,000/-	5	29%
Rs 50,000/- - 100,000/-	0	0
Rs 100,000/- - 500,000/-	4	24%
> Rs 500,000/-	1	6%
Totals	17	100%

It is clearly visible from the above responses that the majority of the purchases are less than Rs 50,000/- per month, (i.e. 70%)

This in turn demonstrates the limitations imposed on the buyers through the credit card limits.

#### 5.2.4 Payment Methods

We inquired about the payment methods used by the companies to settle the on-line purchases.

Payment Method	Response	%
Cash	5	23%
Bank Transfer	7	32%
Credit Card	10	45%
Total	22	100%

It was noticed that the preferred payment method was the credit card, while bank transfer becoming the next preferred method.

Some have indicated the cash payment but this necessarily have to be for local purchases where orders are placed on-line and subsequent payment is made by cash at the time of collection.

### 5.3 Portals

#### 5.3.1 The definition of Portal

An internet site which acts as a 'hub' directing user 'traffic' to other internet sites or by providing further (contact) information.

#### 5.3.2 An example of a Portal

The Ceramics Cluster announced the launch of the "Sri Lanka Ceramics" a web portal devoted to the ceramics industry of Sri Lanka. The portal will project the high quality image of the Sri Lanka ceramic/porcelain products and will serve as a key information source for both international and local buyers, suppliers, manufacturers, investors, academics and others interested in the industry.

The portal will also track and promote the growth of the industry through coverage of news features, industry trends and will provide a forum for discussion and information exchange. Specific site architectural features include a directory of manufacturers, raw materials/inputs suppliers, investment opportunities, information on research and academic institutes associated with the ceramics industry, a calendar of upcoming events, list of industry publications, related government and other industry links.

The web address is [www.ceramics.lk](http://www.ceramics.lk).

#### 5.3.3 Survey Sample Analysis

We were unlucky in this occasion since only one company indicated that it was a member of an e-commerce portal. Therefore we were unable to carry out a sample analysis but now indicate the responses given by this particular company to the questions raised by us.

- |   |                    |
|---|--------------------|
| (a) How long you have been a member?                              | One Year           |
| (b) How did you find out about the portal?                        | By recommendation. |
| (c) How important is the portal service to you?                   | Very important.    |
| (d) What is your level of satisfaction?                           | Satisfied.         |
| (e) Are you going to use the same service for the Next 12 months? | Yes                |

#### 5.4 User Concerns on E-Commerce Applications

The survey revealed that the companies have the following concerns over engaging in the e-commerce activities on the Internet.

(a) Security Concerns – where the buyers are worried that the purchased items will not be delivered as promised since in most of the cases the payment is automatically charged to your credit card at the time of confirming the purchase on the Net. In addition, the buyers are worried that the credit card information is mishandled and unscrupulous elements making unauthorized payments from the credit card.

(b) Delivery Concerns – where the item displayed on your screen is not the one you get. It is always not similar to see with your own eyes 3-D and buy, compared to see on your monitor 2-D and buy. Since the payment is made before you get the item purchased buyers normally worry until the items are delivered at the doorstep.

(c) Authenticity/Accuracy Concerns–

Buyers are always concerned over the authenticity of the items purchased over the Net since they cannot physically verify the accuracy of the items being shipped.

(d) Accessibility Concerns

It is not possible to access your supplier except through the e-mail or on the Net so that “after sales service and support” becomes a problem. Specially when buying or selling goods with a warranty period it may be difficult for both parties to handle the returns and/or the maintenance jobs purely due to the physical distance between the buyer and seller.

## **5.5 Back End Applications**

### **5.5.1 Accounting Systems**

Making sales over the Net is difficult since you have to convince your buyers remotely but the book keeping function for on line sales is equally cumbersome.

Proper invoicing and security controls are necessary when processing credit cards since the forgeries and malpractices reported are very high.

Therefore on-line sales should be tied up with proper accounting systems.

We did not come across any integrated accounting systems employed by the SMEs who declared that they are engaged in e-business.

### **5.5.2 Stock Control Systems**

Stock keeping is of paramount importance to any e-commerce retailer since the items purchased by the customer has to be delivered as soon as possible in order to maintain the business relationship.

Stock balances, item re-order levels, etc are to be dynamically maintained to achieve this objective.

We did not come across any SME who has successfully deployed a good stock keeping system within the survey sample.

### **5.5.3 Delivery Systems**

Well-established and successful e-tailers have automated the deliveries in order to maintain a competitive advantage over their competitors.

Some people promise the delivery within 24 hours and some people promise immediate shipment on confirmation of the order.

We did not see anybody in the survey sample doing so.

## 5.6 Wireless Application Protocol (WAP)

- ❖ The mobile phone companies are now promoting wireless Application Protocol (WAP) services in Sri Lanka.
- ❖ The applications include Stock Market, Flight Information, Cricket Scores, Horoscope, Exchange Rates, etc
- ❖ However the business volumes remain low.
- ❖ Customer behavior and attitude, lack of proper mobile phones, etc., are the main reasons for the low volumes.
- ❖ The companies see the problems such as high set up, promotional and operational cost, low business volumes, etc as barriers to enhance WAP services.

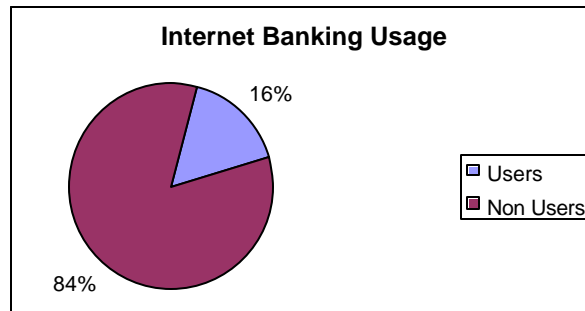
## Chapter Six – Banking Sector Applications

### 6.1 Usage Patterns

#### 6.1.1 Number of Users

We found out that 11 companies out of 67 SMEs who has Internet connections carry out Internet banking.

Internet Banking	Response	%
Users	11	16%
Non Users	56	84%
Totals	67	100%

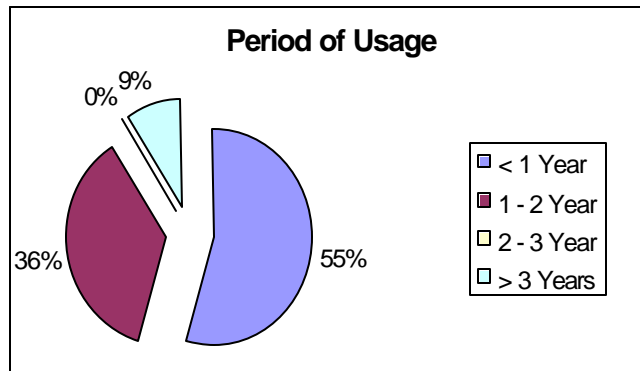


#### 6.1.2 Period of Usage

The period of usage varied as given below.

Period of Usage	Response	%
< 1 Year	6	55%
1 - 2 Year	4	36%
2 - 3 Year	0	0%
> 3 Years	1	9%
Totals	11	100%

The above result indicates that the majority of the SMEs have gone into Internet banking quite recently, in a period less than one year. This matches with the industry statistics where most of the banks offered the I-banking to their customers only during the past one or two years.



### 6.1.3 Reasons for Using the Present Bank for I-Banking

We queried about the reasons for using the present bank for I-banking and some of the prominent answers are given below.

- (a) Economical and less conflicts
- (b) Confidentiality
- (c) Best available facilities
- (d) Availability at all times
- (e) Reliability and advanced technology implementation over other banks
- (f) User friendliness
- (g) I got all my accounts there!!

## 6.2 Available I-Banking Applications

The available I-Banking applications are common to most of the banks offering I-banking solutions.

- Check the real-time account balance in any of the accounts maintained
- View the transactions history of the accounts
- Check confirmation of payment of specified cheques issued
- Transfer funds between own accounts
- Request for stop payment of cheques
- Request transfer of funds to a third party's account
- Request the issue of a cheque book
- Establish standing orders

### 6.3 Security and Other Concerns

The users of the I-Banking applications had the following concerns over using the banking applications.

- (a) The access to the banking application is normally allowed to anybody who has the access keys provided by the bank. This creates a security threat since unauthorized parties could misuse the access key. (However the similar concerns exist over the use of ATM cards but the ATM cards are used all over the world in their millions!)
- (b) The available banking applications do not help when cash is involved. All I-banking applications carry out only non-cash transactions at present.

### 6.4 Future Growth

- ❖ Almost all SMEs who were using I-banking applications at the time of our survey indicated that they were happy about the facilities available at the banking application.
- ❖ They were confident that the I-banking would grow with the growth of the economy and with widespread use of the Personal Computers.
- ❖ The areas where I-banking could be linked in the future are the E-wallet applications. E-wallet applications are not available in Sri Lanka at present.

## Chapter Seven – Non Users

### 7.1 Reasons and Justifications

The research into non-users within the SMEs sector in Sri Lanka provided the following reasons and justifications for not using the Internet or E-commerce applications for business development.

- (a) High initial setup costs
- (b) High cost of telephone facilities
- (c) Existing financial problems
- (d) Lack of educated staff on IT
- (e) Lack of English knowledge among staff
- (f) No value for money
- (g) It is out of our operation area
- (h) Insufficient number of available telephone lines
- (i) Feel not essential for business

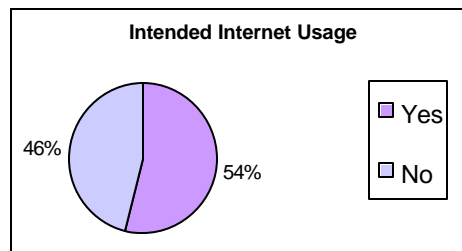
### 7.2 Prospective Users

There were 13 SMEs who did not have Internet facilities at the time of our survey.

We categorized prospective users as the ones who intend to go for an Internet connection during the next 12 months.

The proportionate results were the following.

Intended Usage	Response	%
Yes	7	54%
No	6	46%
Totals	13	100%



The prospective users within our survey sample did not believe that they would use the Internet for the following purposes in the near future

- (a) Sell products or services directly on-line
- (b) Data warehousing
- (c) Back end applications development

The prospective users believe that they could use the Internet for the following purposes once installed.

- (a) For information search over the Internet
- (b) Download software and trade documents
- (c) Buy products on -line
- (d) Communicate with suppliers and customers using e -mail
- (e) Internal communication
- (f) Internet banking
- (g) Install web sites and promote company

### 7.3 Analysis and Projections

#### 7.3.1 Type of Connections to Use

The 7 intended users of our sample will be acquiring the following connection types within the next 12 months.

Connection Type	Response	%
Dial Up	4	57%
Leased Line	2	29%
ISDN	1	14%
Totals	7	100%

The above result follows a logical sequence where most new users connect to the Internet through dial-up lines.

#### 7.3.2 Expected Monthly Budget

Their expected monthly budgets for Internet implementation were as follows.

Monthly Budget	Response	%
< Rs 1,000	0	0%
Rs 1,000 - 3,000	2	29%
Rs 3,000 - 7,000	3	42%
Rs 7,000 - 15,000	2	29%
Totals	7	100%

The actual expenditures incurred by the current users are slightly below the above figures where 41% of them spend something below Rs 3,000/-. The above projection may be due to over-budgeting by the prospective users due to their lack of experience.

### 7.3.3 Future Web Sites Development

Three prospective users out of 7 told that they were planning to install web sites within next 12 months. Two of them were hotels while the other was a trading company.

We provide below the outcome of the survey carried out on them.

(a) Developer

One hotel declared that it would use in-house staff for the development of the web site while the other two would use web-hosting companies.

(b) Cost of development

All expected to develop the site with a cost below Rs 50,000/-. This result agrees with the cost incurred by the current users.

(c) Location of the site

Two were not sure about the location of the site but one company declared that it would install the site in one of their own servers.

(d) Reasons for development of a web site

All prospective users declared that the reason for development of a web site was the "global exposure" they get for the company. Especially the hoteliers thought that they would "reach to the prospective customers through the Internet" while the trading company told that it was floating the web site for "prestige" among other reasons.

### 7.3.4 Future Joining for Web Portals

There was only one SME in our sample who wanted to join a web portal during the next twelve months.

He has an Internet connection at present but is not sure as to how he should proceed.

## Chapter Eight – Key Findings

### 8.1 Key Findings on Internet Usage

- 8.1.1 Most of the SMEs in the urban areas have Internet facilities.
- 8.1.2 Internet use among the SMEs has become popular only during the last few years.
- 8.1.3 Only a lower percentage of computers available to a SME is linked to the Internet.
- 8.1.4 Only a limited number of staff members are allowed Internet access.
- 8.1.5 Majority of the SMEs use Internet for less than one hour per day.
- 8.1.6 Highly used Internet application is the E-mail and everybody agrees that it is better and cheaper as a business tool than the phone or the fax.
- 8.1.7 Most SMEs use the E-mail for contacting suppliers and customers on a daily basis.
- 8.1.8 Net Meeting is used as a business tool at present.
- 8.1.9 Internet is widely used by the SMEs for trade research and knowledge gathering purposes.
- 8.1.10 Widely used connection type is the 'Dial Up' (66%) while 'Leased Line' is used by about 24% of the Internet users. Very few (9%) use ISDN as the connection type.
- 8.1.11 The respondents have considered the speed of the Internet connection as "average" or "better" and very few complained it to be slow.
- 8.1.12 Cost of establishing an Internet connection and the monthly running cost are within the reach of the SME sector.
- 8.1.13 SMEs are happy about the service provided by their ISPs.

### 8.2 Key Findings on Web Sites Maintenance

- 8.2.1 More companies are inclined to run own web sites.
- 8.2.2 The driving forces for establishing web sites are the "global exposure" and the "direct interface with the customers"
- 8.2.3 Primary purpose of the site is to "promote sales"
- 8.2.4 The web hosting companies developed most of the sites while in-house development came second.
- 8.2.5 The majority had entrusted the management of the web site also to a web hosting company.

- 8.2.6 Location of the site is equally divided between in-house server and the web-hosting company.
- 8.2.7 Most of the web sites were professionally maintained and updated.
- 8.2.8 Development cost and the annual running cost of the web sites were within the reach of the SME sector.
- 8.2.9 Majority of the respondents agree that the web sites are important to improve business exposure.
- 8.2.10 Visitor profiles are not monitored by the SMEs who own web sites.

### **8.3 Key Findings on E-Commerce Penetration**

- 8.3.1 Web based selling is not well established in Sri Lanka.
- 8.3.2 Sales volumes were at the low end for the few who used web based selling.
- 8.3.3 Everybody is positive about the sales to increase in the coming months.
- 8.3.4 The portals do not provide enough sales information at present.
- 8.3.5 Web based buying is limited to a few types of items.
- 8.3.6 No local establishments have B2B transactions.
- 8.3.7 Buying frequency varied among the respondents and 37% declared that they buy very rarely.
- 8.3.8 Purchase volumes over the Internet are very low.
- 8.3.9 Payment method is the bottleneck to purchase goods over the Internet.
- 8.3.10 Using web portals for business propagation is not widespread among SMEs we surveyed.
- 8.3.11 Back end applications such as Accounting Systems, Delivery Systems and Stock Control Systems are not used within the SME sector in order to effectively engage in E-commerce.
- 8.3.12 WAP systems though available, are not widely used or profitable within the Sri Lankan marketplace.

#### **8.4 Key Findings on Banking Sector Applications**

- 8.4.1 Number of users of Internet Banking is very low.
- 8.4.2 The main reason for non-usage is the security concern.
- 8.4.3 Most of the respondents have been using the I-banking for less than one year.
- 8.4.4 I-banking may sure catch up similar to the ATM cards since most of the banking operations except cash could be carried out from home.

#### **8.5 Key Findings on Non Users**

- 8.5.1 Undue worries about the cost is a barring factor for SMEs to establish Internet facilities.
- 8.5.2 Lack of staff with adequate knowledge to run an Internet based application is another bottleneck.
- 8.5.3 Infrastructural facilities such as insufficient telephone connections are another disadvantage.
- 8.5.4 The management's perceived lack of knowledge on the benefits of e-commerce is preventing them from investing in Internet based applications.
- 8.5.5 Some of the SMEs are already on the way to establishing Internet connections and an increase in the Internet implementations within SME sector could be seen within a few years.

## Chapter Nine – Recommendations

### 9.1 Recommendations to the Business

- ❖ Develop e-commerce activities where feasible since it improves Supply Chain Management (SCM) by targeting just-in-time approach.
- ❖ It also improves the Customer Relations Management (CRM) that is highly beneficial for a commercial organization in the long run.
- ❖ Provide Board Level support for establishing e-commerce and obtain more information from the trade chambers and other organizations in the country.
- ❖ Remove techno phobia from all elements within the organization.
- ❖ Train staff in new technologies since by default a well-trained staff brings in less production defects and efficient services to the customers.
- ❖ Make staff use the new facilities and new technology as much as possible by encouraging them with production related incentives.
- ❖ Carry out necessary business planning incorporating e-commerce activities so that more benefits could be reaped from future investments.
- ❖ Commence on-line selling of goods. Especially commodities such as Ceylon Tea, Brass Items, etc, could be easily sold over the Net.

### 9.2 Recommendations to the Government

- ❖ Enact laws conducive to the establishment and proper management of e-commerce activities in the country.
- ❖ Invest in the improvement of the telecom infrastructure and other communication facilities in the country.
- ❖ Allow deep penetration of personal computers to rural areas and townships by removing all taxes on import of the IT equipment and reduce taxing on IT related and software development companies. This in turn will bring in additional resources to take the country to the forefront of the information age.
- ❖ A tax moratorium of at least five years on e-commerce transactions in line with the US government or more, preferably a permanent cessation of taxing e-commerce transactions.
- ❖ Carry out further studies on how to build up an e-commerce savvy business environment.
- ❖ Provide incentives to ICT infrastructure projects by way of tax relief similar to roads/ highways, air and seaports, etc

- ❖ Provide infrastructure to attract high level investment in knowledge based industries ( e-highway in Malaysia )
- ❖ Have a national policy on e-commerce and the development of web based applications.
- ❖ Information and Communication Technology (ICT) education and curricular development should be coordinated in all aspects within the government machinery such as the Education Ministry, Department of Examinations,, University Councils, CINTEC, SLIIT, NIBM, etc so that the students will have a clear idea on what they should learn to achieve their ambitions. At present, the education system has become too complicated and too congested that the students find it extremely difficult to know what to learn.
- ❖ Make the technology and services available to grassroots levels encompassing the whole country and propagate methods and technologies conducive to the development of e-commerce within the SME sector.
- ❖ Country level implementation of distance learning facilities embracing all universities, provision of tools and funds for innovation and research in the ICT, establishing a network of Internet centers at village level, etc are some positive steps that the government could take to improve the e-commerce implementation in the country.

### **9.3 Recommendations to the Asia Foundation**

- ❖ Launch programs to educate the senior executives of the SMEs and make them aware of the benefits of E-Commerce. Special attention should be paid to cities outside Colombo where local entrepreneurs lack access to the information technology products.
- ❖ Lobby the government to streamline payment procedures on the Net.
- ❖ Encourage local businesses to commence on-line selling of goods to the world. To this end, launch information and knowledge sharing sessions/work shops for the SME sector.
- ❖ Bring in the attention of the relevant government agencies to implement the recommendations made in Section 9.2.

### **9.4 Recommendations to the Society**

- ❖ Use new technologies effectively and efficiently.
- ❖ Allow PCs to penetrate into homes.
- ❖ Have a positive attitude towards the implementation on Internet applications but also keep an eye on the bad side of the Net.
- ❖ Allow children to use the net for learning purposes but safeguard them from malpractices such as pornography.

## Annexes

### 1. List of Companies Surveyed – Industrial Sectorwise

#### Business Services

- 01 Trico Terminals (Pvt) Ltd
- 02 Acal Systems (Pvt) Ltd
- 03 IDM Group of Companies
- 04 Keells Business Systems Ltd
- 05 Kaluthota Organaization Pvt Ltd
- 06 Ceylon Business Appliances Ltd
- 07 Novel Systems
- 08 Informatics Institute of Technology
- 09 Innodata Lanka (Pvt) Ltd
- 10 Alliance Leasing Company
- 11 Sujay Traders
- 12 Open Arc Management Systems (Pvt)
- 13 National Institute of Business
- 14 Institute of Business Management
- 15 British Council
- 16 MMBL Cyberskius (Pvt) Ltd
- 17 eRunway (Pvt) Ltd
- 18 Data Solution (Pvt) Ltd
- 19 Juki Lanka Service Centre (Pvt) Ltd
- 20 The Sun Associates - Kandy
- 21 Senkadagala Finance Co. Ltd
- 22 Tai (Sri Lanka) Institute of Technology

#### Garment Manufactureres

- 01 Nagindas Industries Ltd
- 02 Muneer Garments
- 03 Y- International (Pvt) Ltd
- 04 Time Garments (Pvt) Ltd
- 05 Winter Quilts (Pvt) Ltd

#### Hotel and Tourism

- 01 John Keells Holdings
- 02 Pizza Hut
- 03 Grand Oriental Hotel
- 04 Show Boat
- 05 H B De Silva & Sons Ltd
- 06 Hilton Jaic Tower
- 07 Hotel Nippon
- 08 New Oriental Hotel
- 09 Oasiss Rest
- 10 The Kandyan Reach Hotel
- 11 Queen's Hotel - Kandy
- 12 Earl's Regency Hotel - Kandy

- 13 Thilanka Hotels Limited - Kandy
- 14 Caravan Bakery & Pastry Shop (Pvt) Ltd
- 15 Hotel Concord
- 16 Hotel Ranmuthu
- 17 Princell Tours (Pvt) Ltd
- 18 Flower Drum Group of Restaurants

### **Manufacturing**

- 01 Imperial Rubber Industries (Pvt) Ltd
- 02 Samindu Industries
- 03 D Samson & Sons Ltd
- 04 Halchem Lanka Pvt Ltd
- 05 S A C A Industries (Pvt) Ltd
- 06 Zealtech Engineering
- 07 U S A Printing (Pvt) Ltd
- 08 Digital Graphics
- 09 World Wide Bright Minds
- 10 ACL Cables Limited
- 11 Lanka Minerals & Chemicals Ltd
- 12 G J M Lanka M&G (Pvt) Ltd
- 13 Boyagane D/C Mills (Pvt) Ltd
- 14 Jayapathi Lanka Exports (Pvt) Ltd

### **Media**

- 01 Weerakesari News Paper Ltd.

### **Telecom**

- 01 Telenet Communication
- 02 Dhawalagiri Communication
- 03 Shimi Communication & Agencies
- 04 Vision Link Communication
- 05 Min Networks Private Limited
- 06 Vinns Communication

### **Trading**

- 01 Marbok MDF Lanka (Pvt) Ltd
- 02 Sofllogic Trading (Pvt) Ltd.
- 03 Herculees Tailors
- 04 Colonjal Hardware
- 05 Vigitha Yapa Associates (Pvt) Ltd
- 06 P S Poly Industries
- 07 Anura Trading House
- 08 Paranagama Trading Company
- 09 Richard Trading Co.(Pvt) Ltd
- 10 New Pharmacy Company (Pvt) Ltd
- 11 Auto World (Pvt) Ltd
- 12 Champo Stores (Pvt) Ltd
- 13 Sagara Industries
- 14 Article 14 Company Ltd

## 2. List of Websites Maintained by the Companies Surveyed

Company Name	Web Site Name
Trico Terminals (Pvt)Ltd.	<a href="http://www.triconav.com">www.triconav.com</a>
Pizza Hut	<a href="http://www.keels.com">www.keels.com</a>
Article 14 Company Ltd.	<a href="http://www.article14.lk">www.article14.lk</a>
D.Samson & Sons Ltd.	<a href="http://www.dsi.lk">www.dsi.lk</a>
Marbok MDF Lanka (Pvt) Ltd.	<a href="http://www.marbok.com">www.marbok.com</a>
IDM Group of Company	<a href="http://www.idm.lk">www.idm.lk</a>
Softlogic Trading (Pvt) Ltd.	<a href="http://www.softlogic.lk">www.softlogic.lk</a>
Keells Business Systems Ltd.	<a href="http://www.kbsldirect.com">www.kbsldirect.com</a>
Grand Oriental Hotel	<a href="http://www.goh.lk">www.goh.lk</a>
Hercules Tailors	<a href="http://www.hercules.tailors.com">www.hercules.tailors.com</a>
Show Boat	<a href="http://www.lanka.net/showboat">www.lanka.net/showboat</a>
Ceylon Business Appliances Ltd.	<a href="http://www.cba.lk">www.cba.lk</a>
Colonial Hardware	<a href="http://www.colonial.lk">www.colonial.lk</a>
Informatics Institute of Technology	<a href="http://www.informatics.lk">www.informatics.lk</a>
	<a href="http://www.iics.ac.lk">www.iics.ac.lk</a>
	<a href="http://www.postgraduate.org">www.postgraduate.org</a>
Innodata Lanka (Pvt) Ltd.	<a href="http://www.inod.com">www.inod.com</a>
Alliance Finance & Leasing Company	<a href="http://www.alfinonline.com">www.alfinonline.com</a>
Open Arc Management Systems(Pvt) Ltd.	<a href="http://www.openarc.lk">www.openarc.lk</a>
National Institute Of Business Management	<a href="http://www.nibm.lk">www.nibm.lk</a>
Institute of Business Management Consultancy (Pvt) Ltd.	<a href="http://www.ibmclanka.com">www.ibmclanka.com</a>
British Council	<a href="http://www.britishcouncil.org.lk">www.britishcouncil.org.lk</a>
Virakesari - Newspaper	<a href="http://www.virakesary.lk">www.virakesary.lk</a>
Winter Quilts (Pvt)Ltd.	<a href="http://www.winterquilts.com">www.winterquilts.com</a>
Hilton Jaic Tower	<a href="http://www.towers@itmin.com">www.towers@itmin.com</a>
E Runway (Pvt) Ltd.	<a href="http://www.erunway.com">www.erunway.com</a>
Anura Trading House	<a href="http://www.anuratrading.com">www.anuratrading.com</a>
MTN Networks Private Limited	<a href="http://www.dialog.lk">www.dialog.lk</a>
Juki Lanka Service Center (Pvt) Ltd.	<a href="http://www.juki.co.jp">www.juki.co.jp</a>
Princell Tours (Pvt) Limited	<a href="http://www.tangafresh.seafood/enterprices">www.tangafresh.seafood/enterprices</a>
Jayampathi Lanka Exports (Pvt) Ltd.	<a href="http://www.com.lk/jayampathy">www.com.lk/jayampathy</a>
Queen's Hotel - Kandy	<a href="http://www.c.com.lk/suisse">www.c.com.lk/suisse</a>
Earl's Regency Hotel - Kandy	<a href="http://www.asiabusiness.com/sl/regency">www.asiabusiness.com/sl/regency</a>
	<a href="http://www.aitkenspencehotels.com">www.aitkenspencehotels.com</a>
Senkadagala Finance Co. Ltd. -Kandy	<a href="http://www.senfin.com">www.senfin.com</a>
Thilanka Hotels Limited - Kandy	<a href="http://www.lanka.net/thilanka">www.lanka.net/thilanka</a>



## 3.2 Geographic and Other Basic Information on Sri Lanka

### Geography

6°-10° North Latitude		
80°-82° East longitude		
Maximum Length	432Km	
Maximum Breadth	224Km	
Land Area	65,525 Sq. Km	
-excluding Inland Waters	62,336 Sq.	
	Km	
Highest Water fall	Bambarakanda	241 meters
Highest Peak	Pidurutalagala	2524 meters
		335 k.
Longest River	Mahaweli	meters

### Population

	19.043 million
Male	9.707 million
Female	9.336 million
Density per sq/km	304
Growth Rate	1.4

### Provincial Population ( 1981 Census)

Western	3.920 million
Central	2.009 million
Southern	1.883 million
North Western	1.704 million
Sabaragamuwa	1.482 million
Northern	1.109 million
Eastern	0.975 million
Uwa	0.914 million
North Central	0.849 million

### Literacy(%)

Male	90.5
Female	82.4

### Ethnicity(%)

Survey on E-Commerce Implementation in the SME Sector of Sri Lanka  
Conducted by the SLBDC for the Asia Foundation

Sinhala	74%
Tamil	18%
Moors	7%
Others	1%

### Administrative Units

9 Provinces, 25 Districts, 256 Divisional Secretariats, 160 Electorates

### Religion(%)

Buddhism	69%
Hinduism	15%
Christianity	8%
Islam	7%

### Climate

Temperature(Mean Annual) 27<sup>0</sup>C in the lowland, 15<sup>0</sup>C at Nuwara Eliya (altitude 1800 m). Relative Humidity varies from 70% during the day to 90% at night. Rainfall (annual) 2500 mm to over 5000 mm in South West of the Island. Less than 1250 mm in the North West and South East of the Island.

Rainy Seasons

South west Monsoon - (May to August)

North East Monsoon - (November to February)

### 3.3 Map of Sri Lanka



Please Note : Towns surveyed by us are marked with a blue rectangle .

## 4. Case Studies

### 4.1 Central Finance Co Ltd. (Successful User)

Incorporated in 1957 Central Finance Co. Ltd. (CF) operates through its head office in Kandy, City office in Colombo and eighteen strategically located Branches Island wide. The company offers a wide range of financial services and is the market leader in leasing. Central Finance has diversified into Manufacturing, Banking, Insurance Broking, Hydropower & IT Services, Venture Capital, Share Trading, Vehicle Hiring, Housing and Real Estate.

CF recently launched [www.cfautomart.com](http://www.cfautomart.com) an exclusive web site for buying and selling of vehicles and vehicle related products. This facility has been extended to the public through the island wide network of branch offices located in commercial hubs.

The site links both new and reconditioned car dealers and private vehicle owners.

All potential buyers have the unique opportunity of conveniently viewing the vehicles on offer from their homes or offices Prior to visiting the sales points.

Guidelines for identifying a good vehicle are listed for potential buyers who are unsure of what to look for in a vehicle.

The web site also provides useful tips on motoring and routine vehicle maintenance. Vehicle owners could also make use of the 'vehicle clinic' for information on vehicle related issues, which will receive a prompt response from CF.

In addition, this site helps in selecting financing options to the buyer. On-line financing applications are available for 'Finance leases' and 'Vehicle hire'.

Access to information on spare parts, Valeting and Routing Services are some features not to miss by vehicle users.

The company is proud to pave the way for interaction within the automobile sales and finance network, a unique facility for all within Sri Lanka and worldwide.

#### 4.2 Tours of Ceylon Group Ltd. (Unsuccessful User)

Tours of Ceylon Group Ltd. (not the real name) is a total destination company having their own hotels, hotel management companies, eco-adventures, transport companies, etc.

They have been in the market for a long period and have established themselves as one of the prominent touring companies in the country.

All of their business operations as well as the management of group hotels have been successfully computerized.

With the explosion of the e-commerce activities and the dot.com companies, the Tours of Ceylon Group adopted a positive role in implementing on-line sales and reservations of their facilities on the Internet.

Since they did not have any web developers among their IT staff the job was sub contracted to a web hosting company. The site was put into operation about three years ago.

The basic solution included the following.

- (a) E-mail accounts for the senior managers through out the country
- (b) A web site giving all the features and facilities of the company
- (c) An on-line reservation system
- (d) An on-line information request/inquiry system

The initial investment including the hardware and software was something around Rs 3 million (far higher than the average expenditure noted in the survey results)

At present the investment has become a total failure and only the e-mail system is in operation.

It was revealed that the number of queries on their web site for the last three months was only eight. The company still maintains the infrastructure and the site as a prestige matter but not for sales propagation.

What went wrong? We asked the management. The answers were worth noting.

- ❖ We did not know anything about e-commerce when we set about it.
- ❖ We depended on the web developer to do a proper job but he misguided us.
- ❖ Economic downturn in the country, especially in the tourism sector made us less appealing to our customers.
- ❖ Higher phone tariff rates and Internet charges made the operation of the Internet applications expensive. We spend more than Rs 100,000 for up-keeping this operation.
- ❖ Introduction of so many taxes and surcharges by the government made our lives difficult.
- ❖ Recent power cuts for more that 8 hours was the worse, how could a company of our nature cope with such a disaster? We made substantial losses during that period.

### 4.3 Jayampathy Lanka Ltd. (Prospective User)

The story of the Jayampathy Lanka Ltd is a wonderful one. They are based in Kurunegala, far from the capital but engaged in selling things to the world for more than 5 years now.

The products they sell are basically horticultural products. Some of them are plants, seeds, manure, specially treated plant beds, etc. and all of the products sold are non-conventional ones.

They started as a small cottage industry at the beginning but today they export their products to more than 25 countries. They have a labor force of about 250 people but the director we spoke told that sometimes they employed double that number if there were urgent orders to complete.

They have been doubling the revenue in each year passed and better results are expected in this year as well.

The success behind them is purely the technological advancement they embarked on during their operation. They have acquired the know-how of production and product development by visiting trade shows of other countries and converted that to their business advantage.

They will be opening a fully-fledged web site with all back-end applications to fully automate the production, selling and distribution channels of the company.

The directors are confident that they will achieve much success with the full operation of the Internet web site since the introduction of the web site is a demand driven one for the benefit of their existing and potential customers.

#### 4.4 Athurugiriya Saw Mills (Non User)

Athurugiriya Saw Mills is a single proprietorship. It has been a very successful timber-milling operator for more than four decades. The present owner is the son of the founder and the business has been flourishing irrespective of the downward economic trend of the country.

Lowest possible profit margin, dedicated service and personal attention to the customer requirements are cited as the secrets behind their success.

There are five timber depots under them and the number of employees exceeds one hundred.

Given all the success stories with them they still do not have a single personal computer. They are adamant that they will not invest in unnecessary equipment such as computers when they can buy a nice imported piece of equipment for sawing timber with that money.

The accounting books are still hand written and there is hardly any stock management system except the ruled books they maintain for each category of timber.

They are lucky enough to have some good trustworthy employees who descend from the previous generation to carry out important functions such as buying, selling, cash collection, etc.

This case could be marked as the management indifference to technological advancement and there is no possible cure to get them into the technologically advanced bandwagon of entrepreneurs.