



ZDH PARTNERSHIP PROGRAM

DEVELOPING AND OPERATING AN INFORMATION SERVICE FOR CHAMBERS AND TRADE ASSOCIATIONS

By

Wong Chin Yeow

FOREWORD

Information is one of the most important services that enterprises expect from chambers of commerce and industry as well as from business sector associations. This is especially true for small and medium enterprises (SME) since their in-house info-search capabilities are often weak and undeveloped.

Getting the right information in time has become more essential with rising competition and expanding market opportunities, which come in the wake of globalisation of trade.

Chambers and industry associations have to develop and improve their information services to satisfy the rising needs of their members and to attract non-members. Information is to cover a wide scope of areas: Technology as well as local and foreign market information, information on policies, laws and regulations, on markets, fairs and exhibitions, on new publications, buyers and suppliers, etc.

The ZDH Partnership Program, a German funded development assistance project that helps chambers and associations to improve services to SME, published a Manual on Information Services already two years ago. Like its predecessor, the present Manual has been written on behalf of the ZDH Program by Mr Wong Chin Yeow. This Manual is thoroughly revised versions of its forerunner.; it has been very much expanded to cover a wider scope of informatino services and to include new developments.

Mr Wong Chin Yeow is an experienced consultant in information services. He worked for several years with the Singapore Manufacturers Association (now SCI) and has assisted various chambers and associations on behalf of the ZDH Program to enhance their information function. He has established his own consultancy company in Singapore in 1998.

The Manual is an excellent guidebook for chambers and associations, it is methodical in its approach, gives many examples and checklists, and is written to help business organisations along in developing their information services in a stepwise approach. The newcomer to information will find that concepts and terms are explained in simple enough langugage and the more experienced chamber or association representative will still benefit from the Manual as it also addresses information services that can be developed by more advanced business organisations.

We hope that the Manual will be very much used by the partners of the ZDH Program to whom it will be made available. The reprint or translation of this Manual by other institutions is encouraged; we would be pleased if a copy of the reprinted or translated version of the manual would be sent to us.

A handwritten signature in black ink, appearing to read "Heiko G. Waesch".

HEIKO G WAESCH
Regional Coordinator
ZDH Partnership Program

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

The twenty-first century is known as the "information age". Today, information is often used to achieve a competitive advantage. Information plays a vital role in investment decisions, export and import and other economic activities. Consequently, the Business Information Centre (BIC) of a chamber or trade association performs a critical role, as it is a focal point for information collection, processing and dissemination to potential users.

This manual is intended for officials and staff of chambers and trade associations who are planning to set up a BIC. The manual is designed as a step-by-step guide. Special emphasis is placed on making the BIC a self-financing entity and on the need to market the services of the BIC aggressively. In other words, the BIC should be run like a business.

1.2 Definition of a Business Information Centre

For the purpose of this manual, the following working definition of a BIC will be adopted:

"A BIC is an organisational entity that facilitates the acquisition, processing, transformation, storage and distribution of accurate and timely information to help customers to solve their business problems".

Customers may be the chamber or trade association itself or its member companies or foreign firms.

The primary concern of a BIC is information provision and not data processing as in a computer centre. Neither is it concerned with developing management information systems for the chamber. Although computers may be used in the BIC, they perform a supporting role. Consequently, our definition is designed to avoid questions that usually plague technology-based definitions of a BIC. It also provides measurable performance indicators to evaluate the success or failure of a BIC i.e. its ability to help businessmen in decision-making.

1.3 Information vs. Data

The distinction between data and information is a constant source of confusion. From the onset, it is vital that we understand the difference between the two so that the focus of the BIC is clear. Data is usually defined as a collection of stored facts within a specific context. Information, on the other hand, is data presented in a meaningful or actionable way so as to facilitate decision-making and accelerate the growth of the enterprise.

To convert data into information, we usually apply the following techniques:

- Collection
- Classification
- Sorting, adding and merging
- Summarising
- Storing
- Retrieval
- Dissemination

To ensure that the information generated is useful for an enterprise, the following criteria must be observed:

- Relevant
- Timely
- Accurate
- Correct information format
- Accessible

1.4 Objective of a Business Information Centre

The major objective of a BIC within the chamber or trade association is to provide a range of timely and cost-effective information services which will enhance the decision-making process and competitiveness of its member companies. In order to achieve this objective, the BIC should concentrate on the 5Rs: providing the right information to the right person at the right time in the right quantity and right quality.

1.5 Roles of the Business Information Centre

A BIC is often required to play a number of roles within the chamber or trade association. The following are the common roles of a BIC in developing economies:

- Become a one-stop information and resource centre for small and medium enterprises (SMEs);
- Facilitate and promote business links between local and overseas enterprises through its information and business networks;
- Facilitate strategic linkages between SMEs and large enterprises within the country; and
- Provide information support to the internal staff of the chamber or trade association.

CHAPTER TWO

DEVELOPING A BUSINESS INFORMATION CENTRE

2.1 Introduction

Setting up a Business Information Centre (BIC) is a long-term commitment and can be costly in financial terms. The BIC would have to be run on a commercial basis with the necessary management and financial controls. Budgets must be established together with performance indicators to measure the effectiveness of the BIC.

Figure 2.1 presents a step-by-step approach for developing a business information centre within the chamber or trade association. Additional steps can be included to refine the process.

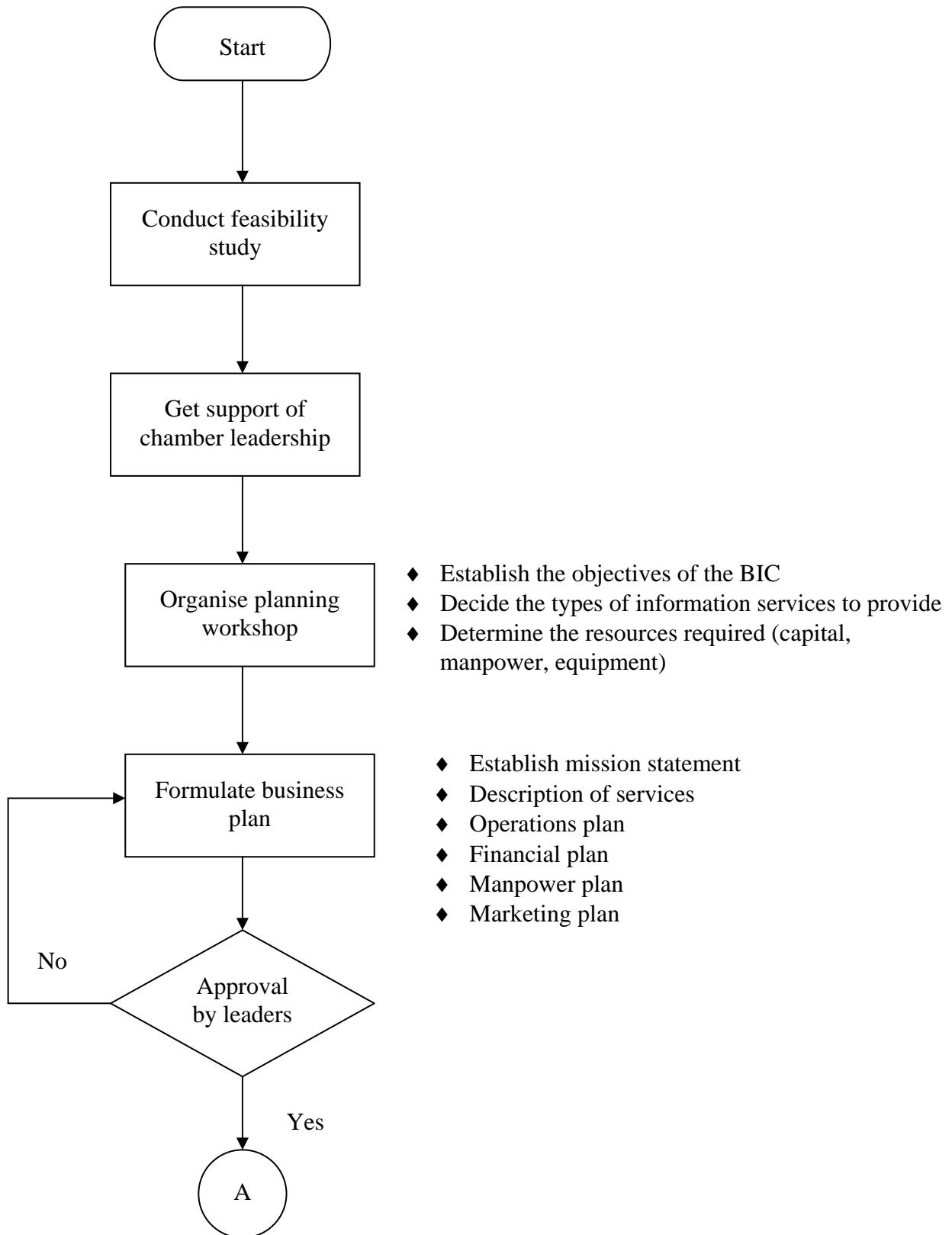
2.2 Feasibility Study

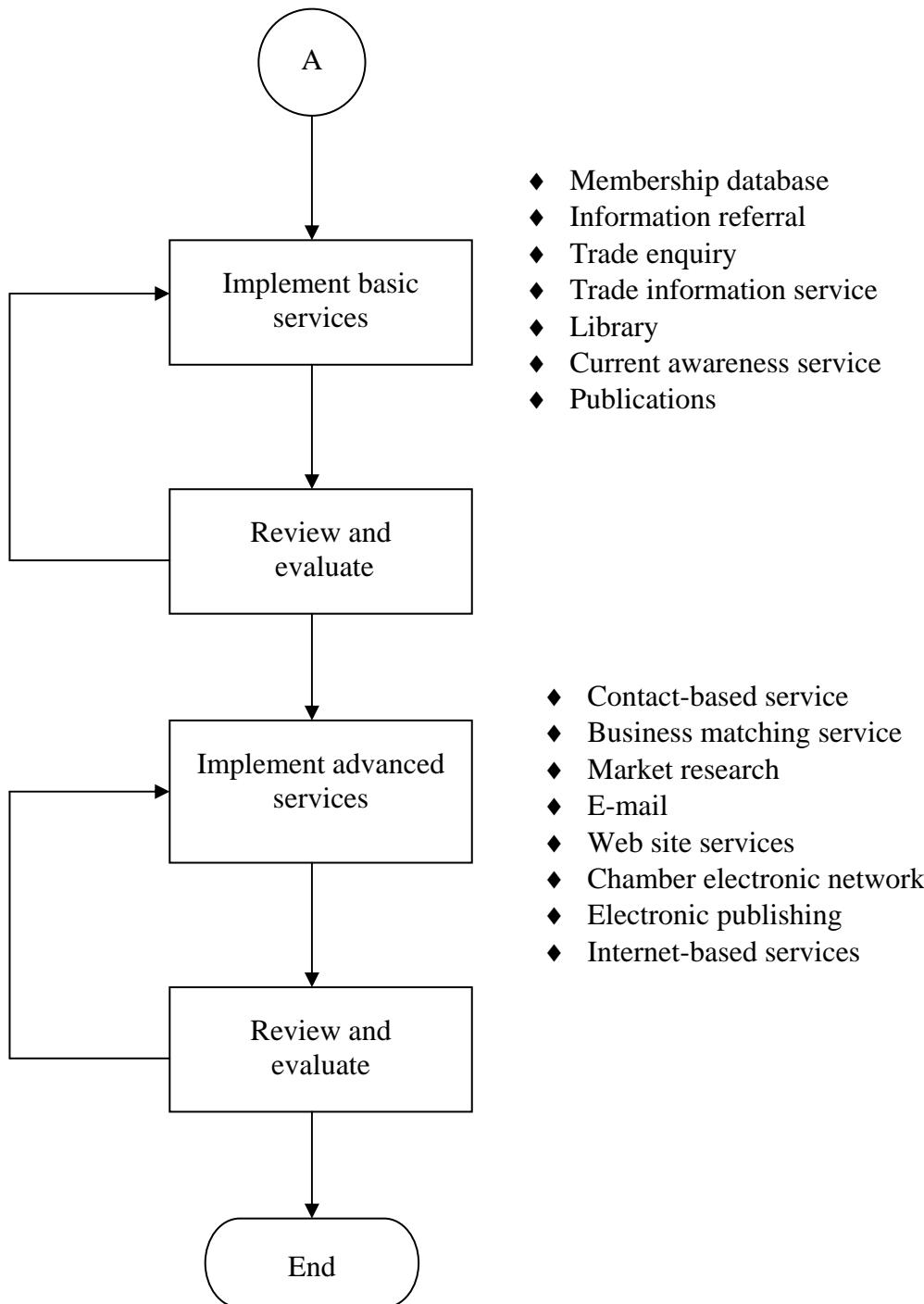
The first step in developing a BIC is to conduct a feasibility study to determine the viability of a BIC for the chamber. The feasibility study can be undertaken by either a task force (steering committee) or an external consultant on behalf of the chamber.

An external consultant is the most effective choice for conducting the feasibility study. The consultant should be selected based on his past experience and expertise in management information systems. But sometimes a small chamber cannot afford outside help and decides to use one of its staffs as the consultant. When an internal staff is used, it is vital that the person should not have any vested interest in the project. He should also be allowed to perform the study without fear of recrimination for asking probing questions.

If a task force approach is used, the team members should comprise key board members, secretariat staff and selected members with experience in using information. Choose members with knowledge, resources and the will to discharge their responsibilities successfully throughout the feasibility study.

Figure 2.1
A Step by Step Approach to Developing a Business Information Centre





Before commencing with the feasibility study, the chamber should develop clear terms of reference to guide the team members or consultant on the direction of the study. Typical terms of reference may include the following:

- ❖ To identify the types of information and services that are needed by the chamber and its members

- ❖ To identify the potential users of the BIC and how their information needs can be satisfied by the establishment of a BIC
- ❖ To conduct a cost-benefit analysis of a BIC within the chamber
- ❖ To recommend measures to develop a viable BIC within the chamber
- ❖ To provide a road map to sustain the BIC in the long run

The process involves asking the right questions, getting the response and documenting how the BIC can solve the business problems of the members. In particular, the task force or consultant should examine the following issues carefully:

- (1) Is there a demand for business information in the chamber?
- (2) What are the existing information gaps in the economy?
- (3) What types of information are required?
- (4) Who are the potential users of such information? Are the numbers large enough to justify the required expenses? Do they play a key role in the development of the economy?
- (5) Is the required information available from other existing information providers?
- (6) Can other organisations provide the information?
- (7) Will the BIC help the chamber to attract new members?
- (8) Will the BIC help the chamber to retain members?
- (9) Are the potential users willing to pay separately for the service or will it be financed through membership subscriptions?
- (10) Can the information that is collected be repackaged and sold separately to cover costs?

2.3 Support of the Chamber Leadership

After the feasibility study is completed, a report should be prepared and submitted to the leadership of the chamber for deliberation. This will help to generate top leadership commitment to the establishment of a BIC. Top management support is vital, as the initial setting-up phase requires the commitment of scarce financial

resources of the chamber. It is also recommended that the leader of the task force or the external consultant make a presentation to the Executive Board to explain the findings of the feasibility study and answer any questions arising from the report.

After the deliberation of the report, a number of outcomes may result. If the chamber leadership supports the establishment of a BIC, the project can proceed onto the next stage. If the leadership does not support the BIC, the project should be deferred until a later date. Alternatively, the task force may wish to modify its findings to take into account the reservations of the chamber leadership.

2.4 Planning Workshop

Once the chamber leadership accepts the feasibility study, a planning workshop should be organised to map out the broad strategies of the BIC. The planning workshop should involve key leaders of the chamber, members of the task force and key secretariat staff who will implement the BIC. It can be a one or two-day workshop. At the end of the workshop, the members should agree on the following issues:

- ◆ The focus of the BIC
- ◆ The detailed objectives of the BIC
- ◆ The broad strategy for developing the BIC
- ◆ The types of information services to be provided
- ◆ The resources required in terms of manpower, capital equipment and finance
- ◆ Key performance indicators

These deliberations will form the backbone of the business plan of the BIC. For example, the objectives of the BIC will be translated into a mission statement to guide the staff of the BIC. A financial budget can be developed based on the resources agreed at the planning workshop.

2.5 Business Plan

After the planning workshop, the secretariat staff of the chamber will develop a business plan. A business plan is a 10-50 page document through which the decision to commit financial resources is made. The document provides the details of a BIC from all perspectives such as marketing, finance, manpower and operations. It tells us

about the types of services offered, the marketing strategy, manpower required, the physical layout, the capital and operating costs of the BIC.

(a) Functions of a Business Plan

A BIC business plan serves four main functions.

- (1) To conceptualise and explore ways of developing and managing the BIC by charting the BIC's future course and devising a strategy for getting there.
- (2) To maintain focus on the major objectives of the BIC
- (3) To evaluate and assess the centre's actual performance over time.
- (4) To convince the governing council of the chamber or trade association of the viability of the BIC.

(b) Key Components of a Successful Business Plan

A business plan has the following components structured as follows:

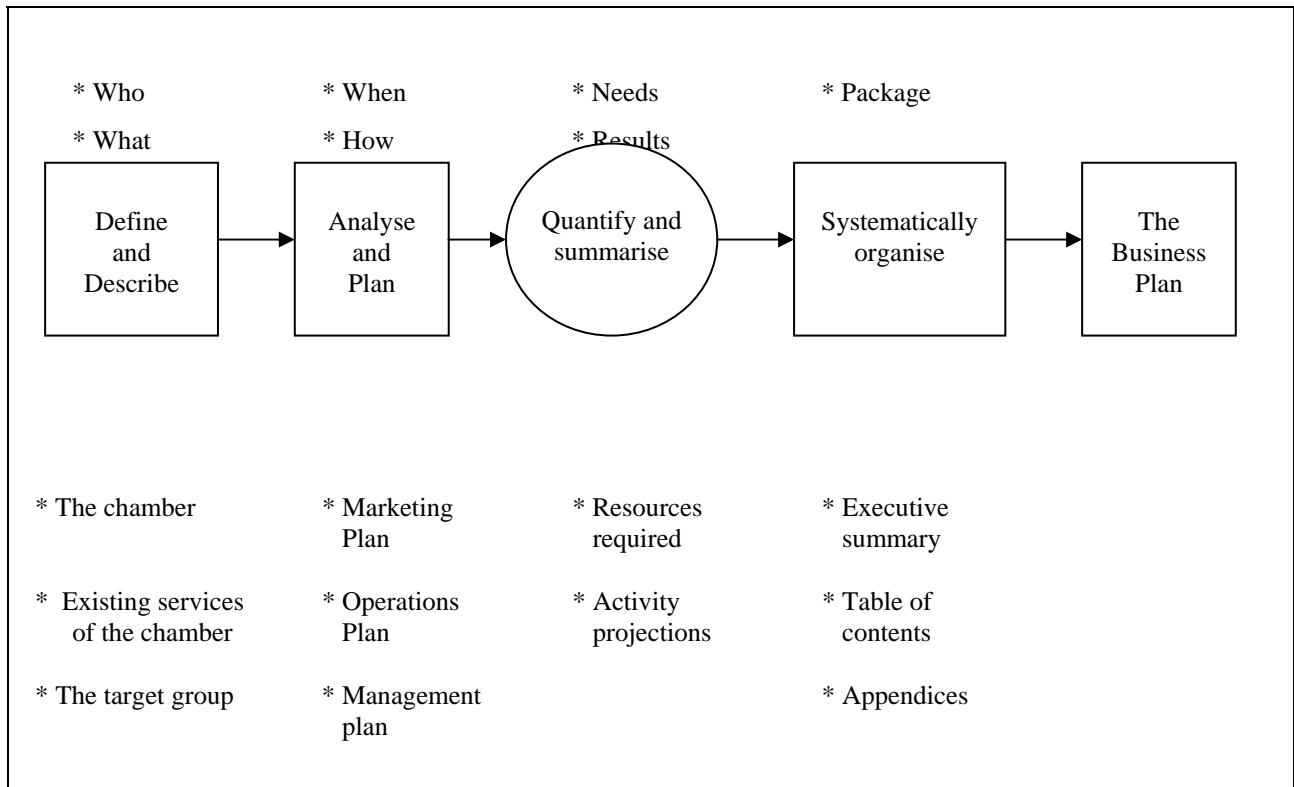
- I. Table of contents
- II. Executive Summary
- III. General Description of the BIC
- IV. Products or Services
- V. Marketing Plan (comprises the description of the customer, target market and marketing strategy)
- VI. Operations Plan (how the service will be provided and resources required)
- VI. Management Plan (management structure and key personnel)
- VII. Financial Plan (costs of developing and operating the BIC).

The business plan may vary from 10-50 pages or more in length. A summary plan, about 10 pages long, is becoming popular. It is usually used when a chamber is starting up a basic Business Information Unit. A standard business plan runs about 40 pages. There is also an operational business plan that takes up 50 or more pages. It details strategic and operational matters.

2.6 Developing a Business Plan

Figure 1 shows the steps and systematic flow of information in the development of a business plan.

Figure 1
Overview of the Development of the Business Plan



(a) Define and describe the BIC

To create an effective business plan, we begin by defining and describing the BIC in terms of the target markets or groups and their information needs. This is the most difficult part of the planning process and the resultant analysis will influence the types of information services that will be offered by the BIC. Specifically, we focus on the following factors:

- (1) Who are the primary and secondary target groups?
- (2) What are the information needs of the target groups and their priority?
- (3) What should be the range and depth of information provided?

(i) Target Groups

Most BICs may not have the financial and manpower resources to service all types of companies. Consequently, the BIC will have to decide which will be its primary and secondary target groups (or clientele) that will be serviced by the centre. Should the primary target group be:

- All firms in the country or only its members?
- All sectors of the economy or only specific industrial sectors or business groups such as exporters, importers or manufacturers?
- All sizes of firms or exclusively the small and medium enterprises?

For a start, it is recommended that the BIC focuses its services on small and medium enterprises. Small and medium enterprises tend to require more assistance in information search and business enquiries, as they do not have the in-house expertise or the direct channels at their disposal to obtain information.

(ii) Understanding the Information Needs

Having determined the target group(s) or clientele of the BIC, we need to establish their information requirements accurately. This will ensure that the services of the BIC are focussed and resources are not wasted in providing information that is not required by the clients.

In general, the information needs of business enterprises are numerous and varied. The common information needs are as follows:

- **Business development** i.e. to identify who are the potential business partners, where are the markets and business opportunities, what are the major trade regulations and documentation needed to export to a foreign country;
- **Competitor analysis** i.e. who are the major competitors or suppliers in the market? What are their capabilities?
- **Risks analysis** i.e. what are the business and political risks associated with a particular market or country? What are the industry risks? And what are the exchange risks?

For SMEs, they would require additional information such as:

- 1) **Information on sources of finance and working capital.** Most SMEs in developing countries face a lack of finance and working capital. This limits their ability to invest in new machineries and to expand their business. They would, therefore, require information on where to obtain finance and working capital.

- 2) **Technology information.** Another problem facing SMEs in developing countries is the low level of production technology and the presence of obsolete machinery. Many SMEs need information on how to upgrade their machines and to source for new and more advanced equipment.
- 3) **Information on government assistance schemes.** Many governments offer assistance schemes to help SMEs to grow. Many of the SMEs are often ignorant of these schemes or will need help to use them.

To identify such information needs, the following mechanisms may be used:

- (a) **Expert Panel.** An expert panel can be formed to provide guidance on the information needs of members and industries.
- (b) **Enquiries received.** Enquiries made in the past by members of the chamber or trade association can also provide clues as to the information needs of the members. Once the BIC is fully functional, it will also receive many business enquiries. Such enquiries should be recorded and analysed to understand the main areas of information needs and requests.
- (c) **Factory Visits.** The staff of the BIC should conduct regular factory visits to member companies so as to understand their business and information needs. Such visits will also strengthen the bond between the BIC and the members.
- (d) **Small focus group sessions.** From time to time, the BIC should invite selected companies for discussion on their information needs and problems.
- (e) **Seminars and Courses.** Another good source of information is participants attending training courses or seminars organised by the association. As part of the course or seminar, officers of the BIC should take the opportunity to conduct a survey on the information needs of companies.
- (f) **Surveys.** Surveys in the form of mailed questionnaires are another good method to gather feedback on the information needs of the members. However, in a developing economy, this technique may be less useful as companies are often not willing to participate in surveys. The participation rate is usually low (less than 10 per cent). Consequently, regular follow-up by the staff is essential to maximise participation. It is also advisable that

the survey be supplemented by other data collection methods. In developing the survey questionnaire, care should be taken to ensure that the objectives are clearly stated and that the members are properly informed about the benefits of the survey for their enterprises. The questionnaire should be simple, short and where possible, respondents should only be required to tick the appropriate responses.

(iii) Determining the Information Coverage

It may not be feasible or economical for the BIC to collect all the required information due to its variety and range. Therefore, the staff of the centre should **prioritise** the identified information needs to determine the types of services to be offered. At the same time, the BIC must also focus on information that will be most frequently requested by its target users and that can be obtained at a reasonable cost.

From the experience of many BIC, the information most frequently requested by members are:

- (a) Business contacts (e.g. trade enquiries, request for business co-operation)
- (b) Contact details (e.g. name, address, telephone, fax numbers) of potential importers from abroad
- (c) Contact details of suppliers and subcontractors
- (d) Potential business local and foreign business partners
- (e) Business legislation and trade regulations (especially if they are reviewed and updated regularly)
- (f) Taxation information
- (g) Manpower information (e.g. where to get skilled workers and professional expertise)

(b) Analyse and Plan

After understanding the nature of the target market segment and their information needs, the business plan will explain how the BIC will attempt to serve the potential customers. It will also provide a time frame for implementing the various information services.

At the end of this phase of the business planning process, the major components of the business plan will be developed and consists of the followings:

- Mission statement

- Operations plan
- Marketing plan
- Financial plan
- Management plan

Mission Statement

A BIC needs a long-term vision to provide it with a sense of direction. This long term vision is usually articulated through a mission statement which reflects the organisation's philosophy, values and beliefs, and its approach in providing information services". A good mission statement usually addresses the following issues:

- The organisation's purpose, shared beliefs and values
- A definition of the business of the BIC - what information needs are being satisfied? who are the target users? how do we reach out to the target users? what technologies will be used to deliver the information services?
- The organisation's attitudes towards growth.

An example of a mission statement of a BIC is provided below:

"To provide timely and accurate information and business advice to small and medium enterprises so as to improve their efficiency and competitiveness. Its information search, data-process capabilities and information networks are and will continue to be significant driving forces behind its services. The information unit will adopt values that are consistent with the vision of the chamber"

Operations Plan

The operations plan will discuss the types of information services to be provided by the BIC. To meet the business information needs of the SMEs, a BIC usually offers four basic types of services or activities. The precise nature of the services offered depends on the needs of its clientele, the resources available and the maturity of the BIC. The basic business information services are:

1. Providing membership information to the management board of the chamber, trade promotion organisations, and local and foreign enterprises. This requires the chamber to develop a good membership database;

2. Information referral service. Since the BIC cannot collect and house all the required information within the BIC, it can assist the members by referring them to organisations that has the information. This is a form of information referral service (see 4.2);
3. Trade enquiry service;
4. Trade information service. This is a weekly or fortnightly publication of business opportunities;
5. Library services. A BIC should have a simple library of trade directories, telephone books, business laws and trade regulations;
6. Current awareness service (see 4.3)
7. Publications. Using the information in the membership database, the BIC can publish a number of business directories. Other publications include a handbook of information sources, updates on business legislation and taxation (see 7.4);

As the BIC develops, it can add on other information services which are listed below:

1. Information enquiry and search services (see section 4.1, 4.4, 4.5)
2. Business contacts and matching services to facilitate business co-operation between member companies and to match local with potential foreign partners (see Chapter 5);
3. Business services aimed at improving the business performance of companies and help them compete locally and internationally. This takes the form of consultancy services, subcontractor exchange and supplier partnership programmes to assist the SMEs;
4. Electronic-based information services using the Internet and other technological innovations (see 4.7 and Chapter 6).

5. Electronic publishing service. This includes the creation of CD-ROM based information services; creation of web pages for members (see 6.8);
6. Electronic networking of chambers (see 6.9);
7. Training of target users to optimise the use of information for business decision-making and competitiveness.

Marketing Plan

Having created the right types of business information services, the BIC will have to find ways of ensuring that the targeted groups use its services. This is especially true for developing countries where information is often collected but not used because of poor marketing or inefficient information delivery systems. Special attention, therefore, must be given to the distribution of information and how such information can be marketed to the right users. It is important for the BIC to develop a marketing plan. A marketing plan explains how the BIC intends to reach out to its target groups and get them to use the information services provided. Some of the important issues, which will have to be addressed by the marketing plan, are:

(a) Market Definition and Opportunity

As discussed earlier, the BIC will have to identify the relevant target groups, their nature, and their importance. In addition to the descriptive content, the plan should offer an evaluation of the relative attractiveness of each target segment : Which markets are of primary importance? Why? Will this relative importance shift over time?

(b) Other Information Providers

Who are the other existing information providers in the country? This will help to determine the niche of the proposed BIC and avoid the duplication of services, thereby minimising any wastage of resources. At the same time, an understanding of the role of other information providers will facilitate information networking and referrals.

(c) Marketing Strategy

A marketing strategy explains how the BIC will organise and implement its marketing plans in order to ensure that the appropriate information is

channelled to the right user in the correct form. With a marketing approach, the staff of the BIC would try to reach out to the target users and sell the relevant services provided instead of waiting for them to come to the BIC.

(d) Pricing Strategy

A BIC normally provides a mixture of free and fee-based services. Some services like the library are provided free as part of membership benefits of the chamber or trade association. Other services will have to be fee-based to reflect their market value.

As a principle, a small fee should be levied where possible so that the users will value the services. It must not be too high as to deter the use of the service or too low. From a business point of view, it may be wise to defer the imposition of a "market-level" service charge to a later stage when the BIC have reached a "stage of maturity" and when clients are willing to pay for the "professional services" rendered.

(e) Advertising and Promotions

To ensure that the services of the BIC are fully utilised, there is a need to market the services to the members and public and inform them of the range of services provided by the Centre through:

- A **corporate brochure**;
- A **service guidebook** detailing the types of information services available and describing how to access such services;
- An **information guidebook** on the types of the information and data available from the centre;
- Special **seminars and training courses** on "how to use information effectively and successfully";
- **Local mass media.** The mass media (i.e. radio, television, newspaper) are very effective channels of marketing. Instead of advertising in the newspaper, the BIC can contribute articles to the local newspaper on subjects of interest, thereby generating publicity for the centre. Staff can also participate in talk shows over radio or television. Likewise, the BIC can publish a regular column in the newsletter of the chamber or trade association.

Financial Plan

The staff will also have to decide on the financing of the BIC and how revenues would be generated. A financial plan will have to be formulated before the commencement of the BIC. The purpose of the financial plan is to formulate a set of projections reflecting the BIC's anticipated financial performance. The financial plan would include the following:

- Projected income and expenditure statements, typically for five years;
- Projected cash flow statements for the first two years;
- A current balance sheet.

Subsequently, annual income and expenditure statements would also have to be prepared so that strict financial control can be exercised.

(a) Expenses

There are two main types of expenses:

- Capital expenses i.e. computers, furniture, office equipment, office renovation, etc
- Operating or recurrent expenses i.e. staff salary, rental, utilities, telecommunications charges, library materials, etc

Capital expenses are normally planned one year in advance and provisions are made for such expenses in the annual capital budget. Recurrent or operating expenses are incurred daily, weekly or monthly. These expenses will affect the day-to-day running of the BIC.

(b) Revenue

The main source of revenue comes from certain income generating activities and fees charged on the services provided. As a principle, a small fee may have to be levied on all services so that the users will value the services. The income-generating activities of a BIC are:

- Publication of membership and trade directories
- Production of business CD-ROM
- Translation services
- Office services
- Business services
- Selling of mailing lists

- Special research reports
- Customised information service
- Search services
- Business advisory and consultancy services
- Catalogue and corporate video library

Some services and activities of the BIC may have to be provided free of charge as a standard benefit of chamber membership. These services are often used to attract new members and retain existing ones. Financing of such services usually comes from membership subscription. Consequently, these services should only be available to members of the chamber or trade association and not to the public at large.

Non income generating activities are:

- Library services
- Basic business enquiries
- Information referral service

It will take time before the BIC reaches its maturity. As such, there is no need to provide the complete range of services at one go. Likewise, the use of sophisticated equipment like computers, electronic data interchange system, advanced storage and retrieval system should grow with the BIC over time.

Management Plan

There is no ideal organisational structure for a BIC. The staffing requirements will depend to a large extent on the range of services provided, the availability of funds and the priority given to the BIC by the governing council of the chamber or trade association.

(1) Advisory Committee of the Business Information Centre

It is recommended that every BIC form an advisory committee to advise on the long-term development of the BIC. The advisory committee should also act as a bridge between the users and staff of the BIC, providing a much-needed link between industry and the chamber.

The Advisory Committee should comprise key industry leaders of the chamber or trade association, academics and government officials. In order not to stifle the

initiative of the secretariat staff operating the BIC, the Advisory Committee should not interfere in the day-to-day running of the Centre and would only perform an advisory role. The Advisory Committee should not have any executive power.

The committee could adopt the following terms of reference:

- To advise the BIC on the information needs of industry;
- To recommend appropriate strategies and policies for the development of the BIC;
- To advise the BIC on the types of information services to be offered;
- To advise on the marketing and dissemination of information; and
- To provide guidance on the management of the BIC.

(2) Staffing

In general, there should be a good mix of staff with different skills in the BIC. The specialist staff should have imagination and initiative based on a broad foundation of professional education and training. Specifically, the following skills are often found in a mature BIC.

- (a) Head of the BIC. The head of the BIC is a managerial position responsible for charting the direction and managing the day to day operations of the centre. He should have keen interest in research, a strategic vision, strong leadership skills and some business experience. His business experience will ensure that the information provided is relevant to the needs of the business community.
- (b) Documentalist(s). The documentalist critically analyses selected documents, summarises the data and information, and may even combine the data with other sources to form a new compilation.
- (c) Information Specialist(s). The information specialist converts the problems or queries posed by users into search models, evaluates the search results, obtains and formulates the answers into natural language texts. The information specialist may also provide information to the user based on his or her own specialist

knowledge or from published materials that are collected, administered and made available by the librarian.

- (d) Information technologist(s). The information technologist provides supporting computing services to the BIC. He is usually familiar with computer programming, database management and some basic knowledge of computer hardware and software.
- (e) Librarian. The librarian takes care of the library and its contents, selecting, cataloguing and documenting the acquired library materials and providing information and loan services to meet the needs of its users.
- (f) Research officer(s). The research officer conducts research and surveys, and interprets and presents the results in a manner, which can be easily understood by the businessmen.
- (g) Translator(s). The role of the translator is to translate foreign language information into the local language. Such translators must also understand technical terms.

Although we have listed out seven types of skills required in the BIC, it does not mean that the BIC would have to employ eight staff. In a small BIC, one person may be responsible for the entire centre and will be required to assume multiple roles. For example, the librarian may also be the information officer and documentalist. Likewise, the research analyst may be the translator, information technologist and information officer (refer to Chapter 8 for details on the manpower requirements).

(3) Utilising External Resources

A BIC will never have sufficient in-house resources to offer the entire range of information services required by the members of the chamber or trade association. To enhance its capability, it must work closely with other information providers, universities, government departments, embassies, non-government organisations, financial institutions and consultancy firms. For example, many banks have economic departments that collect economic statistics and conduct business studies that are relevant to the members of the chamber. They also publish country reports that are useful for companies intending to export overseas. A close working relationship between the BIC and the banks will widen its information base. Such a relationship can be informal or formalised through the following mechanisms:

- Request to be put on their regular mailing lists for publications;
- Regular visits by staff of the BIC to the facilities of the external resources for discussion;
- Inviting the external resources to participate in the centre's activities or to sit in selected committees of the BIC; and
- Organising regular seminars using external resources. For example, the BIC can jointly organise seminars with the universities to inform members of the research currently undertaken by the university staff. Some of these researches may be useful for industry. Likewise, joint seminars can also be organised with the banks to explain to members the range and types of financial services available.

2.7 Approval by Chamber Leaders

After the business plan is prepared, final approval will be required from the top leadership of the chamber. The leadership of the chamber may choose to approve the plan in its entirety or request for modifications and changes.

2.8 Implementation of Business Plan

From the experience of the chambers in various Asian countries, the information services of the BIC will have to be implemented in phases. In the first phase, only the basic services should be implemented. This includes the following services, which will be elaborated in greater details in Chapter 4:

- Creation of an effective membership database
- Information referral service
- Trade enquiry service
- Trade information service
- Establishment of a simple business library
- Current awareness service
- Publication of trade directories, newsletters and other business documents.

In the second phase, more advanced services would be provided (see Chapter 5,6 and 7):

- Contact-based service
- Business matching services

- Market research
- Business services
- E-mail services
- Creation of web sites and pages
- Establishment of a chamber electronic network
- Electronic publishing and the creation of CD-ROM
- Internet-based services

2.9 Review and Evaluation

After the establishment of the BIC, an annual review and evaluation should be conducted to ensure that the correct types of information services are provided. Most evaluations are based on an analysis of variance between actual and expected performance. The review and evaluation process will determine how far the information services had achieved their purpose and whether the information services were cost-effective. The review should also determine what improvements are required to make the BIC even more cost-effective. At the same time, it is also necessary to consider how the information required for evaluation of the BIC should be obtained and analysed.

The evaluation is usually conducted by a chamber staff appointed by the head of the secretariat or by an external consultant. An external consultant is most appropriate if the feasibility study was prepared externally.

2.10 Common Problems faced by BIC

In developing a BIC, there are a number of problems faced by the chamber or trade association. They include:

- (a) **Lack of financial resources.** A BIC is often not revenue generating in the beginning and has to compete for scarce chamber resources. To solve this problem, two approaches can be adopted. The first approach is to source for external financial assistance. The chamber can approach private business organisations, non-government organisations and international aid agencies to provide financial support. However, many of these organisations would require a professional plan from the BIC before agreeing to any proposals. The second approach is to develop the BIC in phases, in line with the financial resources

available. However, this piece-meal approach often suffers from a lack of integration of information services.

- (b) **Lack of top leadership commitment.** Many leaders of chambers are not aware of the importance of information and are not willing to commit the chamber's resources to such an activity. There is a need to conduct special workshops for the leaders to help them understand the roles of a BIC. The involvement of the leaders of the chamber in the planning workshop and activities of the BIC can also help to create top leadership commitment.
- (c) **Lack of expertise and manpower.** Many chambers have limited manpower resources and the expertise to run a successful BIC is usually not available. To overcome this problem, there is a need to tap on external resources. Many financial institutions and government statistical organisations have the information that is useful to members of the chamber. Likewise, private consultancy firms have the technical expertise to help the BIC to run effectively. The chamber should network with these organisations to tap on their expertise to augment in-house resources.
- (d) **Services provided do not meet the needs of the members.** Many chambers do not provide information and services that are required by the members. For example, the business information available in the library is often outdated. Membership information is not accurate. It is vital that a proper feasibility study be conducted before creating a BIC. Existing BIC should conduct regular surveys and feedback session to identify the information needs of the members.
- (e) **Lack of a pro-active and marketing oriented outlook of the staff of the BIC.** One major shortcoming of many BICs is a lack of a pro-active approach to marketing and promoting its services. For example, many staff of the BIC sit in the office and wait for the members to approach them. The experiences of many chambers in other countries suggest that this is unlikely to happen as members are often unaware of the services of the BIC. It is vital that staff of the BIC adopts a pro-active approach and visit the members regularly to identify their information needs. The BIC should also market its activities through regular features in the chamber newsletter, marketing brochures and participation in other chamber activities.

CHAPTER THREE

TYPES AND SOURCES OF BUSINESS INFORMATION

3.1 Introduction

Before proceeding to provide selected information services, a good BIC should have ready access to the following types of information:

- (a) A good membership profile database
- (b) A database or register of local and foreign information sources
- (c) A good collection of local economic and business information
- (d) A good collection of international economic and business information

The above information should be kept in a reference library or resource centre located in a convenient place that is easily accessible by members of the target group(s). Appendix I explains how to set up a basic reference library within a BIC.

3.2 Membership Database

A database is basically a collection of related information about a subject organised in a manner, which facilitates easy retrieval, modification and analysis. Thus, a membership database consists of business information of chamber members that is organised for ease of use. The database can be managed manually or be computerised.

A comprehensive membership database is needed within the BIC for the following purposes:

1. To analyse membership information and company profile.
2. To generate mailing labels for communicating with members.
3. To create business directories (including CD-ROM).
4. To facilitate business matching and trade inquiry between members.

5. To facilitate business matching and trade inquiry between foreign and local companies.

The quality and usefulness of the database is only as good as its input. To maintain the quality and usefulness of the membership database, the information must be **screened for accuracy and timeliness**. It should be **updated regularly and be fairly comprehensive** in coverage, containing the following information:

1. Name of company
2. Address
3. Telephone, fax and telex number
4. Name of owner/chief executive officer
5. Name(s) of person(s) to contact for business co-operation
6. Legal status of company (Private/State owned/Joint Venture/Wholly foreign)
7. Products manufactured
8. Employment size
9. Physical size of factory in square metres or acres
10. Equipment used in factory
11. Principal export markets
12. Areas of interest for business co-operation

Appendix II provide details on how to organise and manage a membership profile database. Membership information is normally collected through surveys using standard forms.

Creating and managing a membership database is time-consuming and costly. To defray part of the cost, the membership database should be turned into an income-generating activity. Such activities include selling mailing lists that can be derived from the database and creating a trade or business directory of members for sale.

3.3 List of Information Sources

It is unlikely that the BIC would have the resources to collect all the information required by the target group(s). For information that is not available in the BIC, the staff should know where it could be sourced. For easy reference, the BIC should compile a simple directory of information sources. The following are especially useful for the business community:

- List of local and foreign raw material suppliers
- List of local and foreign equipment manufacturers and suppliers
- List of consultancy services available
- List of foreign buyers
- List of financial sources
- List of government assistance available for small and medium enterprises
- List of training courses

To partially finance the cost of developing the above databases, a directory of information sources could be published and sold to the public.

3.4 Economic and Business Information

The BIC should have a good collection of local and international economic and business information materials. The information must be current and arranged in a format that is easily understood and accessible to the users. Local business information are particularly useful for foreign investors intending to invest in the country or foreign businessmen interested in developing business contacts with potential local partners. The availability of such information would also be a good selling point to encourage potential investors to join the chamber or trade association as members.

Local businessmen will need good economic and business information of other countries and specific products. Market information by country and region, trend of product demand, prices and foreign trade regulations will be an asset for potential exporters. In addition, a good collection of technology and standards information can also help to improve the productive capability of the local companies.

The following are details of the types of information that could be kept in a good BIC. Not all the information should be collected. As explained in Chapter 3, the staff of the BIC must **prioritise** the required information by understanding the members' need:

Basic business information

1. Social, political and economic information of the country
2. Basic business laws
3. Laws relating to foreign investments and business co-operation

4. Labour legislation of the country
5. Guide on how to do business in different countries. Such guides are available from most major international consulting firms.
6. Directory of government departments and officials
7. Directory of private and government business enterprises within the country published by other trade associations, government departments and foreign embassies
8. Industry reports and other special studies

Investment information

1. Negative list that indicates product areas or industrial sectors where foreign investors are prohibited from investing in.
2. Wages and fringe benefits by geographical area, occupation and industry
3. Labour availability by major occupation and geographical area
4. Rental of office space and industrial land
5. Cost and availability of utilities (water, gas and electricity)
6. Telecommunications cost
7. Other costs of doing business in the country
8. Financial and banking system
9. Taxation
10. Tax incentives for investors
11. Product and technical standards
12. List of national sources of information.

Business opportunities

1. List of potential local and foreign buyers
2. Tender information from local, state and federal government, international organisations and foreign governments
3. Guide or reference book on major trade exhibitions held within and outside the country
4. List of foreign missions visiting the country
5. Business/trade inquiries from abroad
6. Publications of other trade associations
7. Foreign trade association publications (especially directories)
8. Directory of local and foreign suppliers (e.g. Asian Sources)
9. Company newsletters
10. Annual reports of companies

Market information by country and region

1. Import and export statistics
2. Economic trends
3. Trends of demand of major products
4. Information about competing suppliers in other countries
5. Tariff and quota changes
6. Trade channels, list of importers in other countries and methods of doing business
7. Foreign trade regulations e.g. duties payable, quota restrictions, non-tariff barriers
8. Price information on major products

Technology

1. Directory of foreign and local equipment suppliers
2. Selected publications of latest technology trends by industry
3. Publication of organisations such as UNIDO, Technonet Asia and academic institutions.

General

1. Business dictionary
2. Technical dictionary
3. An atlas
4. A gazetteer

3.5 Sources of Information

Generally, the above information can be obtained from the following sources:

Published information. A large amount of useful information can be obtained from published sources. This source of information is easily accessible and tends to be less expensive to collect. They include:

- Publications of international organisations such as International Monetary Fund (IMF), United Nations Conference on Trade and Development (UNCTAD), International Trade Centre (ITC), Economic and Social Commission for Asia and Pacific (ESCAP), International Labour Organisation (ILO), General Agreement on Tariffs and Trade (GATT) and the Organisation for Economic Co-operation and Development (OECD);

- Publications of commercial publishers such as Economist, Economist Intelligence Unit, Dow-Jones, Asian Sources, World Executive Digest and Asian Business;
- Commercial wire services;
- Specialised economic, trade and technical journals covering specific products;
- Commodity brokers' newsletters;
- Newsletters of transnational and shipping companies;
- Directories and handbooks on trade regulations, tariff structures, customs clearance procedures, etc.

Other chambers and trade associations. Many chambers and trade associations publish trade directories, newsletters and trade information guides. Some chambers even publish price indices, cost of living guides, economic surveys, and specialised business surveys and trade journals. These are useful as they provide up-to-date information on the country or regions they represent;

Non-government organisations (NGOs). Many NGOs have access to a host of economic and business information via their national and international networks. These NGOs can also provide the BIC with referrals to other relevant information providers;

Banks and related financial institutions. Banks and related financial institutions are a good source of business information. Many banks publish economic surveys, country reports, economic forecasts and handbooks on how to do business in a foreign country. Banks are also a good source to identify potential business partners and to obtain a credit-rating assessment of a specific firm;

Local and international consultancy firms. Consultancy firms usually have a wealth of information. However, most of it may be confidential. Consultancy firms are a good source of tax and technology information. Many international consultancy firms publish regular country reports, handbooks on doing business abroad, tax information and other financial data;

Foreign embassies. Embassies are a good source of information of the country they represent. The bigger embassies usually maintain reference libraries and have commercial sections that can give business advice and information. Some embassies e.g. US embassy, publish regular country reports which are fairly up-to-date;

Visiting foreign business and trade missions. Many visiting foreign business and trade missions carry with them a wealth of information on the country they come from or have visited. Many of them will be able to give first hand account on business

practices and opportunities. They can also provide a good assessment of the investment climate in another country;

Returning trade missions. Many chambers and trade associations despatch overseas missions on a regular basis. These missions can provide first hand assessment on the business opportunities of the country of visit. The BIC should conduct regular debriefings of such trade missions to collect information. Some trade missions also publish mission reports which could be kept in the resource library;

Trade representatives of the country abroad are another good source of information. Many of these trade representatives collect business information on a regular basis. The BIC should request to be put on the mailing list of the country's trade representatives abroad. They should also have a list of trade representatives or overseas contact persons;

Institutions of higher learning. Many institutions of higher learning have researchers conducting research on a wide range of topics. Institutions of higher learning are a good source of specialised studies and technical information. They can also provide specialised information based on research and consultancy projects undertaken by their academic staff;

Local and federal government authorities. Many government authorities publish regular economic surveys, manpower reports, trade and industrial statistics. In addition, it would be useful to maintain a close working relationship with the government officials of these authorities as some of the statistics collected may not be published. Such statistics may be made available to the BIC on a "personal" basis;

Electronic information sources. With the advancement in information technology, a mass of real-time information is now available on electronic information services. Information and data are also increasingly available on computer diskettes and CD-ROM disks. The advantages of electronic information sources are the real-time access and ease of information handling. For example, an entire book can be stored in a computer diskette or on a CD-ROM disk. The data can also be easily retrieved on a personal computer for research purposes.

The information collected should be timely, accurate and current. The BIC must know precisely what information can be obtained from each of these sources, and how closely the information matches its own priorities and information needs.

CHAPTER FOUR

INFORMATION SERVICES

4.1 Information Enquiry Service

Most information centres begin by offering a simple information inquiry service in the form of a trade enquiry or technical enquiry service. This is basically a question and answer service whereby the BIC receives the business enquiries from members or foreign companies and distributes them to the members through a newsletter or circular. Enquiries can be made either through telephone, fax or on an inquiry registration form (see Annex A for an example). For specific requests, staff of the BIC can scan their database and provide the required information.

To operate a trade/technical enquiry service, the BIC should proceed as follows :

1. Recruit a multi-lingual staff for the service. The staff would have to be trained in business information search and be well versed with government assistance schemes;
2. Set up and maintain a comprehensive membership database;
3. Write to all member companies and foreign trade associations informing them of the service (see Annex B);
4. Conduct a preliminary screening of all business inquiries received for authenticity, reliability and accuracy;
5. Catalogue, compile and document all such inquiries; and
6. Develop a system of disseminating business inquiries by informing members directly through the telephone/fax, circular or weekly newsletter on business inquiries. An example of such a newsletter is given in Annex C.

In answering business enquiries, the following procedure should be observed so that the right type of information is provided to the enquirer:

- Who is requesting the information and how to contact him;
- What information is required?
- Why does the user need the information?

- How is the information to be presented?
- When is the response required?

The business enquiry service can be a potential income-generating activity in the long run. In some countries, companies subscribe to such a service for an annual fee. In return, these companies will be the first to receive regular faxes on business enquiries or information on government tenders. The BIC will also ensure that only the relevant ones are faxed to the subscribers.

4.2 Information Referral Service

Usually at the early stages of the development of the BIC, most of the business enquiries cannot be answered using in-house resources. Instead the BIC will refer the enquiries to other information providers or individuals with specialised knowledge. To establish a referral service, the following steps are needed:

- Identify major sources of business information and the relevant contact persons within the country
- Establish a "personalised" relationship with other information providers within the country for mutual exchange of information
- Compile a database or directory of information sources

This service is usually provided free of charge as a service to the members.

4.3 Current Awareness Service

As the BIC grows in size and experience, it can add on new services like a current awareness service. The objective of a current awareness service is to highlight the availability of certain useful information to the target users of the BIC. The development of a current awareness service involves the following steps:

- Scanning for information that are appropriate for the members of the target group;
- Compiling a title-list of recommended articles and providing the relevant abstracts;
- Circulating the compiled list to potential users through a regular publication at regular intervals. Interested users will then contact the BIC for copies of the selected articles at a small fee.

4.4 Customised Information Service

Unlike the current awareness service that caters to the general membership, the customised information service provides information to selected users. The users can be specific industrial sectors, selected business groups or companies which play a key role in the development of the economy. Individual users subscribe to this service by listing their subjects/topics of interest. The BIC will scan for the required information and mail the abstracts to the subscriber at regular intervals. Interested subscribers will then contact the BIC for copies of the selected articles. The service is usually provided at a fee.

4.5 Information Search Service

The BIC can also offer a search service for users with special requirements. This service is especially useful for small and medium enterprises. Unless a company is familiar with information search procedures, it can be frustrating and costly because an inefficient search will require more time and money. The BIC, by having specialised and trained personnel, can ensure that the search is conducted in the most cost-effective manner.

The search service can be a simple referral service such as recommending a list of reference materials or providing the actual information. An example of such specialised search service is the patent search service often used by companies to explore the types and range of technologies available internationally. Electronic on-line information search on local and foreign companies to determine credit rating is another type of service provided by some information centres.

4.6 Briefing Services

Many chambers and trade associations organise overseas trade missions to help members seek new markets and business opportunities. Before going abroad, it is vital that mission members be briefed on the country of intended visit especially on the cross-cultural aspects of how to do business in a foreign country. Most of the information required is usually available in the BIC. Staff of the BIC could be asked to brief the mission members.

Likewise, many chambers and trade associations also receive visitors or trade missions from abroad. Many of these visitors will require briefing on the economy,

investment and trade regulations and other business information. Again, the BIC can provide such briefing services.

CHAPTER FIVE

BUSINESS MATCHING SERVICE

5.1 Introduction

Trade enquiries and business matching are important services of the chamber and trade associations as most enterprises join chambers to receive regular information on possible business contacts. Likewise, many foreigners often come to the chamber to look for potential business partners.

5.2 Types of Business Matching Service

In developing a trade enquiry and business matching service, there are four levels of service that can be provided by the chamber or trade association. Level I service is the simplest to provide, while Level IV is the most sophisticated. The selection of which service to provide will depend on the stage of development of the chamber.

(a) Level I - Trade Information and Business Opportunities

Most chambers and trade associations provide information on trade and business opportunities. This is usually done through weekly or fortnightly publication of a trade information service circular.

The steps in developing such a service are as follows:

- Maintain a list of trade and business enquiries from local companies
- Maintain a list of trade and business enquiries from foreign companies
- Circulate the list to interested parties either in the form of a fax, telephone call, a circular or newsletter.

(b) Level II - Business Contact and Partner Identification

There are four types of services at Level II. Level II services are more focused and provide specific information to the inquirer. The chamber can charge for some of these services.

- List of Potential Contacts by Product Categories or Countries - provide a simple list of member companies to enquirers. This could also take the form of a mailing list.
- Market Contacts Service - helps the client to identify key market contacts specific to the client's needs and verify the contact details and provide a brief description of each contact. To provide good market contacts, the staff of the BIC may have to spent about 15 to 25 hours of research time.
- The Right Connections Service - provides the client with details of potential partners and market representatives; and an assessment of their interests in the client's business and recommendations for action. The time taken to research for the service is 40 to 50 hours.
- The Right Arrangements Service - provides the client with details of potential partners and arranges for business meetings. The chamber may also provide translation and interpretation services during the meeting.

(c) Level III - Market Research Services

A good understanding of the market is essential for penetrating new markets. Many local and foreign companies often request for market information that requires research.

- Market Selection - under this service, the business matching service will provide the client with information on market demand and possible market entry barriers affecting the product.
- Market Knowledge - this is the most detailed and comprehensive type of market research. The research helps the client to understand the operations of the target market, the expected competition, prices of similar products, promotion and distribution. The research may require assistance from professional consultancy firms.

To collect the above information, the chamber may have to conduct a market survey. In addition, there will be a need to prepare detailed reports. Some chambers in Asia are already providing this type of service e.g. the Hubei Provincial Chamber of Commerce and Industry and the Jiangsu Provincial Chamber of Commerce and Industry. The ZDH Partnership Program provided assistance to the above two chambers to conduct the market surveys.

Once the chambers or trade associations have developed the necessary capability for market based services, they may consider a strategic collaboration with private and foreign organisations to offer the services. A good example is the All China Federation of Industry and Commerce Information Centre (ACFIC). The BIC conducts an annual survey of the “Investment Environment in 186 Cities in China” jointly with a Beijing market research company, a Hong Kong financial news agency and a Japanese financial news agency.

As market research is time-consuming, the chamber would have to charge the client for such services.

(d) Level IV - Joint Ventures and Business Collaboration

This form of business matching is usually not within the scope or capability of the chambers or trade associations as it involves months of detailed negotiations and a large amount of legal work. Such matching is best left to the professional consultancy firms. However, the chamber and trade associations may request for a referral fee.

5.3 Supporting Activities

(a) Seminars

To support the business matching service, the chamber should organise regular seminars to brief members on how to do business with foreign companies. This may take the form of country briefings, business practices and etiquette and negotiation techniques.

In addition, business-matching seminars can be organised when a foreign delegation visits the chamber. During these business-matching seminars, one-to-one meetings should also be organised to provide opportunities for members to get personally acquainted with prospective foreign partners.

(b) Out-Bound Missions

The organisation of out-bound trade and business matching missions is another important activity of the chamber in promoting business matching. The out-bound mission seeks to reach out to the potential partners instead of waiting for them to come to the chamber. Before embarking on an out-bound mission, the chamber should ensure that the mission members are properly briefed about the economy and

the business practices of the countries that will be visited. If time permits, a brochure outlining the details of the proposed joint venture projects should be compiled and printed for circulation.

5.4 Developing a Business Matching Service

In developing a business matching service, the following steps should be considered as a guide:

- Step 1 - Determine the types of business matching service to be provided.
- Step 2 - Assess the financial viability of such a service and resources available.
- Step 3 - Develop a business plan for the business matching service.
- Step 4 - Create a focal point for business matching activities in the chamber or trade association.
- Step 5 - Develop the supporting infrastructure for the business matching service based on the plan:
 - Collection of local yellow pages and directories
 - Collection of foreign trade directories and yellow pages
 - Good membership database.
 - Good documentation procedures and filing system for the service
 - Office
 - Tables
 - Chairs
 - Computers
- Step 6 - If the above information is not available, write to the relevant organisations for such information.
- Step 7 - Recruit the manpower required for the service.
- Step 8 - Develop the forms to be used in the service:
 - trade/business enquiry form
 - membership profile form
 - report format for the various services
- Step 9 - Develop procedures for handling local and foreign enquiries for business matching, including the screening process.

- Step 10 - For contact-based services and research based services, develop a framework for analysing client's requirements and format for reporting of information.
- Step 11 - Decide how the services will be charged.
- Step 12 - Request members who are interested in business matching to submit detailed company information. A standard form should be developed to collect the company information. The interested company should also provide corporate brochures and samples of their products.
- Step 13 - Publicising the service locally and abroad.
- Step 14 - Training of personnel on business matching procedures, information search processes and handling enquiries.
- Step 15 - Evaluate the above system and procedures.
- Step 16 - Follow-up procedures. This is a critical step in the entire process. The business matching service should follow-up on all enquiries, whether successful or otherwise. Proper records should be kept on the follow-up action and success cases should be publicised to create awareness of the service.

5.5 Resource Requirements for Business Matching Service

To provide effective business matching service, the chamber would have to commit specialised resources to the service. Usually in most chambers, one or two persons is/are assigned for the job.

- Qualified persons with some working experience and ability to conduct desk research and interviews with clients and companies, and conversant with foreign languages.
- A good membership database.
- A good business library with product catalogues and company annual reports.

5.6 Administering Business Enquiries and Developing Business Matching Procedures

Since trade enquiry and business matching service are vital services of the chamber, it is recommended that a standard procedure be developed to handle such enquiries. Such a procedure should address the following questions:

- Who and which department in the chamber is responsible for business matching and trade enquiries?

- Who is responsible for checking the authenticity of the enquiry?
- What method(s) will be used to authenticate the enquiry?
- Is it necessary to acknowledge the receipt of enquiry?
- What is the maximum time allowed for answering any enquiry?
- What is the title of the form(s) that will be used to record the enquiry?
- What information is entered on the form?
- Who maintains the completed form?
- Where are the forms stored?
- Where to search for information to respond to the enquiry?
- What method(s) would be used to communicate the information to interested parties?
- Who is responsible for follow-up of the enquiry?
- How should the follow-up be done? (e.g. through phone, personal visits, fax, etc)

Example of Procedures for a Contact-based Business Matching Service

The following is an example of the procedures for developing a contact-based business matching service:

- Step 1 - Receive inquirer
- Step 3 - Request the inquirer to fill up business enquiry form (refer to Annex B)
- Step 4 - Check the completed business enquiry form
- Step 5 - Are there any missing details? If YES, ask the inquirer to fill in the missing details. If NO, proceed to Step 6.
- Step 6 - Check for the authenticity of the inquiry
- Step 7 - If the inquiry is authentic, proceed to Step 8. Else terminate the inquiry by telling the inquirer that the chamber cannot help.
- Step 8 - Study the inquiry and understand the requirements
- Step 9 - If the requirements are not clearly spelt out, clarify the requirements with the inquirer. Else, proceed to step 10
- Step10 - Check the membership database.

- Step 11 - Are there any member companies that meet the requirements of the inquirer? If YES, proceed to Step 12. If NO, tell the inquirer that there are no members that meet his requirement. Go to Step 23.
- Step 12 - Print the list of members and their details.
- Step 13 - Provide the list to the inquirer.
- Step 14 - Ask whether the inquirer requires additional information. If YES, proceed to Step 15. Else go to Step 23.
- Step 15 - Study the additional requirements of the inquirer.
- Step 16 - Can the chamber provide the additional information requirements? If YES, proceed to Step 17. If NO, Go to Step 23.
- Step 17 - Is the provision of additional information chargeable? If YES, proceed to Step 18. If NO, go to Step 19.
- Step 18 - Ask the inquirer whether he is prepared to pay for the additional information? If YES, proceed to Step 19. If NO, go to Step 23.
- Step 19 - Proceed to acquire the additional information.
- Step 20 - Is the information provided chargeable? If YES, prepare invoice for payment. If NO, proceed to Step 22.
- Step 21 - Provide the additional information and invoice to the inquirer.
- Step 22 - If the information provided is chargeable, request for payment. Else, proceed to Step 23.
- Step 23 - Complete lower portion of Form 1.
- Step 24 - File the completed Form 1
- Step 25 - END

5.7 Follow-up procedures

Developing follow-up procedures is another important aspect of a business matching service. The following areas should be noted:

- Members should be encouraged to report all outcomes of the trade enquiry or business matching to the BIC, whether successful or otherwise.
- Proper records should be kept on the follow-up action.
- Successful cases should be publicised to create awareness of the service.

- The BIC should also solicit regular feedback from its members on the usefulness and the quality of the service. This will help the BIC to improve on the services offered.

5.8 Information Dissemination

To speed up the information dissemination process, it is proposed that the chamber sends the information to the interested companies directly by fax or by telephone on receipt of the enquiry. The information should also be published in the newsletter with the **date of receipt of enquiry** included.

CHAPTER SIX

ELECTRONIC INFORMATION SERVICES AND OTHER NEW INNOVATIONS

6.1 Introduction

Most electronic information systems involve the use of computers, data communication networks and the Internet. Before we look at the details of electronic information networks and other innovations in information technology for information services, it is essential for the reader to understand some of the basic computing concepts that will be used in this chapter. For readers not familiar with computing terms, they are requested to read Annex H.

6.2 On-line Information Services

Many electronic on-line information services are now widely available from commercial companies. On-line information services basically provide subscribers with news, stock quotes and other business information via telecommunication linkages. Access is provided mainly through telephone lines via a modem using a communications software and personal computer. You have to be a subscriber with an account before you can access the information. Apart from paying a subscription fee, you will also have to pay for access time to retrieve the information. The fees can be steep - averaging more than US\$1 per minute. In addition, you will also have to pay your local telephone company for the connect time.

Many on-line information providers also permit access through the Internet. This will greatly reduce the cost of accessing information as Internet access is based on local call rates. However, you will still have to pay a subscription fee and a time-based charge for retrieving the information.

Trade information contained in major databases can be broadly classified into the following categories:

1. Market information
2. Trade contact information

3. Price information and other economic statistics
4. Others e.g. data on shipping, trade fairs, technical standards, packaging, new products, tariffs and trade regulation

(a) Market Information

Market information can be obtained on-line from a number of bibliographic databases. These databases usually compile information published in newspapers, magazines, journals, books, reports and other publications. The information may be reproduced in full or in an abstract form. Market information on the United States and Europe are more readily available on-line while information on Asia and other developing countries are less readily available. Major on-line market information databases are Dialog Information Retrieval Services (U.S.), Kompass Online, Data-Star (Switzerland), Industry Data Sources/Harfax (Canada) and Foreign Trade and Economic Abstract (Netherlands). Specialised databases are also available for selected products and countries. These include Coffee-line (coffee), Chemical Business Newsbase (chemical), CERAB (ceramics), Agridata (agriculture), Middle East Abstracts (Middle East), Nikkei (Japan) and ICC Key Notes (United Kingdom).

(b) Trade Opportunities and Tenders

Several databases specialise in the dissemination of trade opportunities. These include Business, Commars, Tradetech and the World Trade Centre Network (WTCA On-line). Information on industrial projects and related supply opportunities of the World Bank and various development banks are available on Scan-a-Bid. A similar database on public tender opportunities in the countries of the European Union is TED (Tenders Electronic Daily).

(c) Others

Other on-line information services provide stock market information, news, price information, economic statistics, shipping, and packaging, tariffs and trade regulations. They include Dow Jones News/Retrieval Service, GEnie, Telerate, Prodigy, BRS Information Technologies, IP Sharp and Data Resources Inc. The former four services provide mainly up-to-date stock quotes, home shopping services and news updates. The latter three services are either bibliographic retrieval services which specialise in maintaining huge computerised indexes to scholarly, scientific, medical and technical literature or statistical databases.

On-line information services are most useful if you require real-time or time-sensitive information such as the latest news, stock quotes, commodity prices, and foreign exchange rate. These services are generally expensive and are **not cost effective** unless you are accessing large volumes of information regularly. In particular, small and medium enterprises are usually **disadvantaged** in the use of such electronic on-line services because of their limited information requirements and the lack of skilled computer manpower to conduct efficient information searches.

Most chambers and business organisations providing on-line information services to their members levy a fee for the use of such services. The fee is based on the actual access time to retrieve the information and a small administration fee (e.g. 10 per cent). This is the practice of the TANTSIA-FNF Service Centre of Tamil Nadu in India. Inspite of charging a fee, most of these organisations do not breakeven on the on-line services due to the high subscription fees.

6.3 CD-ROM and Computer Diskettes

For non-time sensitive information, a good alternative to the electronic on-line information services is CD-ROM disks or computer diskettes. CD-ROM based information are widely available and are usually distributed free of charge. Many business directories are also available on CD-ROM. However, you will need a computer with CD-ROM drive.

Before we subscribe to an on-line service, it would be better to check whether the same information is available in CD-ROM disks or computer diskettes. This is a preferred option because you only need to pay a one-time fee for the CD-ROM disks or computer diskettes. Retrieval time is free and you can make full use of the interactive searching potential of such databases.

Therefore, before signing up for an electronic information service, the staff of the BIC should check whether the required information could be obtained on CD-ROM disks or computer diskettes. For example, international trade statistics are available from the International Monetary Fund on diskettes. Statistics on Singapore and other useful business information can be obtained on CD-ROM disks from the Singapore Trade Development Board. The US Department of Commerce has also downloaded selected business information on CD-ROM disks. Company financial statistics are

available from KOMPASS. For information on suppliers, ASIAN Sources CD-ROM is an important source of information.

6.4 Electronic Bulletin Board System

An electronic bulletin board system (BBS) is a computer (generally a micro-computer) set up to receive calls and act as a host system. BBSs allow users to communicate through message bases, to exchange files and to share information. To access an electronic bulletin board, the user requires a modem, a communication software, a bulletin board software and a telephone line. Bulletin boards are relatively cheap to maintain and operate. The major disadvantage is the high cost of access, especially when long distance telephone calls are required.

Some chambers (e.g. the Philippines Chamber of Commerce and Industry and the All China Federation of Industry and Commerce) have established bulletin boards for their members. The common services offered over the BBS are:

- Economic, financial, technological and statistical information
- Information on trade fairs and exhibitions
- Joint venture opportunities
- Chamber newsletters
- Uploading and downloading of the above information
- Electronic mail
- Forums
- File libraries
- Shareware software

Bulletin boards were very popular in the 80's and early 90's. However, most of these BBSs are gradually replaced by web pages on the Internet, as the cost of accessing information is cheaper through the Internet.

6.5 Internet-based Information Services

The Internet contains many useful business informations that the chamber requires. However, the information is actually found on the World Wide Web that cross-references, links and retrieves data from computers around the world using the hypertext system.

World Wide Web (WWW or W3) is the huge collection of interconnected hypertext documents. Hypertext documents are simply text with links. Hypertext documents can contain links to other documents, to other kinds of files, and to other sites on the Internet.

The WWW is implemented as a client server software application. The client, usually called an Internet browser, resides on your computer. The server operates on another computer, connected to the Internet, that contains resources available for access by clients.

To find information on the Internet, the chamber requires the following:

- Web address which identifies the location of the information on the World Wide Web
- Web browser
- Search engine or web directory

Details of the above tools are provided in Annex K. Most of the information on the Internet are provided free of charge. Some organisations require the user to register before they are allowed to view the web pages (e.g. Financial Times). Other organisations charge a membership and user fee for access.

The chamber can provide a bureau service to help members to search and access Internet-based services. Useful information on the Internet can be downloaded regularly and distributed to members in a circular or newsletter. Such information includes country profiles, international trade statistics, commodity prices and other economic information. Useful URLs should also be circulated.

6.6 Web Pages and Web Sites

Due to the world-wide reach of the Internet, some chambers are considering using the Internet to reach out to existing members, potential members and foreign chambers and enterprises. This mainly takes the form of web sites or web pages on the Internet. The URL of such web sites are provided in Annex L.

Most of the web sites of chambers contain the following information:

- Profile of the chamber
- Members of the Executive Board or committee
- Listing of members by industry or name
- Newsletter
- Country profile
- Business information
- E-mail contacts
- Market research and customer surveys
- Business matching form
- Trade enquiry form
- Links to other information providers in the country

Through their web sites, some chambers are able to compile a regular list of trade enquiries. The Indonesian Chamber of Commerce and Industry of East Java receives about 30 enquiries a week from their web site. The listing of members' profile is another useful service on the chamber's web site, judging from the number of access by users.

6.7 Other Electronic Information Services

(a) Directory of E-mail Addresses

Electronic mail (e-mail) is the most widely used function on the Internet. It is an electronic cross between letters, telephone calls and faxes. With the rising popularity of e-mail, there is a need to create a directory or Yellow Pages of e-mail addresses of chamber members. This will complement the existing business directories published by most information centres. Alternatively, the e-mail addresses should be incorporated in the listing under the business directories.

(b) Directory of URL

To help the SMEs access information on the Internet, a directory of useful URL could be published by the BIC. This directory should include URL of government departments, educational institutions, private organisations, chambers and international bodies.

(c) Electronic Publishing

Electronic publishing includes the creation of CD-ROM business directories, construction of web pages and web sites on the Internet. Most chambers have already produced a CD version of business directories that incorporates powerful search features (e.g. Vietnam Info of VCCI) and other useful business information. Some of these CD-ROM are sold to generate revenues for the chamber. Another method of generating revenue is to sell advertisement space on the CD-ROM.

With the increasing use of the Internet for marketing, many SMEs will require assistance to create web pages and a good site to host these pages. The chamber may wish to provide such assistance or provide a referral service.

(d) E-mail services

For members of chambers in the rural area, Internet connections may be expensive. However, they may still require an e-mail address. Some chambers provide members e-mail facilities at a small fee. The major disadvantage is the lack of security as the e-mail can be opened by the secretariat staff.

6.8 Chamber Electronic Network

The creation of a nation-wide electronic network for chambers is becoming increasingly popular. The roles of such a network are:

- Provide on-line interactive information exchange between the national chamber, provincial chambers and members
- Provide an information bridge between chamber and the international community via the INTERNET or other mechanism.

Appendix IV provides a step-by-step approach for creating such an electronic network. It also outlines the process, resources and manpower needed. In terms of hardware configuration, the following options are available:

(a) Wide Area Network

Many chambers favour the use of wide area network to provide connectivity. There is a need to critically evaluate whether connectivity in the form of a wide area network is required by the chamber. The benefits of connectivity must be evaluated against the real costs of a network and need for connectivity. The real costs of connectivity include:

(i) Physical Level Costs

- Telephone and lease line charges
- Maintenance of phone lines
- Carrier charges
- Special hardware
 - Network cards for personal computers
 - Protocol converters
 - Modem costs
 - Terminal controllers
 - Communication controllers
 - Routers

(ii) Logical Level Costs

- Network management software
- Terminal emulation programmes

(iii) Local Level Costs

- Special network versions of application systems
- New application development to use connection
- Format translation programmes
- Changes to existing programmes due to network

There is also the human cost of connectivity. These include:

(i) Installation Costs

- Training costs
- Actual time spent in installation
- Time spent in problem resolution in initial time period

(ii) Maintenance Costs

- Time spent in controlling network configuration changes
- Installation of new network software releases
- Training time to learn new features with new releases
- Problem resolution - user support
- Performance tuning

(iii) Administrative Costs

- System backup
- Password administration
- Conflict management

Given the limited need for real-time information at the chamber, **a wide area network is not recommended**. Instead, the chamber should explore the following alternatives:

(b) Sneaker Net

In a “Sneaker Net”, data is stored on one main computer. A diskette copy is made when sharing is required and this is physically transferred onto the machine requiring the information. Alternative, the transfer can be effected via the Internet using the FTP protocol.

(c) Client/server on-line software with multi-user hardware

Another solution is to employ a new generation of client/server on-line software with multi-user hardware e.g. GalactiBox which enables the chamber to support up to 256 simultaneous users on a single personal computer. In addition, such hardware allows 16 or more lines to answer to the same telephone number.

This new generation of client/server on-line software enables the chamber to run an INTERNET type of service on a desktop personal computer. It can offer users a full menu of interactive services:

- Electronic mail (E-mail)
- Group messaging areas
- File libraries
- Multi-user teleconference
- Polls and questionnaires
- Hypermedia
- INTERNET connectivity

The server runs on a 486 or Pentium DOS machine, and can efficiently handle over 100 high-speed (v.34) callers, with INTERNET connectivity up to 250 simultaneous TCP/IP sessions (telnet, ftp, rlogin, WWW). A basic system that can support up to 8 simultaneous users will cost about US\$7,000 excluding the Pentium server.

(d) INTRANET

The use of an Intranet is becoming popular to link chambers electronically. Intranet refers to the use of Internet technologies for data communications within private organisations. In other words, an Intranet is a private computer network based on the data communication standards of the public Internet.

Intranet offers the advantage of lower costs, the use of existing Internet web browsers and a gateway to the Internet. The major problem of an Intranet is the need for the national chamber to operate a lease line and this can be expensive in some countries. At the same time, the members must have access to a local Internet service provider to use the Intranet.

The creation of an Intranet requires technical expertise normally beyond the capabilities of the staff of the chamber. Thus, it is essential that the chamber employs a professional information technology company to build the Intranet. Currently, the All China Federation of Industry and Commerce and the Philippines Chamber of Commerce and Industry^a are using this method to create a chamber network.

^a Support is provided by the ZDH Partnership Program

CHAPTER SEVEN

BUSINESS SERVICES

To ensure the financial viability of the BIC, there is a need to provide income-generating services to finance the activities of the centre. Most of the following business services are spin-offs from the information provision activities of the centre.

7.1 Business Centre

Some information centres set up professional business centres for members within their premises to generate revenue. The Business Centre could also provide services to foreign companies wishing to establish business contacts with local companies. The following services could be provided by a Business Centre:

- (a) Office and secretarial services
- (b) Group fax and telex service
- (c) Photocopying service
- (d) Translation service
- (f) Documentation service
- (g) Rental of temporary office space

All these services should be provided on a fee-paying basis. Foreign companies could be charged higher fees for such services compared with the local members.

(a) Office and Secretarial Services

Within the Business Centre, office space could be rented to local and foreign businessmen. Such an office would require an executive table with chair, a small filing cabinet, fax and telephone facilities. In addition, it should offer temporary office personnel for companies using the Business Centre. The office personnel should provide secretarial services such as typing, arranging for meetings and translation services.

(b) Group fax, international calls, telex and photocopying services

In many developing countries, fax and international calls are not readily available for the small and medium enterprises. The BIC could consider offering such facilities to its members and foreign companies at a fee on a cost-recovery basis. Photocopying services can be offered as a by-product of the library facilities.

The BIC could also run a bureau service for members. For companies without a fax or telex machine, member companies should be allowed to use the Business Centre's fax or telex number in their correspondence with foreign companies. The fax or telex received would be forwarded to the companies concerned. To encourage members to use the bureau service, all their correspondence should be kept in strict confidence.

(c) Translation Services

Many foreign trade documents and materials will have to be translated. The demand for such **technical translation** service will grow with time. At the same time, foreign companies visiting the country would require good translators to assist them with their business dealings.

Instead of employing full-time translators in the association, the service could be provided by independent translators. The BIC will have to set up a register of qualified translators and act as an intermediary between the translators and potential clients. It is essential that the association vets and screens the translators so that high standards and quality are maintained.

(d) Documentation Services

Most information centres also provide documentation services for small and medium enterprises. They include the issue of certificates of origins and certifying the authenticity of documents used in international trade such as invoices, insurance policies, etc. Another documentation service is to help small companies apply for government assistance schemes and fill up the required forms.

(e) Renting out of Space

The BIC may also rent out space for conferences and for small temporary exhibitions by foreign companies or trade missions. For the latter, it may

provide related services such as issuing invitations to interested companies to meet the trade mission, arranging for translators, transport and hotel facilities.

7.2 Catalogue Library

To assist members in their business, a separate Catalogue Library of members' product could also be created. This could be supplemented with a library of corporate videotapes. To establish the Catalogue Library, the secretariat staff would have to write to all members requesting for copies of their corporate brochure. This will be catalogued by industry (based on SITC scheme) and made available to foreign and local businessmen for reference purposes.

To generate revenue for the BIC, a separate Catalogue Showcase or display section can also be created in the business centre. The Catalogue Showcase will display the corporate brochures of member companies. Interested third parties or foreign buyers would be allowed to take these brochures away, together with name cards of company representatives. Members participating in the Catalogue Showcase should be charged a fee that will cover the administrative and manpower cost of running the Catalogue Showcase.

7.3 Business Advisory Service and Consultancy

Business advisory service of a BIC usually offer advice on the following areas:

- Business management
- Taxation
- Industrial relations
- Industrial safety and occupational health
- Legal matters

In providing advisory services, there are two options for the BIC - it can either employ a group of full-time in-house experts or work with selected individuals or consultancy firms on a retainer basis. The advantage of in-house expertise is accessibility, availability and control. The major disadvantages are difficulties in recruiting highly qualified persons to serve as consultants and the high salaries needed to retain them. To solve this problem, the information could employ retirees with extensive business experience on a part-time basis. In addition, the chamber or trade association can also tap on international expert schemes such as the British Executive

Services Overseas (BESO), Canadian Executives Services Overseas (CESO), Australian Executive Services Organisation (AESO), Japanese Expert Service Abroad (JESA) and German Senior Expert Services (SES) to recruit overseas experts on cost-sharing basis. Similar schemes are also provided by other Economic Union (EU) countries. For more details, the staff of the BIC should contact the respective embassies for more information and assistance.

Most BICs charge members for the use of the advisory service as time is involved. A graduated schedule of fees may be charged based on the functions involved and the time required for dispensing the service. Routine advice may be offered free of charge.

An alternative to in-house expertise is to work with external consultants on a retainer basis. Many international consulting firms are more than willing to work with BICs to provide business advice and consultancy services. The centre can develop joint schemes with these external consultants whereby the BIC will refer such enquiries to the consulting firms. The consultants can be requested to provide the service either free or charge a special concessionary rate for the members.

7.4 Publications

Once the membership database is completed, the BIC should publish a directory of companies. The directory would contain non-sensitive information of companies but must contain enough details to be useful. It should be cross-classified by alphabetical order and industry. Should the need arise, it can be translated to other languages.

For the directory to be revenue-generating, income from advertisement is essential. Alternatively, the association could consider giving an independent publishing house the rights to publish the directory for a fixed fee or a percentage of the advertisement revenue. This fee should be reviewed annually so that the BIC can obtain the best terms possible.

In addition, a mailing list (comprising names and addresses of companies) can also be developed from the database. The directory and mailing list can be sold and could be an important source of revenue for the BIC.

Other types of publication that may be produced by the BIC are guidebooks on:

- How to do business

- How to prepare tax returns
- How to prepare successful business plans
- How to manage the finances of the company
- Import and export procedures

CHAPTER EIGHT

EVOLUTION AND DEVELOPMENT OF A BUSINESS INFORMATION CENTRE

Like all business organisations, a BIC needs to grow and develop over time to provide a better and wider range of services. This will also ensure that the staff of the centre can grow with the centre and develop their career in a meaningful way. Table 1 to 3 present the stages of evolution of a BIC in a nutshell. They provide a summary of the activities of the BIC at each stage of its development and the manpower and equipment required. The stages are not to be interpreted in a rigid way. It is only a guide. There is no attempt to quantify the financial cost of the centre, as this will vary from country to country, depending on the national wages, rental and other operating costs.

8.1 Stage I : Business Information Services Unit

This is the first stage in the evolution of a BIC. The business information services unit is designed to service mainly the local business community. As its resources are limited, the unit will provide only basic information services such as a simple business enquiry service, local referral and a simple reference library. To generate revenue, it will rely on office and secretarial services, trade documentation and translation services. It should also attempt to publish a simple membership directory based on its membership database.

8.2 Stage II : Regional Business BIC

This is the second stage of the evolution of the BIC. Once a centre gains more confidence in its capability to provide information services, it will increase its range and depth of services. The information coverage would also broaden to include more regional information. The library collection would be larger and include more international publications and periodicals. A catalogue and brochure library should also be set up. A business advisory service would be developed to provide

preliminary consultancy to members. Characteristics of this stage of development are its adoption of a regional orientation in information provision and more reliance on income-generating and fee-based activities to finance operating expenses.

8.3 Stage III : National/International BIC

The ultimate aim of a BIC is to become a national/international BIC. A national/international BIC serves national and international business information needs of its members. The centre would also exploit its vast international network to promote the business development of the members. At this stage of development, the BIC will rely more on information technology and computers to help it to achieve its objective. Due to the economies of scale in providing information, the BIC may find it feasible to subscribe to international electronic information services. Another key development is the ability of the BIC to provide consultancy services and perform international business matching. Ideally, the national/international BIC should be self-financing.

Table 1 : Stage I - Business Information Services Unit

| S/No | Services | Objectives | Detailed activities | Resources required | |
|------|-------------------------------|--|--|--|--|
| | | | | Manpower | Equipment |
| 1. | Information management | To manage and transform data into information to help solve business problems and maintain a constant transfer of information to appropriate users | <ul style="list-style-type: none"> • Local information networking • Collection of secondary data • Maintain a basic reference collection • Information referral service • Facilitate trade and technical enquiry • Create a membership directory | Minimum requirement <ul style="list-style-type: none"> • 1 librarian / information specialist • 1 clerk Recommended <ul style="list-style-type: none"> • 1 Department Head or librarian • 1 Information specialist • 1 Training assistant (preferably multi-lingual) • 1 clerk | <ul style="list-style-type: none"> • Shelves • Desks and chairs • Typewriters or computers • Books • Periodicals • Trade literature • Facsimile machine • IDD telephones • Membership database • Photocopier |
| 2. | Business referral | To facilitate business co-operation between member companies and match local and potential foreign investors through a referral system | <ul style="list-style-type: none"> • Local business referral • Catalogue/Brochure library | | |
| 3. | Business services | To facilitate international trade and business development | <ul style="list-style-type: none"> • Translation services • Communication services • Secretarial services • Trade documentation services | | |
| 4. | Training | To train users on the optimal use of information for decision-making | <ul style="list-style-type: none"> • Basic information courses and seminars | | |

Table 2 : Stage II - Regional Business Information Centre

| S/No | Services | Objectives | Detailed activities | Resources required | |
|------|------------------------|--|--|---|---|
| | | | | Manpower | Equipment |
| 1. | Information management | To manage and transform data into information to help solve business problems and maintain a constant transfer of information to appropriate users | <ul style="list-style-type: none"> • Regional and national information networking • Collection of primary data for analysis • Maintaining a special purpose library • Current Awareness Service • Maintaining a trade/technical information service • Publication services | Minimum requirement <ul style="list-style-type: none"> • 1 Manager • 1 Information specialist /research officer cum training officer • 1 clerk Recommended <ul style="list-style-type: none"> • 1 Centre manager • 1 Librarian • 1 Information specialist / research officer • 1 Business specialist • 1 Training officer • 2 clerks | <ul style="list-style-type: none"> • Shelves • Desks and chairs • Typewriters • Computers • Books • Periodicals • Trade literature • National register of companies • Photocopier • Facsimile machine • IDD telephones • Training rooms |
| 2. | Business matching | To facilitate business co-operation between member companies and to match local companies with potential foreign investors | <ul style="list-style-type: none"> • Regional and national business matching • Catalogue/Brochure library | | |
| 3. | Business services | To grow local companies through business guidance and international trade | <ul style="list-style-type: none"> • Business advisory service • Translation service • Documentation services | | |
| 4. | Training | To train users on the optimal use of information for decision-making | <ul style="list-style-type: none"> • Basic information courses, workshops and seminars | | |

Table 3: Stage III - National / International Business Information Centre

| S/No | Services | Objectives | Detailed activities | Resources required | |
|------|------------------------|--|---|---|---|
| | | | | Manpower | Equipment |
| 1. | Information management | To manage and transform data into information to help solve business problems and maintain a constant transfer of information to appropriate users | <ul style="list-style-type: none"> • International information networking • Conduct research and generate business intelligence • Maintaining a resource centre • Information and patent search • Publication services | Minimum requirement <ul style="list-style-type: none"> • 1 Centre director • 1 Information specialist • 1 Research analyst • 1 Training officer • 2 clerks Recommended <ul style="list-style-type: none"> • 1 Centre director • 1 Information specialist • 1 Research analyst • 1 Librarian • 2 Business consultants • 1 Multi-lingual staff • 1 Training officer • 1 Training assistant • 2 clerks | <ul style="list-style-type: none"> • Shelves • Desk and chairs • Books • Periodicals • Trade literature • Typewriters • Computers with modem • IDD telephone • International dial-up services • Photocopier • Facsimile machine • Register of local companies • Seminar facilities |
| 2. | Business matching | To promoting business co-operation between member companies and to match local companies with potential foreign investors | <ul style="list-style-type: none"> • International business matching • Catalogue/Brochure/Video library | | |
| 3. | Business services | To help grow local companies by strengthening their competitive capabilities through training and consultancy | <ul style="list-style-type: none"> • Business consultancy services • Translation services • Trade documentation services | | |
| 4. | Training | To train users on the optimal use of information for decision-making | Advanced information courses, workshops and seminars | | |

CHAPTER NINE

CRITICAL SUCCESS FACTORS

Operating a BIC is like managing a business enterprise. Unless certain critical success factors are observed, the chances of success are remote. The following are the key critical success factors:

1. **Strong leadership support and commitment** from the governing council of the chamber or trade association. For the BIC to become fully operational, it may take about two to three years. Usually, some of the activities of the BIC are non-revenue generating during the initial years (e.g. the library and business inquiry desk). However, there are other activities like the Business Centre and office services that can be revenue-generating if properly managed. It is vital that the chamber or trade association provides strong leadership for the setting up of the BIC and that they consider information as one of the key services to be offered to the members.
2. **Sensitive to the information needs of the target group.** A BIC is only successful if there is a demand for its products and services. Consequently, it is imperative that the staff of the BIC should regularly examine its services to ensure that the information provided are relevant and timely. At the same time, it must continuously upgrade its services and develop new services through careful strategic planning and management.
3. The need to **promote and publicise the activities of the BIC** within the country and abroad. It is recommended that the BIC produces a business brochure that could be placed at the airport and all major hotels. This is vital if the BIC is to play a pivotal role in facilitating business opportunities for its members.
4. **Establish a good information network and working relationship** between the BIC and other information providers within the country. Such networking is essential to minimise any duplication in services.

5. **The secretariat staff must take a pro-active role** in identifying the information needs of its members, sourcing and cataloguing of information. This will ensure that the materials acquired are relevant to the needs of the members and will be utilised fully.
6. To succeed, the BIC must also adopt a **customer oriented and marketing approach** in delivering information to the users. Instead of waiting for the members to use the services of the BIC, the secretariat staff would have to reach out to them through regular newsletters, promotion seminars, factory visits and direct selling.
7. The **professional attitude of staff** of the BIC is another critical success factor. Apart from possessing the professional skills, staff of the BIC would have to be trained in telephone techniques, answering of business enquiries and customer service techniques.
8. Finally, the BIC must be **income-generating**. The experience of various BIC in Asia (e.g. ACFIC Information Centre) shows that the BIC can be self-financing and income-generating. By generating income, the BIC can expand into new activities and attract high quality staff. Therefore, it is vital that the staff of the BIC examines methods of generating income. However, some basic services should still be offered free of charge as a service to the members.

CHAPTER TEN

INFORMATION CENTRES IN ACTION

In this final chapter, we will examine the roles, responsibilities and operations of various BIC that have co-operated with the ZDH Partnership Program. For each of the BIC, we will only be examining certain key aspects of their operations to highlight some of the critical success factors and lessons to be learnt.

10.1 ALL CHINA FEDERATION OF CHAMBERS OF INDUSTRY AND COMMERCE (ACFIC) INFORMATION CENTRE^b

The All China Federation of Chambers of Industry and Commerce (ACFIC) is the central organisation of chambers of industry and commerce in China. It acts as a forum for communication and consultation between chambers of industry and commerce, non-state enterprises, foreign businessmen and the government authorities on business matters.

The ACFIC has established an information centre. The roles of the ACFIC are:

- (1) Disseminate economic, business and technology information to member chambers and the non-state sector;
- (2) Support the advocacy and policy making function of the ACFIC through data collection and research;
- (3) Promote and facilitate information networking and information exchange at the national and international level;
- (4) Undertake business and market research and prepares economic forecast; and
- (5) To foster and promote international economic co-operation.

The ACFIC is self-financing and income-generating. The success of the BIC may be attributed to the following reasons:

1. Income-generating orientation

^b The ZDH Partnership Program co-operated only briefly with the ACFIC Information Centre. The main supporter of the Centre is now the Partnership Project of DIHT and ACFIC

2. Marketing outlook
3. Good information collection and dissemination system
4. Good networking with government departments and other information providers
5. Harnessing information technology to create new information services

(a) Marketing Outlook

To market the services of the BIC, the ACFICIC has produced an impressive full-colour corporate brochure. The corporate brochure provides a general profile of the ACFICIC, its organisational structure and the services provided by the ACFICIC. This brochure is distributed to members and potential clients.

(b) Electronic On-line Information Service (ACFICIC BizNet)

The ACFICIC BizNet information system offers the following information services using a client/server on-line software with multi-user hardware:

- Business, economic, technology and statistical information of China
- Upload and download of the above information
- Electronic Mail

The network is capable of transmitting about 600,000 Chinese characters per week. Provincial chambers and enterprises can join the BizNet for RMB 2,000 per year. The following are the information available from the BizNet:

- Economic information
- Services e.g. exhibition, trade mission
- Economic forecast and analysis
- New product and technology
- Market information
- Enterprise information
- Special Economic Zone
- Financial Information
- International Trade
- Government policy and other regulations
- Supply and demand conditions
- Large and medium sized projects
- Technology transfer
- Housing and property information

- International tenders
- Investment and business co-operation
- Comprehensive information (National Information Centre)
- Commercial information (Ministry of Commerce and Industry)
- Demand and supply information (Commodity Department)
- Industrial information (Xin Hua Agency)
- Technology transfer (Patent Office)
- Chamber information (ACFIC)

The information is also sold to foreign companies and chambers to generate income for the ACFICIC. The information is highly demanded by foreign companies wishing to invest in China or trade with Chinese companies.

(c) DataChina

With the rapid development of Internet in China, the ACFICIC is currently converting the ACFIC BizNet to provide business information over the INTERNET. The network will be known as DataChina and may be accessed using the URL: www.datachina.com.cn. The following information will be available on DataChina:

- Business information
- Market information
- Management information
- Technology information
- Manpower and headhunting information
- Business legislation
- ACFIC membership database and other chamber information

(d) Information Networking

The ACFICIC has a good formal system of information networking with the relevant government departments, news agency and provincial chambers. The centre is linked to a number of government databases and they include:

- The National Information Centre
- Ministry of Commerce and Industry
- Patent Office
- Xin Hua News
- Science and Technology Department / Patent Office

Trade enquiries are received regularly from abroad and these are circulated through the BizNet and DataChina. The ACFICIC also provides the regional and provincial chambers with the latest economic data, new legislation, decrees, regulations and international tender information for China.

In return, the provincial chambers are expected to provide ACFICIC with regional information on natural resources, provincial government regulations and other relevant legislation.

ACFICIC also intends to collect information on the problems faced by the regional chambers and private sector enterprises. These problems will be relayed to the relevant government authorities. They also provide the government department with feedback on the investment climate through their annual surveys.

(e) Income-generating Activities

To generate revenue, the ACFICIC engages in a number of commercial information services activities. They include:

- The sale of information on the ACFIC Biznet to interested parties abroad
- Designing and producing brochures for member companies
- Linking with foreign on-line information providers to provide information on Chinese companies
- Survey of the Investment Environment in 186 Cities in China
- Survey of Small and Medium Enterprises in the Non-State Sector

The survey of the “Investment Environment in 186 Cities in China” is conducted jointly with a Beijing market research company, a Hong Kong financial news agency and a Japanese financial news agency. The total project time is 6 months. The results are compiled into a report and sold in Hong Kong, Japan and other foreign countries.

The survey of “Small and Medium Enterprises in the Non-state Sector” was first conducted in 1992. Currently, the survey is conducted in collaboration with a Beijing market research firm. The survey covers 20 non-state companies in 40 cities of China and requires 3 months. The ACFICIC publishes the Chinese edition while an English edition is published by a Hong Kong company.

The ACFICIC is also linking up with Dun and Bradstreet, an American financial information service, to provide financial information of Chinese companies. They are also in the process of negotiating with an interested German company to market such financial information in Europe.

10.2 Jiangsu Federation of Industry and Commerce Business Information Centre

The Jiangsu Federation of Industry and Commerce is a Provincial Chamber with local chambers in 11 municipalities in China. They include Nanjing, Suzhou, Wuxi, Changzhou, Nantong, Yangzhou, Yancheng and Huaiyin.

(a) Types of Information Services

From the experience of Jiangsu Provincial CCI Information Centre, the following are the six major services most frequently requested by members:

- Consultancy services
- Exhibition
- Training
- Contact-based service
- Market research
- Current awareness service

In terms of information services, the experience of the Jiangsu CCI suggests that SMEs require assistance from the BIC to help them improve their operations through consultancy and training. Market research and contact-based services is another area of demand.

(b) Publications

The BIC publishes a current awareness service newsletter every 10 days. The newsletter is in Chinese and is printed using a copyprinter. The content of the newsletter is obtained mainly from the ACFICIC BizNet and supplemented by information from Jiangsu Province.

(c) Membership database

The BIC has developed a membership database with assistance from the university and a consultancy firm. The programme is user friendly and has powerful search

facilities. They also plan to update the membership database every 6 months. Currently, the database contains information of 10,000 enterprises.

(d) Market Research

The Jiangsu BIC undertakes market research for its members. For example, the BIC helped a member company to study the feasibility of selling medicinal calcium. As part of the study, a total of 5,000 questionnaires were despatched to various organisations and individuals. 1,000 forms were returned and these were analysed.

10.3 Philippines Chamber of Commerce and Industry

The Philippines Chamber of Commerce and Industry is the peak organisation of chambers and industrial associations in Philippines. The chamber has more than 1,700 members. In terms of information services, the chamber offers the following benefits to members:

- Trade enquiry service
- Trade information service
- Bulletin board
- Business library services
- Current awareness service
- Membership database
- Business directories and publications

PCCI Membership Database Management System

The PCCI currently has a comprehensive membership database. However, the information collected is restricted to information on member chambers and industrial associations, and business enterprises in Manila. There is no comprehensive database of all companies in the Philippines. To overcome this shortcoming, the PCCI is developing a comprehensive PCCI Membership Database Management System (MDMS) together with the ZDH Partnership Program.

Under the MDMS, information collection will be decentralised to the regional or local chambers of commerce and industry (LCCI). The regional information will be transmitted to the PCCI via the PCCI Intranet. The PCCI will then compile the information into a national MDMS and provide the information world-wide through

the Internet. Details of the development process of the MDMS are provided for the benefit of other chambers.

Uses of the PCCI Membership Database

The PCCI Membership Database will be used to:

- (1) Keep track of its membership in Philippines, the membership of the Local Chambers of Commerce and Industry (LCCIs) and the Industry Associations (IAs)
- (2) Facilitate more effective business matching and trade enquiry.
- (3) Promote the development of supplier partnership programmes between large Filipino companies and the small and medium enterprises;
- (4) Create a mailing list for communication between members and the Executive Board.
- (5) Develop business directories for sale.

Project Management

The proposed project was spearheaded by the PCCI SME and Communications Division and implemented in five phases as follows:

- Phase I : Identification of the working group
Phase II : Pre-analysis
Phase III : Workshop on the MDMS System
Phase IV : System design, development and evaluation
Phase V : Distribution and installation of MDMS software to the LCCIs and IAs.

Software Development

One of the most challenging aspects of the PCCI MDMS was to develop a membership software capable of meeting requirements of the PCCI and LCCI at the lowest cost. The prototype MDMS was developed using Lotus Notes at the front-end and Sybase SQL Server at the back-end. The local chambers will be connected to PCCI Intranet via the Internet. This will reduce the need to use expensive long distance telephone connections.

Bulletin Board Service

The PCCI established a Bulletin Board Service in the middle of July 1996 using the MAJOR BBS software. The following services are provided under the PCCI BBS:

- Forums
- Electronic Mail or e-mail
- Files libraries
- Registry of users

In terms of information services, the following information is available to subscribers through the Library and ReadFile pages:

- Economic reports
- Selected business news
- PCCI press releases
- Trade fairs and seminars
- Joint ventures opportunities

The major problem with the current bulletin board is the need to access the information via expensive long distance telephone calls. This limitation will be overcome by offering the bulletin board information under the MDMS using Lotus Notes and the Internet.

10.4 KAMAR DAGANG DAN INDUSTRI INDONESIA (KADIN)

The Indonesia Chamber of Commerce and Industry (KADIN) is the central organisation of associations and business groupings in Indonesia. It acts as a forum of communication and consultation between Indonesian entrepreneurs, foreign businessmen and the government on all economic matters.

(a) Membership Database

KADIN National used to have a comprehensive membership database with more than 50,000 profile of Indonesian companies. However, this was destroyed by a computer virus. Consequently, the KADIN National is currently developing a membership database programme in co-operation with the ZDH Partnership Program, that could be used by the entire provincial (KADINA I) and town chambers (KADINDA II) in Indonesia.

(b) Newsletter and Directories

The chamber publishes a number of directories and a newsletter. They are :

- (i) Indonesia Chamber of Commerce and Industry Trade Directory 1992. The directory contains the following membership information:

- Name of company
 - Address
 - Telephone
 - Fax
 - Contact Person
 - Activity
 - Product
- (ii) Sectoral Directories. The chamber has published one sectoral directory and is planning a number of new ones. These directories provide the same membership information by industrial sector.
- Indonesian Food and AgriBusiness Directory 1995
 - Electronics Directory
 - Chemical Directory
 - Agriculture Products Directory
 - Food Products Directory
 - Engineering and Machinery Directory
 - Mining Industry Directory
- (iii) Directory of Board Member, Regional Chambers and Associations.

(c) On-line Information Services

KADIN National is linked to the Ministry of Industry PUSDATA On-line Information System. The PUSDATA information system is comprehensive and offers the following services:

- Electronic Mail
- Bulletin Board System
- Information centre
- Teleconference
- Account display
- Information on Multilateral Co-operation
- Fax Gateway

10.5 VIETNAM CHAMBER OF COMMERCE AND INDUSTRY

(a) Introduction

The Vietnam Chamber of Commerce and Industry (VCCI) is a non-government and independent central organisation of business enterprises in Vietnam. It acts as a

forum for the exchange of information and ideas among business enterprises and consultation between the latter and the government authorities. The VCCI also promotes trade and investment in Vietnam and between Vietnam and the rest of the world.

Information services are provided by the VCCI through the Information and Data Centre (IDC), one of the independent centres of the Vietnam Chamber of Commerce and Industry. The Centre supplies information on Vietnam's economy, foreign trade and foreign investment as well as the new laws and regulations affecting businesses in Vietnam. The IDC also manages a database of domestic companies and representative offices of foreign companies.

(b) Main Activities

The main activities of the IDC are to:

- Produce the Vietnam Business Directory;
- Produce and update the VIETNAM INFO, an CD-ROM based electronic business directory; and
- Answer business enquiries and request for information.

(c) VIETNAM INFO

The VIETNAM INFO is a CD-ROM based electronic business directory. It consists of the following modules:

- Vietnam's Socio-Economic Statistics
- Administrative Structure of Vietnam
- Legal Framework of Vietnam
- Foreign Direct Investment in Vietnam
- Import and Export Statistics of Vietnam
- Profiles of Domestic Companies
- Representative Offices of Foreign Companies in Vietnam
- Other Useful Information e.g. Vietnamese embassies abroad, where to stay in Vietnam

The database contains a short business profile of about 4,500 of domestic companies of which 3,000 are state-owned enterprises while the remaining 1,500 are large non-

state enterprises. The initial information is supplied by the Ministry of Planning and Investment. However, the updated information has to be sourced by the staff of the IDC.

The data are updated quarterly from various sources. Some of the data are updated directly from information obtained from the companies. New company information are provided by the Ministry of Planning and Investment. The staff of the IDC also scans the newspaper for any changes in company profile. The IDC VIETNAM INFO is not linked to any of the International Information Service Providers e.g. Dun and Bradstreet and Reuters.

VIETNAM INFO is sold and distributed through the branches of VCCI and representatives offices overseas. The retail price is US\$480. Quarterly updates are available at US\$120 per copy.

(d) Vietnam Business Directory

The VCCI also produces the Vietnam Business Directory (VBD) annually. The Vietnam Business Directory retails for US\$50 per copy. However, most of its revenue is derived from advertisements.

Data in the directory are indexed as follows:

- Alphabetical index of companies by industries in English
- Alphabetical index of companies by exports in English
- Alphabetical index of companies by imports in English
- Alphabetical index of companies in Vietnamese
- Alphabetical index of companies by company's trade name

The VBD provides the following company information:

- Name in English and Vietnamese
- Trade Name
- Address
- Telephone
- Fax
- Total capital
- Total revenue
- Number of employees

- Name of Chief Executive Officer
- Legal Status (State-owned/limited/private/joint-stock/other)
- Company's main activities

(e) Information Networking

The VCCI has established a good working relationship with most of the relevant government agencies and they include:

- General Statistical Office
- Ministry of Planning and Investment
- Ministry of Science Technology and Environment
- Ministry of Trade
- Excise and Customs Department
- Ministry of Finance
- State Bank

Data required for the VIETNAM INFO has to be purchased from the relevant departments. There is no electronic links between VCCI and the various government agencies.

(f) SME Database

To compliment the business information available under the Vietnam Info, the SME PC has created an SME Database^c. The database has a record of about 5,000 SMEs from all the provinces in Vietnam. This database will be used for business matching and trade enquiries.

^c In co-operation with the ZDH Partnership Program

Managing and Operating a Basic Reference Library

A basic reference library is an integral part of a BIC. However, given the limited resources of the chamber or trade association, the library is usually a **small and specialised** business library housing selected reference books, magazines and statistical handbooks. Before developing a library, the following factors should be considered carefully:

- What are the objectives and direction of the library?
- Where is the location of the library?
- What materials should be acquired by the library?
- What should be the scope, depth and organisation of the library collection?
- What are the other services to be provided to members?
- What are the capital and operating costs in setting up a library? Are funds available for such a library?
- What are the human resources required?

(a) Location

It is always recommended that the library be located in a convenient place which is easily accessible to users. The books and publications should be placed on open shelves and not kept in locked cabinets. However, it may not be possible to loan out the publications as they are mainly reference materials.

(b) Equipment

The library will require basic furniture such as shelves, filing cabinets, reading tables and chairs. For a start, the following number of library furniture would be required for a small library:

- 4 reading tables with 16 chairs
- book shelves
- newspaper stand
- index boxes
- office table and chair for the librarian and
- typewriter

In addition, a photocopier may be required for users who want to make photocopies of selected documents for their own use. A fee must be levied on such photocopying so as to recover the recurrent and capital cost of the photocopier.

(c) Manpower

In terms of manpower requirement, a simple library would require at least:

- 1 full-time librarian and
- 1 library clerk.

The librarian will be responsible for establishing the priority of information needs, sourcing and acquisition of materials and to set up a system of classification, cataloguing and indexing of books and periodicals. The clerk will assist the librarian with the office and administrative work and ensure the security of the library collection during library hours.

(d) Acquisition of Materials

Before acquiring any publications, the librarian should identify and prepare a list of publications based on the information needs. A visit to other libraries in the country would also be useful in understanding the publications available.

As the financial resources available for the library are usually small, it is advisable that the library should try to obtain the materials free of charge or at special discounted rates from the publishers. Exchanging publications between the BIC and foreign trade organisations is another cost-effective method of keeping down library expenses. To obtain foreign publications, the BIC would have to write to foreign trade organisations (see Annex F for a list of organisations) requesting for free publications, especially trade directories. A copy of a sample letter requesting for business publications is given in Annex G.

When acquiring information or publications for the library, it is also important to evaluate their usefulness and timeliness. The following factors should be considered:

- The comprehensiveness and depth of coverage as compared to the needs of the target groups;
- The timeliness and currency of the data;

- The reliability of the source;
- The ease with which the information can be used; and
- The cost effectiveness of the particular publication or information.

(e) Accession Register

Every library should keep an accession register. On receipt of a publication, the library staff would update the accession register. The publications are then classified and catalogued to facilitate efficient storage and retrieval of information. It is recommended that the Standard Industrial Trade Classification (SITC) scheme be used for the classification and cataloguing of library materials. The library could acquire the following cataloguing tools from the Trade Promotion Centre in Bangkok, Thailand:

- SITC Classification/Cataloguing Scheme
- Country Classification for International Trade
- Modified ITC Function Codes

An index card is then prepared for each publication and arranged in the card catalogue in order of classification numbers. The publication is next stored in the library.

(f) Training

To ensure that the library is developed properly, it is recommended that systematic training be provided to the library staff. It should include the following:

1. Library objectives, functions and policies
2. Role of information
3. Role of library in an organisation
4. Role of information officers
5. Methods of determining information needs
6. Information requirements of SMEs
7. Setting up a library - resource requirements
8. Documentation of library materials
9. Information services

Such training can be conducted by an expert for library staff. Librarians from other trade associations and government departments could also be invited to participate in the training so as to encourage networking among libraries.

(g) Translation Services

Documents and materials collected by the library may have to be translated from a foreign language into the local language and vice-versa. The library staff would have to determine the priority for such translation. A fund for the translation service may have to be set up for this purpose.

Organising and Managing A Membership Database

Introduction

A comprehensive membership database is needed to operate a successful business enquiry service within a BIC. It can also be used to facilitate business co-operation or business matching between local companies and between foreign and local companies.

What is a Membership Database?

A membership database is basically a collection of key corporate and product information of the members of the chamber or trade association, organised in a manner which facilitates easy retrieval, modification and analysis.

Features of a Good Membership Database

The following are the features of a good membership database:

- Accuracy
- Comprehensive.
- Up-to-date. A majority of the membership information does not change frequently. However, key information such as members of the management team and number of employees may change regularly and this must be updated. Sales figure and areas of interest for business co-operation should be updated annually.
- Flexible. Information can be easily exported to other databases.
- User friendly and easy retrieval.

Uses of a Membership Database

A good membership database has many uses in a chamber, trade association or Business Information Centre. They are:

- (1) **Keeping track of its membership.** A good membership database is vital for the membership department and can be used to analyse the profile of the membership. This will enable the chamber or trade association to understand

- the needs of its members and to organise relevant activities to cater to their needs.
- (2) **Business matching and enquiry.** For the Business Information Centre, a good membership database facilitates effective business matching and to answer trade and investment enquiries.
- (3) **Mailing list.** If the membership database is computerised, mailing list of members can be easily generated by different market segment and characteristics. This facilitates focused direct marketing. In addition, the mailing list can be sold to interested party to generate revenue.
- (4) **Business Directory.** Apart from the mailing list, chambers and trade associations can published a membership and business directory based on the membership database. The directory can be published in the form of a book, diskettes or CD-ROM. The directory can subsequently be sold to earn income to finance the activities of the chamber or trade association.

Developing a Membership Database

Effective planning is vital in the development of a membership database. The following steps may be used as a guide when developing a membership database.

Step 1 - Decide on the objective and purpose of the membership database.

Step 2 - Determine the types of information to be collected.

Step 3 - Decide on the methods to be used for collecting such information.

Step 4 - Decide on the data design, process design, and methods for processing the information (including the selection of database management software).

Step 5 - Recruiting, selecting and training people to manage the database.

Step 6 - Data collection and processing.

Step 7 - Determine the access policy, security and protection provisions.

Step 8 - Maintenance and updating of database on a regular basis.

Purpose of the Database. The first step in developing a membership database is to determine the objectives and purpose of the membership database. This will affect the type of information collected, the size and coverage of the database. For example, if the membership database is to be used for business matching, information such as capital structure, factory equipment used and areas of interest for business co-operation will be required.

Information Coverage. Depending on the objectives of the database, a good membership database should contain some, if not all, of the following information:

1. Name of company
2. Address
3. Telephone, fax and telex number
4. Name of owner/chief executive officer
5. Name(s) of person to contact for business co-operation
6. Legal status of company (Private/State owned/Joint Venture/Wholly foreign)
7. Products manufactured
8. Employment size
9. Physical size of factory in square metres or acres
10. Equipment used in factory
11. Principal export markets
12. Areas of interest for business co-operation

Commercially sensitive information. It is important not to request for information that can be commercially sensitive e.g. profit and cost data. Although such disclosure of information may not be a problem for public listed companies, private companies are unlikely to do so as it is not required by law.

Confidentiality of information. Members must be assured that all information provided would be kept confidential. Such confidentiality must be maintained at all times. Access to the data must be restricted to selected staff of the BIC through the use of password and other security measures.

Methods for Collecting Information

Surveys in the form of mailed questionnaire is a good method to gather membership information. However, in a developing economy, this technique may be less useful as companies are often not willing to participate in surveys. The response rate may be low. A copy of a sample survey form for collecting the above information is given in Annex D. The form could be mailed out to members.

To maximise survey response, it is recommended that the officers of the BIC follow-up with reminders and make personal telephone call to solicit replies. It is also advisable that the survey be supplemented by other data collection methods.

Questionnaire Design

Most of the information for a membership database is collected through a survey. The following aspects should be noted in the design of the survey questionnaire:

- Ensure that the objectives are clearly stated and members are properly informed about the benefits of the survey for their enterprises.
- User friendly and easy to fill. Where possible, respondents should only be required to tick the appropriate responses.
- No ambiguous questions.
- Should be simple and short (not be more than two pages). Respondents should not require more than 30 minutes to fill the questionnaire.
- Do not request respondents to code response e.g. HS code or Standard Industrial Classification code.
- Do not request for sensitive information.

Processing and Compilation

Once the completed survey forms are received, the information should be screened for accuracy and completeness. The data can be compiled manually or keyed into a computer. Should the BIC decide to computerise the membership database, a high speed personal computer (preferably a 486 DX-33 system or higher) with at least 200 MB hard disk is recommended. A good database management software will also be needed.

Data Design, Process Design and the Selection of Database Management Software

Two types of design are important in developing a membership database. Data design is the process by which a structure is developed for the data that accurately reflects the structure of the business.

Process design is concerned with the aesthetics of the system. Process design need not be elaborate, but might be as simple as creating a standard template for on-line data input and one for reports.

Care should also be taken in the selection of an appropriate database management software. The following features should be noted:

- User friendly and easy to learn.
- Data can be exported to and imported from other databases.
- Ensure that the software is compatible and can be integrated into existing software.
- A network version is recommended, although not essential.
- Powerful search features e.g. the use of free-field search capability, no limit on number of entries or restrictions on the number of search criteria.
- Widely available and supported in the country of use.
- Security features including the ability to restrict access through passwords and automatic backup systems.
- Flexible and versatile reporting system.

Flat-file Database. A flat-file database programme such as Q&A Version 4.0 or PFS Professional File is recommended for a BIC as it is easy to learn, does not require programming and can do multiple criteria and free-field data search. The major disadvantage of a flat-file database is its limited relational capability. Since most membership databases do not require a one-to-many relationship, this may not be a major disadvantage.

Relational Database. Alternatively, a relational database programme like Microsoft FoxPro, Microsoft Access or DBase IV can also be used as this is widely available in most developing countries. Unlike the flat-file database, such relational databases can work on two or more data tables at the same time, relating the information through links established by a common column or field. The disadvantage of relational database is the need for programming knowledge to exploit the full benefits of the database and the inability to use free-field search.

Customisation. As most generic database management packages e.g. DBase are usually designed for general use, it may be necessary to customise some of these packages to suit the specific requirements of the BIC. Since most BICs do not have the in-house technical expertise for such customisation, it is recommended that the centre enlist external help such as the computer department of member companies, universities or consultancy firms to advise on the relevant computer packages and help customise existing database packages for use by the BIC.

Staffing and Equipment

At least one full-time staff will be required to manage the membership database. The staff would have to be computer-literate and familiar with basic survey methods. The responsibilities of the staff are:

- (a) To collect data for the membership database through annual surveys;
- (b) To follow-up on the survey forms through personal contacts and telephone calls;
- (c) To check and validate the accuracy and completeness of the membership information received. If certain critical information are missing, it is the responsibility of the staff to call the company to obtain the missing information;
- (d) To update the membership database regularly;
- (e) To compile and catalogue the membership information;
- (f) To key in the membership data into the computer database (should the BIC decide to computerise its membership records);
- (g) To provide regular management reports on the membership status and to answer requests for company information; and
- (h) To help in the compilation of the business directory and mailing list.

Access Policy, Security and Protection Provisions

Since the information in the membership database is confidential, there is a need to develop an access policy. Access should also be controlled due to the risk of damage from unauthorised access and the potential loss theft or destruction of data files and programmes.

To control and restrict access, the database administrator should determine:

- Who is allowed to access the database?
- Who is permitted to modify the information?
- Who is permitted to modify the database and process design?

If a computerised database management system is used, access may be controlled through the use of passwords, allocated by the database administrator. In addition, there is also a need to guard against data losses by using off-premise storage backup files and programmes. Backup of the database should be made whenever the database is modified.

Maintenance and Updating of Database

Developing a membership database is only the beginning of the entire process. The difficult part is the maintenance and regular updating of the database. The process is time-consuming as surveys have to be conducted regularly to update the data.

There are three types of updating:

- (a) Updating changes in the attributes of existing fields in a member's record. For example, there may be a change in sales manager or address of the company.
- (b) Adding new records into the database or deleting some of the outdated records. For example, new members may have joined the chamber or association and their corporate information would have to be included in the database. Likewise, records of members who have resigned from the chamber should be deleted.
- (c) Adding new fields into the database. For example, new fields or categories may have to be included to enhance the comprehensive of the database over time.

Quality Assurance of Membership Database

Quality of the Membership Database is defined as meeting the requirements of end-users and the objectives of the BIC. It may be measured by the following criteria:

- Accuracy
- Comprehensiveness
- Timeliness

The quality and usefulness of the database is only as good as its input. To maintain the quality and usefulness of the membership database, the initial information must be **screened for accuracy and timeliness**. It should be **updated regularly and be fairly comprehensive** in coverage. It is recommended that an annual updating exercise be done.

INTRANET

Intranet refer to the use of inside private organisations of technologies designed for computer communications between organisations. In other words, an Intranet is a private computer network based on the data communication standards of the public Internet.

Intranet are currently used for the following purposes:

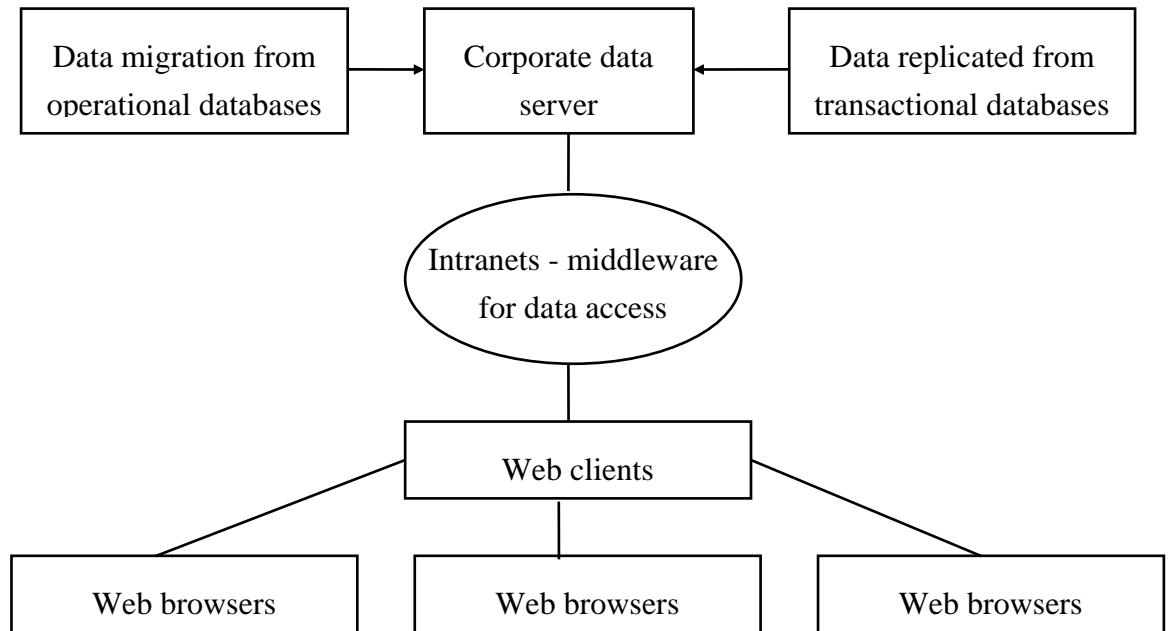
- Facilitate faster internal corporate communications.
- Facilitate more co-ordinated work activities.
- Facilitate easier management of complex operations with online transaction processing (OLTP)
- Facilitate better managerial decision support with online analytical processing (OLAP)
- Facilitate better systems management by enabling maintenance and distribution of applications.

Intranet-based Data Warehouses

A data warehouse is a physically separate, dedicated database, often residing on powerful hardware. A snapshot or copy of historical and current operational data is loaded into this “warehouse”, where “knowledge workers” then sort and analyse it for marketing, manufacturing, and distribution decision support. Data warehousing sieve quickly through terabytes of economic, demographic data, enabling support for strategic decision making.

Intranet Architecture

Intranets tie access to major Internet services together at the web browser. For example, most browsers can send e-mail using Simple Mail Transfer Protocol (SMTP), the standard for Internet mail. Many browsers can also exchange messages with USENET newsgroups.



Intranet-based Decision Support

Intranets versus GroupWare

- GroupWare emphasises teamwork, whereas webs regard single users as a target audience. This gives rise to the distinction between GroupWare's "push" model of distributing information - in which data and documents are disseminated from a central repository - and the Web's information "pull" model, wherein only those users interested in a given data set will find and view it.
- Lotus Notes has powerful built-in "replication" capability, which lets users synchronise databases. Achieving the same effect with webs requires custom programming.
- GroupWare products like Lotus Notes or Novell GroupWise are built around proprietary messaging and database components. Webs are based on public domain technologies, such as SMTP and HTTP
- Today's GroupWare products tend to have stronger built-in security than do web-based applications.

Competition between GroupWare and Intranet products is forcing each to look at the other's strengths, and to incorporate cross-features on customers' demand. For example, Lotus has added a Notes-to-Web gateway to its product line called

InterNotes, while Netscape Communications Corp., the dominant maker of web browser software, has acquired GroupWare vendor Collabra Software Inc. In this sense, the difference between the technologies is narrowing.

Currently, GroupWare has the edge in network security and administration of distributed data. Webs cost less, use flexible, open standards, and command the interest of major software firms, ensuring rapid growth. The competition can only get keener.

Document Management Using an Intranet

Organisations keep records. People exchange notes. Retailers publish catalogues. Engineers draw prototypes on the backs of napkins during lunch. All of these are documents, and managing them is one of the daunting tasks of the Information Age.

Managing documents has four essential dimensions:

- Search/Retrieval - The ability to find what you're looking for.
- Security - Controlling read/write access to documents.
- Version Control - Keeping track of changes and originals.
- Archiving - Making historic data available.

Document management systems can do all four of these things. Intranets can do search and retrieval. On the other hand, a full-blown document management system might cost several million dollars to set up, in contrast to a typical baseline of US\$50K for an internal web.

If you don't need automated document management, you need an Intranet. If all four of the above functions are strategic in your organisation, you need a document management system.

Cost of Intranet

(a) The cost of creating Intranet content

- Conversion of existing documents to HTML
- Co-ordination of various content providers via training and standards
- Periodic indexing of material for the benefit of search engines

- Type of content - easier to create forms and tables with HTML than unstructured graphics such as maps.

(b) The cost of maintaining Intranet software

- Server costs
- Browser costs
- Application development and support costs
- Network cost
- Security cost

(c) People Cost

Intranets work best where the corporate culture encourages teamwork and rewards information sharing.

DEVELOPING A CHAMBER ELECTRONIC NETWORK

Many chambers have expressed interest in developing an electronic network for the chamber. The main purpose of the Chamber Electronic Network (CEN) is to electronically link all the member chambers through an on-line system. The CEN would also have a gateway to the Internet, thereby creating business links with the international community.

Developing a CEN is a highly complex task and the creation of such a network should proceed in phases. This will ensure that the entire project is manageable, with control benchmarks along the way. It is recommended that the project be divided into four phases as follows:

Phase I – formation of steering committee for CEN

Phase II – Development of specification and systems requirements

Phase III – Selection of hardware and software

Phase IV – Systems implementation

Phase I - Formation of Steering Committee and Selection of Consultant

(a) Steering Committee

To emphasise the importance of the CEN and on-line computerisation, a Steering Committee should be formed to manage the entire CEN project. The Committee will be responsible for monitoring the progress of the project, make the necessary important decisions along the way and review the post-implementation process. The committee should comprise key members of the Executive Board, head of the chamber secretariat, departments affected by the CEN and on-line computerisation, and selected members with expertise in information technology.

The committee should meet regularly to keep track of the progress of the project, make the necessary important decisions along the way, and review the post-implementation process.

The following are the roles and responsibilities of the Steering Committee at different phases of the CEN Project:

Phase I – Invitation for Feasibility Study and Selection of External Consultant

- Approve/reject the “Invitation for Feasibility Study” prepared by the Project Team
- Evaluate and decide on the choice of consultants

Phase II - Specifying Requirements

- Provide views and feedback on the functional and performance requirements of the system
- Approve/reject consultant’s findings

Phase III - Hardware and Software Selection

- Approve Request for Proposal (RFP) prepared by consultant and send to vendors shortlisted by the consultant
- Attend demonstration of proposed solution
- Assess consultant’s recommendation on hardware, software and vendor
- Decide on whether to proceed to implement solution with the selected vendor
- Negotiate with the vendor, if necessary
- Assess consultant’s implementation consultancy proposal
- Decide on whether to retain consultant for implementation consultancy

Phase IV - System Implementation

- Participate in implementation activities with vendor/consultant
- Manage implementation progress and monitor vendor’s performance
- Conduct post-implementation review with consultant

(b) Project Team

At the same time, a Project Team should be formed to handle the day-to-day operational issues and to work closely with the selected consultant. Members of the Project Team will be drawn mainly from the secretariat. However, it would be useful to include one or two members of the Executive Board as advisors so that there is a good linkage between the Project Team, Executive Board and the Steering Committee.

(c) Project Consultant

As most chambers in Asia do not have the technical expertise to manage the development of a CEN, it is recommended that an external project consultant be appointed to assist the project team. The consultant appointed by the chamber will be required to perform the following roles:

- (1) Identify the information needs and requirements of the chamber, provincial chambers and members
- (2) Develop the functional and performance requirements of the proposed CEN and on-line system
- (3) Recommend workflow and organisation improvements to support the CEN and on-line system
- (4) Advise on the possible types of computer hardware and software configuration that would meet the chamber's on-line and information needs for the next five years
- (5) Help the chamber to identify the costs and benefits of the on-line system. Costs should be divided into capital and recurrent/operating costs
- (6) Produce documents of the functional and performance specifications of the on-line system
- (7) Produce request for proposal (RFP) for the approval of the chamber
- (8) Shortlist vendors for the chamber's consideration
- (9) Evaluate system proposals and make specific recommendations for hardware, software and vendor
- (10) Suggest an approach to the implementation of the on-line system
- (11) Submit complete evaluation study report to the chamber
- (12) Develop a marketing plan for the proposed on-line service. The marketing plan would contain the recommended pricing policy, marketing strategy and advertising and promotion.

If the consultant is required for implementation, the following additional roles will be required:

- (1) Review implementation progress with the chamber and the selected vendor
- (2) Help the chamber to oversee site preparation and hardware installation
- (3) Help the chamber to specify and conduct acceptance tests
- (4) Assist the chamber to carry out improvement projects to support the electronic on-line systems
- (5) Manage the specified and agreed implementation activities for the chamber
- (6) Help the chamber in post-implementation review report.

(d) Terms of Reference for Feasibility Study

Before engaging a consultant for the feasibility study, the Project Team must prepare an invitation for feasibility study. The recommended terms of reference for the Feasibility Study are as follows:

- (1) To study the information needs of the chamber and its members; and recommend the types of information services to be offered on CEN
- (2) To evaluate and recommend the software and hardware requirements for the system, including the number of lines the system should start with.
- (3) To conduct a cost benefit analysis of an on-line system for CEN and recommend measures to ensure its commercial viability
- (4) Develop a request for proposal (RFP) from potential vendors based on the functional and performance specifications approved by the Steering Committee
- (5) To develop criteria for evaluating hardware and software requirements of CEN
- (6) Develop a training plan to support the on-line service at the national and provincial level.
- (7) Develop a data entry plan and information management system for the on-line service
- (8) Establish an implementation plan for the entire project, including connectivity to an INTERNET provider

- (9) Establish the organisational structure, manpower requirement and procedures to support the on-line system
- (10) Build a bridge between INTERNET and users of CEN and to establish an interactive service on the INTERNET
- (11) To develop a total marketing plan for CEN which will link the chamber and the provincial chambers. The marketing plan would contain the recommended pricing policy, advertising and marketing strategy.

(e) Invitation for Feasibility Study Consultancy

The invitation should solicit quotations from consultant for the following items. The solicitation can take the form of a single-stage open tender or a two-stage tender. In some countries, a registration of interest may be used. The following information should be requested in the invitation to quote:

1. A total Fixed Price Quotation (inclusive of out-of-pocket expenses) for the feasibility study consultancy assignment
2. Name and curriculum vitae of the consultants to be assigned to the project
3. Proposed schedules for the feasibility study
4. The total estimated effort (in man days) for the study
5. The expected time taken for the study
6. List of Deliverables (including those given below) with dates
 - Functional and performance specifications
 - Hardware recommendations
 - Software recommendations
 - Cost Benefits Analysis
 - Training Plan
 - Implementation Plan
 - Data Entry/Data Conversion Plan
 - Request for Proposal (RFP) & Evaluation
 - Rate for implementation consultancy based on man-days required.

The ‘Invitation for consultancy on feasibility study’ must be approved by the Steering Committee. Once the ‘invitation’ is finalised, the Project Team will send letters of invitation with the background of chamber electronic network to selected consultants for quotation. The Project Team will also answer any queries from the consultants.

Once the proposals are received from the consultants, the Steering Committee will evaluate the proposals. If required, the Committee should interview the consultants to gather more information before making any decision. Once the consultant is selected, a letter of appointment will be prepared and sent to the successful company.

Phase II - Development of Requirements

Before building the on-line system, there is a need to determine the functional and performance requirements of the system. These requirements are then formalised and translated into functional and performance specifications.

In preparing the specifications, the Project Team will work closely with the consultant in the following areas:

- Determine the information requirements and on-line computerisation needs of the national chamber, provincial chamber and the members.
- Determine the expectations of the chamber with regards to the on-line system.

Once the requirements are determined, the consultant will produce documents of the functional and performance specifications of chamber electronic network. Subsequently, the consultant and project team will produce request for proposal (RFP) for the approval by the Steering Committee. The request for proposal will be sent to the various hardware and software vendors for quotation.

On receipt of the quotations by vendors, the consultant would shortlist vendors for the Steering Committee’s consideration.

Phase III - Hardware and Software Selection

During this phase, the Project Team and the consultant should evaluate the different systems available which meet the chamber’s requirements, and costs involved. It is also the time to decide whether the project is worth carrying out. Once the decision is made to carry on, the procurement of hardware and software begins.

Phase IV - System Implementation

The final stage is the implementation stage where equipment and programs are installed, new procedures and work methods are introduced, and the system is tested. In the implementation stage, the following major activities will be conducted:

- software testing,
- staff training,
- information entry and data conversion,
- establishing work procedures
- establishing security and control

The on-line system should be pilot tested with test data and a few beta-test sites in the province. During the pilot test, views will be sought regarding the user friendliness of the system, the information available and suggested improvements.

At the same time, the consultant and the vendor should work together to co-ordinate and test installation of the telephone or ISDN lines, X.25 network (if required), INTERNET service, LAN connections, modems and other hardware. There is also a need to configure security and access levels.

Once the system is fully implemented, the consultant would be required to document the operation guidelines and backup procedures for the system.

Electronic Networking with Other Chambers Abroad

After the on-line service has been successfully implemented within the country, the chamber may wish to consider whether to offer the CEN to subscribers from companies and chambers of commerce and industry from abroad. If the answer is yes, there are a number of decisions to be made:

- How to charge foreign users?
- How to prevent unauthorised access through added security features?
- Should the information be offered in English or other languages?

Inquiry Registration Form

Name of Inquirer : _____

Designation : _____

Name of Company : _____

Address : _____

Telephone : _____ Facsimile No : _____

Nature of business : _____

Information requested for :

(a) Product (s) _____

(b) Market (s) _____

Purpose for which the information is needed

Reply required by _____
(date) _____ Signature of Inquirer

Inquiry handled by _____

Response given by _____

Date : _____
Signature of officer

Dear Sir

BUSINESS INQUIRY SERVICE

The [name of Association] is the largest trade association of private companies in [name of country]. The Association was founded in [year] and to date, we have more than [number] companies as members. Most of our members are small and medium enterprises from various industries.

To facilitate more business co-operation between local and foreign companies, the [association] has set up a Business Information Centre. As part of the services offered by the Business Information Centre, a Business Inquiry Service was set up to answer any business inquiries from abroad and to refer such inquiries to appropriate local partners. For foreign companies visiting our country for business, we can also help to arrange for translation services and visits to appropriate local companies.

It would be greatly appreciated if you could publicise our Business Inquiry Service to your members. We would welcome any business inquiries and visit to our country. Please do not hesitate to contact me if you have any further queries.

Thank you very much.

Yours faithfully

[Name]
Director
Business Information Centre



THE FEDERATION OF BANGLADESH CHAMBERS OF COMMERCE & INDUSTRY

TRADE INFORMATION SERVICE

ISSUE NO. 68

MARCH 1997



German Confederation of
Small Business & Skilled Crafts

A PUBLICATION OF FBCCI RESEARCH DOCUMENTATION
AND LIBRARY CELL UNDER FBCCI-ZDH-
PARTNERSHIP PROJECT



SEQUA

The objective of the Trade Information Service (TIS), a monthly bulletin of the Federation of Bangladesh Chambers of Commerce and Industry (FBCCI), is quick dissemination of information to interest of the FBCCI's Memberbodies - the Chambers and Associations. It covers trade enquiries pertaining to exportable and importable items from trading enterprises at home and abroad, calendar of trade fairs and exhibitions, tender notices, joint venture proposals, business and investment regulation, intended and sanctioned investments by DFI's and local intrepeneurs, and other information on trade and business development at home and abroad.

EXPORT FROM BANGLADESH

The following is the list of Firms interested in importing selected items from Bangladesh mentioned against their names:

01. International Textile Management Consulting Co.
350 Fifth Ave. Room #8804
New York, NY 10118, USA.
Fax:212-629-3294
04. Stephen Brothers
3108 Parham Road
Suite 5028 Richmond
VA 23294, USA.
Fax:180-4-747-3541

Item: Shirts.

Items: Gift and paper items.

02. Al Saadah International
P.O. Box 644, Clarkstan
GA 30021, USA.
Fax:770-498-0895

Item: Garments.

05. Trading USA
23 Bethany Drive
Irvine, CA 92612, USA.
Fax:714-856-0515

Item: Sea food.

03. Access One Information Service
3649W, 18 3rd Street
Suite 129 Hazei Crest
Illinois 60429,
USA.
Fax:708-799-2247

Item: Craft products.

06. Gilka Sarl
66 Rue Danvers
69007 Lyon
France
Fax:337-786-11051

Item: Leather goods.

Company Profile

Name of Company : _____

Business Address :

a. Main Office : _____

Telephone : _____ Telex : _____ Fax : _____

b. Other Office : _____

Telephone : _____ Telex : _____ Fax : _____

Legal Status of Company : Private / State / Joint Venture / Wholly foreign

Name of Owner/Chief Executive Officer : _____

Name of person to contact for :

Local sales : _____

Export sales : _____

Staff strength : _____

Nature of Business (please tick where appropriate) :

[] Manufacturer [] Exporter [] Importer [] Wholesaler

(a) Manufacturers

Product /Services manufactured : _____

Main production equipment : _____

Major markets : _____

(b) Exporters

Type of Product(s) exported : _____

Major markets : _____

(c) Importer/Wholesaler

Type of products imported : _____

Major markets : _____

Annex E**SAMPLE BUSINESS MATCHING FORM**

Name of company: _____

Business Address :

a. **Main Office :** _____

Telephone : _____ **Telex :** _____ **Fax :** _____

b. **Other Office :** _____

Telephone : _____ **Telex :** _____ **Fax :** _____

Legal Status of Company : Private / State / Joint Venture / Wholly foreign

Year of establishment of company:

Name of Owner/Chief Executive Officer : _____

Products/services:

| | | | |
|---|--|--|--|
| Name of product | | | |
| Total production capacity per annum | | | |
| Average capacity utilisation per month (%) | | | |

Size of factory (sq metre):

Number of employees:

Types of machines

| Specification of machine | Make of machine | Age of machine |
|---------------------------------|------------------------|-----------------------|
| | | |
| | | |
| | | |

Annual sales and profit for the last three years:

| Year | | | |
|---------------|--|--|--|
| Annual Sales | | | |
| Annual Profit | | | |

Annual sales

| | |
|-----------------|--|
| Domestic market | |
| Foreign market | |

Main foreign markets:

Average wages

| Type of worker | Average wage per month |
|-----------------------|------------------------|
| Unskilled workers | |
| Skilled workers | |
| Engineers | |
| Manager | |
| Working hours per day | |

Cost of production

| Item | Percentage of Total Cost |
|----------------------------|--------------------------|
| Raw materials | |
| Direct labour | |
| Indirect labour | |
| Utilities | |
| Rental | |
| Telecommunications charges | |
| Others | |

Items for Business Co-operation

(a) Product specification:

- (b) Potential production capacity:
- (c) Past experience in producing the above product:
- (d) Expected sales to the domestic market:
- (e) Expected share of foreign market:

Expected contribution from foreign partner:

Technology

Market

Training

Management

Capital

Selected List of Useful Publications

Asian Business is a monthly business magazine of the Asia-Pacific region. Every month, the magazine will review the business prospects of one or two countries in the region, giving all the economic statistics. The magazine is a monthly publication and sent free of charge on request to manufacturers, bankers, property developers, government officials, traders and executives in the field of insurance, finance, research, construction, communications and agriculture.

The address for requesting free copies is :

Asian Business
3rd Floor, Kai Tak Commercial Building
317 Des Voeux Central
Hong Kong

Asian Sources is an excellent trade journal containing information on where to source for products and components. The magazine is published in Hong Kong by Asiamag Limited, G.P.O. Box 12367, 13/F Amber Commercial Building, 70 Morrison Hill Road, Hong Kong. Separate journals are available for :

- Electronic Components
- Electronics
- Computer Products
- Timepieces
- Fashion Accessories
- Gifts and Home Products
- Hardwares

The January issue of each year usually provides the outlook of the industry for the Asia Pacific region for that year. Asian Sources is now available on CD-ROM.

ASEAN Business Telephone Directory comprises of telephone and fax numbers of businesses in the ASEAN countries. It can be obtained from the following address :

ASEAN Directories Ltd
Suite 1105-6, Eastern Commercial Centre
393-407 Hennesy Road
WanChai
Hong Kong

Key Business Directory of Singapore, Malaysia, Indonesia/Thailand is published by Dun and Bradstreet Information Services. The directory lists the top 7,000 firms in each country and provides company profile information.

TISNET Trade Information Sheet is issued fortnightly by ESCAP Trade Information Service (TIS) and contains useful trade information of the developing countries of Asia. The address of TISNET is :

Trade Information Service
International Trade and Tourism Division
ESCAP
Rajadamnern Avenue
Bangkok 10200
Thailand

International Trade Forum is a useful publication on export market opportunities, export marketing and trade promotion services available to developing countries. It is published quarterly in English, French and Spanish and can be obtained from :

The Editor
International Trade Forum
c/o UNCTAD/GATT
Palais des Nations
1211 Geneva 10
Switzerland

Selected Government and Non-Government Organisations

Technonet Asia

291 Serangoon Road
#05-00 Serangoon Building
Singapore 0821
Singapore

Asian and Pacific Centre for Transfer of Technology (APCTT)

UN/ESCAP
49 Palace Road
Post Box 115
Bangalore 560 052
India

United Nations Economic and Social Commission for Asian and the Pacific (ESCAP)

United Nations Building
Rajadamnern Avenue
Bangkok 10200
Thailand

International Trade Centre

UNCTAD/GATT
Palais des Nations
CH-1211 Geneva 10
Switzerland

ITC publications are available free of charge to public and private trade-related institutions. There are trade promotion handbooks, directories and bibliographies, market surveys and commodity handbooks, monographs on trade channels, short market surveys, monographs on trade functions, training materials and other technical materials.

Japan External Trade Organisation (JETRO)

2-5 Toranomon 2-chome
Minato-ku
Tokyo 105 Japan

Hong Kong Trade Development Council
38th Floor, Office Tower, Convention Plaza
1 Harbour Road
Wanchai
Hong Kong

Japan International Co-operation Agency (JICA)
International Cooperation Centre Building
10-5 Ishigaya
Honmura-cho, Shinjuku-ku
Tokyo 162
Japan

International Co-operation Division
Korea Institute of Industry and Technology Information
P.O. Box 205
Cheongryangri-dong
Dongdaemun-ku
Seoul
Republic of Korea

China External Trade Development Council
8th Floor, 333 Keelung Road, Sector 1
Taipei
Taiwan

Commonwealth Science Council
Commonwealth Secretariat
Marlborough House
Pall Mall
London SW1Y 5HX
United Kingdom

Foundation For Economic Development and Vocational Training
Belderberg 5
5300 Bonn-1
Germany

ZDH Partnership Program

31/31A Bali Lane
Singapore 189867
Tel: 65-2939391
Fax: 65-2933286
E-mail: zdhprog@pacific.net.sg

Chambers of Industries/Associations

International Chamber of Commerce (ICC)
The World Business Organisation
38 Cours Albert 1 er- 75008
Paris
France

The ICC International Bureau of Chambers of Commerce (IBCC)
c/o International Chamber of Commerce
The World Business Organisation
38 Cours Albert 1 er- 75008
Paris, France

Confederation of Asia-Pacific Chambers of Commerce and Industry
10th Floor, 122 Tunhua North Road
Taipei
Taiwan 105
Republic of China

Zentralverband des Deutschen Handwerks (ZDH)
German Federation of Small Business
Johanniterstrauß 1
53113
Bonn
Germany

Association of German Chambers of Industry and Commerce (DIHT)
Adenauerallee 148
D-5300 Bonn 1
Germany

ASEAN Chamber of Commerce and Industry (ASEAN CCI)

3rd Floor, The ASEAN Secretariat Building 70A

Jalan Sisingamangaraja

Jakarta 12110

Indonesia

Tel: 6221-7267325

Fax: 6221-7267326

E-mail: aseancci@dnet.net.id

SAARC Chamber of Commerce and Industry

Federation House, Main Clifton

Karachi, Pakistan – 75600

Tel: 9221-5873691

Fax: 9221-5874332

Australian Chamber of Manufactures

380 St Kilda Road

Melbourne

Victoria 3004

Australia

The Federation of Bangladesh Chambers of Commerce and Industry

Federation Bhaban

60 Motijheel Commercial Area

Dhaka-1000

Bangladesh

Tel: 880-2-956 0102

Fax: 880-2-863 213

Chittagong Chamber of Commerce and Industry

Chamber House, Agrabad C/A

P.O. Box 481

Chittagong

Tel: 880-713-3669

Fax: 880-31-710183

Dhaka Chamber of Commerce and Industries

Dhaka Chamber Building
65-66 Motijheel Commercial Area
Dhaka
Bangladesh
Tel: 880-2-232693
Fax: 880-2-863 608

Bangladesh Electrical Merchandise Manufacturers Association (BEMMA)

2 Shahid Nazrul Islam Road
(Hatkhola Road)
Rowshan Chamber (3rd Floor)
Dhaka 1203
Tel: 880-2-956 2126
Fax: 880-2-865 116

Bangladesh Handicrafts Manufacturers and Exporters Association

13 Gaus Nagar New Eskaton Road
Dhaka 1000
Tel: 880-2-839 369
Fax: 880-2-839 369

National Association of Small and Cottage Industries of Bangladesh

51 Siddeswari Circular Road
Dhaka 1217
Tel: 880-2-842 709
Fax: 880-2-842 709

Rajshahi Chamber of Commerce and Industry

Station Road
Ghoramara
Rajshahi
Tel: 880-721-772 115
Fax: 880-721-772 412

Sylhet Chamber of Commerce and Industry

Chamber Building

Jail Road

P.O. Box 97

Sylhet

Tel: 880-716 069

Fax: 880-821-715 210

Bhutan Chamber of Commerce and Industry

Thimphu, Bhutan

Tel: 975-2-23140

Fax: 975-2-23936

Brunei National Chamber of Commerce and Industry

Negara Brunei Darussalam

Suite 301, 2nd Floor

Bangunan Guru-Guru Melayu Brunei

Negara Brunei Darussalam

All China Federation of Industry and Commerce

93 Bei He Yan Dajie, Beijing

Postcode 100006

Tel: 86-10-6513 6677

Fax: 86-10-6513 1769

E-mail: acfic@public3.bta.net.cn

Anhui Federation of Commerce and Industry

260 Huai He Road

Hefei, Anhui

Post Code 230001

Chinese Manufacturers Association of Hong Kong

CMA Building

64 Connaught Road

Central

Hong Kong

Chongqing Central District, Federation of Industry and Commerce

269 Xinhua Road

Chongqing

Post code 400010

Hubei Provincial Chamber of Commerce and Industry

71 Shouyi Road

Wuhan

Post code 430060

Tel : 86-27-8831 0322

Fax : 86-27-8804 6648

Jingzhou Chamber of Commerce

6 Wen Hua Gong Road, Shashi

Jingzhou

Post code 434000

Tel : 86-716-821 5008

Fax: 86-716-821 5008

Jiangsu Provincial Chamber of Commerce and Industry

No. 30, Room 1306 West Beijing Road

Nanjing

Post code 210024

Tel : 86-25-332 1128

Fax : 86-25-332 9618

E-mail : jsficclx@js.cei.gov.cn

Suzhou Chamber of Commerce

89 Wu Sa Road

Suzhou

Post code 215006

Tel : 86-512-522 5474

Fax : 86-512-522 5474

Wuxi Chamber of Commerce

No. 1-3 Qian Xi Xi

Wuxi, Jiangsu

Post code 214001

Tel : 86-510-203 408
Fax : 86-510-270 8206
E-mail : wuxicoc@wst.net.cn

Confederation of Indian Industries
23, 26 Institutional Area
Lodi Road
New Delhi I10033
India

Federation of Indian Chambers of Commerce and Industry
Federation House
Tansen Marg
New Delhi 110 001
Tel: 91-11-3319251-61
Fax: 91-11-3320714

Ambattur Industrial Estate Manufacturers' Association
Ambattur Industrial Estate
Chennai 600 058
India
Tel: 9144-6250245
Fax: 9144-6250489
E-mail: krisnam@giasmd01.vsnl.net.in

The Coimbatore District Small Industries Association (CODISSIA)
CODISSIA G.D. Naidu Towers
Post Bag No. 3827 Huzur Road
Coimbatore 641 018
India
Tel: 91422-215182
Fax: 91422-214231
E-mail: codissia@md2.vsnl.net.in

Karnataka Small Scale Industries Association (KASSIA)
2/106, 17th Cross, Magadi Chord Road
Vijayanagar
Bangalore 560040

India
Tel: 9180-3353250
Fax: 9180-3353250
E-mail: kassia@blr.vsnl.net.in

Indonesian Chamber of Commerce and Industry (KADIN National)
Menara KADIN INDONESIA
29th Floor Jln H R Rasuna Said X-5 Kav 2-3
Jakarta 12950
Tel: 62-21-527 4884
Fax: 62-21-527 4485

KADIN Jawa Barat
Jl Suniaraja 3
Bandung 40111
Tel: 62-22-420 3301
Fax: 62-22-435 075

KADIN Jawa Timur
Jl Kembang Jepun 25-27
Surabaya 60161
Tel: 62-31-340 481
Fax: 62-31-335 888
Email: ejcci@cci.or.id or ejcci.@indo.net.id

KADIN Unjung Pandang
Jalan Ahmad Yani 23
Unjung Pandang
Tel: 62-411-321 704
Fax: 62-411-326 553
E-mail: kadin@upandang.wasantara.net.id

Jakarta Chamber of Commerce and Industry
Majapahit Permai Blok B 21-22-23
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Chamber of Commerce and Industry of Vietnam (Haiphong Branch)
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Fax: 84-31-842 243

Chamber of Commerce and Industry of Vietnam (Cantho Branch)
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Chamber of Commerce and Industry of Vietnam (Danang Branch)
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Fax: 84-511-822 930

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Fax: 84-4-843 4794

Union of Associations of Industry and Commerce of Ho Chi Minh City
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Ho Chi Minh City, Vietnam
Tel: 84-8-829 3389
Fax: 84-8-829 8546

Leather and Shoes Association of Ho Chi Minh City

85 Le Thanh Ton Street, District 1

Ho Chi Minh City

Tel: 84-8-821 003

Fax: 84-8-821 003

Dear Sir

REQUEST FOR BUSINESS PUBLICATIONS

The [name of association] is the largest trade association of private companies in [name of country]. The Association was founded in [year] and todate, we have more than [] companies as members. Most of our members are privately-owned small and medium enterprises from various industries.

To promote business co-operation between our local and foreign companies, we have established a Business Information Centre. The Business Information Centre provides useful business information for both local and foreign companies. These information are stored in our newly created library.

We would be interested in receiving business publications from your organisation and country on a regular basis for our library. It would be greatly appreciated if we could also be placed on your mailing list for such publications. At the same time, we would like to request you for referral to other organisations that can assist us in our effort to establish a good library for our members.

Thank you very much for your kind assistance.

Yours faithfully

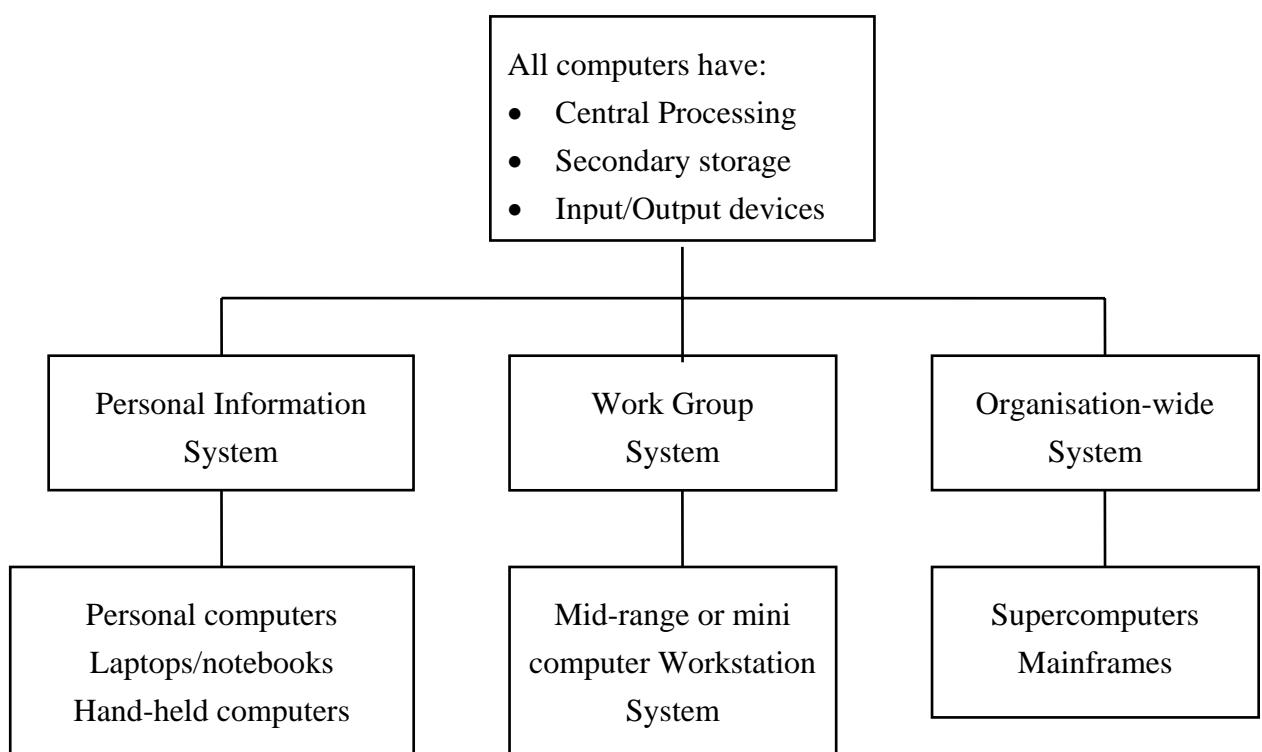
Director
Business Information Centre

Basic Computing Concepts and Data Communications Network

1. Computer Hardware

There are three main types of computer system that are designed to meet the specialised needs of the user (see Figure A.1). They range from personal computers for the individuals to mainframes used mainly by large corporations.

Figure A.1 Types of Computer



The computers commonly found in most chambers and trade associations are the personal or microcomputers. Some of the large chambers use work group systems with a minicomputer as the server (e.g. IBM AS/400 system). The popularity of microcomputers as the main computer hardware in the chamber is due to its low acquisition price and maintenance cost. Another reason is that most of the computer applications within the chamber are office automation or transaction processing and do not require extensive sharing of resources.

Major components

All computers have the following hardware components:

- Central processor
- Secondary storage
- Input devices
- Output devices

(a) Central Processor

The central processor comprises a central processing unit and primary storage. The central processing unit directs the flow of information between the various input and output devices. The primary storage is the computer's main memory and usually comprises of random access memory (RAM).

(b) Secondary storage

Data stored in the computer's main memory is lost when the computer is switched off. Therefore, the computer needs a system of secondary storage that can retain the data even when the computer is switched off. The common secondary storage media are:

- Hard or rigid disks
- Floppy disks
- Magnetic tapes
- Recordable CD-ROM
- Zip drives and cassettes

The most popular secondary storage is the hard disk. The typical hard disk stores about 2.1 gigabyte of information. Recordable CD-ROM are becoming popular as each disk can store up to 650 MB of data and are less susceptible to damage from fungus growth. They require less maintenance and cost about US\$3 per disk. The major disadvantage is that the disk can only be written once. This is changing with recordable CD-ROM that can handle multiple sessions. CD-ROM is most useful for archiving data.

(c) Input devices

To key in data into a computer, we require input devices. Input devices comprise the following:

- Keyboard
- Mouse
- Touch screen
- Voice recognition
- Optical character reader
- Scanners
- Magnetic Ink Character Recognition (MICR)

(d) Output devices

The processed data and information from a computer is displayed via output devices.

The common output devices are:

- Video display terminals
- Printers - dot matrix, daisy wheel, inkjet, laser printer

Modem

All computers process digital signals. Telephone lines transmit analog signals. Hence if two person wish to compute over telephone lines, the sending computer's digital signal must first be converted into analog signals, and at the other end, reconverted into digital signals. To accomplish this process, we need to use a modem.

Modem is an acronym for Modulator/DeModulator. It is a device that converts digital signals into analog signals and vice versa. A modem takes the digital electrical pulses received from a computer and converts them into a continuous analog signal that is needed for transmission over an analog voice grade circuit.

Modems can be either external or internal modems. Most modern modems are both data and fax modems in that they can transfer computer data as well as acting as fax machines.

2. Data Communication Networks

Many chambers intend to link or network computers in different departments and provinces to share data or information. Basically, this involves data communications which is the movement of computer information from one point to another by means of electrical or optical transmission systems.

(a) Objectives of Data Communication Network

Most chambers develop data communication networks within the chamber for the following purposes:

- Increase access to valuable information.
- Share computing resources e.g. printer through network printing services, fax services, e-mail.
- Reduce the time, effort, and cost required to perform various tasks within the chamber.
- Captures chamber data at its source and rapidly disseminate the information within the secretariat staff and chamber members.

(b) Components of a Data Communication Network

There are three basic components of a data communication network. They include:

- Host computer (or server) - the central computer in the network, storing data or software that can be accessed by the client.
- Client is the input/output hardware device at the other end of the communication circuit.
- Circuit is the pathway through which the message travels e.g. copper wire, fibre optic cable or wireless transmission.

(c) Local Area Network

A local area network refers to a group of microcomputers or terminals located in the same general area and connected by a common cable (communication circuit) so they can exchange information. LANs are typically used within the same building or a set of buildings situated closer together. Most chambers link the operations of different departments through a LAN. A LAN would also enable the chamber to share and exchange membership information.

(d) Wide Area Network

A wide area network (WAN) may be defined as a network spanning a large geographical area. Its nodes (comprising of microcomputers) can span cities, states, or national boundaries. This network interconnects computers, LANs and other data transmission facilities on a countrywide or world-wide basis.

(e) Network Architecture

There are three fundamental network architectures:

- Host-based networks
- Client-based networks
- Client-server networks

The three types of network architecture are designed to support different computer applications. All computer applications can be broadly classified under three basic building blocks:

- Data storage
- Processing of the data
- Presentation of the information to the user and acceptance of the user's commands

In host-based networks, the host computer performs virtually all the work. In client-based networks, the client computers perform most of the work. In client-server networks, the work is shared between the hosts and clients (see Table A.2)

Table A.2
Types of Network Architecture

| | Client | Hosts |
|-------------------------------|--|--|
| Host-based networks | Dumb terminals | Mainframe |
| | | <ul style="list-style-type: none"> • Presentation • Processing • Data storage |
| Client-based networks | Microcomputers | Minicomputers |
| | <ul style="list-style-type: none"> • Presentation • Processing | <ul style="list-style-type: none"> • Data storage |
| Client-server networks | Microcomputers | Microcomputer, minicomputers, mainframes |
| | <ul style="list-style-type: none"> • Presentation • Processing | <ul style="list-style-type: none"> • Processing • Data storage |

Network Typology

Networks can be classified by their topology, which is the basic geometric arrangement of the network. The basic topologies used to lay out networks are:

- Ring
- Bus
- Star
- Mesh

GroupWare

Staffs within a chamber often work in groups or teams. To assist persons working in groups, a variety of network application software known as GroupWare technologies has been developed. GroupWare permits people in different places to communicate either at the same time or at different times. GroupWare can also be used to improve

communication and decision making among those who work together in the same room, either at the same time or at different times (see Table A.3 below).

Table A.3
Types of GroupWare

| | Same time | Different time |
|-----------------|--------------------------------|--------------------------|
| Same place | Group support systems | Group support systems |
| Different place | Video teleconferencing | Electronic mail |
| | Desktop video teleconferencing | Document-based GroupWare |

Electronic Mail

Electronic mail (e-mail) operates like normal postal mail services except that the message is transmitted across a data communications network. With electronic mail, users create and send messages to one user, several users, or all users on a distribution list. Most e-mail software also enables users to send text messages and attach documents from word processors, spreadsheets or graphic files.

Document-based GroupWare

One of the problems with e-mail is that it lacks a structured way to support an ongoing discussion. Each e-mail is a separate item, unrelated to other messages. It is possible to group and file e-mail messages into separate file folders, but there is no overall way to integrate them.

A document-based GroupWare is designed to store and manage large collection of text and graphics to support ongoing discussions. An example is Lotus Notes. Lotus Notes is also used to automate certain document-based processes. For example, the processing of membership application within the chamber may require different persons from different departments to work together to process the application. The membership department may handle the initial application. This is passed to the

finance and administration department. All this paper work could be replaced if Notes is used to prepare and pass the document from one person to another.

Video Conferencing GroupWare

Video conferencing provides real-time transmission of video and audio signals to help people in different locations to have a meeting. The key benefits of video conferencing are the time and cost savings. By using video teleconferencing, meeting participants no longer need to spend time and money in travel. One of the fastest growing forms of video teleconferencing is desktop video conferencing. Small cameras are installed on the top of each computer that permit meetings to take place from individual offices.

Group Support Systems

Group support systems (GSS), also called electronic meeting systems, are software tools that are designed to improve group decision-making. Most GSS are used in special purpose meeting rooms that provide each group member with a networked computer, plus large screen video projection systems that act as electronic whiteboards. GSS software enables participants to communicate, propose ideas, analyse options, evaluate alternatives and develop solutions. GSS are ideal for a chamber strategic planning workshop.

INTERNET

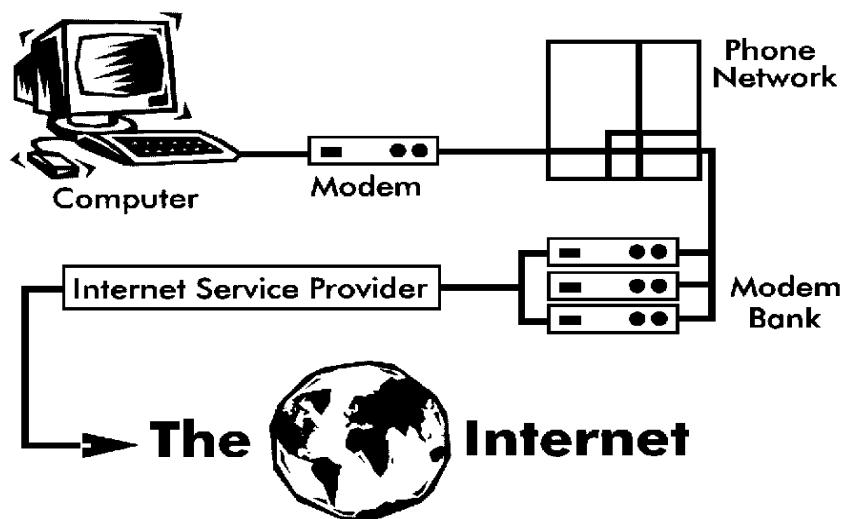
The Internet is becoming an important vehicle for chambers to search for information and become connected to the international community. The Internet also links governments, businesses and individuals in different countries.

The INTERNET is a collection of thousands of smaller computer networks operated by federal, state, and local governments; universities and colleges; and private companies through Internet service providers. Each network is linked to the next network to form one large world-wide network (see Figure A.2)

Over this network, vast amounts of data, text, graphics, sound, voice and live broadcast of video are transmitted from one computer to another, often at the speed of light.

Figure A.2

The Internet



(a) Characteristics of the Internet

The Internet has a number of characteristics that are useful for the chambers in searching for and providing information. They include:

- No geographical boundaries.

- Not owned, controlled, or operated by any one organisation or country.
- Rapid expansion in the number of users, the number of service providers, and its information resources.

(b) Hardware Requirements to access the Internet

To access the Internet, the chamber must have the appropriate hardware equipment. A high-speed modem is recommended as it would result in faster access, and is likely to result in lower cost for the chamber in the long run. The required hardware are as follows:

- High-end personal computer - equivalent to 80486, 50MHz or faster with 8 MB RAM
- 14" monitor
- Video card with at least 256 (8-bit) colours
- 500 MB hard drive
- Mouse
- Sound card
- Ethernet connection or modem (28,800 BPS or faster)
- Telephone line

(c) Software Requirements

Apart from the hardware requirements, the chamber also needs the following software (see Table A.4) to carry out tasks on the Internet. The Internet Service Provider will provide most of these software.

Table A.4
Software for the Internet

| | | |
|--------------|---------|------------|
| Web Browser | NetNews | Telnet |
| E-mail | FTP | Gopher |
| Modem Dialer | | |
| TCP/IP Stack | | PPP / SLIP |

- An Internet Web browser to navigate the WWW and to display web pages. It also supports file transfer protocol (FTP).
- A telecommunications network (telnet) interface to support remote dialup connection of a terminal with a network computer. Telnet is often used for remote login to bulletin board systems.
- Electronic mail (e-mail) software.
- A modem dialer
- Virus protection software will detect whether your computer has caught anything and provide a means of cleaning it up.
- The TCP/IP (Transmission Control Protocol/Internal Protocol) stack is the low-level software you need to install to make your computer conversant with the underlying protocol or language of the Internet.
- Point-to-Point Protocol (PPP) capabilities and Serial Line Internet Protocol (SLIP) are provided by Windows socket (Winsock). Both SLIP and PPP allow your computer to use Internet Protocol (IP) over a serial telephone line. PPP supports error detection and data compression while SLIP does not.

(d) Types of Access

There are two main methods of access: through an organisational network (dial-up access) and a lease line (full network access). A full network access allows the chamber to provide faster sending and receiving of information and superior electronic mail capability. To obtain full network access, the chamber requires an information technology department to set up and maintain a permanent link to the Internet. In addition to the hardware and software mentioned above, the chamber will also need:

- A router that allows data signals from the network to be sent to other networks.
- A firewall that sits between the Internet and the computer network to prevent unauthorised access.
- A dedicated leased line from the chamber network to another network on the Internet.

Full network access should only be considered by a chamber at the national or provincial level. It is expensive and can only be justified if there is a large volume of information to be sent or received by the chamber.

For the chamber at the local or district level, the preferred option is the dial-up access via a commercial Internet Service Provider. Unlike full network access, the chamber does not require additional hardware but only an account with an Internet Service Provider. Most Internet service providers (ISP) charge a one-off signing-on fee plus either a flat rate for unlimited monthly usage or a fee for each time the user access the Internet. In addition to the charges levied by the Internet service provider, the chamber will also incur telephone charges to reach the ISP.

Basic Terminology of the INTERNET

- A gateway is a computer or the program running on it that transfers files from one network to another.
- A bulletin board is a public discussion area where people can post messages - without sending them to anyone's e-mail address - which can be viewed by anyone who enters the area. Other people can then reply to posted messages and on-going discussions ensue. On the Internet, the equivalent areas are called newsgroups.
- Internet Service Providers function as a gateway; getting you onto the Internet and letting you go where you want. All ISPs run a bank of modems which takes the call from your modem. The PPP or Point-to-point-Protocol is used to connect your personal computer to the Internet.
- On-line Service or Information Providers provide information on the Internet.
- An ISP Account allows you to get onto the Internet and comes with an e-mail address, some storage space on a computer somewhere on the Net, usually in a directory (a folder) with the same name as your user name.

An ISP account is also a billing entity, and your account will be billed monthly, sometimes based on the amount of time you spent connected that month (depending on the provider) or the amount of space you used on their hard drive.

- PPP or SLIP Account (Point to Point Protocol). A PPP account lets your computer behave like it's connected directly to another computer on the Internet.

File Transfer Protocol (FTP)

File transfer protocol (FTP) supports transfer of files between your computer and an ftp server on the network. You can upload or download a variety of files, such as files that contain graphics, photographs, programmes, sound clips, text information and video. It is the preferred method for transmitting large files.

Using FTP you can do the following:

- Send a file (commonly referred to as uploading a file) from your computer to another person's computer on the Internet.
- Retrieve a file (commonly referred to as downloading a file) from another person's computer to your own and save it for future reference or use.

When you want to download files from a remote computer, you will need to know the following information:

- The Internet address of the remote computer
- The name of the file you wish to download
- The mode you should set your FTP programme in order for the file to transfer properly (such a binary or text).

Anonymous ftp permits you to access an ftp server on which you don't have an account; you login in as an anonymous user and enter your e-mail address as the password. Depending both on your browser's capabilities and the functions configured on the ftp server, you will be able to view a directory of files and download or save the files to the hard drive on your computer. Few ftp servers permit files to be uploaded from your computer.

Gopher

Gopher is a search programme designed to help you find information you are looking for on the Internet.

When you use a Gopher program, you are actually sending a message out on the Internet to several thousand special machines called Gopher servers, which contain information about resources available on the Internet.

When your message is received by a Gopher server, a special software programme, called Veronica, can be used to search the server's database to determine if it has any

information on the topic in which you are interested. If it does, then that information is returned to you to help identify the location on the Internet where the information you want can actually be found

Internet Relay Chart (IRC)

IRC provides you with the mechanism to have a group or “private” conversation in real time.

Web Addresses, Web Browsers and Search Engines

Web Addresses (URLs)

All documents on the WWW have a unique address, known as Uniform Resource Locator (URL). The URL identifies a web page allowing it to be addressed and retrieved. The URL of a web page is composed of three pieces of information:

- A Web address starts with the name of the protocol (e.g. HTTP which stands for Hypertext Transfer Protocol), followed by ://
- An Internet address in the form of site.subdomain.domain, followed by a forward slash. The domain name is unique and is used to locate a web page server.
- The directory path and file name of the web page on the server's hard drive, often ending with the extension .html. An HTML (hypertext markup language file) is the primary type of document on the Web.

For example, the URL for the Singapore Confederation of Industries is

<http://www.asia-mfg.com/sci/index.html> and is made up as follows:

- http:// - hypertext transfer protocol
- www.asia-mfg.com - the domain name
- sci/index.html – the directory and file that holds the information

The protocol to be used depends on the type of server that houses the information you want to retrieve. For example, gopher protocol is used to access information on a gopher server. File transfer protocol (FTP) supports transfer of files in either direction between your computer and another computer on the network. Some ftp servers require login. Example of the URL format: <ftp://ftp.microsoft.com/>

Domain names

A domain name is the name that the company or organisation that operates the web server has registered with InterNIC. The domain name consists of two parts. The first is usually an abbreviation of the organisation name or the service to be provided. The second part or domain identifier defines the type of organisation.

Standard identifiers are:

| | |
|------|--------------------------------------|
| .com | commercial business |
| .edu | educational institution |
| .gov | U.S. Government |
| .mil | U.S. Military |
| .net | network or Internet service provider |
| .org | any other organisation |

Web Browsers

To browse the Web, we often use a Web Browser. A click on a hypertext link, highlighted by your browser, will retrieve the associated web page from its server. The use of browser software to navigate web page links is called surfing.

The popular Web browsers are:

- Netscape Ver 2.02 or later
- America on Line (AOL)
- Compuserve Mosaic
- Lynx
- Microsoft Internet Explorer

Searching the Web

There are two major ways of searching the Web:

- Directory - where Web sites are organised by topic and subtopic, something like yellow pages phone book.
- Searchable index - where you enter a key word to search for, and the search page gives you a list of suggested sites that seem to match what you're searching for.

One of the best directories on the Web is the Yahoo site. To access the Yahoo site, you type <http://www.yahoo.com>. Other sites are:

| | |
|---------------------------|---|
| A2Z | http://a2z.lycos.com |
| Amazing environmental | http://www.webdirectory.com |
| Excite | http://www.excite.com |
| Magellan | http://www.mckinley.com |
| World Wide Arts Resources | http://www.concourse.com/wwar/default.html |
| Yahoo | http://www.yahoo.com |

You can also use search engines. A search engine is a program or Web page that enables you to search an Internet site (or the entire Internet) for a specific key word or words. Popular search engines include:

| | |
|-------------------------------|---|
| Alta Vista | http://www.altavista.digital.com |
| Berkeley Public Library Index | http://www.ci.berkeley.ca.us:80/bpl/bkmk/ |
| Infoseek | http://www.infoseek.com |
| Inktomi | http://inktomi.berkeley.edu |
| Lycos | http://www.lycos.com |
| NightN | http://www.nlightn.com |
| Open Text | http://www.opentext.com/omw/formw.html |
| Shareware.com | http://www.shareware.com\ |
| Web Crawler | http://www.webcrawler.com |
| WhoWhere | <u>http://www.whowhere.com</u> |

The WWW Virtual Library (URL <http://www.w3.org/hypertext/DataSources/bySubject/Overview.html>) catalogues Internet information by subject and provides easy retrieval through hypertext subject links.

Other popular search engines

- CERN (URL <http://www.w3.org/pub/DataSources/WWW/Servers.html>)
- DejaNews (URL <http://www.dejanews.com/>)
- The Electric Library (URL <http://www.elibrary.com/id/2525>)
- HotBot (URL <http://www.hotbot.com/>)
- Wais (<http://quake.think.com>)

Additional search engine links are available at:

- Comprehensive Searching Services web page
(URL <http://union.ncsa.uiuc.edu:80/HyperNews/get/www/searching/services.html>)
- Understanding and Comparing Web Search Tools
(URL <http://www.hamline.edu/library/links/comparisons.html>)
- The Web Master's Guide to Search Engines and Directories
(URL <http://calafia.com/webmasters/>).

Useful Internet URL for Chambers and Trade Association

1. Resources available on the Internet on the Internet

- Learning about the Internet (<http://www.charm.net/learning.html>)
- The Internet Public Library (URL <http://ipl.sils.umich.edu/ref/RR/INT/>)
- Netscape Communications Corporation Internet links (URL http://home.netscape.com/assist/about_the_internet.html)
- Yahoo Internet search page (URL http://www.yahoo.com/Computers_and_Internet/Internet/)

2. Quick-reference to industry software resources

- Eudora Light Freeware (URL <http://www.qualcomm.com/quest/>)
- McAfee virus protection software (URL <http://www.mcafee.com/>)
- Microsoft Corporation home page (URL <http://www.microsoft.com/>)
- University of Illinois NCSA Mosaic home page (URL <http://www.ncsa.uiuc.edu/SDG/Software/Mosaic/NCSAMosaicHome.html>)
- Netscape Communications Corporation home page (URL <http://www.netscape.com/>)
- Pegasus Mail home page (URL <http://www.pegasus.usa>)
- Software review (<http://www.cws.internet.com>)

3. Resource available on the Internet relating to WWW

- Microsoft Site Builder Workshop (URL <http://www.microsoft.com/workshop/>)
- Netscape Communications Corporation links for creating web sites (URL <http://home.netscape.com/home/how-to-create-web-services.html>)
- Ultimate Homepage Starter Kit (URL <http://www.shsu.edu/~stdsdi/homepage.html>)
- Web Developer's Virtual Library (URL <http://www.stars.com/>)
- Web Master Online (URL <http://www.cio.com/WebMaster/>)
- Yahoo WWW search page (URL http://www.yahoo.com/Computers_and_Internet/Internet/World_Wide_Web/)

More information on FTP is available at the following links:

- Anonymous FTP Frequently Asked Questions (FAQ) List (URL
<http://hoohoo.ncsa.uiuc.edu/ftp/faq.html>)
- David Lemson's Compression List (URL
<ftp://ftp.cso.uiuc.edu/pub/doc/pcnet/compression>)

4. Resources on Chambers of Commerce and Industry in Asia

- ◆ All China Federation of Industry and Commerce
 - www.datachina.com.cn
 - www.asiawww.com/acfic/index.htm
- ◆ Chinese General Chamber of Commerce – www.cgcc.org.hk
- ◆ Huizhou City Chamber of Commerce and Industry - www.hzgcc.com
- ◆ Xiamen City Chamber of Commerce and Industry - www.xmic.org
- ◆ Federation of Indian Chamber of Commerce and Industry – www.ficci.com
- ◆ Federation of Nepalese Chamber of Commerce and Industry
 - www.catmando.com/npo/fncci/fncci5.html
- ◆ Federation of Pakistan Chamber of Commerce and Industry
 - www.g77tin.org/fpcciphp.html
- ◆ Federation of Malaysian Manufacturers – www.fmm.org.my
- ◆ Indonesia Chamber of Commerce and Industry (KADIN)
 - www.indonesia.elga.net.id/business/index.html
 - www.Batavianet/kadin/kadin/index.html
- ◆ KADIN Jawa Timur - www.cool.mb.ca/indonesia/kadinda
- ◆ Philippines Chamber of Commerce and Industry
 - www.philcham.com/bin/index/cgi
- ◆ Cebu Chamber of Commerce and Industry - cebuchamber.gsilink.com
- ◆ Singapore Chinese Chamber of Commerce and Industry
 - www.sccci.org.sg
 - www.worldyellowpages.com/sccci
- ◆ Singapore Confederation of Industries – www.asia-mfg.com/sci/index.html

- ◆ Singapore International Chamber of Commerce and Industry
 - www.webnexus.com/users/icc/siccchp.html
 - www.asianconnect.com/sicc/home.shtml
- ◆ Singapore Indian Chamber of Commerce and Industry
 - www.commerceasia.com/sicci
- ◆ Thai Chamber of Commerce – www.tcc.or.th
- ◆ Federation of Thai Industries – www.fti.or.th/