



**Asia-Pacific
Economic Cooperation**

E-Commerce Strategies for Rural SMEs in APEC

**The Telecommunications and Information Working Group
Business Facilitation Steering Group**

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1 Introduction

The importance of community Internet access in rural areas is a key point made by Harvard University's Center for International Development in their research document entitled, Global Information Technology Report 2001-2002: Readiness for the Networked World (GITR).

“With more than half the world's population living in rural areas, rural communities promise essential new markets, new producers, and new ideas. Helping them to help themselves develop also offers security for urban areas and the developed world by contributing to the grander goals of social and economic stability (and prosperity) through increased economic opportunity, new channels for learning, better communication with government, and improvements in health and wellness.

Economic self-sustainability for the Internet in rural areas is key if we want to avoid common development failures associated with donor initiatives, empower local communities, use the market to vet demand and interest, and ultimately link to real and legitimate development objectives.

There are a handful of crucial issues determining the viability of the Internet in rural areas: costs, revenues, networks, business models, policy and capacity. Business, government, and nonprofit institutions have different roles and capabilities in pushing these drivers, and while they may have occasionally competing interests, they have an overriding and common goal in economically sustainable access to ICT in rural areas.”

The report also stresses the importance of making market information immediately available to the rural sector, particularly pricing for farmers:

“The farmers' primary interest is to maximize the profits they earn from their farms. To achieve this goal, farmers need price information for four important purposes:

First, relative prices allow the farmer to make decisions on the mixture of crops to produce. Even if conditions restrict him to one crop, its price tells him how much to produce.

Second, prices enable him to produce in a more efficient manner. He is able to purchase inputs (e.g., fertilizer, irrigation equipment) when and where they are cheapest. Prices may also alert him to the existence of inputs that would profitably boost his production.

Third, price information allows him to know where to sell his output and the appropriate price to accept. For example, while prices often differ across villages, the farmer typically knows only the local price. So even if, say, the urban price is higher, he doesn't know to send his output to the city. Nor does he realize that it is profitable to produce more of that output (and perhaps less of another). He misses opportunities to earn more income, and urban consumers face excess prices. By not being able to pursue the highest price, farmers are not sending their output to where they are valued most, and lowering the price there for consumers.

The fourth purpose of price information for farmers is to prevent their exploitation by middlemen.”

In concluding remarks, the report highlights research that demonstrates how ICTs can create a “Digital Provide” that boosts incomes and ultimately leads to economic growth. It makes the further point:

“ICTs have the ability to disseminate information to isolated, information-deprived locales. Those receiving this information (predominantly farmers and laborers), as both producers and consumers, will be, for the first time, able to participate in effective markets. The immediate consequence should be income gains for participants, and the ability to better spend their incomes. Over the long term, enhanced access to information should enable producers to significantly improve their practices. Such improvement lays the path to economic growth.”

2 Project Scope and Objectives

To put theories into practice and to move from the lecture halls of Harvard University to the rural realities of the Philippines, AOEMA and the Philippines economy jointly proposed a project entitled EC Strategies for Rural SME's in APEC, with the following project proposal details submitted to the APEC secretariat:

Rural regions in developing economies are the backbone of export, employment, and resource allocation. Many businesses in rural areas could be classed as "micro" businesses. Many of these businesses could benefit from the usage of electronic commerce as a new channel for the marketing of their products.

In addition, many developing economies have formed cooperatives for the development of markets for agricultural products. These cooperatives and their members would benefit from the usage of EC as a tool in their activities.

A number of economies in the region have begun to use existing narrowband technologies to implement EC for their constituency. One economy in particular, the Philippines, has been very successful in developing EC in a sustainable way.

Many economies could benefit from the experience of other economies in the development of EC in the agricultural sector fully utilizing existing narrowband infrastructures. In order to help economies realize the benefits of these developments they must understand the project structures. In order to do this we propose a project that studies these initiatives in order to achieve the following outcomes:

- Information regarding successful EC initiatives that make use of existing narrowband infrastructures
- Details of the costs and resources required and strategies followed to provide these EC initiatives
- The ability for the development to be replicated in other economies and the scope for cooperation in this effort.
- Reporting to APEC on infrastructure capabilities required
- Development of strategy recommendations that will enable micro enterprises to take advantage of the initiatives

At the time of scoping this project, AOEMA and the Philippines economy agreed that at least one other East Asian APEC economy should be included. Indonesia responded with interest and is included in this project report. Independent research was conducted by local sources in both the Philippines and Indonesia, using the following report structure:

- | | |
|-----------------------------------|---------------------------|
| 1. Introduction | • Aim and objectives |
| 2. Business statistics | • Cost and funding bodies |
| 3. Telecommunications environment | • Participants |
| 4. Internet and PC penetration | • Technologies employed |
| 5. Education | • Services provided |
| 6. Legal framework | • Impact and achievement |
| 7. e-government | • Lessons learned |
| 8. Case studies | |
| • Selection of 3-4 case studies | |

A total of seven case studies are included in this report, with one serving as a benchmark example for SMEs in the agricultural sector. While there are similarities across the seven examples, each one represents a unique business approach, meeting the specific needs of each enterprise. Many of the lessons learned in the Philippines and Indonesia are consistent with those identified in other parts of the world, thus forming the basis of a strategy and set of recommendations that others might find useful when developing their own strategy and subsequent implementation plan.

3 Executive Summary

Considering more than half the world’s population lives in rural areas, and nearly two-third’s of the world’s poor live in Asia and the Pacific, it is vital that we study ways to make ICT work for the rural poor. Call it the “digital divide” or “digital provide,” it is all about providing relevant information to communities in need and closing the gap between the information rich and the information poor. There are many projects from all corners of the globe that demonstrate ICT’s positive contribution to reduce rural poverty, but there are far too many failures as well. Identifying success criteria for ICT projects in the rural areas of the APEC region is a core objective of this project and one way to accomplish this is to review the selected case studies in terms of what worked and what didn’t.

Project researchers in the Philippines and Indonesia interviewed both program developers and participants to find out what they learned from their experience. While the details are included in Sections 7 and 9 of this report, the following is a summary list of the more significant lessons learned:

- **Cost of involvement:** Most SMEs and farmers in developing economies cannot afford to pay fees associated with a program, no matter how good that program is. There is concern that programs charging fees will not be sustainable.
- **Strategic partnerships:** Programs are more likely to succeed and grow if backed by a consortium of strategic players. Refer to Section 5 for a detailed discussion on this important lesson.
- **Customer centric:** You must be customer centric in your focus and in so doing you will have to be prepared to regularly revise your business plans to meet customer demands.
- **Technology:** Make sure your technology provider has the necessary expertise, otherwise your clients may experience business losses due to system or application failures.
- **Phased implementation:** Implementation should be phased in over time and in response to actual user requirements. Don’t over-engineer, especially in the beginning stages.
- **Brand:** Need to establish brand recognition for your program and market it aggressively.
- **User interface:** Take full advantage of mobile technology as an alternative for computer access (which is prohibitively expensive for many SMEs) and promote its use extensively.
- **Education and Training:** Provide access to telecenters and offer appropriate training programs to introduce the benefits of ICT.
- **Local involvement:** It is most important to assess the information needs of the local community and involve intended users in a process of continuous development.
- **Government:** SMEs tend to look to government for support and to lead by example.

As per the chart below, the anticipated project outcomes are identified and the relevant sections in the report referenced:

Project Outcome	Report section
Successful EC initiatives that make use of existing narrowband infrastructures	Section 7 – Case Studies: Enabling SMEs in the Philippines to Participate in the New Economy Section 9 – Case Studies: Enabling SMEs in Indonesia to Participate in the New Economy (take note of case study in Section 9.3 Case Study #3: BaliQualitySilver.com) Section 10.1–Booking Hotel Rooms in the Philippines
Ability for programs to be replicated in other economies and the scope for cooperation in this effort.	The case studies in this report provide a platform which other economies can replicate. Section 5 – Benchmark Case Study: b2bpricenow.com (Philippines) business model being considered by several APEC economies.

Executive Summary

Development of strategy recommendations that will enable micro enterprises to take advantage of the initiatives.	Refer to the business strategy, achievements and lessons learned in each case study to learn what has worked and what hasn't.
Details of the costs and resources required to initiate these programs	Each case study in this report identifies the necessary resources and strategies with corresponding costs.
Reporting to APEC on infrastructure capabilities required	Case studies report on infrastructure requirements.
Recommendations on use of existing narrowband telecommunications technologies for the benefit of micro enterprises, particularly in the agricultural sector	Section 5 – Benchmark Case Study: b2bpricenow.com (Philippines)

Sections 6 and 8 profile the Philippines and Indonesia respectively. The following chart provides a snapshot comparison of these two economies in terms of key teledensity factors:

	Philippines	Indonesia
Population in millions	76	208
Telephone lines (per 1,000 people) – World Bank 2000	40	31
Mobile telephones (per 1,000 people) – World Bank 2000	84	17
PCs (per 1,000 people) – World Bank 2000	20	10
Internet users (per 10,000 people) – World Bank 2000	266	68
% Dialup	84%	93%
% Cable	6%	2%
% Leased line	6%	1%
APEC TEL East Asian e-Readiness & IT Indicators (2002)	7 (out of 10)	10 (out of 10)

Additionally, the following facts are known about the Philippines:

- 63.3% own and use mobile phones
- 72.4% of those who own mobile phones use SMS for transacting business
- 22.7% use PDAs for business purposes

4 Global Context: Rural ICT Case Studies from Around the World

A number of representative case studies from different parts of the world were reviewed for purposes of learning their key lessons, establishing an appropriate context for selecting and studying similar case studies in the APEC region, and providing a basis for comparison. Each of the following case studies includes a brief project overview and the key lessons learned:

4.1 China:

With joint funding from the UN Development Program and the Chinese government, a pilot project providing rural community Internet centers to five provinces in central China is scheduled for completion at the end of 2003. In an interim project report, the following recommendations have been made:

- Project should make greater use of the Internet as a medium of communication and not just as an electronic source for information;
- In poor, rural areas, fees for service shouldn't be charged because such practices have rarely succeeded in similar programs demonstrated in other developing countries;
- The project's funding sources should consider satellite technology as the most feasible option for reaching the poorest villages in mountainous terrain.

Key Lessons: fees shouldn't be charged; satellite technology is the most feasible in remote locations;

4.2 India:

An example of the adoption of ICT by a rural community is the Warana "Wired Village" project, in the state of Maharashtra, India. A local cooperative is using ICT to streamline the operations associated with sugar cane growing and harvesting. This project is benefiting small farmers, both in terms of transparency and time saved on administrative transactions, as well as the cooperative, in terms of monetary gains.

The Warana project refers to four key lessons on the use of ICT for development in rural areas:

- Assessing the information needs of the community: Before launching any ICT initiative, the information needs of a community should be thoroughly assessed. Development practitioners and software developers might have in mind a very wide range of resources and applications that are of potential use to a community. However, it is information that has a direct impact on the livelihood of the people that matters most, and any application should be developed only after an accurate assessment of these needs.
- Local ownership and participation: Once the information needs of the community are assessed, content and software applications should be developed with the continuous involvement and feedback from the community. For the Warana "Wired Village" project, NIC developed a software program which is easy to use and all information is in Marathi, the local language. The process of development of the software, however, was far from ideal. The lack of local participation in content creation, as well as in software development, partly explains why much of the information, including that on sugar cane growing and agricultural prices, lies unutilized and has not been updated since 1998. Local ownership and participation, in sum, ensure continuity, while a top-down approach will most probably lead to a waste of resources in the initial period of the project, without ensuring its future sustainability.
- Women and poor people's access: Particular efforts should be made to improve women and poor people's access to information. In Warana, women generally visit information kiosks to obtain sugar factory services; but only men are using the Internet where available. Without finding means to get women involved in the use of ICT and in particular to ensure that women are trained to become information kiosks operators, there is a severe chance that they will be further marginalized. Similar considerations apply to

access to ICT by poor people. In Warana, the information kiosks are mostly accessed by members of the cooperative - farmers who own their land. The poorest, landless laborers and tribal groups currently do not have a reason to visit the information kiosks because they do not need the services connected with sugar cane growing and harvesting. However, information on government schemes offering employment, or on educational opportunities for children, would be of great importance to the poorest.

- Empowering grassroots operators: Finding people with the right mix of skills and motivations is a necessary condition for any project to succeed in bringing ICT to rural communities. In the case of Warana, operators at the information kiosks generally come from the grassroots, and have a great faith in the potential of ICT to improve the standard of living of their community, especially of the rural youth. They feel that the Internet will allow young people to find information about educational and job opportunities, and they see IT as the best sector where to find stable and well-paid employment. Many operators have the capability of teaching computer skills and software to children and youth, and would be willing to provide training if given the necessary incentives. Furthermore, some of the operators have good programming skills; in the village of Tope, for instance, an operator has developed a database to manage the local store's orders and purchases. Some of these young operators have had job experiences in the city and decided to return to the Warana for the strong attachment to their community. If they are given the necessary incentives, these grassroots operators can become champions for ICT in their villages, easing access to information for farmers, providing training to children, and creating new economic opportunities through software development.

Key Lessons: it is imperative to assess information needs of the local community; content should be developed with the involvement and continuous feedback of intended users;

4.3 Senegal:

Browsing web pages using a mobile phone has become popular with market traders in Senegal. Manobi, a joint venture run by French and Senegalese entrepreneurs, uses local teams to gather information about the prices of foods and goods being sold in the markets in and around Dakar. It has been the case that most farmers have no way of finding out the prices before they travel to the market, or to know if their crop is in short supply at a particular location. Pricing information is critical to farmers and the differences in prices can be significant. One farmer using Manobi's service found that he could get more than twice as much for grapefruit than he was offered by the middle men he usually dealt with.

Manobi independently collects prices and uploads them to its central database using mobile phones that dial in to a server via WAP. The price collectors note the price of every item they come across and then farmers in the field can use their mobile phones to check prices and to find out where they will get the best offer for their produce. For a farmer, price is living data and changes all the time. Although many farmers trialing the system are illiterate, they are familiar with a calculator and treat a phone in the same way. Many farmers are producing crops for particular markets and will only bring produce to a market where they know they will get a good price. Others are using it to get a better deal from the middlemen who buy their crops to sell on. Up to 70% of Senegal's population lives in rural areas and few of them would have access to market information without a program like Manobi.

Currently 150 people are trialing the Manobi program, including farmers, importers who use the information to load their boats with the most profitable goods, and fisherman who get weather forecasts. Manobi is now talking to professional organizations that represent more than 250,000 people who work in Senegal's agricultural industry. Prices are kept low and farmers pay for the service as part of a deal between Manobi and the national telephone company.

Key Lessons: poor rural farmers can benefit greatly from pricing information being accessible from their mobile phones; such information services can be provided at an extremely minimal cost by using local teams to manually gather the information directly from the markets;

4.4 European Union:

CTA Workshop on Gender and Agriculture in the Information Society (Sept 2002): CTA – The Technical Center for Agricultural and Rural Cooperation (EU). Workshop statement on gender issues: gender disparities mean that opportunities for ICTs to empower rural people are not immediately available to the poorest of the poor, who are mostly women.

To address these disparities, concerted action needs to be taken in two broad areas:

- enabling rural women to use ICTs, to improve their livelihoods and those of their families and communities and to amplify their voices in local and national fora;
- ensuring that development actors systematically adopt gender-sensitive approaches in their programmes, especially those in agriculture and rural development.

To achieve such action, five priority areas need to be addressed by all stakeholders, including rural communities, governments, civil society and the development community. Priority areas for gender, ICTs, and agriculture:

- **Mainstreaming.** Gender must be mainstreamed in all development activities, from formulation and design through to implementation and evaluation. Ensuring the participation of poor rural women in these processes is key.
- **Policy.** National policy on rural issues and ICTs should give high priority to actions that promote gender equity and provide an enabling environment for rural women to improve their livelihood opportunities.
- **Access.** Affordable ICT infrastructure and support services must be brought to rural areas. Access to this infrastructure should be based on community priorities as well as local gender-sensitive principles.
- **Content.** The knowledge of rural women is a valuable resource and driver of local livelihoods. Women have specific information and communication needs that should be explicitly recognized – and acted upon. The creation and exchange of local and locally relevant content by rural women themselves or customized to their needs (in local languages, for example) should be given top priority.
- **Human capacities.** Education and learning opportunities should be made available to all rural women and men to realize the ‘education for all’ principle. Girls and women should receive priority in ICT and related skills development schemes, to ensure their active participation in rural development and in the information society.

Key Lessons: the poorest of the poor in rural areas are women and currently not enough is being done to make ICTs available to them; the needs of women need to be addressed and content developed to meet those specific needs;

4.5 Jamaica and Tanzania:

International Institute of Communication and Development (IICD): Case studies in Jamaica and Tanzania, introducing ICT in the form of an information-service made available through telecenters. Small-scale farmers in the Jamaican and Tanzanian contexts mainly practice subsistence farming. They do not treat agriculture as a business in Western terms, which reflects on their information-practices. Long-term planning, bookkeeping, time-management and training are not as timely or prioritized. When it comes to information sources a Jamaican farmer tends to rely on an Almanac that directs planting activities by the position of the moon and Tanzanian farmers can consult a witchdoctor for the explanation of a low yield. The local value of certain types of information and ways of retrieving it, result in an attitude of farmers that does not necessarily support the use of ICT according to a Western frame of mind.

Due to past extension initiatives and development projects that were tangible-oriented, many Jamaican and Tanzanian farmers are disappointed when they hear that ICT is just about the provision of information. In a tribe where it can even be a disadvantage to have much information, and the use of it for personal progress can lead to social exclusion, it will be problematic for an information technology in a Western format to be adopted. To make ICT valuable for potential users it is necessary to fine-tune the technology and its content to the local context. ICT in less developed countries needs to be based in the local culture. An understanding of the socio-cultural aspects that influence the meaning of ICT and

integration of the local dimensions of information in the project design avoids the introduction of a technology that does not meet the existing practices and reality.

The most legitimate question is how ICT actually will be perceived at the grass root level in less developed countries. Due to socio-cultural aspects like traditions, values, political system, economical developments and institutional relationships, the meaning of a technology can differ from one region to another and even amongst groups of people. Therefore the local context should be studied in order to make ICT work for local people in less developed regions.

Key Lessons: it is important to recognize that rural farmers in many parts of the world don't necessarily value the same types of information and ways of retrieving it, resulting in an attitude that does not necessarily support the use of ICT according to a Western frame of mind;

4.6 Asian Development Bank: World Summit (January 2003 Tokyo):

In his keynote address, President Tadao Chino made the following points:

- Ten years ago, the Internet and e-mail were relatively unknown. Now, at the start of 2003, the information revolution has touched every country on the globe. For example, in the Philippines, where ADB is headquartered, cellular phone users send over 18 million text messages everyday. Many of these messages are not simply friendly greetings; people receive information about crop prices, social insurance benefits, and even politics, in an instant.
- Nearly two-thirds of the world's poor live in Asia and the Pacific. Widespread poverty undermines Asia's ability to take full advantage of its economic potential. Reducing poverty and empowering the poor are crucial ingredients for equitable and sustainable economic growth. Asia's future in the global economy will depend on its ability to make significant and sustainable gains in its fight against poverty.
- ADB's Poverty Reduction Strategy has three pillars: one, pro-poor, sustainable economic growth; two, social development; and three, good governance. The three pillars serve to guide all our operations toward achieving ADB's overarching goal of poverty reduction in each of our developing member countries, and Information and communication technology (ICT) can provide a powerful means of supporting each of these three pillars.
- In addressing the challenge of poverty reduction in the region, we at ADB have learned that the nature and causes of poverty are complex and multidimensional. In today's rapidly changing world, growth and competitiveness are dependent upon access to quality information. The most critical factor in breaking the cycle of poverty is the empowerment that comes from access to information and knowledge. As the ITU's World Telecommunications Development Report 2002 points out, there is a direct correlation between access to telecommunications, economic wealth and social development.
- In applying ICT to reduce poverty, it is important for us to distinguish between information and knowledge, and to understand what that distinction means for developing countries. Increased access to information alone is simply not enough to foster socioeconomic progress and reduce poverty in developing economies. In fact, knowledge is much more than information. Knowledge is acquired through one's own experience as well as the experiences of others. For developing economies to make the best use of information, they need the capacity to interpret and apply information to their own needs and local circumstances.
- As we state in our Long Term Strategic Framework, ADB's roadmap for moving our poverty reduction agenda forward to 2015, ADB is committed to supporting ICT to promote development, and to close the gap between the information rich and the information poor.

Key Lessons: there is a direct correlation between access to telecommunications, economic wealth and social development; the Asian Development Bank is committed to supporting ICTs to promote development and to close the gap between the information rich and the information poor;

4.7 UN ESCAP – The Impact of ICT on Rural Development:

The impact of ICT in rural areas and particularly on rural poverty is limited despite its penetration into every corner of modern life. Although many projects can demonstrate ICT's contribution to reduce rural poverty, the list of failed initiatives is unfortunately very long. One of the major reasons for this is that program management has typically been left either to the private sector or to NGOs. These organizations don't necessarily operate with a clear definition of tasks and responsibilities, and consequently, programs tend to languish or worse, completely fail.

Government leadership is a key element in making ICT work for the rural poor. Country studies in India, Malaysia and Thailand commissioned by the Rural Development Section of ESCAP's Population, Rural and Urban Development Division found that governments have an important role in creating an enabling environment for ICT expansion in rural areas. What is required and in most of the cases missing is a national ICT policy that puts poverty reduction at the center and addresses the inequality bias of ICT development.

Development of national ICT strategies for rural poverty alleviation is a complex matter. There is no single solution or best ICT project to fit all rural situations, but a variety of approaches would be needed, particularly in the early stage of ICT expansion in rural areas. Understanding how ICT can service specific development goals requires both knowledge of appropriate technologies and how these technologies could be operationalized to address socio-economic goals in rural areas. Key policy-makers need to make informed decisions to enact "enabling" policy frameworks appropriate for their contexts and needs.

ESCAP's specific program objectives are to:

Promote the formulation of consistent national policies on ICT for rural poverty reduction and sensitize the need for government leadership in making ICT an effective tool for rural poverty reduction;

- Encourage collaboration among governments, development organizations, NGOs and other stakeholders in finding solutions to the common problem of reducing rural poverty through application of appropriate ICT services in rural areas;
- Develop a framework of national ICT policies for rural poverty reduction and recommendations for defining the role and limitation of government and other parties in developing ICT into an effective tool for rural poverty reduction, including services expected to be rendered by international organizations;
- Assist in defining ESCAP's role in promoting ICT policies for rural poverty reduction, and facilitating access to information on issues related to rural poverty reduction through the identification, analysis and dissemination of best practices.

Key Lessons: government leadership is a key element in making ICT work for the rural poor; ESCAP strongly supports national ICT strategies for rural poverty alleviation, but cautions there is no single solution;

5 Benchmark Case Study: b2bpricenow.com (Philippines)

Of the four case studies in the Philippines, and three in Indonesia, b2bpricenow.com (Philippines) stands out as a benchmark example of what can be achieved in the rural sector, serving as a model for others to adopt and adapt for local use. While the other six case study programs clearly address the interests and needs of SMEs in general, b2bpricenow is focused specifically on meeting the needs of the operators of very small agricultural concerns across the Philippine archipelago.

The development model for this successful program is currently being reviewed by other APEC economies for potential replication. Appendix A: b2bpricenow Correspondence and Reviews includes correspondence between b2bpricenow and interested parties, discussing the possibilities. This appendix also contains a number of press releases and critical reviews of this successful program.

It was Edgardo Herbosa's dream to create an e-Bay-like online trading portal for farmers and the b2bpricenow website is a manifestation of that vision. In return for a 5 percent stake in the company, Unisys became Herbosa's technology partner, taking full responsibility for building and maintaining the web-based marketplace. Another strategic partnership is with Ating Alamin, a popular agricultural TV and radio show, with free advertisement spots for three years in return for another 5 percent.

LandBank of the Philippines and the Department of Agriculture are also partners, and the Philippine Association of State Colleges and Universities handles technology education of the farmers. In addition to these strategic and cost saving relationships, Herbosa has been awarded a \$US188,000 grant from the World Bank

Users of b2bpricenow do not pay fees. How, then, is it possible for this program to sustain itself? Profits are realized through online advertisements, fees from mobile phone transactions, web page development services, fees from online transactions and grants.

The following charts provides a breakdown of business types and dollar value of product postings for participating b2bpricenow businesses as of March 31,2003:

Business Sector	Number
Insurance Company	7
Media	13
Transportation Company	14
Equipment Company	15
Affiliate Bank	20
Finance Company	49
Education	63
Wholesaler	125
Government	135
Trading Company	154
Non-government	157
Dealer/Retailer	210
Manufacturer	216
Cooperative*	512
Total	1690
With Mobile Phone	934

*Each cooperative represents 15,000 individual traders

Product Postings	Number	PHP	USD
Agriculture (Sellers)	1021	2,861,748,391	53,646,047
Agriculture (Buyers)	161	34,406,773	644,986
Total	1182	2,896,155,164	54,291,033
Consumer Manufacturers (Sellers)	71	8,975,379	168,252
Consumer Manufacturers (Buyers)	6	54,500	1,022
Total	77	9,029,879	169,273

Benchmark Case Study: b2bpricenow.com (Philippines)

Industrial Manufacturers (Sellers)	41	49,909,548	935,599
Industrial Manufacturers (Buyers)	49	3,004,250	56,317
Total	90	52,913,798	991,917
Total All Industries	1349	2,958,098,840	55,452,223

5.1 b2bpricenow.com



Edgardo Herbosa founded b2bpricenow.com in the year 2000 with Fiona J.M. Pua. It is the country's first Internet-based agricultural and fisheries marketplace. It was created to address one of agricultural sector's weaknesses, marketing its products competitively locally and globally.

Farmers and cooperatives can register and use this website, for free, to post or inquire on various products and services. This website is also the first e-commerce marketplace that took advantage of mobile or cellular phone short messaging system (SMS) technology. A farmer can use an SMS-enabled mobile phone to access relevant price information in the website as long as there is a cell site in his area.

Aim and objective:

1. It aims to be the premiere e-marketplace for the agriculture, fisheries, consumer and industrial manufacturers.
2. It intends to become a common and reliable source of online market prices.
3. It wants to help farmers and cooperatives maximize their selling prices and increase their bargaining power versus the institutional buyers of produce.
4. The site also intends to foster intra-cooperative trade.

Cost and funding bodies:

The founders of b2bpricenow infused US\$40,000 in its initial operating capital. The biggest cost for this e-marketplace project that comes from the private sector is the technology and the marketing component. In order for the company to lower its cost and have the least burn rate, Herbosa negotiated with Unisys Philippines to own 5% of b2bpricenow.com Inc. in exchange in being called its technical partner.

Benchmark Case Study: b2bpricenow.com (Philippines)

He also negotiated with Ating Alamin, the premier TV and radio program focused on agriculture, to own another 5%. Hence, b2bpricenow.com advertisement spots in Ating Alamin TV and radio show is free for 3 years.

Its main strategic partner is the Philippine Rural Reconstruction Movement (PRRM). Since PRRM was begun 50 years ago, one of its objectives is to help increase incomes of its partner peoples organizations, e.g., farmers, fishers, by providing assistance in all aspects of their livelihood and business activities from production, marketing, finance and management. It partnered with b2bpricenow.com as it showed opportunities for marketing the produce and wares of its members, and in keeping with the advancements in information technology.

Since the partnership with b2bpricenow.com began in 2000, PRRM has already offered its computer facilities to its members (in 195 towns and 487 villages) for easy access to the site. Training facilities within or outside the office have also been used for the project.

Benefits gained by its members are the latest market information, especially prices of their produce and other products of interest, knowledge and skills acquired in using the computer and the internet, and membership in networks that will help in the marketing of their products.

Herbosa also approached the Department of Agriculture (DA), Landbank of the Philippines (LBP) and the Philippine Association of State Colleges and Universities as its government partners in charge to inform and educate farmers using their personnel and resources.

One of LBP's program is the development of an e-marketplace. b2bpricenow.com provided a free electronic place for its more than 3700 registered cooperatives. By doing that, LBP could endorse a private organization to its bank-assisted clients. Thus, led to the creation of the LBP B2B Strategic E-Commerce Program.

Herbosa also joined the World Bank Development Marketplace Global Competition (<http://www.developmentmarketplace.org>) in 2001 to seek for further funding. Of the initial 2400 submissions from over 122 countries, only 200 got the chance to enter the finals and b2bpricenow.com was one of them. His project proposal was "E-Commerce for Farmers" that intends to enable the farmers to harness the benefits of information and communication technologies (ICT) in order to promote development which translates to poverty alleviation. Of the 200 finalists, 30 winners were chosen, and of these 30 winners only three were ICT based. b2bpricenow was one of those three.

Participants:

As of January 17, 2003, the website has 1505 cooperative members. 54% of its members have a mobile phone. Product postings in the website reached 1006 worth US\$51,205,061.10.

Membership composition as follows:

Sector	% members (to the nearest %)
Insurance Company	0%
Transportation Company	1%
Equipment Company	1%
Affiliate Bank	1%
Media	1%
Finance Company	3%
Education	4%
Wholesaler	7%
Government	8%
Trading Company	9%
Non-Government	9%
Manufacturer	13%
Dealer/Retailer	13%
Cooperative(each cooperative =1,000-15,000 members)	30%

Benchmark Case Study: b2bpricenow.com (Philippines)

The promotion of the marketplace is being done through its Agriculture E-Business Roadshow Program, in partnership with various entities such as the Landbank of the Philippines, where they teach the following to farmers and cooperatives participating:

- What is e-commerce?
- Benefits of participating in a free e-marketplace,
- Teach them on the what constitutes a computer: hardware and software
- Hands on training on how to access the internet,
- Get and use email account and
- Register, post and canvass at b2bpricenow.com.

It has visited provinces such as Cagayan De Oro City, Zamboanga City, San Fernando City, Tagaytay City, Butuan City, Baguio City, Iloilo City, Bacolod City, General Santos City, Davao City, among others from 2000 up to the present.

The LB partnership program has completed 20 city road shows. The initial objective of the program is to educate the cooperatives on the use of computers, Internet, and B2B. It claims that such has been achieved so far.

The postings are done by the cooperatives and SMEs themselves after the two-day hands on computer training sponsored by LBP and the various government agencies. Another set of roadshow and training is in coordination with the Worldbank- Infodev and PRRM is in progress. This is where the US\$118,000 grant won in the World Bank Development Marketplace Competition was put to use. Computers and mobile phones for cooperatives were also funded through the World Bank grant.

Usually postings are done on the second day of the training, and most often, that is the last time the cooperatives post as well. The prices are important but they are all indicative prices and hence, still subject to negotiations.

Technology:

Unisys entry as a partner relieved Herbosa in worrying about the technical infrastructure. He did not have to buy the hardware, web programming, designing, and software for an e-marketplace and do not have to pay for any administration, maintenance and hosting charges on a monthly basis.

The website is currently running on Microsoft Internet Information Server, SQL Server, and written in ASP language. The whole infrastructure is provided and hosted by Unisys.

Services:

The website offers subscription free posting and viewing of products for sale. Buyer postings can also be found in the website. Market prices of products and commodities can be accessed on the website and through SMS.

The website generates revenue through banner advertisement, SMS revenue share, web design and hosting, and bank commissions. Funding or grants are also being tapped to help in augmenting its computer and Internet education farmer awareness campaign.

Impact and Achievement:

Making e-commerce a reality and relevant to agricultural sector is such a noble and tough task at the same time. Such challenge enabled this project to get as many supporters as possible and elevate its founders to the category of "social entrepreneurs". Before, farmers and cooperatives considered ICT as a tool not meant for them. With b2bpricenow.com, making them appreciate the value of ICT is beginning to gain ground as the number of cooperatives with computers and mobile phone are increasing.

Major strides have been accomplished in terms of promoting the facility nationwide, education and training given the roadshows and training conducted with LBP and PRRM jointly or separately. Other agencies like TESDA and DA have also contributed to the promotion of b2bpricenow.com to their partners.

International recognition is also noted given the awarding of a \$118,000 grant from World Bank having been chosen as one of the 30 winners (out of 2,400 entries) in World Bank's Development Marketplace Competition in January 2002.

Postings have considerably increased from the time of inception. Getting the latest market price information are hence readily available by visiting the site. Volume of business deals or transactions closed resulting from accessing the website, however, have yet to be known as cited by PRRM.

Its model is gaining international support as well as organizations like the Asia Pacific Rural Agricultural Credit Association (APRACA), an association composed of rural financial institutions and finance-related institutions, is looking into bringing the Land Bank – b2bpricenow.com partnership model to other countries. Its focus on e-commerce for farmers is in line with the mandate of APRACA for the promotion of strategies and approaches that seek to assist farmers and other rural workers in achieving self-reliance, accumulating additional knowledge, and learning from each other. Marketing is an important segment in the credit-production-marketing triangle and therefore it support initiatives that enhance the profitability and added income for farmers.

The project is still in its infancy stage. But based on the stated goals, APRACA believes that it will go a long way to alleviating poverty in the countryside, through better pricing options for consumers and producers. APRACA takes the risk in supporting a new project, but noting how e-commerce works for other groups, it hopes that it will also work for farmers.

Another recent development is the endorsement of the Congressional Oversight Committee on Agriculture, Fisheries, and Modernization (COCAFAM) of the project. The Committee supports b2bpricenow.com because the agriculture and fisheries sectors, including cooperatives, traders, processors and SMEs may now post supply, demand prices and other market information thereby facilitating trade. The site though needs to provide more information that ordinary farmers will find useful as cited by COCAFAM. COCAFAM endorsed b2bpricenow.com as the " Official e-marketplace of the Philippines for Agriculture and Fisheries Sector" and hence, when the PHP 500 billion agricultural trade goes online in the Philippines, it will only go through Landbank and b2bpricenow.com

To merit COCAFAM support, an ICT project should provide the necessary information the farmers/fisherfolk as producers and the buyers may need. In the case of b2bpricenow.com, it was able to provide information as envisioned by Republic Act 8435 or the Agriculture, Fisheries, Modernization Act. Any ICT project should be user-friendly. In this case, ordinary farmers, fisherman, and the buyers should be able to easily access the site using any means available to them.

LBP and b2bpricenow.com are now on the second phase of the program that is the creation of the B2Bcenters, business centers at the municipality level. The business center will be operated and owned by both the key cooperative in each of the 1,500 municipalities nationwide and b2bpricenow.com. The B2BCenter is an Internet cafe, business machine provider (fax and photo copiers), telephone-related services, and phone card dealer in their community. With this connectivity, b2bpricenow.com expects that more up-to-date posting will occur.

3 APRACA agricultural banks visited manila last may 2003 to observe b2bpricenow.com - Landbank e-commerce for farmers program for information on how replication could be achieved and stayed for two days , they were : Bank Rakyat of Indonesia , Agricultural Development Bank of Nepal , and National Bank for Agriculture and Rural Development of India. The others in the group (China, Vietnam, Thailand and Sri Lanka) would have followed but were delayed by the outbreak of SARS . Other agricultural banks have planned to come from October 2003 onwards.

Lessons Learned:

Herbosa believes that he is indeed lucky in getting all the support he is enjoying now for b2bpricenow.com. Its present state of success is dependent on the following decisions he has made in the past:

1. Making it free for farmers and cooperatives to use is important. Such merited LBP and PRRM support.
2. Doing it in a private sector capacity gives b2bpricenow.com all the room it needs to make the site grow without being slowed down by bureaucracy that government and NGOs usually face.
3. Partnering with an agricultural bank is key to its success and considers that the project will be a major failure without a bank supporting its cause. Agricultural banks are mandated to develop the human capacity (from entrepreneurship to sales tools) of the sector it caters to. If its clients do well in business, they can pay their loans to the bank.

4. Partnering with Philippine State Universities and Colleges is also important. As government entities, they are mandated to develop the community through education. Using the schools as point of access for farmers and cooperatives greatly helped in propagating b2bpricenow.com.

5.2 b2bpricenow – User Experiences

5.2.1 EL GANCHO MULTI-PURPOSE COOPERATIVE:

Summary: b2bpricenow facilitates a win/win situation, the cooperative grows its membership and the community increases its skills and finds a way to provide computer access to a wider audience in the community.

Computer Facilitated Community Service

As a response to the worsening situation in Manila Bay, Philippine Rural Reconstruction Movement (PRRM) has been implementing a community-based coastal resource management CB-CRM (program) in strategic and important villages along the Bay since the early 1990s. The program intends to institutionalize resource management by the fishing communities themselves. It is complemented by development of livelihood systems and bay-wide financing mechanisms for the fisherfolk.

In Cavite, PRRM has assisted in the formation of a provincial-level federation named NAMAMANGKA (Nagkakaisang Maliliit na Mangingisda ng Kabite) under which is El Gancho, a village-level organization that formed a multi-purpose cooperative with the same name. El Gancho was formally registered as a cooperative on October 16, 1996. Its area of operation is Bagong Karsada in Naic, Cavite. When initially formed as a credit cooperative, its function was to provide credit to the members. However, as time passed, it saw the need to diversify its services. Presently, aside from providing credit services, the cooperative has put up a consumer store and sometimes does fish trading. Rice has the highest sales among the commodities sold. They can sell sixty (60) sacks of rice every month. This volume is equivalent to PhP 60,000.00. Since the community is a coastal area, they also trade fish but at minimum level. The main reason is that most of the fish catch go to the big traders. The cooperative can only buy ten (10) kilos at the maximum every two or three days.

Ms. Vivian Escoton, PRRM Area Manager assigned in Manila Bay areas, considered and gave slots to El Gancho to attend the hands-on training for the farmers, fishers, and small entrepreneurs. Her main reason was to provide capacity building for the PO leaders and to present avenues for marketing information such as price and product sources. She was aware that the hands-on training would access the cooperative to the b2bpricenow.com website and hence relevant marketing information.

As of May 2003, El Gancho Multi-purpose Cooperative has 98 members. Mr. Reynaldo Bernal, also known as Ka Rene, is the Chairperson of the cooperative. He is a member of the Sectoral Council for Fisherfolk Sector of the National Anti-Poverty Commission where he heads the Livelihood Committee. He is also a member of the board of directors of the National Marketing Umbrella organized by the government a year ago.

He grabbed the opportunity of attending the training on February 12 and 13, 2003 at Polytechnic University of the Philippines (PUP), Sta. Mesa, Manila, because he wanted to learn computer operation and aimed to gather information and develop contacts which he believed would help him in his position as a NAPC sectoral representative.

As a leader, he listened to his constituents. When they were informed of the computer hands-on training, the members suggested if their children could attend in their behalf, because they believed that younger and fresher minds would absorb more than the likes of them who would only be keen in operating fishing gears. Ka Rene heeded the request.

On February 12, 2003, there were nine (9) youth who attended the training. As expected, the youth were very active and could easily absorb the lessons. After the training, the problem on computer access was a big issue. They felt that the learning would be in futility if not applied. Another problem was the high cost of charges in computer rental/use being charged by Internet cafes in the town center. However, despite the pressing issues the youth surfaced, the training helped entice the youth to become members of the El Gancho Cooperative.

At the PRRM National Office, Ms. Escoton was informed that a computer unit, as part of WB grant, would be detailed to the Manila Bay Field Office. She decided to detail the computer unit with the El Gancho Cooperative because the area was considered as the center in Cavite every time fieldworks

were conducted. Through the initiative of El Gancho, meetings and informal sessions attended by the cooperative members and other interested parties were held. They came up with policies and schemes for maximum and well-maintained use of the computer and the Internet. With this development, a barangay councilman who attended the training sponsored a barangay resolution for the availability of another computer for purposes of marketing and education for the out-of-school youth, which was approved accordingly. The cooperative charged minimal cost for computer usage by the students who would use it for their school requirements. The service being provided for by the cooperative thereby was also of great importance to the parents who were assured that school requirements of their children would have been complied with. The income from computer rentals would be used for maintenance.

The cooperative members were grateful that with the training and the availability of the detailed computer unit, patronage to the cooperative by the members as well as by the community has increased.

Ka Rene was hopeful that the youth who have joined the cooperative would continue to share the learning for the service of the cooperative to the community. He also wished that the same opportunity and more advanced training be made available and be given to other members of the cooperative.

Ka Rene has committed himself to share the difference and importance of the b2bpricenow.com as a website to his colleagues in the NAPC. He believed that the system would somehow contribute to breaking the long-time practice of pricing of fish catch among fisherfolk and traders, which is called the "bulungan-system" (by whisper / silent pricing).

He is very thankful that with the training, specifically on the Internet, communications with different agencies have become efficient and paper presentations have been presented in a more formal manner.

5.2.2 RINCONADA COCONUT FARMERS COOPERATIVE:

Summary: b2bpricenow is facilitating the marketing of product as well as the recognition of new product opportunities

Network Formation and Opening Up of Ideas for Product Development

Philippine Rural Reconstruction Movement's (PRRM) thrust of area development program in Camarines Sur is called the Community-Centered Coconut Industry Development and Ecosystem Management (CCIDEM). To help achieve the said thrust, it helped in the formation of the Rinconada Coconut Farmers Cooperative (RCFC) which was formed on 28 June 2000 and formally registered on 19 October 2001. RCFC's business undertakings are processing and marketing of cocofiber and cocopeat.

RCFC was a spin-off from a larger federation of coconut farmers called Kaburungayan nin Magniniyog sa Rinconada (KAMARIN) and a women's group named Agrupasyon nin mga Kababaihan sa Camarines Sur (AGKAS). The two federations have more than 600 individual members. The cooperative was initially organized by 25 members from the two organizations mentioned.

The cooperative is gearing towards operating a coir decorticating plant. A capital build-up scheme, supported by donations from the local government, has been designed to procure the needed decorticating machine. The project would be in partnership with PRRM, local government units (LGU) of Iriga City, and Technical Education and Skills Development Authority (TESDA). RCFC is on its way also to operationalization of two other projects. These are the Basic Commodity Dealership Project and Copra Trading. PRRM helped the cooperative in project conceptualization down to implementation. New ideas are being generated through the help and facilitation by the community organizer.

RCFC's initial venture was on twining and roping of cocofiber from decorticated coconut husk. Nowadays, the twines are made into doormats, hotpads, and wattles for orchid growing. Its production sites are located in Iriga City, Baao, and Nabua. Its twining operation has the capacity to produce at least 100 units of wattles every month which is equivalent to PhP 60,000.00.

Marketing though remains to be a problem for the cooperative. Even if RCFC has linked up with JUBOKEN Enterprises for selling the cocofiber products, it needed to seek other avenues for marketing.

The introduction of **b2bpricenow.com** thus showed promise while it brought doubts as well on RCFC's capacity to access a computer since PRRM through the WB grant could provide only one unit of computer, and Internet cafes charged P30-35/hour. Mainly through the efforts of Mr. Vladimir

Foronda, PRRM-Camarines Sur Livelihood Officer, a network called Network for Market Information and Assistance Centers was established and formally launched during the roadshow to help facilitate the farmers' access to computers. Members of the network such as TESDA, and the Department of Trade and Industry (DTI), NGOs like CARE-Phils, and the academe specifically committed free or cheap use of their own computers for purposes of accessing **b2bpricenow.com**.

The training that was conducted in Naga City on 14-15 November 2002 made the participants appreciate more the positive aspects that **b2bpricenow.com** could offer.

Meanwhile, having been oriented on **b2bpricenow.com**, Maggie Monge, Community Organizer cum Training Officer of PRRM-CamSur, thought of the potentials of producing virgin coconut oil. When she visited the website one time, she learned that there was a demand for virgin coconut oil but there was no producer. This prompted her to introduce the production of the virgin coconut oil to the cooperative.

She saw that the twin activity of roadshow cum training on b2bpricenow.com was a good strategy for the co-op. It gave solutions to the apprehensions of those who were not computer-literate. The co-op participants felt proud after completing the training. She even recalled that a farmer-member could not believe himself operating a computer. Also, the training manual served as a good tool guide for community organizers like her. The training also provided her more confidence in mentoring some of the cooperative members.

5.2.3 KOOPERATIBANG LIKAS ng NUEVA ECIJA :

Summary: An introduction to b2bpricenow elevates the skill level of a cooperative's farmer operators and increases the efficiency of the cooperative.

From Farm Tools to Computer Operation

Kooperatibang Likas ng Nueva Ecija (KOOL-NE) was an offshoot undertaking of the Philippine Rural Reconstruction Movement (PRRM) and Kalipunan ng mga Magbubukid para sa Likas-Kayang Sakahan (KALIKASAN), a partner peoples' organization of PRRM implementing sustainable agricultural production. The cooperative was formally organized in 2002. The formation of the cooperative was aimed at providing financing services to its members and marketing, organic rice. Most of the members are farmers from the different municipalities of Nueva Ecija in the northern part. These are Talavera, Sto. Domingo, San Jose, Carranglan, Guimba, Munoz, San Jose and Lupao.

After a year of operations, the cooperative now has 101 regular members and 46 associate members. Associate members refer to the individuals who are mainly the clients of the microfinance program of the cooperative. These individuals are those who are individually engaged in micro-enterprises like garments production, vending, food processing, and novelty items production.

The three major business undertakings of the cooperative are financing (for rice production for farmers and microfinance for micro-entrepreneurs), palay trading, and organic rice marketing. It has traded 1,200 sacks of palay and 600 sacks of organic rice for the last second cropping season (January – May 2003). The total amount of products traded and sold reached to more than PhP800,000.00.

In early 2000, Ka Mario Lina, the Alternative Trading And Marketing (ATM) Officer of KALIKASAN then, and now of KOOL-NE, was one of those who were given orientation on **b2bpricenow.com** in PRRM. During the orientation, he raised the issue on the access and literacy on computers by farmers. After the orientation, he was determined to study computer operation because he was hopeful that b2bpricenow.com would help the cooperative market its products. The orientation made him aware that through the use of the website, the posted product would be globally advertised. He believed that computer was inevitable nowadays and that computerization was partly an indication of professionalism in any business management. This interested him to study computer operation and use.

KALIKASAN is a district-wide federation of village-level organization for farmers adopting sustainable agriculture technology. Ka Mario, as a leader in a village-level organization and ATM officer, needed to acquire skills and knowledge to have better access to market information and other opportunities for his own benefits and of his organization. He saw the need to learn using the computer in order to facilitate his reportorial requirements and project proposal making both for his village-level organization, Bukluran para sa Likas-Kayang Sakahan sa Triala (BUMALIKAT), KALIKASAN, and for the cooperative as well.

Benchmark Case Study: b2bpricenow.com (Philippines)

In July 2002, the cooperative was informed, through PRRM, that computer hands-on training as a capacity building for farmers, fishers and micro-entrepreneurs would be conducted to facilitate the basic sectors' access to electronic marketing. The said training was sponsored by World Bank and facilitated by **b2bpricenow.com** and PRRM.

The training served as the first formal computer lesson for Ka Mario and other members of the cooperative. There were seven members of the cooperative who were given slots to attend the computer hands-on training. The training was held at the CLSU Alumni Center on October 3-4, 2002.

The training made them understand more the importance of computer and how it works. The information on the basic hardware specifications in acquiring a computer unit was a practical tip that would be very useful for the individuals and for the cooperative as well. Ka Mario and Ka Lita (the Microfinance Officer), viewed the internet access as their link to a wider market and easy connection and access to market information, which was very important to the marketing of their products.

For farmers who were more used to handling heavy farm tools and implements, they would have more difficulty in manipulating the computers. But after the training, these farmers were so proud of themselves that they overcame their fears of using the computer and that they were able to finish and understand the course, and were actually applying the learning acquired.

The issue on access has been addressed because the cooperative management realized the need to be connected. PRRM –NE management donated a computer and external modem to KOOL-NE.

They wished that same opportunity would be given to most of the second liner staff of the cooperative and to members of KALIKASAN. The dream of running the cooperative in a professional manner is partly realized because of the actual operation of computer by its farmer-member-employees. Ka Mario, along with other members, were proud to say that their skills have not stopped with the use of farm tools but have been upgraded to the use of computers.

6 Philippines: A Profile

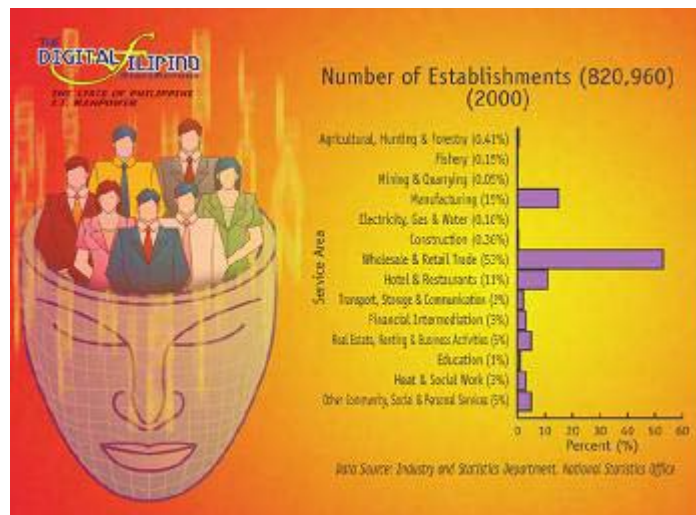
This section profiles the Philippines on a number of topics related to the use of ICTs and Section 7 highlights three case study projects from the Philippines. The research and subsequent interviewing was conducted by Janette Toral of Digital Filipino. Ms Toral founded the Philippine Internet Commerce Society in September 1997 and has been actively promoting e-commerce developments in the Philippines for since that time. An IT practitioner for many years and active in lobbying for the passage of the Electronic Commerce Law, Ms Toral has been instrumental in helping the people of the Philippines take full advantage of ICTs. (www.digitalfilipino.com)

6.1 Introduction to the Philippines

The country has an estimated population of 76 million. It was a colony of the United States of America from 1898 up to 1946. Consequently, it has adopted the US educational system entirely and one of the outstanding results is the Filipino's excellent grasp of the English language. A majority of the working population understands and speaks English. The said language is the default medium of instruction from pre-school up to post-graduate university.

6.2 Business

According to the National Statistics Office, there is an estimated 820,960 registered establishments in the country as of the year 2000.



The country's labor force is estimated to be at 33,675,000 where only 62% of such have full time jobs. 51% of the labor force is in the rural areas. According to the National Statistics Office (2000) 37% of total labor force is in agricultural, hunting and forestry sectors. In 2002 around 3.5 million Filipinos were unemployed and 1.2 million left the country for overseas work.



6.3 Telecommunications

The current liberalized telecommunications environment has so far resulted in the operation of the following: 11 international gateway facility operators (those that can provide international long distance calls), 5 cellular mobile telephone system operators, 11 paging companies, 14 inter-exchange carrier licensees (those that service other carriers' traffic using their own networks) and 9 fixed line operators (those with landline services) in one area. Although the country has an installed capacity of 6,938,762, there are only 3.3 million fixed (land line) phone lines subscribed as of end December 2001. At present, it is estimated that the number has reached to 4 million.

As of year-end 2002, the number of cellular users reached to 14.5 million (from 12,159,153 as of end December 2001 and 6,454,359 in 2000). Telephone line charges are fixed at an average of US\$15-\$25 per month.

The country was dubbed as the text messaging capital of the world as an average mobile phone user sends 20 text messages a day. This totals to 150 to 200 million text messages passing through carriers daily. Value added services such as logos, icons, ring tones, picture messages, news, games, location-based services, among others contribute greatly to its popularity.

Various Internet services are now being extended to the mobile phone as SMS, GPRS and WAP are being offered at affordable rates. Mobile email is being promoted extensively as well. It is common to find e-commerce and Internet initiatives in the Philippines that has a mobile phone component.

6.4 Internet and PC Penetration

There are around 191 Internet Service Providers (ISPs) in the country today with the major providers offering 56K service at an average rate of \$0.50 per hour. DSL, wireless and fixed broadband, cable, satellite Internet facilities are now being offered as well.

The number of Philippine Internet users range from 3 to 4 million. Contributing heavily to its growth are Internet cafes (rentals) that allowed Filipinos who don't own computers to gain access to the facility at an affordable price at US\$0.20 to \$2 an hour. An increasing number of schools and SMEs accessing the Internet contributed to the growth as well.

Penetration of computers in Filipino households has increased significantly and presently estimated to be at 2.2 million with 1.5 million having access to the Internet. The primary purpose why people go online is to access research information.

6.5 Education

The Philippines education system is facing so many challenges in keeping itself updated and attuned to current needs. The penetration of computers to primary and secondary schools is very low at this time.

Out of 48,000 schools, less than 3% have computer facilities. Of those with computers, only 2% have, yet limited, access to the Internet.

6.6 E-Commerce Law

The Philippines is the 3rd country in South East Asia to enact an E-Commerce Law. Republic Act 8792, or the Electronic Commerce Law, was enacted June 14, 2000. Efforts for its passage started as early as 1992 with the Electronic Evidence Act. The law defines Philippines policy on electronic transactions to enable the country's players and consumers to actively participate in electronic trade.

The law provides:

- Legal recognition of electronic documents, electronic data messages, and electronic signatures;
- Guidelines for retention and storage of documents in electronic form;
- Recognition and validity of electronic contracts;
- Guidelines for use of transport documents in carriage of goods;
- A 2-year mandate for government to have the capability to transact its business electronically;
- The directive for the Department of Trade and Industry to function as the country's e-commerce authority;
- The penalties to crimes such as hacking, cracking, and piracy offenses;
- Made banking transactions done through ATM switching networks absolute once consummated;
- Parties are given the right to choose the type and level of security methods that suit their needs;
- Mandates RPWeb, a strategy that intends to connect all government offices to the Internet and provide universal access to the general public, to be implemented;
- Made cable, broadcast, and wireless physical infrastructure within the activity of telecommunications;
- Provided guidelines as to when a service provider can be liable;
- All existing laws, such as the Consumer Act of the Philippines, also applies to e-commerce transactions.

6.7 E-Government

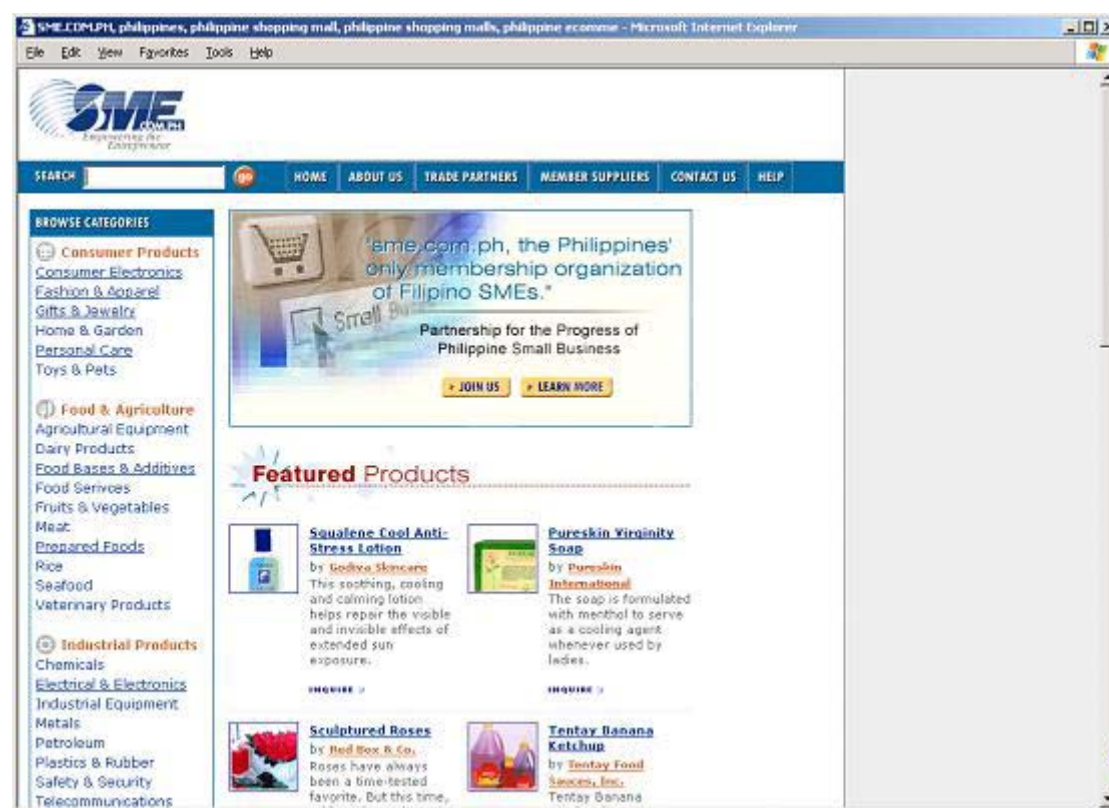
Since the passage of the law, numerous e-commerce initiatives by government agencies came into reality intending to comply with the passage of the law. At the policy level, the government is continuously updating its plans and programs, Internet Strategy of the Philippines (ISP.com) and Medium Term Development Plan (MTDP), to set clear directions to develop and accelerate the use of IT.

There are around 363 national government agencies connected to the Internet and with websites offering information and services to the general public. (Source: National Computer Center as of October 31, 2002)

7 Case Studies: Enabling SMEs in the Philippines to Participate in the New Economy

Here are three examples of e-commerce and Internet applications in the Philippines that were developed for the benefit of small and medium enterprises in both urban and rural areas. The companies featured were interviewed from December 2002 to January 2003.

7.1 Case Study #1: SME.COM.PH



Project description:

PDB SME Solutions Inc. is the company behind SME.COM.PH, formed in June 2000 from the affiliation of Planters Development Bank (PDB), the Philippines' largest private development bank, International Finance Corporation (IFC), the investment arm of the World Bank, and eVicom, a leading technology firm in Silicon Valley.

IFC's investment in this company is the first of its kind in Asia. The organization believes that technology can play a significant role in improving the way SMEs conduct their business. IFC approached Planters Development Bank to collaborate on this project which is intended to be replicated in other countries once the business model is perfected.

SME.COM.PH is a membership program that provides small and medium enterprises (SMEs) with resources that promotes business opportunities, cost efficiency to operate its business, as well as easy access to information and other business solutions.

As an early result of its endeavor, the company bagged the Asian Banking Award for the E-Commerce Service in 2001.

Aim and objective:

1. To be recognized as the developmental partner of Philippine SMEs who are harnessing ICT to build global competitiveness, to strengthen diverse SME communities, and to create enduring difference in their business.
2. To help Filipino SMEs to use ICT as a tool to change and enrich the way they do business.

3. To deliver continuing education and public service activities designed to enhance business efficiency and effectiveness, improve technology awareness, improvement of the SME communities at large, as well as, enrich personal lives.

Cost and funding bodies:

SME.COM.PH's initial capital was US\$250,000. Jesus Tambunting is the company chairman of SME.COM.PH and Planters Development Bank. He is known as an active advocate and of major influence in SME development in the country. He is also the founder of the Philippine British Business Council.

The company believes in having an economic sustainable viability model venture. Rather than giving its service for free to members, it charges an annual fee for the use of its service.

In the year 2000, the SME.COM.PH package being offered to SMEs is at thirty to sixty thousand pesos (P30,000 to P60,000 or US\$600 to US\$1200). With price considered to be prohibitive, the company was only able to get 71 members by the end of 2001.

In order to increase its membership, the company restructured its pricing with the intent of making it affordable and concrete in its value proposition. In the year 2002, members are provided with a basic package that includes a 2 page website, a registered domain name, and corporate email address. Members' site is optimized for increased visibility and awareness when searched on the Internet. Members who availed of this service pay an annual fee of P8,000 (US\$150). The said package helped boost its membership from 71 to 290 members.

Taking into consideration the various lessons learned that the company has in dealing with clients, the company revised its package in 2003 with the objective of being able to get 800 members by the year-end. The company will have up to 18 sales personnel this year to work on its membership goals.

The 3 membership options as follows:

1. SMEBizStarter (P10000 per annum)
 - Basic Company Listing at <http://www.sme.com.ph>
 - 10-product showcase in SME.COM.PH e-Marketplace
 - E-mail forwarding capability for customer inquiries regarding showcased products
 - Free 3-month subscription to Entrepreneur Magazine for 1-year membership
 - SME.COM.PH Privilege Card
2. SMEBizBuilder (P30,000 membership and set-up fee on the first year; P15,000.00 on succeeding years)
 - One web page company listing at <http://www.sme.com.ph>
 - 5 web page company website
 - 15-product showcase in SME.COM.PH central catalogue
 - Own Domain Name
 - Own E-mail Address (maximum of 50 mailboxes)
 - E-mail forwarding capability for customer inquiries regarding showcased products
 - Free 6-month subscription to Entrepreneur Magazine for 1-year membership
 - SME.COM.PH Privilege Card
3. SMEBizOptimizer (P80,000.00 membership and set-up fee on the first year; P25,000.00 on succeeding years)
 - One web page company listing at <http://www.sme.com.ph>
 - 10 web page company website
 - Own catalogue system that can feature 100 products
 - 15-product showcase in SME.COM.PH central catalogue
 - Own Domain Name
 - Own E-mail Address
 - E-mail forwarding capability for customer inquiries regarding showcased products
 - On-line Payment System
 - Logistics (optional)
 - Free 12-month subscription to Entrepreneur Magazine for 1-year membership

Participants:

The website currently has 290 SME members as of year-end 2002. Approximately, 30% of its members are from the National Capital Region followed Southern Luzon –30%, Metro Bulacan – 20%, and Western Luzon- 30%.

Its current industry breakdown as follows:

Food & Agriculture = 21%

Industrial Products = 16%

Consumer Products = 22%

Services = 41%

SMEs interviewed for this case study cite several reasons why they subscribed to the service despite numerous free offerings whose service is similar to SME.COM.PH.

SMEs don't like bundled package where the service is being tied-up to an ISP subscription.

Found convenience in paying a one-time annual fee rather than fixed monthly payments.

Technology:

The main technology solution and catalog application being used by SME.COM.PH, when it started, was provided by eVicor as part of its investment in the corporation. Third-party alliances were established to provide outsourced service in certain areas of operations while critical areas were retained within the company. Open source technologies were fully utilized in order to further drive down the cost.

Services:

1. Provides trade-matching services for the SME member companies. Their business can be promoted online using the portal at <http://www.sme.com.ph> and also through marketing activities with established trade associations.
2. Provides practical and non-Internet based accounting, human resource, payroll, and customer relationship software that help SMEs automate their businesses.
3. Provides Internet solutions and services such as hosting, domain registration, e-commerce enablement (activation of catalog, online payment, logistics facility), and search engine optimization.

Impact and Achievement:

The company packages itself as a trade promotion and facilitation unit. At the end of the day, it is all about doing business. Technology and E-Commerce becomes incidental only. At present the following benefits are offered to members who signed up to its service:

1. Trade with fellow business members of the SME.COM.PH Community. You'll get an instant number of potential customers when your products, services, or programs are introduced to the existing, and ever-increasing, members of SME.COM.PH.
2. Online merchandising of products through SME.COM.PH. This high traffic website is visited by local and foreign buyers wishing to purchase products for personal or business use.
3. The company offers trade-matching service with other businesses in the Philippines or with partner associations in other countries. The needs of various trading partners are communicated to its members as business opportunities.

The company faced a lot of challenge in order to make its business model work with the intent of achieving economic sustainability. The business benefit was the one being emphasized when marketing this business. It also worked with trade associations as a means to reach out to more members.

The most important achievement that this company had so far is in proving that a noble e-commerce endeavor targeted towards SMEs need not be free. With the right combination of services, SMEs will find it worthwhile to invest.

For its subscribers, there were numerous success stories on how they were able to get business from unexpected geographic markets that made them rethink their market strategy to explore this potential brought to them.

Lessons Learned

This company is rich with lessons learned and we're very fortunate for we had the opportunity in interacting with its clients who gave balanced insights about the project.

Becoming business-oriented: The company made a major revamp in packaging SME.COM.PH into a business center, not just your typical e-commerce website where it intends to provide various business opportunities to its members through cross-promotion and sales referrals in its network.

Revision of business plans: SME.COM.PH was never afraid in reinventing itself to keep its service attuned with market needs while trying to be economically sustainable. As the business grows, the more the company realized the need to be customer centric and consider the inputs of its community, trade associations, clients seriously in improving its product/service.

Getting the right people: To make the business work, it needs more than just technology people. Getting the right combination of people who truly understands what matters most to SMEs is important to the sustainability of this project.

Not much diligence: The company admitted that one of its weaknesses in the past was the lack of due diligence in its endeavors that contributed to its technical and business challenges.

Meeting customer expectations: With so many subscribers to take care of, meeting its expectation is one big task. We interviewed 2 companies: My Left Hand, a graphic design firm, and Godiva, a manufacturer of locally made skin care products.

Godiva's experience is interesting for its first venture to go online is with SME.COM.PH. This site is generating US\$500 to US\$3000 online sales per month. With its frustrations in the past, the company almost didn't renew their annual subscription. However, after further dialogue and management commitment from SME.COM.PH, they decided to proceed in giving the company a chance. At the end of it all, companies interviewed shared that the birth pains they had with SME.COM.PH were all worth it.

Here are some of the expectations they shared that SME.COM.PH should be able to provide them:

1. Link to potential clients.
2. Categorizing member companies properly according to the types of services they offer.
3. Make SME.COM.PH portal interesting and attractive to potential site visitors to make prospective clients interested in its members too.
4. Better customer service by giving fast reaction time in handling its problems.
5. Offer customizable interface so that not all member websites will look alike.
6. Training to be provided to members adequately.
7. Give guidelines to prospective site visitors on step-by-step ordering procedures.

Finding the right technology partner: As the company did not have the technology expertise when it started the project, its primary lessons learned is finding the right technology and service providers at the start of the project. There were instances where partners failed to deliver its commitments whereby SME.COM.PH had to do a lot of firefighting in order to cover its technology partners' shortcomings. Godiva experienced missed orders while My Left Hand had email access problems at one point.

7.2 Case Study #2: EYP.ph



Project description:

E-YellowPages (EYP) is the largest online Yellow Pages in the Philippines.

EYP gets an average of nearly 2 million hits or 306,000 page views per month. More importantly, EYP registered businesses receives as many as 13,000 sales inquiries in the last semester on various products and services. One third of its traffic are from outside the Philippines.

Businesses can register at the website for free because EYP wants to make it easy for businesses and consumers to come together and start transactions. It sources its revenue from online advertisements.

Aim and objective:

1. Be the premiere and biggest yellow pages directory in the Philippines.
2. Offer products that will be consistent to the yellow pages concept but more affordable.
3. Promote the use of the Internet as a business tool.
4. Expand on the utilities associated with traditional directory services.

Cost and funding bodies:

Domingo Lopez and Directories Philippines Corporation (DPC) co-founded the website last August 2000. In its start-up days, ePLDT.com had 51% ownership stake in the company but was later re-acquired by DPC. As the company needs to be telco-neutral, being non-affiliated with any telco in terms of company ownership is important in achieving success.

Participants:

Some 23,000 businesses in Metro Manila alone are currently registered, for a total of nearly 60,000 business listings; key cities in the provinces are covered as well. EYP also includes nearly all the business subscribers of major telephone companies in Metro Manila.

Technology:

The company took technology considerations seriously for this website project. As it aspires to be the best of its kind on the Philippine Internet, technology investments include high-availability hardware and software from IBM and Oracle.

Services:

For companies that register at its EYP, it has full access to its Business that allows registered businesses to access and update their accounts. This includes:

- Update information on your Business Page
- Receive online sales inquiries and messages from prospective customers through the Email and Fax Messengers.
- Open and use its very own free email account.
- Change password.

The website also generates revenue through the following advertising means:

1. Banner ads – placed in key sections of EYP. (P4000 to P14000 or US\$80 to US\$380per month)
2. Premium lists – place companies on top of category searches. (P150000 or nearly US\$3000 per year)
3. Business showcase – have a mini-website within EYP. (P12000 per year)
4. Fax Messenger sponsorship – be seen in every fax sent through the EYP site. (P14000 per month)
5. Email Messenger sponsorship – be seen in every email sent through the EYP site. (P14000 per month)

At present, more than 1000 companies have availed of EYP’s advertising packages.

Impact and Achievement:

DPC, through EYP.PH certainly spurred awareness among businesses, of all sizes, on the value of making their contact information available on the Internet. For buyers and sellers alike, the website offers useful and up-to-date contact information that one won’t easily find using the traditional print yellow pages.

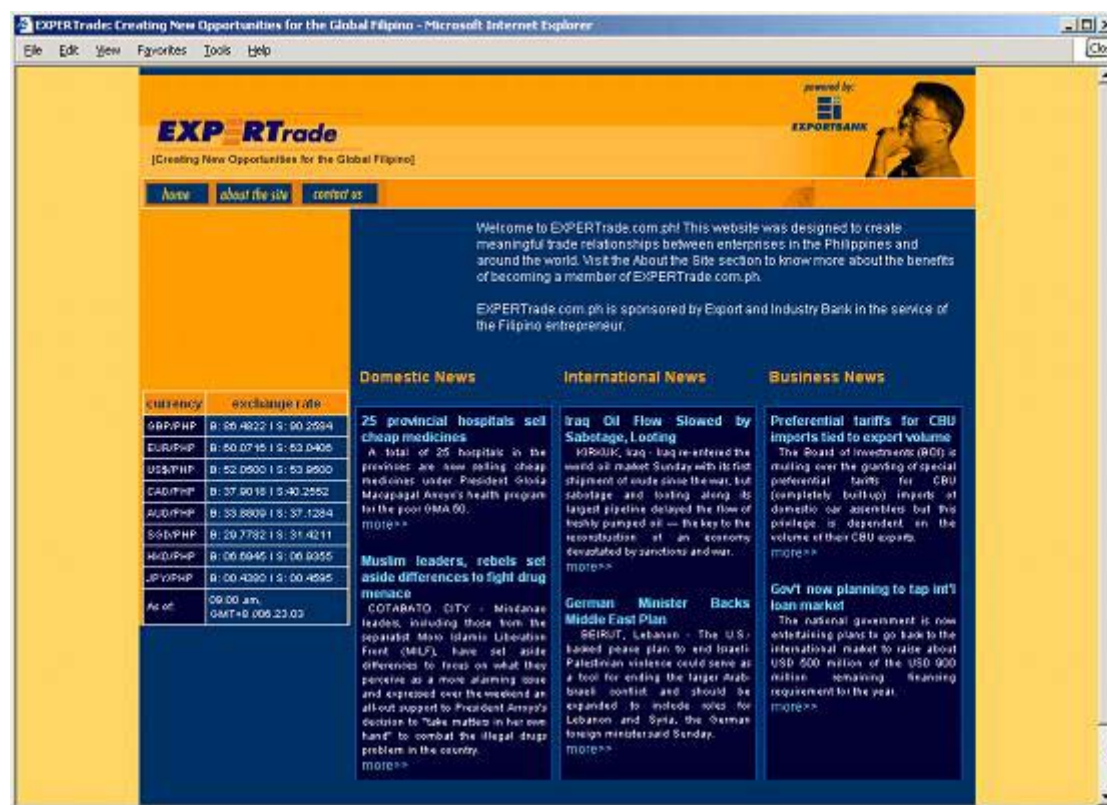
The directory service of EYP is also available through the mobile phone that empowers individuals to get the information they need, when they need it.

Sales inquiries generated through the website is already worth the effort of listing oneself in EYP. Furthermore, the company doesn’t just list any company in its directory. Documents such as business registration, Mayor’s permit, and the likes need to be submitted to prove one’s legal existence. This method of validation further increases consumer and buyer confidence in contacting companies listed in EYP.

Lessons Learned:

1. Put technology infrastructure according to the needs of the market. Don’t put too much assuming that the market would need it.
2. Making the brand known and common to SMEs, to generate immediate recall. EYP recognizes the need to establish its brand.
3. Take advantage of mobile phone technologies and promote its use extensively as well. Although SMS and MMS functionalities offers great service to consumers, its value is still not taken seriously by consumers.
4. Take advantage of mobile technologies such as location-based services that can be tied into EYP’s service to deliver value-added targeted marketing service.

7.3 Case Study #3: EXPERTrade.com.ph



Project description:

EXPERTrade is a portal for Filipino exporters and SMEs seeking to market their products to the global market. It was developed and is managed by Exportbank, a commercial bank co-founded by PhilExport, an association of Filipino exporters and SMEs. The site was launched last September 2002.

EXPERTrade was not conceived as a standalone project, but as one of 2 major component of Exportbank's Internet Channel Strategy, as approved by its Board of Directors in 2001. The other component is the bank's Internet Banking services that allow clients to inquire balances, statements, perform online fund transfers, and other transactions. Exportbank did not want to compete by simply following the strategy of other commercial banks, which was focused on Internet banking, and the consumer market. The bank wanted to position its services so that it would be consistent with its slogan and promise to provide 'Expert banking for the Global Filipino'.

EXPERTrade.com.ph membership is free. Only one condition was stipulated, which was for the member to open a regular deposit account with Exportbank, if he/she wasn't a depositor yet.

Aim and objective:

1. To be a proactive catalyst in the Philippines, in promoting E-Commerce to its target community of exporters and SMEs.
2. To enable the bank to offer a competitive value-added service that will open doors to new clients, enhance existing relationships, and help develop customer loyalty.
3. To develop a critical mass of E-Commerce enabled SMEs and exporters that will be the foundation for the bank's long-term presence and participation in the emerging e-Economy.
4. To be a self-sustaining and profitable service facility.

Cost and funding bodies:

The company invested 2 million pesos in setting up the portal and its Internet banking services. To sustain its operations, the opening of account by members and maintaining their regular average daily balance will suffice.

Value-added bank services such as micro-finance will also be offered to its members as an additional service thereby translating to revenues as well.

Participants:

While the web construction was ongoing, the bank's Internet Channel Management or ICM team, initially composed of 4 people, pre-marketed EXPERTrade both internally (through product briefings and newsletter articles), especially to the marketing units, and externally, to SMEs. It participated in major trade fairs to invite SMEs to join Expertrade. They developed a process for quickly building a database of exhibitors, generating mail-merge invitation letters with registration forms, and distributing these booth by booth at the exhibit halls. To interact effectively with the clients, the ICM personnel had to be conversant not just with Expertrade, but with Exportbank as an institution supporting exporters and SMEs, and its banking products and services. Follow-up telephone calls were then made. This was supplemented by actual visits to clients. The Exportbank branch in Cebu also helped market Expertrade during trade exhibits held there.

In this manner, SME members from various parts of the Philippines were acquired. At present, the site has 120 members.

The company is targeting to get 200 more members this year.

Technology:

Open systems technologies with high acceptance in the e-commerce community, like the Linux operating system, were used for cost-effectiveness, reliability, and scalability. Higher-end servers, multi-processor servers (IBM and HP) were used to ensure reliability and fast performance. Adequate bandwidth was also availed for fast response times.

Services:

The website is designed to allow members in updating their website content and catalog, check queries from buyers, send quotations, and other selling or buying activities. In cases where its members don't have a PC or technical know-how, EXPERTrade takes care of everything from web design, hosting, initial set-up of product catalog (up to 25mb), scanning of pictures, and free email address.

In May 2003, the bank will be offering micro-financing services to SME on various ICT products and services.

Impact and Achievement:

As the website is the newest and youngest in this series of case studies, its impact and achievement is too early to measure.

1. Promoting E-Commerce Through Sponsorship and Stable Support.

A positive contribution Expertrade to the field of E-Commerce in general, is the demonstration of a model for promoting the adoption of E-commerce technology among SMEs that is cost-effective since it involves a sponsoring institution. Since the sponsoring institution is a bank, it also provides the organizational and financial stability that, as the bursting of the 'internet bubble' has shown, purely E-commerce organizations cannot provide.

2. The Viability Imperative.

The Expertrade business model is likewise viable to the sponsoring institution, in this case, Exportbank, since it is a tool to acquire new clients, cross-sell bank products and services, and retain, add value to existing relationships. The B2B service portal likewise provides Exportbank a competitive niche in the banking industry the builds on its perceived 'Export' orientation and its commitment to support the 'global Filipino'.

3. The Need for Intensive Marketing.

At the same time, the business model highlights the need for both expansive and intensive marketing. Even after removing major obstacles to technology adoption by SMEs (i.e. free service, full technical support, ease of use, etc.), the response of SMEs in terms of the number of registrants to the portal is less than expected. There is an apparent need to raise the level of awareness and desire among SMEs to establish their presence in the cyber market space. To address this, Exportbank's Internet management organization is strengthening its E-Services marketing capability, since it has realized that the effort requires focus that the other internal marketing units cannot provide, because of their other business priorities.

4. The Need for Self-Sufficiency.

The setting-up of an Internet channel management organization to support the development and marketing efforts, is consistent with theories on the need by organizations to develop an 'absorptive capacity' for new technology, as well as the imperative to develop 'dynamic capabilities' to compete in a fast-paced environment. It may be a paradox to state that in order to effectively outsource, there has to be a corresponding internal capability to absorb (the external technology) and manage it from within. Likewise, the breadth of skills and functions with the supporting organization (from technical to marketing skills, from mundane to complex functions) requires flexibility in terms of processes, team structure, and attitudes. In any case, the supporting organization, has to be willing to take responsibility on a 'straight through' basis (i.e. self-sufficient).

5. The Need to Pay Attention to Process and Service Quality.

As a 24x7 operation that is globally accessible, and one that showcases the products and services of a community of SMEs, ensuring availability and reliability is important. It is not just, however, the Internet servers that have to be reliable. The supporting organization itself has to be as reliable in terms of its basic processes: how fast it responds to client inquiries, processes applications, how efficient and effective it promotes its services. In testing other sites' processes, Exportbank discovered this to be a weakness of competing sites. Thus, from the onset, the Internet support team streamlined and standardized its various processes, which included the development of a data bank of scripts and FAQs. A database of clients, both prospective and registered was also developed early on, to provide the organization customer relationship management (CRM) capability.

In summary, the key lesson learned is that technology is not the most important nor most difficult component in this type of project or business. Rather, it is marketing, training, and overall support services that matter most, and need more management attention and resources. It is only such shift in bias that will enable the realization of objectives and the attainment of viability and long-term sustainability.

Country-Specific Considerations.

The business model, and implementation and promotions approach of e-commerce sites like the ones listed here, is appropriate to country-specific conditions in the Philippines, such as:

1. Low SME awareness of, and access to, Internet and E-Commerce technology.
2. Non-affordability for developing Internet B2B capability for most SMEs.
3. Low SME exposure to global markets and non-affordability of gaining such exposure for most SMEs through the traditional means (joining international trade fairs).
4. Relative higher concentration of financial and technology resources in the banking sector for the support of such project.

Its corresponding brick and mortar institutions also provided both a stronger sensitivity to the problems and opportunities presented by the country-specific conditions stated above, and a stronger motive to support the project. In doing so, these companies has supported its respective mission, as well as business objectives, while serving as a catalyst for the adoption of Internet and E-Commerce technology by SMEs.

7.4 Comparative Analysis of SME E-Commerce Initiatives in the Philippines

Project	Members	Year started	Source of Funding	Services	Technology
b2bpricenow	1505	2000	Grants and private sector partners	1. Posting of products and viewing of products for sale by cooperatives 2. Inquiry of product prices and catalogue updating using SMS. 3. Training of farmers, cooperatives	Microsoft Internet Information Server, Windows 2000, SQL 2000, ASP. Infrastructure provided by Unisys.
SME.COM.PH	290	2000	Investments from Planters Development Bank and International Finance Corporation	Membership subscription that includes website creation for SMEs. Business matching	Open source technologies
EYP.PH	23,000	2000	Private investors that includes Directories Philippines Corporation	Free listing of companies Advertising products	High availability technologies and solution from IBM and Oracle.
EXPERTrade	120	2002	Fully-funded by Export Bank	Free website for SMEs engaged in exporting. Business promotion	Open source technologies IBM and HP servers and solutions.

7.5 Strength and Weakness Analysis of SME Initiatives in Implementation

Project	Strength	Weakness
b2bpricenow	<p>The only marketplace to offer free membership to agricultural cooperatives.</p> <p>Has strong partners including Land Bank of the Philippines - the biggest agricultural bank, Philippine Rural Reconstruction Movement - - non-government organization catering to cooperatives, among other supporters. All provide logistics and monetary support for the project.</p> <p>Has received grant support to augment cost of its operation.</p>	<p>There's no mechanism in place to monitor the benefits and impact of the marketplace on its livelihood contribution to its member cooperatives.</p> <p>Hardly any repeat postings from cooperatives after the 1st training due to lack of access to computer and Internet technologies.</p>
SME.COM.PH	<p>Investment support from International Finance Corporation that contributes greatly to the credibility of the project.</p> <p>Has a tightly integrated family of services that makes a website venture of an SME competitive such as business matching, search engine optimization, and cross promotion.</p>	<p>Its initiative is worth tracking for its model for charging SMEs for subscription is being doubted for long term survival. However, it remains to be proven.</p>
EYP.ph	<p>Having a stable company with the track record behind it, Directories Philippines Inc.</p> <p>Being able to register establishments in the website for free with validation of its legalities makes it a credible directory web site.</p>	<p>Its documentary requirements discourages companies to register and considers such process a hassle.</p>
EXPERTrade	<p>Encouraging SMEs to register in the website for free is an interesting offering for SME exporters.</p>	<p>However, with similar web sites offering such service (e.g. http://www.buyphilippines.ph), without the requirement of opening an account with a bank, its long-term effectiveness remains to be seen.</p>

8 Indonesia: A Profile

This section profiles Indonesia on a number of topics related to the use of ICTs and the following section highlights four case study projects. The research and subsequent interviewing was conducted by Donny Budhi Utoyo of ICT Watch in Indonesia. (www.ictwatch.com)

8.1 Project Overview

This research describes the utilization of information and communication technology (ICT) to empower the Small and Medium Enterprises (SMEs) in Indonesia. The focus will be put on the websites used by the SMEs to support their activities. These websites are the ones used by the SMEs to display their products, share information and even trade online. Upon conducting the research, the pre-selected SMEs and other site owners that have used ICT facilities will be interviewed to gather specific information. To complete this research, some related data will also be included to give better understanding about the ICT condition in Indonesia.

8.2 ICT in Indonesia: An Overview

By January 1st, 2002, the population of Indonesia has reached an estimated number of 207.5 million people, with its annual growth rate at 1.35 percent. Indonesia has the average income per capita of US\$ 712.2, with its total of poor citizen numbering at 38.7 million people, or 18.6 percent of its population. The Gross Domestic Product (GDP) of Indonesia has reached US\$ 172.9 billion, with three percent of growth every year. Indonesia's personal computer market sits at 5 PCs per 100 households, whereas in the rural areas the estimated availability is only at 1 PC/village.

8.3 Small and Medium Enterprise (SME)

Based on the research from *Biro Pusat Statistik* (Central Bureau of Statistics), it is proven that the Small and Medium Enterprise (SME) in Indonesia had an excellent resistance during the dire monetary crisis a few years back. The research concluded that 64 percent of the SMEs were not affected by the crisis, another 31 percent still operated albeit in a limited way, while only four percent of them got totally halted in their business activities. These days, the estimated total number of SMEs in Indonesia amounts to 40 million units, which in turn absorbs around 76.5 million workers. In fact, the amount of SMEs in Indonesia covers 99 percent of the total sum of national entrepreneurs, at the same time pervading 99 percent of total sum of national workforce, and continuing to contribute to 58.2 percent of the Gross Domestic Product. Considering the huge potential of SME position in Indonesia, the Government of Indonesia undoubtedly has allocated 42,300 billion rupiahs worth of credit fund in its 2003 budget for SME. This is quite an increase, considering the 23 percent rise from the previous year's 34,200 billion rupiahs. Currently the credit for SMEs forms 50.6 percent of the total banking credit expansion value in Indonesia.

8.4 SME and IT

The research done in 2001 by Partnership for Economic Growth (PEG) – USAID covering 417 SMEs in eight cities in Indonesia had concluded the following facts:

84.7 percent of SMEs that perform export activities use computers to support their activities.

61 percent of those SMEs claimed to have approximately 1 to 5 computers, while other 15.1 percent said that they employ 6 to 10 computers.

60 percent of those SMEs use computers for managerial activities and collect data from the Internet, 21 percent only use them for administrative and marketing activities, and 4.1 percent only for business correspondence [writing conventional letters/snail mail, not e-mail].

Furthermore, based on the research conducted by CastleAsia in January 2001 that covered 227 SMEs in 12 Indonesian cities, it is concluded that:

Indonesia: A Profile

About 150 SMEs use the Internet, 98 percent of them have Internet access at the office whereas the rest 2 percent use the Internet at 'warung Internet' or warnet (telecenter/Internet kiosk).

About 100 SMEs use the Internet for the purpose of communicating with buyers from other cities/foreign countries.

50 percent Internet respondents use e-mail more than 20 hours per month, while yet another 25 percent use e-mail more than 40 hours per month.

93 percent Internet respondents use dial-up system, 15 percent of them has benefited from e-banking, and 38 percent of them have their own websites as a promotion tool.

According to a research conducted particularly in Jabotabek (Jakarta and its three nearby cities; Bogor, Tangerang, Bekasi) by Business Intelligence Report (BIRO), which was published on the book titled "Prospect of Small and Medium Enterprises in Indonesia", about 60 percent respondents are familiar enough with doing correspondence by e-mail and prepared to carry out online transactions. The research covered 420 SMEs located in the Jabotabek area, 80 percent of which has investment worth under US\$ 1 million and 72.5 percent of which has the turnover rate at under US\$ 1 million. It is also stated that 127 companies or around 30 percent SME respondents has already designed and used websites to support their promotion activities.

8.5 Telecommunication

With the telecommunication's deregulation being implemented in Indonesia, there will be at least two international gateway facility operators (companies that provide international calls) in Indonesia. They are Telkom and Indosat, both are the two biggest telecommunications companies in Indonesia. Apart from them, there are also nine cellular mobile telephone system operators, more than 101 paging companies and 2 fixed line operators. The country has an installed capacity of 7,882,000 units, with 7,825,152 fixed phone lines subscribed as the end of March 2003. Telephone line charges are at an average of US\$1-\$1.5 per hour (currency at Rp 8500 per US\$1)

As of year-end 2002, the number of cellular users has reached 11,300,674 from 6,222,600 by the end of December 2001 and 3,669,300 in 2000. The Short Messaging Service (SMS) contribution is quite significant to cellular operators' income, which reached 13 percent in 2002, and 20 percent by March 2003. Various cellular services are becoming more common to mobile phone users as GPRS and WAP technologies are being offered at affordable rates.

8.6 IT and Internet Penetration

	1999	2000	2001	2002	2003
Internet subscriber (thousand)	256	400	581	667	800
Internet user (thousand)	1,000	1,900	4,200	4,500	7,550
.ID domain name registered	4,679	8,918	12,413	15,947	16,800
Peak of Internet Traffic (MBps)	2.05	3.07	40.96	245,760	620,595
Operating ISP	35	63	82	90	90

*) estimation until the end of 2003

Internet Service Providers (ISPs) in the country today with the major providers offer 56K service at an average rate of \$0.40 per hour. ADSL, wireless, cable and satellite Internet facilities are now being offered as well. Based on IDC data, in 2001 Indonesia spent US\$ 769 million in IT hardware, US\$ 63 million in software, US\$ 75 million in IT services. It is estimated a total of US\$ 907 million of IT spending in 2001. There is approximately 2.3 million PCs in the country. Most of these PCs, about 1.9 million of them, are used in business and government. Only about 251,000 PCs are used in Indonesian households. In the area of education, more than 60,000 institutions currently use only about 58,000 PCs.

8.7 Education and IT

Nowadays, there are no exact number found on Internet penetration in educational sector. Nevertheless, many parties had several programs in increasing IT (Information and Technology) usage at school. For example, *Direktorat Menengah Kejuruan* (Directorate of Vocational School) from the Department of Education implements a developmental program called “Wide Area Network (WAN) Kota” (City Wide Area Network) in 11 Indonesian big cities. This program is aimed at connecting various schools in those cities together by using the Internet. There are also other similar activities, such as *Jaringan Informasi Sekolah* (Schools Information Network) which is provided by practitioners in education, and *Program Sekolah 2000* (School Program 2000), provided by Indonesian Internet Service Provider Association.

8.8 Law & Regulation

Issues	Status
Electronic Information and Transaction	Drafted by University of Indonesia (UI) and Padjajaran University. Had already conferred to Ministerial of Communication and Information. Will be soon presented to the President.
Telecommunication industry	Telecommunication Act (UU 36/1999)
Broadcasting licensing and content regulation	Broadcasting Act (UU 32/2002)
ICT industry	Presidential Decree (INPRES 6/2001)
Telecommunication Services	Ministerial Decree on Telecommunication Services (KEPMENHUB 21/2001)
Internet Telephony Services	Ministerial Decree on Telecommunication Services (KEPMENHUB 23/2002)
Digital Crime Act	Drafted by ICT Watch and Law Faculty of University of Indonesia
Intellectual property rights	Intellectual Property Right Act (UU 19/2002)
Consumer protection	Consumer Protection Act (UU 8/1999)
National strategy of e-Government Development	Presidential Decree (INPRES 3/2003)
Reference of Local Government Website Development	Drafted by Ministerial of Communication and Information

8.9 E-Government

Nowadays around 45 percent of local governments in Indonesia, ranging from regencies, cities, and provinces, have already owned their own Internet sites, which act as a basic tool for starting e-government. Unfortunately, only 27 percent performed well, performing daily updates and responding to the incoming e-mail. The President has issued *Instruksi Presiden (Inpres)* no.3/2003 (Presidential Decree) on National Strategy for Developing e-Government. Furthermore, the Department of Information and Communication is currently composing a Reference for Developing Local Government Site.

8.10 Indonesia Internet Review.

Introduction: The Bigger Picture

At first, the Indonesian Internet Service Provider Association or *Asosiasi Penyelenggara Jasa Internet Indonesia* (APJII) was highly optimistic that the customer growth of Internet Service Providers (ISPs) could increase to 72.12 percent throughout 2002, from 581 customers in 2001 to one million in the next year. Unfortunately, the optimism had failed in reality. Confronted with the result of current research conducted by AC Nielsen Indonesia, APJII had to give up to the fact that customer growth only increased 7 percent throughout 2002. Still according to AC Nielsen, the amount of residential access

user (household) in fact has declined 6 percent, from 13 percent in 2000 to 7 percent in 2002. This is partly caused by the telephone penetration rate in Indonesia, which is still low, only 3 to 4 percent from total population. This is quite a significant obstacle. Other obstacle which slightly dominant is the telephone tariff rate, which is quite expensive.

If in 2000 the *warung Internet* (*warnet/internet kiosk*) was the most favorable place for 50 percent Internet's user, then in 2004 the estimated amount will increase to 64 percent. The increasing number appears as the effect of the declining numbers of residential access users, which dropped to 7 percent this year, down from 13 percent in 2000. The declining trend is followed by office access user category, which falls from 42 percent in 2000 to 18 percent this year.

The Indonesia Mailing-list User Behavior*

In the end of 2001, Onno was evaluating <http://groups.yahoo.com>. He managed to review 30.000+ mailing lists out of 45.000+ mailing lists. Out of those mailing lists, only 1278 have more than 100 subscribers. Following is the data:

Total subscribers	465,749
Business	96,093 (20,6%)
Politics	32,388 (7.0%)
Hobby	48,342 (10.4%)
Religious	56,035 (12.0%)
Pornographic	59,871 (12.9%)
Knowledge	83,648 (18.0%)
Social Functions	89,372 (19.2%)

Message Distribution in 2001	1,635,395
Pornographic	42,590 (2.6%)
Politics	187,588 (11.5%)
Religious	194,714 (11.9%)
Hobby	236,023 (14.4%)
Knowledge	291,396 (17.8%)
Business	306,480 (18,7%)
Social Functions	376,604 (23.0%)

Subscriber Activeness	Average Messages / Subscriber / Month
Pornographic	0.71
Business	3.20
Religious	3.47
Knowledge	3.48
Social Functions	4.21
Hobby	4.88
Politics	5.79

Total consumed bandwidth	1,732 Kbps
Hobby	103 Kbps (6.0%)
Politics	113 Kbps (6.6%)
Religious	149 Kbps (8.6%)
Business	153 Kbps (8.8%)
Social Functions	237 Kbps (13.7%)
Knowledge	270 Kbps (15.6%)

*Digital Review of Indonesia by Onno W Purbo, November 2002

High-Tech Crimes and Impact to e-Commerce

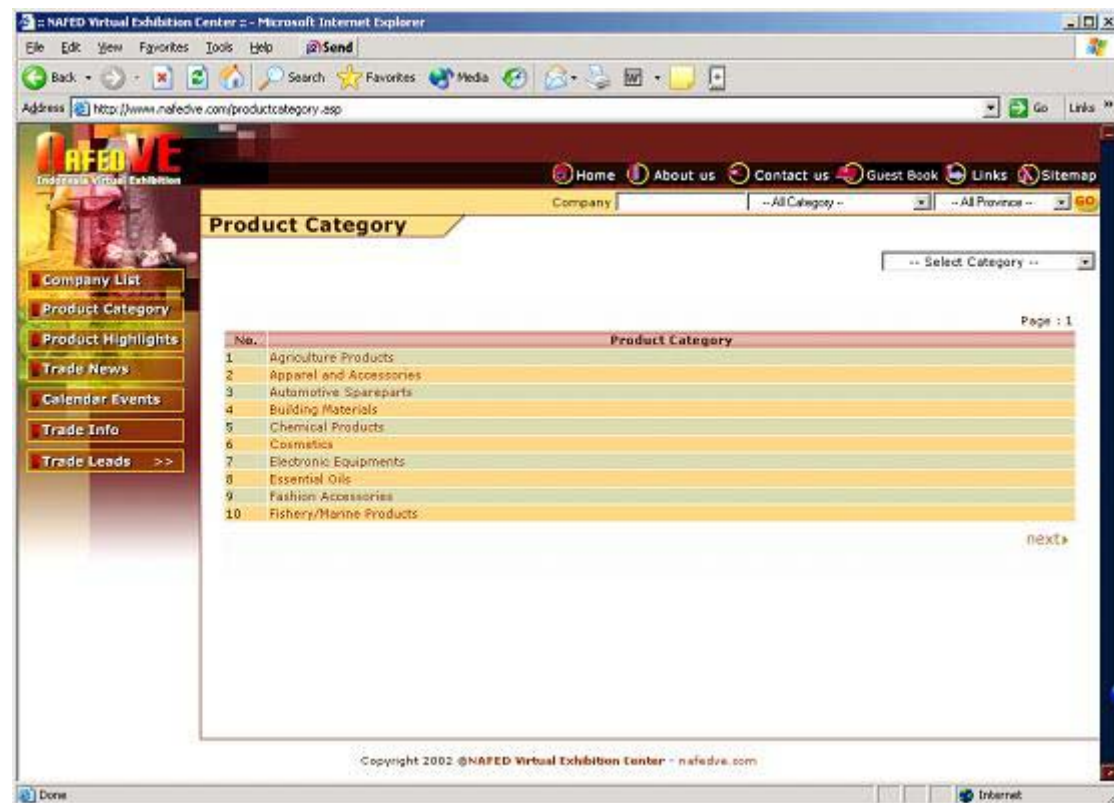
Surprisingly, Indonesia is the second paradise in the world, after Ukraine, for cyberfraud agents. A Texas-based security company, ClearCommerce (ClearCommerce.com), claims this fact in 2002. The company added that around 20 percent of Indonesia-originated credit card transactions on the Internet are cyberfraud. The research, which began from mid 2000 until end of 2001, surveyed 1,137 merchants, six million transactions, and 40 thousand customers. Besides cyberfraud, other criminal activities often found on the Internet are phony trading (offering non-existent items) via chatroom and site hacking. Most of those cyberfraud agents perform their action from the *warnet*.

According to MarkPlus research in 2000, which concerned 1,100 people from five big cities in Indonesia (Jakarta, Bandung, Yogyakarta, Surabaya and Medan), 90 percent of total respondents have never done or been unwilling to do online transactions. When asked why, the answers followed: They simply do not trust transaction online (15.1 percent) and they do not feel safe or thought that the risk is too high (13.6 percent). That means 25.85 percent, or around 284 out of 1,100 respondents surveyed, turned out to be reluctant on doing online transactions because they are much worried about the safety factor when doing transaction via the Internet.

9 Case Studies: Enabling SMEs in Indonesia to Participate in the New Economy

To complete this research, below are three examples of e-commerce and Internet application in Indonesia that are specifically built to empower small and medium enterprises. The interviews to the sites owner are conducted from June 25 to July 3, 2003.

9.1 Case Study #1: NAFEDVE.com



NAFEDVE.com was initiated and owned by National Agency for Export Development, an agency part of the Department of Industry and Trade, Republic of Indonesia. It was originally built to advance the SMEs' capability to enter the global market. One of the initiators was Mr. Rahayubudi, Director of Centre for Export Information and Training. He realized that the Internet is the cheapest and the best way to compete in global marketplace.

Based on consideration that the SMEs' IT literacy in Indonesia is still low, NAFEDVE.com combines the usage of IT and conventional ways, including physical visits, to serve its members.

Although it was originally intended for the SMEs, the website also asked several big industries to join. The reason was simple: It needed something to attract the foreign market, and it regards big industries as eye catchers to the visitors.

Aim and objective

1. As a "virtual exhibition" center, it aims to be a key agent in fostering the capability of SMEs in Indonesia to compete in the global market.
2. Help Indonesian SMEs' to promote their products globally.
3. Facilitate information-sharing on entrepreneurship for all the members
4. Promote the benefit of ICT to the SMEs

Cost and funding bodies

NAFEDVE.com is solely owned and maintained by National Agency for Export Development (NAFED), a Government of Indonesia agency under the Department of Industry and Trade. The

website's daily activities are run by the Centre for Export Information and Training, a division inside NAFED.

In practice, NAFEDVE.com is supported by local offices of the Department of Industry and Trade. This way, they managed to reduce the operational cost to run their activities. This is considered very important to reach SMEs in thousands of islands all across Indonesia.

Participants

The website currently has 86 members. Most of them (98%) are small and medium enterprises, while the other two percent are considered large-scale industries.

The membership composition is as follows:

Chemical Products	1	1 %
Fashion Accessories	4	5 %
Footwear	2	2%
Furniture	26	30%
Garments	5	6%
Handicrafts	30	36%
Household products	3	4%
Leather and Products of Leather	1	1%
Musical Instruments	1	1%
Paper and Paper Products	1	1%
Plastics Products	1	1%
Stationery	2	2%
Textile Products	7	8%
Toys	2	2%

Most of the members are considered as low information technology (IT)-literate. For that reason, NAFEDVE.com combines both conventional technology for the "IT illiterate" SMEs and any advanced technology available for SMEs equipped with IT gadgets. Through the location visit to the selected SMEs, NAFEDVE.com managed to introduce the importance of IT in order to win the tight competition in global market. To overcome the limitation of their human resources, NAFEDVE.com often asked the local officials of the Department of Industry and Trade to help introducing NAFEDVE.com activities.

Eighty percent of the members are located in Jakarta, the capital city of Indonesia. It is considered reasonable since Jakarta has better IT infrastructure than other places in Indonesia. In addition, with their human resources and fund limitations, NAFEDVE.com started their effort with the SMEs near their office.

Technology

Inaweb, one of the leading web developer companies in Indonesia provides the technology used by NAFEDVE.com. The website is running on Windows NT operating system, written in ASP language.

The program provided by Inaweb facilitates web administrators to conduct an advanced evaluation for their websites. Besides the commonly used visitor counter, this site also records the visitor's IP and how long those visitors spend their time exploring the website. It means that the web administrator can assess whether their website design or contents are attractive or not. Based on that evaluation, NAFEDVE.com will be able to make necessary improvements in order to attract more visitors.

To get in touch with the members, NAFEDVE.com uses any possible way to overcome the communication infrastructure problem. In some areas, they even contact local officials of the Department of Industry and Trade to visit the SMEs that have no phone lines installed.

Services

1. Provide a "virtual exhibition" center for members to display their product. This facility is critical for majority of SMEs that don't have financial ability and IT knowledge to promote their products online. The assistance includes visiting the location and taking pictures of products using digital camera.

2. Provide export-management training for members to promote their businesses, which is the core responsibility of NAFED, the owner of NAFEDVE.com
3. Provide e-mail account for members to enable them to have correspondence with other parties abroad.
4. Provide “Trade Leads”, a posting facility for buyers and members to display their products or needs. Any inquiry posted in this facility will be delivered to the appropriate members.

Impact and Achievement:

By using intensive approaches, NAFEDVE.com has succeeded in convincing SMEs to utilize ICT as a means to promote their businesses. Some SMEs have even run their own websites, albeit in a somewhat elementary fashion.

In the beginning most members has never known ICT, let alone using it for business. These members were contacted through NAFED-sponsored events (export-import training, exhibitions, and seminar). They were later persuaded with the benefits of using the Internet in marketing their products.

To SMEs that do not have any means to access the Internet, NAFEDVE.com provides a telephone- and also mail-based information service. Members can contact NAFEDVE.com site administrator via the telephone, fax, mail, or even go to the nearest Department of Industry and Trade office. On the other hand, NAFEDVE.com can also use those means to contact the members.

Besides capital, another main difficulty for the SMEs to compete is their management capability. Some members who didn't perceive the importance of having product catalogs were persuaded to submit the photos of their products to NAFEDVE.com. To those SMEs who do not have any camera or do not understand photography techniques, NAFEDVE.com usually sends its personnels to take pictures of their products using digital cameras.

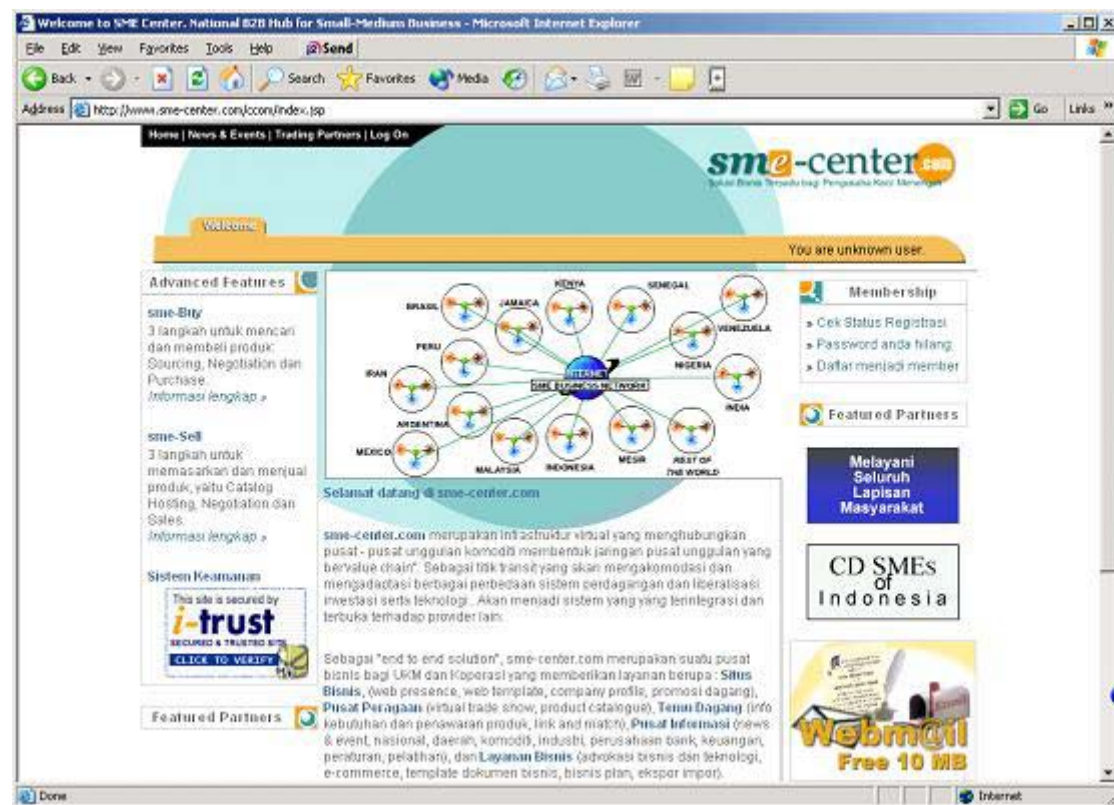
Currently, NAFEDVE.com has started its cooperation with Japan's agency JETRO to exchange information on commerce and to place banners in JETRO's website.

Lessons Learned

NAFEDVE.com learned a lot from the failures of other websites and also from other technical hindrance they deal with on a day-to-day basis. To overcome them they took several measures:

1. Giving free and proactive service to the members, considering the facts that most SMEs have poor knowledge of ICT and have financial limitations. By offering such service, it expects to attract a lot of SMEs in using ICT.
2. At present Rahayubudi, the site administrator, is still not satisfied with NAFEDVE.com's ability to disseminate information about Indonesian SMEs' products. The reason is simple: Even though NAFEDVE.com claims to be the center for Indonesian SME product marketing, it still does not have presence in search engines such as google.com.
3. Recognizing responsiveness as the key to customer satisfaction, NAFEDVE.com sends trade leads (requests from foreign buyers) only to the members who are considered ready to respond quickly.

9.2 Case Study #2: sme-center.com



In the beginning, the embryo of sme-center.com was Center for Development of Small and Medium Enterprises (CD-SMEs), a part of an undertaking done by a group of individuals within the Indonesian Chamber of Commerce (KADIN) to increase the business capacity of SMEs in Indonesia. Through Center for Development of Small and Medium Enterprises (CD-SMEs), KADIN has conducted management training programs for SMEs since the 1980s. It has also sponsored joint facilities to further advance SME businesses, especially in the marketing area. KADIN, for example, has set up collective marketing programs to reduce travel costs. It also has advanced the competitiveness of Indonesian SMEs by increasing their available goods capacity.

Following the rise of ICT awareness in Indonesia, there was an effort in 1997 to utilize the technology to support such cause. The initiative came from Firman Subagyo, currently the head of SME and Cooperative Development Department in KADIN. In November 2001, the sme-center.com was launched. It was meant to serve as a virtual marketplace and education facility for all its members.

Aim and Objective:

1. To be the leading institution in empowering and developing small and medium enterprise in Indonesia.
2. Establish a global market information network system interactively, easily, cheaply for SMEs.
3. Assist SMEs in improving their business capabilities in the global market by applying Information Technology.
4. Provide assistance to the members in promotion, business consultation, transactions, and post transaction activities.

Cost and Funding Bodies

Initiated by Mr. Subagyo, KADIN, in cooperation with Bank Rakyat Indonesia (BRI), a leading state-owned bank that provides loans to SMEs, and PT Telekomunikasi Indonesia (TELKOM), the biggest telecommunication company in Indonesia, agreed to implement new ways in empowering SMEs in Indonesia. This project was based on experience and the result of research done by education institutions, that the improvement and empowerment of small and medium enterprises could not be done partially and sporadically. So it was the reason why they built Center for the Development of Small and Medium Enterprises (CD-SMEs), to answer this challenge.

In performing its vision and mission, CD-SMEs has collaborated with BRI and TELKOM to set up telecenters designed specifically to advance SMEs capability through IT utilization. Together they built 9 SME-Centers as pilot projects in 9 cities in Indonesia, that is Padang, Jakarta, Cirebon, Makassar, Yogyakarta, Jepara, Sidoarjo, Denpasar, and Balikpapan with [www.sme-center](http://www.sme-center.com) served as the portal. As a portal, [sme-center.com](http://www.sme-center.com) plays a vital role in the whole CD-SMEs project. It is a means of promotion that can reach broad potential market all over the world.

The latest progress in the development of CD-SMEs, the Government of Republic of Korea has granted aid through technical assistance. The assistance will be a program in ICT development for virtual training and establishment of 33 SME-Centers to improve ability and knowledge of SMEs in Indonesia, and also to their trading activities in global market.

Participants

The website currently has 1020 members across Indonesia. Of those members, around 80 % were registering through SME-Centers and the rest were registering online from any other places. Most of the members were initially IT-illiterate. Through information distributed by SME-Centers, [sme-center.com](http://www.sme-center.com) has now posses the largest members among other websites providing e-commerce in Indonesia.

The key factor to get its members is by using the SME-Centers spread in 9 cities. These SME-Centers provide cheap alternative for SMEs with limited ability to use IT in order to enhance their business.

Technology

At first, [sme-center.com](http://www.sme-center.com) was developed simply as a means to exchange information among members and offer their products online, and also as a tool to promote the products it contain to other parties in the world that cooperate with KADIN. The site uses Windows 2000 to support Java Script Program (JSP). However, the website was continuously developed until it would finally be able to handle commercial transactions online (planned for August 2003). For this end, [sme-center.com](http://www.sme-center.com) owner felt it necessary to improve their network security by using security software built by a local company I-Trust (www.i-trustononline.com).

In the next step, starting July and scheduled to finish on August 2003, this site will use a “banking application system” that integrates payment transactions by using members’ account numbers. The system, which is already tested, was provided by Internet Computer Technology Limited (Australia). It is made to comply with the platform used by Bank Rakyat Indonesia (BRI).

Services

Until now, the website does not charge its members for the services and facilities it provided. Members may use the website to get a free e-mail address, information about product demands and supplies, and also other educational information related to business and management.

Members are given the opportunity to display their products, both virtually in [sme-center.com](http://www.sme-center.com) and either physically in SME-Centers. The SME-Centers in this case functions not only as telecenters and training centers, but also as exhibition centers for members’ products.

Impacts and Achievements

The presence of [sme-center.com](http://www.sme-center.com) as an ICT media has encouraged many SMEs to use it as a way to promote their businesses. Some members who finally joined the [sme-center.com](http://www.sme-center.com) to promote their products have demonstrated an increase in their sales.

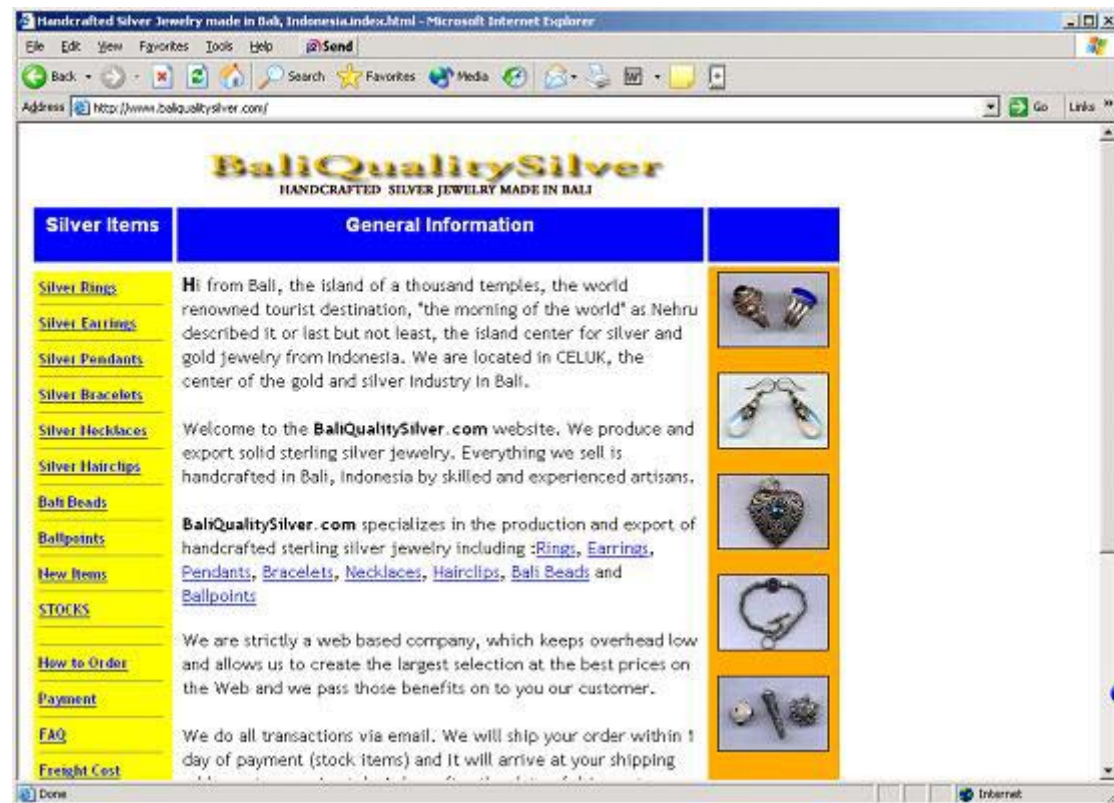
Seeing the increase in the number of [sme-center.com](http://www.sme-center.com) members, some private companies have expressed their interest to develop such program. This proved that CD-SMEs programs have a great potential in promoting small and medium businesses. Just last year, the [sme-center.com](http://www.sme-center.com) even received an award from IBM and the Department of Information and Communication, Republic of Indonesia for its efforts in utilizing ICT to advance SMEs in Indonesia.

Lessons Learned

1. Considering the fact that most SMEs have financial limitation and low ICT literacy, one needs to approach them by providing telecenters as a way to introduce the benefits of using ICT in their businesses.

2. It is necessary to give the right solution to SMEs, particularly on management and marketing problems. This can be done by giving various training programs in telecenters and creating a collective marketing system.
3. One thing the website has not opened its list of products and companies to public browsing, only to registered members and parties cooperate with KADIN, making it closed and unattractive to a wider market.

9.3 Case Study #3: BaliQualitySilver.com



(Note: This is a family business run in a very traditionally, simple management. Because of that, the data shown might not be satisfying. The reason this site included in this research is because their profile known as small company with high comprehension about benefit of IT utilization. In 1996, where the Internet is still something very unpopular facility for most Indonesian people, they have managed to use the Internet to promote their products.)

Bali Quality Silver began as a home business that started utilizing the Internet in 1996. It uses the website as a showroom to market their products, which are silverwares and handicrafts. The sole initiator of this website was Made Kembar Kerepun, the founder of Bali Quality Silver, who foresaw that marketing via the Internet would rapidly grow in the future. He believed that through the Internet, marketing products will be more efficient, effective, informative, reaching worldwide with an affordable cost. Up to now, this family business has six running websites.

Aim and Objective:

1. To introduce the company and its products worldwide.
2. To seek foreign buyers for its silver products.

Cost and funding bodies:

The company spent initially around 50 million rupiahs to build its first website and the necessary infrastructures in 1996. At that time, Bali Quality Silver started out with 2 units of Apple computers, a scanner, and a digital camera. It also hired a freelance staff from Australia to translate the website contents into English.

Technology

Satyawibawa, son of the business founder and initiator Made Kembar Kerepun, saw the family business as small in nature, so he set out to develop the website by himself. With limited knowledge, Satyawibawa used the HTML language to write the program.

Service

Though Bali Quality Silver has used the Internet to display its products, so far it can only accept purchase orders by e-mail and fax. The company cannot yet accept online payment via the Internet, as most banks in Bali are not ready to handle it. Furthermore, it is considered too expensive and too complicated for a small company like it. So, it decided to use any possible way, namely combining conventional payment with IT to make fast confirmation. Currently Bali Quality Silver accepts payment through wire transfer to its bank account. Once the buyers transferred the money, they are asked to send the bank transfer receipt via fax or e-mail.

Lessons Learned

Satyawibawa, the current site owner, said that the Bali Quality Silver website has made the company and its products more widely known than before, which helps them a lot in the marketing side of the business. He found out that in e-business, one has to be always active, creative, innovative, and honest, not to mention responding quickly to incoming e-mails.

9.4 Comparative Analysis of SME E-Commerce Initiatives in Indonesia

Projects	Members	Year Started	Source of Funding	Services	Technology
NAFEDVE.com	86	2003	Fully funded by government	Free membership subscription including opportunity to display products and listing of company Posting products for sale and viewing products needed by buyers Information about inquiries, export-import procedures and trade events	Written in ASP running on Windows NT Infrastructure and program provided by Inaweb
sme-center.com	1020	2001	KADIN, PT TELKOM, BRI and other private sector	Free membership subscription Provide education through virtual information Establish a cooperation for market matching in the global market	Running on Windows 2000 written in Java language (JSP)
Baliqualitysilver.com	-	1996	individual	1. Products display 2. inquiries through e-mail	Running on Windows NT written in HTML

10 Alternate Access Methods and Successful Applications for Low Bandwidth

Around the world, companies and community groups are recognizing the need and the potential for using the short messaging services(SMS) of cell phones for communicating with customers, members and associates.

We have already seen that mobile phone usage in all economies is growing rapidly and has certainly reached "critical mass". Mobile phones are usually kept with the person all the time and so it becomes the ideal way of communicating reliably with people.

b2bpricenow has established a method of using mobile phones and SMS to enable small and medium rural farmers to keep up to date on commodity prices. There are many other opportunities for governments, companies and community groups to better serve their constituencies through improved communications.

Many applications that were uncovered during the research phase of this project did not necessarily involve APEC economies or just rural users. However, these examples do provide insight into the way creative people around the world are using text messaging (SMS) to communicate with employees, employers, citizens, family, friends and associates.

In addition more information may be found on SMS applications from an SMS vendor, XIAM, which develops mobile middleware and application software for operators, service providers and enterprises. They publish an on line newsletter on SMS applications. The newsletter can be found at <http://www.xiam.com/news/business-gets-the-message/>

10.1 Booking Hotel Rooms in the Philippines

A beach resort recently opened in the Philippines. Business during a prime vacation week was quite brisk, even though the place has no reservations office, no Web site, no fixed-line phone or Internet access. The owners of Villa Arcadia, located in a town on the southern island of Mindanao about 880 kilometers south of Manila, had only a poorly printed brochure in bad English that listed two mobile phone numbers. "Practically all our guests this week made reservations through these numbers, and most of them didn't even call - they just texted us," Jimmy Trece, the owner of Villa Arcadia, said. "Our customers save a lot of money."

10.2 text2teach in the Philippines

text2teach, a service introduced in the Philippines is a global program developed jointly by Nokia, the International Youth Foundation (IYF), Pearson and the United Nations Development Programme (UNDP). The four organizations combined their expertise in technology, training, content, and processes to create an impact on the learning of young people. It enables teachers to use mobile phones supplied by Nokia to request more than 80 full-length videos provided by Pearson, each of which introduces and illustrates a key component of the Philippine science curriculum. Upon texting, the requested video will be sent via satellite to a digital recorder connected to a television in the teacher's classroom. Each video's interactive demonstration of science concepts and ideas is expected to benefit both teachers and students.

10.3 UK Hospital Appointments

Hospital patients in the UK are set to receive hospital appointment reminders via text message in four of the country's National Health Service (NHS) Trusts, after a deal was agreed between the NHS and mobile media and technology services company Enpocket. If the pilot is successful, the company could subsequently offer the service to hospitals across the country.

It has been estimated that missed appointments cost the NHS over £400m (EUR 568 million) per year. A test that has been running at Homerton Hospital has found that text message reminders sent to

outpatients the day before an appointment can significantly reduce non-attendance and improve communications with patients.

The full launch of the service will follow. Some 30 NHS Trusts – representing some 20% of the NHS and 9 million appointments per annum – are looking at taking up the service in its first year.

10.4 Malaysian News by SMS

Online newspaper Malaysiakini launched pay-per-view access to its news content by SMS. In order to subscribe, readers must send an SMS with the word "Mkini" to telephone short code 32300. Malaysiakini will send a return SMS with a special login code. Once this code is entered into the SMS login box on the website, the content can be accessed for the next 24 hours.

10.5 London traffic tax

On February 17, London initiated a new plan to ease traffic congestion which cripples the city, "bringing into operation the largest congestion charging scheme the world has ever seen", according to the Mayor. A tax of £5 (\$8.00) is now being asked of motorists who drive into the city every day under the surveillance of 800 cameras in and around an eight-square-mile, which monitors their licence plates. Payment can be made through a call center, online or at one of the 1,500 retail outlets, as well as by SMS. (courtesy textually.org)

10.6 Insurance Policy updates by SMS in India

International Aviva Life Insurance has recently launched an SMS-based service in India, informing customers about premium payments and the policy status on their cell phones. "Updating policyholders about their policies as well as informing them about Aviva Life Insurance products, is another step towards improving customer services", reports the The Times of India

10.7 Real estate turns to SMS

Adelaide, South Australia real estate agent, Toop & Toop believes the patented Virtual Agent(VA) system is on the verge of global success. VA uses SMS, email and the web to sell houses in a manner that may reinvent how people sell and buy properties. Prospective buyers register with Toop, leaving details of area and house size and so on, and then receive an SMS or email with information on houses as they come on the market.

10.8 Livestock and Harvest Prices

Australian based Agricultural agency Elders says that SMS is replacing fax as the best way for growers and sales reps to receive up-to-date information about prices - vital in an industry where big price changes can happen quickly. They say that SMS notifications should prove even more popular with the harvest this year, with grain prices expected to remain high and growers having better crops to sell. They are also examining the use of SMS for insurance quotes and livestock prices. Email has also become an important means of reaching growers. Elders says that in some regions faxes were becoming obsolete.

10.9 Transperth SMS trial

Approximately 650 people took part in the first of Transperth's Short Message Service trials. Transperth is the public transport organization in Perth Australia. The test would show to what degree passengers accept SMS as a convenient way to get information about Transperth services. A recent police siege in Yokine showed how SMS could be used in advising passengers about delays and when the disruption was likely to end. Passenger responses would be analysed regularly during the trial. "Ultimately where we'd like to be is that we could do away with timetables," Ms Cummings said.

10.10 Western Australian Police service

The Western Australian Police has introduced a text messaging service for people who are deaf, hard of hearing or speech impaired. The SMS text messaging service enables people who are deaf, hard of hearing or speech impaired, to contact the police and request assistance.

10.11 Bureau Trial of SMS Messaging to Warn of Severe Weather

The Australian Bureau of Meteorology is running a trial in four cities (Cairns, Gold Coast, Sydney and Perth) using SMS to deliver an alert directly to the mobile phones of members of the public when severe weather is forecast.

The trial has already attracted over 2500 subscribers each requesting, on average, six specific services. Subscribers have received a total of 20,000 messages so far. The SMS message provides an alert that a warning has been issued and refers the recipient to the Bureau website or a 1300 telephone number for full details of the warning.

11 Lessons Learned

From the research carried out in the Philippines and Indonesia, many lessons were learned from the perspective of both developers and users. While some of these lessons could be considered best practice, we prefer to leave this judgment to the reader:

- **Cost of involvement:** Most SMEs and farmers in developing economies cannot afford to pay fees associated with a program, no matter how good that program is. There is concern that programs charging fees will not be sustainable.
- **Strategic partnerships:** Programs are more likely to succeed and grow if backed by a consortium of strategic players. Refer to Section 5 for a detailed discussion on this important lesson.
- **Customer centric:** You must be customer centric in your focus and in so doing you will have to be prepared to regularly revise your business plans to meet customer demands.
- **Technology:** Make sure your technology provider has the necessary expertise, otherwise your clients may experience business losses due to system or application failures.
- **Phased implementation:** Implementation should be phased in over time and in response to actual user requirements. Don't over-engineer, especially in the beginning stages.
- **Brand:** Need to establish brand recognition for your program and market it aggressively.
- **User interface:** Take full advantage of mobile technology as an alternative for computer access (which is prohibitively expensive for many SMEs) and promote its use extensively.
- **Education and Training:** Provide access to telecenters and offer appropriate training programs to introduce the benefits of ICT.
- **Local involvement:** It is most important to assess the information needs of the local community and involve intended users in a process of continuous development.
- **Government:** SMEs tend to look to government for support and to lead by example.
- **Alternate Access Methods:** It is important to take into consideration all appropriate access methods when developing a strategy for rural and remote users. For example, mobile phone technology may be more appropriate than computer-based telecenters for many rural and remote locales.

When comparing the experiences of APEC economies with those of other regions, the following critical points raised by the global community should be considered as well:

- Fees shouldn't be charged if the poor are expected to participate;
- Satellite technology is the most feasible technology in remote locations;
- It is most important to assess information needs of the local community and involve intended users in a process of continuous development;
- Critical pricing information can be successfully accessed from mobile phones, making it possible to involve the poorest of farmers, even those who are illiterate and not likely to be comfortable with computers;
- The poorest of the poor in rural areas are in fact women and their needs must be addressed;
- Important to recognize that rural farmers in many parts of the world do not value the same types of information as that defined by a "Western" frame of reference;
- There is a direct correlation between access to telecommunications, economic wealth and social development;
- Government leadership is a key element in making ICT work for the rural poor – especially true in developing economies;
- National ICT strategies are important, but there is no single approach;

12 Building Capabilities of Rural Enterprises

A by-product of the b2bpricenow program is the education and training being offered to the farmers. A comprehensive training manual has been developed for the benefit of b2bpricenow members. Clearly, this educational product helps build general ICT capabilities as well as providing the specific training required for successful involvement in the b2bpricenow program. This manual is an excellent example of the type of training product required by rural traders.

Appendix D: b2bpricenow Training Manual includes the complete b2bpricenow training manual.

13 Appendices

13.1 Appendix A: b2bpricenow Correspondence and Reviews



LAND BANK OF THE PHILIPPINES

Official Depository Bank of the Republic of the Philippines

23 October 2002

MR. EDGARDO B. HERBOSA

Managing Director

B2Bpricenow.com, Inc.

4/f Multinational Bancorporation Building 6805 Ayala Avenue

Makati City 1208

Dear Mr. Herbosa:

This has reference to your letter updating us on the developments and achievements of our Strategic E-Commerce Program.

It is great to know that our partnership has generated benefits for the countryside and reaped nomination to the 1st e-Government Awards. Further, we also believe that the move of Sen. Ramon Magsaysay and the COCAFM to make b2bpricenow.com to be the "Official e-marketplace of the Philippines" will be beneficial both to our Bank and Landbank-assisted clients.

We wish to highlight though the following issues and concerns relative to the program:

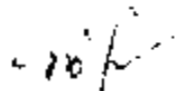
- Landbank welcomes your interest in providing a payment gateway. As a matter of procedure, B2bpricenow.com, Inc. will have to undergo the required government bidding procedure for any private services. However, if b2bpricenow.com can provide the payment gateway service for free like the e-marketplace, then the proposal is highly appreciated. We understand that there are about P2.4 B amount of postings in b2bpricenow.com that we can generate income from.
- With regards to the Convergence Program, Landbank pose no objection to the implementation of a 60% - 40% scheme between bank-assisted cooperatives and b2bpricenow.com, Inc. The dealings between B2Bpricenow.com and the cooperatives will be made private in order to maximize benefits to both parties. We will be informing our cooperatives on your intent for this partnership.
- We welcome B2Bpricenow.com in providing a special award to the cooperative that has excelled in the management of its IT project in the next Gawad PITAK.

With these developments, we have considered your offer for b: bpricenow.com to be presented during the Landbank's visit to Bank of Agriculture and Agriculture Cooperatives (BAAC) in Thailand on November 3, 2002.

In this regard, may we invite you to join the team of Landbank in our scheduled visit to BAAC. Should you have further query regarding the details of the trip to Thailand, please feel free to contact our AVP Maurice Feliciano of Development Assistance Department at telephone nos. 405-7316

Thank you.

Very truly yours.



MARGARITO B. TEVES
President and CEO
Land Bank of the Philippines



Republic of the Philippines
CONGRESSIONAL OVERSIGHT COMMITTEE ON AGRICULTURAL AND FISHERIES MODERNIZATION
(COCAFAM)



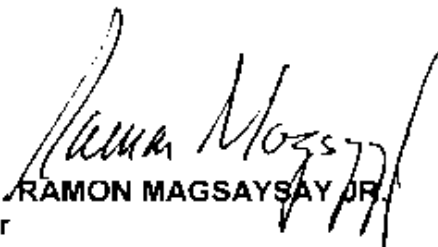
Sen. RAMON B. MAGSAYSAY, JR.
 Chair

Rep. ALFREDO G. MARAÑON, JR.
 Co-Chair

ENDORSEMENT LETTER

The Congressional Oversight Committee on Agriculture and Fisheries Modernization (COCAFAM) would like to endorse the b2bpricenow.com to be one of the E-marketplace of the Philippines for the agriculture and fisheries sectors. B2bpricenow.com is a company engaged in electronic trading using the Internet WAP phones or regular GSM phones for free. B2bpricenow.com is the Philippines' first ever business to business (b2b) marketplace where members can actually trade and pay on-line.

B2bpricenow.com with its Managing Director, Mr. Edgardo B. Herbosa, is backed-up by several strategic partners, like Unisys Philippines, 1st ebank, Aboitiz Inc., Ating Alamin, PRRM, DA, DAR, DTI, TESDA, PUP, and the National Confederation of Cooperatives. With these qualifications, COCAFAM strongly endorses the b2bpricenow.com to be one of the E-Marketplace of the Philippines for the agriculture and fisheries sector including cooperatives, traders, processors and SMEs, where they may post supply, demand, prices and other market information. Implementing agencies of the AFMA are likewise enjoined to avail of this website. In return, b2bpricenow.com is eligible to avail funding support from the government through loans or grants if available following policies and procedures for the availment of such type of funding.


SEN. RAMON MAGSAYSAY JR.
 Chair


REP. ALFREDO G. MARAÑON JR.
 Co-Chair

Senate Panel:

Sen. EDGARDO J. ANGARA
 Sen. ROBERT Z. BARBERS
 Sen. RODOLFO G. BIAZON

Sen. JUAN M. FLAVIER
 Sen. GREGORIO B. HONASAN
 Sen. MANUEL B. VILLAR, JR.

House Panel:

Rep. BENJAMIN A. CRUZ
 Rep. JUNIE E. CUA
 Rep. JESLI A. LAPUS

Rep. CELSO L. LOBREGAT
 Rep. PROSPERO C. NOGRALES
 Rep. GENEROSO DC. TULAGAN

Email: cocafm@ibahn.net

Room 515, Senate of the Philippines, GSS Financial Center, Pasay City 1308
 Tel. Nos. 552-6601 to 80 (local) 5501, 5503, 5512, 5513 Fax No. 551 3253

Edgardo Herbosa

From: Agus Ahdiyati (SUGGESTION BOX) [suggestions@b2bpricenow.com]
Sent: Wednesday, December 18, 2002 9:00 AM
To: Erick Kalugdan; Tedjie Herbosa
Subject: SUGGESTION(S) FROM SUGGESTION BOX

Agus Ahdiyati has posted suggestion(s) in the b2bpricenow.com Suggestion Box.

You can reach him/her at ahdiyati@bri.co.id

December 18, 2002

Mr. Edgardo Herbosa
Managing Director of b2bpricenow.com

Dear Mr. Herbosa,
referring to your e-mail addressed to Mr. Rudjito, President Director of Bank Rakyat Indonesia, we do really appreciate for your attention to our company. As a bank with the biggest network in Indonesia focusing on Small and Medium Enterprise financing, we are very interested in adopting e-commerce program in our company. Regarding with that, your offering of "E-Commerce for Farmer" Program will be our consideration.

Thank you for your attention.

Sincerely,

Agus Ahdiyati
Staff of Micro and Retail Business Planning
Bank Rakyat Indonesia



Republic of the Philippines
DEPARTMENT OF AGRICULTURE
Office of the Secretary
Elliptical Road, Diliman, Quezon City



MESSAGE

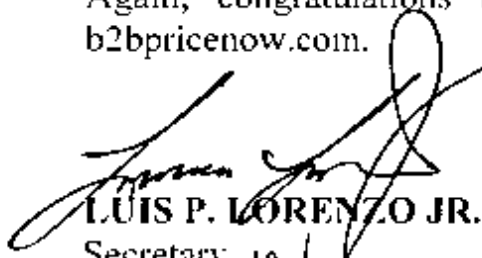

Mabuhay!

Congratulations to b2bpricenow.com on your noteworthy contribution of providing “**E-commerce For Farmers**” through both content (b2bpricenow.com website) and connectivity ([b2bcenters](http://b2bcenters.com)).

Your initiative of giving a FREE and sustainable electronic marketplace for cooperatives is most welcome by both the Department of Agriculture and agriculture and fisheries sector.

The Department of Agriculture will continue to support the noble endeavor of using Information and Communication Technology (ICT) to make our farmers/cooperatives globally competitive.

Again, congratulations to Land Bank of the Philippines (LBP) and b2bpricenow.com.


LUIS P. LORENZO JR.
Secretary


UNISYS

20 March 2003

MR EDGARDO B. HERBOSA
Managing Director
B2Bpricenow.com, Inc.

Dear Mr. Herbosa:

This has reference to our partnership on the provision of a free and sustainable e-marketplace for cooperatives and SMEs nationwide through B2Bpricenow.com. We are glad that the Philippine government has provided support to our project and that other countries have taken interest in replicating this in their country, as you have reported in previous communication with us.

As discussed, we would like to explore how we can further strengthen our partnership as your official technology partner. As suggested by you, we would like to study further the possibility of providing an electronic payment gateway to your partner-bank, the Land Bank of the Philippines, as part of the technology services provided by Unisys. As a matter of procedure, we would like to assess the scope of work required for this activity and therefore would like to meet with you and Landbank representatives this.

Thank you for your continued support and trust in Unisys and we wish you and B2bpricenow.com more success in your endeavors.

Very truly yours,



TONY TISINGTON
Director, Public Sector

cc: Mr. Gary B. Teves
President and CEO
Land Bank of the Philippines



13.2 Appendix B: Promotional Materials

13.2.1 b2bpricenow

Mission and Vision

The E-commerce for Farmer's Program bridges the digital divide in the most marginalised and fragmented sector - agriculture. Providing the farmers and fisherfolks the reason to connect to the internet, to assist them through hands on computer training; and to allow them to engage in e-commerce. **b2bpricenow.com** provides co-operatives and SMEs the opportunity to earn from IT products and services.

The e-commerce for Farmers Program is anchored on both Content (www.b2bpricenow.com) and Connectivity (b2bcenters).

Winner of the Marketplace Development 2001 Competition

b2bpricenow.com is a proud member of



Endorsed as the official e-Marketplace of the Philippines for Agriculture & Fisheries Sector by



Senate of the Philippines House of Representatives

The Congressional Oversight Committee on Agricultural & Fisheries Modernization (COCAFAM)

b2bpricenow.com

your e-trade partner

b2bpricenow.com website is a free and sustainable e-marketplace for agriculture products. Providing them an added venue to buy or sell their products, we have given them the reason to use the internet.



Services offered:

- Free e-marketplace
- SMS application
- Web page design and hosting
- On-line transaction
- Corporate Partnership



b2bcenter

your e-business partner

Connectivity is the rollout of 1,500 **b2bcenters** at the municipality level - these business centers will house the internet café, business machines, phone and phone card dealership which is owned by the cooperatives and **b2bpricenow.com**. The **b2bcenters** have transformed an ordinary agriculture cooperative dependent on traditional products to also earn through IT products and services.

Services offered:

- Internet access
- Business machines (photocopy, fax, scanner)
- Sale of Cellular Phones
- Sale of Prepaid cards



Filipino farmer checking nationwide prices of commodities through his cellular phone via text (sms)



Strategic partners



b2bpricenow.com

your e-trade partner



3/F Multinational Bancorporation Bldg., 6805 Ayala Avenue, Makati City

FREE Membership...
Sign an e-Contract....
 Post and canvas prices...
 Negotiate on-line...
Trade On-line!
 Buy and sell products...



b2bpricenow.com
 your e-trade partner
 Powered by **UNISYS**

your free and sustainable e-marketplace that provides up to the minute price update on market information for agriculture, consumer manufactures, and industrial manufactures.

■ MARKET WATCH

People in farming communities can now monitor prices or find buyers through the Internet *By LALA RIMANDO*

Electronic Market For Farmers

DOT-COMS ARE A DYING BREED. THIS IS PROBABLY AN exaggeration, but worldwide, businesses solely dependent on the Internet as their medium of trading have been closing shop one after the other. Only the strong are surviving. In the Philippines, one dot-com company is not only surviving. It is actually thriving.

B2Bpricenow.com is an electronic marketplace that caters to—surprise, surprise—the farmers.

The picture of a farmer being tech-savvy may seem far fetched since many in the farming sector have low literacy, let alone have access to the Internet. The answer, of course, is to educate them and expose them to the technology. Connecting the farmers, including those in far-flung areas, is a gigantic task. But efforts are being exerted to make it a reality.

The Department of Agriculture is initiating programs to give farmers a venue for marketing their products more efficiently. Stress has been given to increasing productivity, but often, farmers produce crops that they soon realize have no potential buyers. "The tendency is to end up with a lot of spoils," notes Edgardo Herbosa, a trader by profession.

Herbosa, 36, used to be with Indonesia's Salim Group, where he traded agricultural commodities, construction materials, and chemicals. After obtaining his masters degree from the American Graduate School of International Management, and engaging in the technical field of countertrading, he decided to become a "social entrepreneur."

FARMING WEAKNESS

"I saw that one of the weaknesses of the agricultural sector is marketing," he says.

B2Bpricenow.com, Herbosa's brainchild, aims to address this weakness.

The Internet is the cheapest way to market

the products since it can facilitate and create market encounters between producers and buyers without their incurring traditional expenses such as for rent and labor. In the Internet marketplace, producers can post their production and the buyers' requirements online. For farmers, this will reduce dependency on middlemen, who profit from trading their products. If farmers have easy access to information on the going price for their commodity, they'll be in a better position to price and market their goods. They'll also produce crops needed by buyers.

Ricardo Buenaventura, a rice farmer from Talavera, Nueva Ecija, tells *Newsbreak* how having access to *B2Bpricenow.com* has helped him and his cooperative, *Nagkakaisang Magsasaka*. "This trading venue enables us to monitor prices. We no longer have to travel far, going to a marketplace or trading center, to do that."

Technology costs usually account for most of the dot-coms' capital expenditures. *B2Bpricenow.com* was able to cut down on these. Herbosa and partners were able to persuade Unisys to become their technical partner. In exchange, Unisys got to own 5 percent of Herbosa's company. Unisys is a US-based technology vendor engaged in e-business solution and infrastructure.

As a result of this partnership, B2B's major expenditures like programming and purchase of e-marketplace software, including administration, maintenance, and hosting charges,



were taken out of the cost structure. And *B2Bpricenow.com* can now provide the marketplace for free, Herbosa says.

"If we charged subscriptions for the use of our site, it would have been difficult to move on to the next step."

TEACHING FARMERS

The next step was to approach government agencies with the mandate, network, and resources to reach and educate farmers about the benefits of electronic commerce. Land Bank, which works with cooperatives, became the pioneering partner.

Land Bank personnel teach farmers the ba-



Edgardo Herbosa (right), e-farmer with a cause, wants to speed things up for the hardworking farmer (above)

sics of using the Internet—how to log in, surf, send or receive e-mail. They are also trained to use the *B2Bpricenow* site for trading. The training is free. Herbosa says: "Since I go around the country with the Land Bank team for the information campaign and training, the education component of my business model is taken care of."

The next challenge is to get the farmers connected once they become computer literate. Most of them cannot afford to buy their own

LON FILLON

computers. To enable them to do so, Land Bank gives them loans at no interest.

In many parts of the world, the use of IT in the agricultural sector is one of the keys to alleviate poverty. In the Philippines, where agriculture accounts for 70 percent of the gross domestic product, giving farmers the necessary skills and a channel for marketing their products can ease their burdens, especially those related to marketing their produce.

WORLD BANK AWARD

For helping alleviate poverty through information technology and forging strategic partnerships with the private sector, *B2Bpricenow* was able to get a \$118,000 grant in a World Bank-sponsored contest. It was chosen one of 30 winners in the World Bank's Development Marketplace Competition held January 9-10, 2002, in Washington D. C. There were 2,400 entries from all over the globe.

The judges were reportedly impressed with a feature of the *B2Bpricenow* project that allows farmers to check prices through their cell phones. With mobile phones now very popular all over the country, farmers can use them to canvass prices or post and change commodity prices through the Internet trading site. *B2Bpricenow* has tie-ups with both Smart and Globe for this service.

A large number of Land Bank cooperatives are now covered by the electronic marketing service. Herbosa's company will use its World Bank grant to assist co-ops under the Philippine Rural Reconstruction Movement (PRRM).

Land Bank sent out its own teams to the countryside to train co-op members. In PRRM's case, co-op members will be taught at the training facility of Polytechnic University of the Philippines in Sta. Mesa, Manila, and in other state universities and colleges all over the country.

The grant will be used by Herbosa to donate computers to the 14 cooperatives under PRRM and finance their training. *B2Bpricenow.com* has set up partnerships with computer hard-



TONY PICONILLA

ware companies to become their sole distributor. Similar partnerships are with cell phone companies and other service providers, like logistics firms, insurance companies, and banks. "In exchange for these partnerships, they have to advertise with us," says Herbosa.

REVENUE SOURCE

Like other dot-coms, the *B2Bpricenow.com* website gets most of its earnings from advertisements. "They advertise with us not because we are cute. It's because it makes good business sense," he quips. These companies obviously want to reach out to the farmers, too. Cell phone companies, for example, may claim to have a nationwide reach, but the upper-middle classes still compose most of their users. If they want to go deeper, farmers are good targets.

Another revenue source for Herbosa's company is the 20 percent fee for every SMS (short messaging service) inquiry or transaction, which costs about P2 or P2.50 per text message. It also earns P2,800 a year for web development and hosting services, and a share in the partner banks' settlement fees for on-line payments.

As the market matures, and as the user-base increases, revenues from transactions will account for the bulk of revenues.

PROFITABLE

Herbosa says his company, incorporated in June 2000, or less than two years ago, is already profitable. Many companies take three years to just break even.

Most dot-coms used to depend on venture capitalists for funding. *B2Bpricenow's* business model, attested to by the World Bank, is sustainable even without such financing. "For us to reach out to more cooperatives, we can approach other grant-givers," says Herbosa.

Grant-givers are supporting similar initiatives to bridge the digital divide. A grant from the Canadian International Development Agency, in coordination with Landbank and Thai Farmers Bank, is in the offing so that *B2Bpricenow.com* can be replicated in Thailand.

Other government agencies want to partner with *B2Bpricenow*. The Department of Trade and Industry wants small and medium enterprises to post and canvass commodity prices for their products.

NO STRINGS PULLED

Herbosa proudly claims that his company did not need to "pull strings" to get these agencies to tie up with them.

Right now, it has expanded to cater to other industries. From an agricultural marketplace, it has taken in construction and chemical commodities.

There are still loose ends to tie up. For example, Gil Melendres of Acres Multi-purpose Cooperative in Valencia City, Bukidnon, is eager to jump in but says facilities for on-line payments are still not in place.

Despite this, *B2Bpricenow.com* is showing that Filipino entrepreneurs can and do make a difference. ☐

2003 CALENDAR

b2bpricenow.com
your e-trade partner Powered by **UNISYS**

The image shows a 2003 calendar with a green header. Below the calendar is a photograph of two men in a field; one is wearing a hat and holding a mobile phone, while the other is looking at it. The b2bpricenow.com logo and 'Powered by UNISYS' are overlaid on the photo.

To check prizes using text (SMS)

- 1) Go to Write Message
- 2) Type **b2b <Region> <Product>**
- 3) Send to **2333** for Globe users, **211** for Smart users,
- 4) Wait for reply.

Example:

b2b R3 Rice
b2b CARAGA Fruits

Winner of the Marketplace
Development 2001 Competition

* PHP 2.50 for every message sent
for Globe and Smart subscriber



REGION

1 2 3 4 5 6 7 8 9 10 11 12
CARAGA CAR MM

PRODUCT

RICE
CORN
MEAT
FISH
VEGETABLES
FRUITS
OIL
SUGAR

Endorsed as the official e-marketplace of the
Philippines for Agriculture & Fisheries Sector by



Senate of the Philippines



House of Representatives

The Congressional Oversight Committee on Agricultural
& Fisheries Modernization (COCAFAM)



13.2.2 Expert Trade

EXPERTRADE REGISTRATION FORM				
<p>Fax to ICM (c/o Pia): 878-0630 or e-mail to expertinfo@exportbank.com.ph or deliver to Internet Channel Management, Exportbank, 20 F, Chino Roces corner Sen. Gil J. Puyat Avenues, Makati City, or to any Exportbank branch nearest you. Call 878-0641 for more information.</p>				
Name:	Company Name & Address:			
Position/ Title:				
Cellphone:	Office phone:			
E-mail:	Fax No.			
Existing Website address (if any)	Exportbank Deposit Acct No. (if any)			
Options: <input type="checkbox"/> Please link our existing website to Expertrade	<input type="checkbox"/> None, but we agree to open a deposit account upon Exportbank's approval of this registration form.			
Present Market: <input type="checkbox"/> Local <input type="checkbox"/> Export What Countries? _____ _____ _____ _____	Attachments (optional, to facilitate Web setup. Can be sent later) <input type="checkbox"/> Sample Company Logo <input type="checkbox"/> Catalog/ List of Products & Services <input type="checkbox"/> Brief Company Background <input type="checkbox"/> Company Brochure (if any) <input type="checkbox"/> List of Persons authorized to access orders, send quotations, change catalog details.			
Type of Business & Products:				
<p>Yes! We are interested to subscribe to Expertrade.com.ph as a founding member. I understand that this is subject to compliance with Exportbank requirements to qualify for this service and that Exportbank reserves the right to accept or reject any application for the service. I understand that annual service subscription charges will be waived by Exportbank as long as we qualify for the service.</p>				
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Signature over Printed Name	Date			
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anytime, any day, from anywhere
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Just by logging on to www.exportbank.com.ph, I can access my Exportbank accounts conveniently wherever I have Internet access!

I can also carry out any of the following transactions:

- > Inquire about my balances
- > View my Mini Statement of Account
- > Transfer funds
- > Pay my bills
- > Reorder checkbooks
- > Order manager's checks
- > Order gift checks
- > Apply for loans

and do many other EXPERTbanking services!

It's banking with **EXPERT ONLINE** on the net! Even if I am just an average computer user, it's so easy to transact through www.exportbank.com.ph!

It's secured by **EXPERTS!** All my online transactions are protected by state-of-art e-commerce security technology, Verisign, that meets US military encryption standards. Internet banking through www.exportbank.com.ph is another convenient and efficient service in addition to Exportbank's advanced line of electronic banking facilities: *EXPERTeller ATMs, and EXPERTphone mobile banking.*

Thanks to Exportbank's banking expertise, I can now bank with **EXPERT ONLINE!**

Register Now! Visit www.exportbank.com.ph or the nearest Exportbank branch! You can also email expertinfo@exportbank.com.ph or call 878-0641 to 43.



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Maktye Business Park, Alabang Ave.
Ayala Alabang, Muntinlupa
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850-5699 to 72 / 850-5684
Fax No. 850-5693

Exportbank Binang
ACE Tower 1 Building #211
Binang St., Quezon City
Tel. Nos. 740-1297 / 740-1241
740-1402 / 740-1142
Fax No. 740-1234

Exportbank Caloocan
Augusta Building
478 Road Avenue Extension
468 8th and 10th Avenues, Caloocan City
Tel. Nos. 365-4302 / 365-4318
Fax No. 365-8702

Exportbank Chino Roces
G/F Exportbank Plaza
Sen. Gil J. Puyat corner Chino Roces
Avenue, Makati City
Tel. Nos. 887-9972 to 79
887-9992 to 89
Fax No. 887-9999

Exportbank Ermita
Victoria Condominium
41 Arroyo St., San Juan City
Tel. Nos. 721-4591 to 92 / 724-8351
723-9069 / 721-0003

Exportbank Juan Luna
694-696 Juan Luna corner
Dra. Elena Serrano, Brno, Manila
Tel. Nos. 244-7045 / 243-2079
243-2102
Fax No. 244-7048

Exportbank Las Pinas
172 Alabang Zepeda Road
Pampanga, Las Pinas City
Tel. Nos. 543-7037 / 543-6778
Fax No. 543-6767

Exportbank MRT Movement
Level 2, Ever Grande Grand Central
Rizal Avenue, Caloocan City
Tel. Nos. 363-1169 / 363-6995
Fax No. 363-1170

Exportbank Malabon
14 Doc Pineda Avenue
Concepcion, Malabon
Tel. Nos. 281-8065 / 281-7585
281-8068 / 281-8047
Fax No. 282-5808

Exportbank Mendaya
613 Blue Maroon Bldg.
Boni Avenue, Mendaya City
Tel. Nos. 533-5545 / 533-3599
Fax No. 533-3561

Exportbank Muntinlupa
34 National Road
Rizal, Muntinlupa City
Tel. Nos. 855-9147 / 565-8955
Fax No. 855-9141

Exportbank Origas
G/F Pacific Center Bldg.
San Miguel Avenue
Origas Center, Pasig City
Tel. Nos. 838-4604 / 810-1067
Fax No. 838-4423

Exportbank Roxasville
G/F 542 Center, Kalayaan Avenue
cor. Don Pedro St., Makati City
Tel. Nos. 889-7325 / 889-0010
889-8321
Fax No. 889-7918

Exportbank Rufin Pacific
G/F Rufin Pacific Tower Bldg.
Arla Avenue cor. Rufin St.
Bermily Herrera Dr., Makati City
Tel. Nos. 812-1896 / 813-2308
813-2014 / 813-1888 / 813-8084
Fax No. 813-1878

Exportbank Subicville
G/F Subicville Towers
169 H.V. Dela Costa St.
Subicville, Zambales City
Tel. Nos. 843-3261 / 843-3639

Exportbank Sucat
Overseas Center
Dr. A. Serrano Avenue, Parañaque City
Tel. Nos. 826-4121 / 826-4123 / 826-4183
826-4216 / 826-4742

PROVINCIAL BRANCHES

Exportbank Angeles
343 Sta. Rosa St.,
Algebra City, Pampanga
Tel. Nos. (045) 888-6746 / (045) 352-1350
(045) 888-6755
Fax No. (045) 352-1351

Exportbank Bacolod
MTC Bldg., Linaon cor. Heneral Streets
Bacolod City
Tel. Nos. (034) 433-3690 to 93 / 433-0001
Telex (034) 433-0194

Exportbank Cabanatuan
543 Villamor Bldg., Quizon District
Maharlika Highway, Cabanatuan City
Tel. Nos. (044) 483-0183 to 97
Fax No. (044) 483-0192

Exportbank Capayan De Oro
Jehonor Bldg., Morice corner
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(0882) 857-4307 / (0882) 721-403
Fax No. (0882) 721-6556

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(032) 233-4980
Fax No. (032) 232-4995

Exportbank
Cebu Business Park
Ayala Life/CGI Center
Cebu Business Park
Mindanao cor. Birhan Road, Cebu City
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233-7471 / 233-7596 / 233-7599
Fax No. (032) 233-6918

Exportbank Dagupan
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Dagupan City
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(027) 519-0246 to 47
Fax No. (027) 523-1772

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Abasco Commercial Bldg.
4 C.M. Risco St., Davao City
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(033) 339-9000
Fax No. (033) 339-9676

Exportbank Iruag
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Agumbato Highway, Iruag, Cebu
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Fax No. (048) 471-0729

Exportbank Sta. Rosa
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Barbago, Sta. Rosa, Laguna
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Bantale, Manila

Exportbank Escalante
2124 Mabini Building
Escalante cor. T. Puyat Streets
Bantale, Manila

Exportbank Laguna Village
Ental Bldg., 855 Pines Road corner
Aronson St., Laguna Village, Makati City
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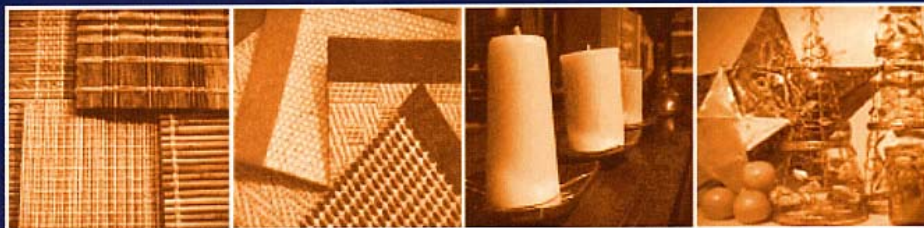
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13.3 Appendix C: E-Readiness and IT Indicators: East Asian APEC Economies

A number of research studies have been conducted in recent years to assess e-commerce readiness in East Asian economies. This section includes excerpts from the work done by the Asian Development Bank, the World Bank and a special report from the National Electronics and Computer Technology Center (NECTEC) of Thailand that is an official APEC report and was distributed to the APEC TEL in March 2003. This information provides a working context for understanding the environmental issues associated with the case studies in the Philippines and Indonesia.

13.3.1 E-Commerce Readiness in East Asian APEC Economies:

A Precursor to Determine HRD Requirements and Capacity Building (Thailand reports to APEC Telecommunications and Information Working Group, December 2002)

(Executive Summary) “This study seeks to capture the current trends of e-readiness in East Asia, assess its relative competitiveness against its peers, and proposes a set of policy recommendations to build human resources capacity to support e-commerce.”

(Findings) “As expected Singapore; Hong Kong, China; Chinese Taipei and Korea lead the region in their ability to capitalize on the information revolution to sustain their economic engine. The rest of East Asia, however, while recording significant progress in deploying national information and telecommunication infrastructures, appears to lag behind due to its lack of resources, principally drained by the vast size of its economically disadvantaged populations.

Also, our data tend to substantiate the increasing role of information technology in promoting national wealth. East Asia has remarkably improved its national and communication infrastructures. There are reasons to believe the information revolution has been a crucial driver for improving economic, political and social conditions. In fact, improved and less costly use of information technology has facilitated information flow within and across national boundaries, accelerated participation in global trade and increased press freedom. Promoters of information technology use should claim credit for this trend.

Last but not least, the most intriguing cue that emerges from the set of 52 e-commerce readiness indicators is that non-technology factors such as education, economic stability and attitude toward risk, are as important as technology factors for any economy to fully reap the benefits of digital progress.”

(Recommendations for APEC):

1. Continue to analyze the impacts of ICT on each member economy and on specific sectors.
2. Support the developing economies within APEC by providing information regarding opportunities, and lessons learned.
3. Act as a coordinator and facilitator.
4. Encourage regional cooperation in the expansion of ICT infrastructure.
5. Support public campaigns to raise awareness about potential business opportunities that the Internet offers.
6. Facilitate the adoption of ICT related standards (e.g. payment systems, intellectual property rights, privacy, encryption, and signatures).
7. Offer training and education in relevant fields.

(Definition of E-Readiness):

“E-readiness can be defined as the aptitude of an economy to use Internet-based computers and information technologies to migrate traditional businesses into the new economy, an economy that is characterized by the ability to perform business transactions in real-time – any form, anywhere, anytime, and at any price. E-readiness reaches its optimal level when the economy is able to create new business opportunities that could not be done otherwise.”

(Importance of E-Readiness):

- The level of e-readiness can be a strong predictor of how well an economy can perform in the new economy.
- An e-readiness assessment provides policy makers with a detailed scorecard of their economy’s competitiveness relative to its international counterparts.

Appendices

- A breakdown of indicators allows policy analysts to pinpoint areas of strengths and weakness, thus providing a balanced perspective in guiding an economy through the digital revolution.

(Framework of Measuring E-Readiness):

“The Six Dimensions of the New Economy:

1. Immediacy – a market driven by fast, if not immediate, supply and demand reactions.
2. Re-intermediation – use of the Internet to conduct trade reduces or, in certain circumstances, eliminates, the needs for intermediation. Middlemen are no longer needed when producers are able to retail to the buyers directly. With new ways of online selling, system integrators and e-marketing research are examples of new intermediaries.
3. Knowledge and innovation – the new economy is driven by knowledge in which only enterprises with innovative capabilities can remain competitive. Human capital is becoming an ever more important asset.
4. Integration and internetworking – Internet technologies allow companies to extend the supply chain beyond its traditional physical borders. E-commerce makes it possible for companies to become transnational, reaching global markets.
5. Virtualization – although goods and services remain “real” and serving “real” customers, businesses that offer these goods and services can be virtual.
6. Convergent and diverging forces of the new economy – while technologies are helping businesses to team up as partners providing fast, efficient, and integrated services to their clients, they also reshape the basic structure of societies affecting the lifestyle of global citizens.

We have defined our readiness framework as being comprised of eight global factors, each of which can be measured by a set of specific variables. We contend that the 52 variables used for this study should provide a rather representative assessment of the e-readiness status of the APEC members.

Based on the characteristics of the new economy and the requirements of a nation and its businesses to join the e-market place, there are three basic building blocks that need to be put into place:

- Basic Infrastructure – technological, financial, legal and regulatory framework;
- Supply – ability of an economy to produce innovative products that meet the constantly changing, increasingly demanding needs of the global customer;
- Demand – ability of an economy to possess a strong customer base.

Knowledgeable Citizen: refers to the ability of an economy to possess citizens who can live and work effectively in a knowledge-based economy.

Access to Skilled Workforce: creating and nurturing a trained workforce is essential for expanding enterprises and governments seeking to attract high-technology and information technology companies.

Macro Economy: economic climate and business environment favorable to trade development.

Digital Infrastructure: despite significant improvement in the building of computer and telecommunications infrastructure, most of East Asia still lags behind developed economies. Mobile telephony and computing seems to be an important development factor given the dispersed geographical nature of several APEC economies.

Competitiveness: in a knowledge-based economy, innovation and creativity via R&D and higher education are critical for global competitiveness.

Culture: having a culture that is open or familiar with foreign influence could facilitate international trade using e-technology. A young urban population with fluency in English should provide a culture that is sufficiently international to deal with cross-border electronic commerce.

Ability and Willingness to Invest: having a business environment that is conducive to foreign investment.

Cost of Living and Pricing: the underlying assumption is that the wealthier the citizen, the more inclined he/she is to engage in e-commerce transactions. GDP per capita is taken as one of the indicators for wealth. There is a wide disparity in the purchasing powers across East Asian economies.

Philippines Scorecard:

Global Factor	Score	Ranking (out of 10)	Ranking for Thailand	Ranking for Indonesia
Knowledgeable Citizen	3.50	5	5	7
Access to Skilled Workforce	2.50	6	5	8
Macro Economy	2.33	7	5	8
Digital Infrastructure	2.20	6	7	9
Competitiveness	2.29	6	5	9
Culture	4.25	2	6	6
Ability, Willingness to Invest	2.00	6	5	7
Cost of Living and Pricing	2.67	4	3	3
Overall Ranking		7	6	10

Ranking for all East Asian APEC Economies:

Singapore	1
Hong Kong, China	2
Chinese Taipei	3
Korea	4
Malaysia	5
Thailand	6
Philippines	7
China	8
Viet Nam	9
Indonesia	10

13.3.2 Asian Development Bank:

Information and Communication Technology in Developing Countries of Asia (2002)

Philippines: “The ICT industry has a significant presence in the Philippines. Many of the ICT-related manufacturing activities are relocated production facilities of Japanese firms. SITC 75-77 goods constitute a huge part of Philippine exports (69% of total exports in 1998), and most of these go to the United States. The country has abundant educated and skilled personnel, but their potential has not been fully used for ICT development. There are 20 PCs per 1,000 persons and about 265 Internet users per 10,000. The availability of ICT-related infrastructure is limited and confined to Metro Manila and its neighborhood.”

Thailand: “In comparison with Singapore and Malaysia, Thailand has a relatively less-developed ICT sector, especially outside the urban metropolis of Bangkok. With 24 PCs per 1,000 persons and 266 Internet users per 10,000 persons, the use of PCs and Internet access are available to only a small segment of society. Aspirations for ICT development are high however, and the country produces significant amounts of PC components. The Government has launched the development of Phuket as Thailand’s cyber island. That the economy is still to recover fully from the 1997 Asian economic crisis constrains further ICT development to some extent, and inadequate numbers of high-level scientific and technical personnel also hamper progress.”

13.3.3 World Bank: IT Indicators (2000)

Indicator	PH	TH	ID	SG	JP
Telephone lines (per 1,000 people)	40	86	31	485	558
Mobile telephones (per 1,000 people)	84	44	17	684	526
PCs (per 1,000 people)	20	24	10	483	315
Internet hosts (per 10,000 people)	2.50	10.50	1.25	492	366
Internet users (per 10,000 people)	266	266	68	2987	3044

13.4 Appendix D: b2bpricenow Training Manual

B2B PriceNow Training Manual

Module I: Computer Parts and its Uses / Terms and Jargons

1. Introduction to Computers

What is a computer?

A computer is a device that:

- Accepts data
- Processes data
- Stores data
- Produces output

What kind of input can a computer use?

- Computer input is whatever is put into the computer system supplied by a person or another computer.
- An input device gathers and translates data into a form that a computer can process.
- The keyboard is the most commonly used device.

How can a computer process data?

- Data refers to the symbols that describe people, events, things and ideas.
- Computers manipulate data in many ways: This is called processing data. A Process is called a series of actions that a computer uses to manipulate data.
- Some ways computers can use data: performing calculations, sorting list of numbers of words, changing documents and graphics, and drawing graphs.
- A computer processes data in a device called Central Processing Unit (CPU) (ex. Pentium I, II, III)

Why does a computer store data?

- A computer must store data so that it is available for processing.
- Most computers have more than one place for storing data – one place while it is waiting to be processed and another place when it is needed for immediate processing.
- Memory is the area that holds data that is waiting to be processed. Often times it is referred to as RAM (Random Access Memory).
- Storage is the area where data can be left on a permanent basis while it is not needed for processing. Storage refers to either the hard drive or floppy diskette drives.

What kind of output does a computer produce?

- Computer output is the result produced by the computer.
- Examples of outputs include reports, documents, music, graphs and pictures.

What is Hardware and Software?

Hardware is the physical components of the computer. Software is the applications used on the hardware.

2. Overview of the Hardware Components of a Computer System

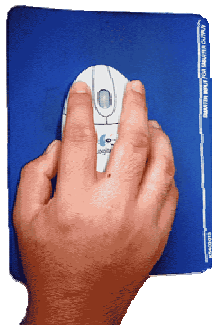
A Computer system can be broken down into several components: input device, output device, storage device, memory, and the microprocessor.

The input device, output device, storage device are peripheral devices as they are attached to the computer. Each component has its own function but most work in conjunction with the other components



Input Devices

- Keyboard – the typewriter look-alike that allows the user to input information into the computer
- Mouse – allows users to navigate around the operating system and the Internet.



How to Use the Mouse:

- Left Click
- Right Click
- Double Click
- Drag & Drop

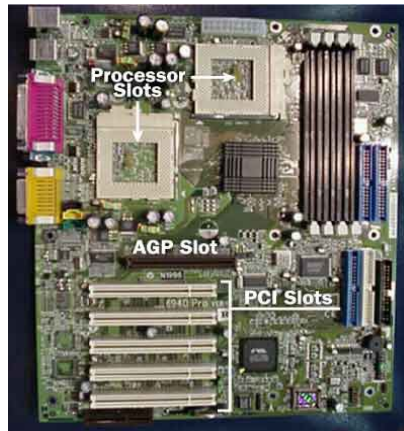
Output Devices

- Monitor – the TV-like object that displays information on the screen for the user.
- Printer – displays information on paper for the user.

Storage Devices

- Hard Disk – a large area of storage in your computer
- Floppy Disk – can permanently write and re-write data on diskettes. Today's 3.5 floppy disk can store 1.44 megabytes of data.
- CD ROM – a device that retrieves data from a CD ROM disk.
- CD Write – use for backing up programs.

What's inside the Computer Case?



- Motherboard – the main circuit board of a microcomputer. Contains the connectors for attaching additional boards. The motherboard contains the CPU, BIOS (Basic Input Output System), Memory, etc.
- RAM (Random Access Memory) – all memory accessible at any instant by the processor.
- Processor – a solid state central processing unit much like a computer on a chip.
- Video Card – responsible for producing visual input from your computer.
- Sound Card – an expansion board that enables the computer to manipulate and output sounds.

Other Peripherals

- MODEM (Modulator/Demodulator) – a device that enables the computer to transmit data over telephone lines.



3. Recommended H/W Specifications

- ASUS Motherboard
- Pentium III 500Mhz or faster
- 64MB RAM or larger
- 10GB Hard Disk or larger
- 24X CDROM Drive or faster
- 1.44MB 3.5" Floppy Drive
- 8MB Video Card or larger
- 16bit Sound Card
- 14" SVGA Monitor
- 56Kbps External Modem
- 500W AVR

Module II. Basic Operating System: Windows

Operating Systems

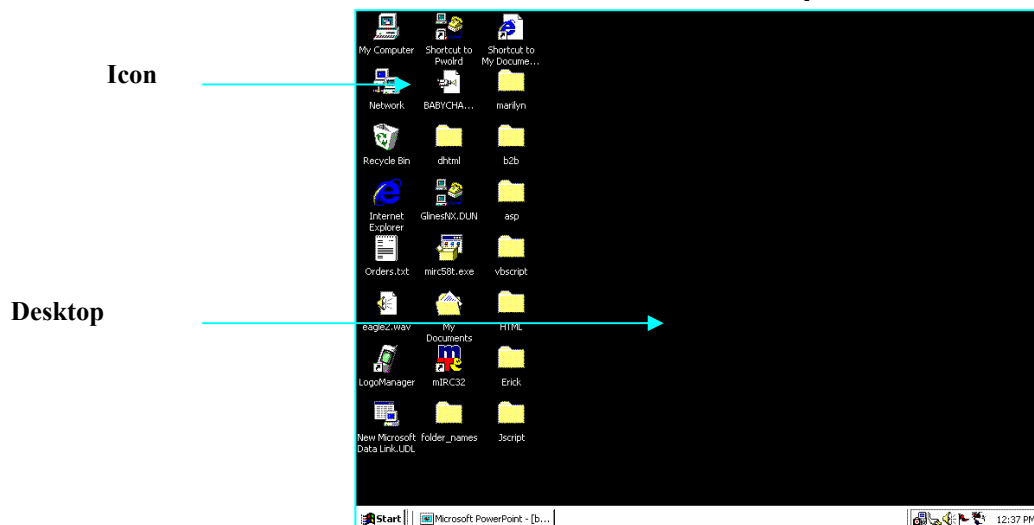
The main function of the operating system is to act as an interface between the user and the hardware components that have been outlined so far. The primary function is performed by coordinating and supervising the activities of the computer.

Windows is a big program that is called an operating system. It is the master program that runs all other programs you used on your computer. It is also the program you use to give your computer instructions and to make it do things.

Other Operating Systems

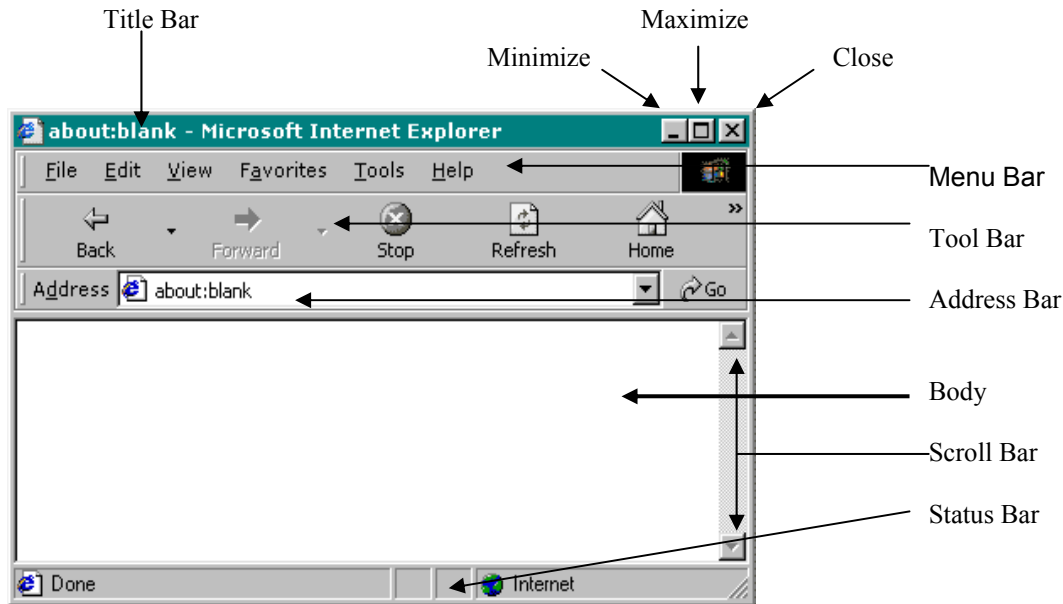
- UNIX
- LINUX

Windows Desktop



- GUI-Based (Graphical User Interface) as represented by “icons”.
- Multi-Tasking – can work on a program while running another one.
- Plug-n-Play – (describe)
- No need to memorize commands.

Parts of the Program Window



Module III. Basic Systems II: Internet, E-Mail, and Connectivity

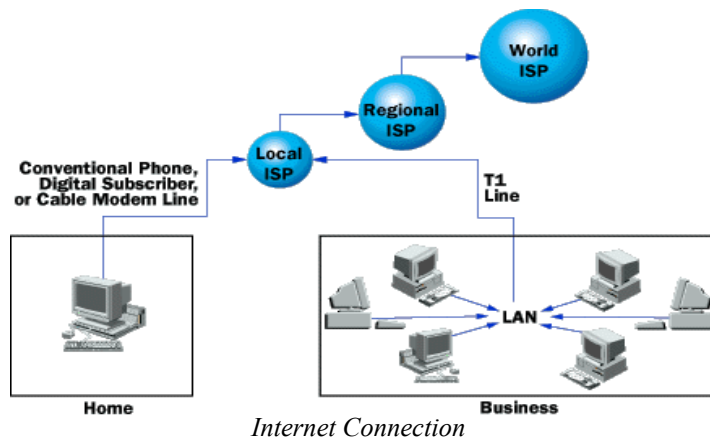
1. Introduction to the Internet

What is the Internet?

Breaking down the word Internet reveals exactly what the Internet is. The prefix “inter” means “Between” and the suffix “net” is short for “networks”. Therefore, the Internet is a virtual world that exists between computer networks located in different parts of the world.

It is also known as the World Wide Web or the Information Superhighway.

The most common uses of the Internet are Internet Surfing and E-Mail.



2. What Do You Need to Get Online?

2.1 Hardware

- Personal Computer (Monitor, CPU, Keyboard, and Mouse)
 - Pentium-based
 - 64Mb RAM (Memory)
 - 50Mb free hard disk space
- Modem - Speed of 56 Kbps (kilo bits per second)
- Telephone line

2.2 Software

- Windows 95 / NT / 98 / 98 Second Edition / 2000 / Millenium Edition
- Dial-Up Networking
- Internet Explorer

2.3 Internet Service Provider (ISP)

ISP – is an organization, such as America Online, Netcom, Infocom, and PhilWorld. They give you access to the Internet. All ISP's are not the same, and it is importance that you select one that meets your needs.

Things to Consider in Choosing an ISP

- Performance – An ISP's performance is determined by its accessibility and speed.

- *Accessibility* refers to the ISP's ability to actually get you online through multiple access numbers or trunk-lined phone numbers.
 - *Speed* refers to the rate at which the ISP connects you to the Internet. Most ISP's support a minimum of 28.8 Kbps. That's considered as the minimum speed you should be using for browsing the Internet.
- Technical Support – At one time or another, everyone needs assistance in setting up or maintaining their Internet account. Most ISP's have technical support staff available to assist you during these times.
- Tools – Of course you'll want to have access to the tools you need to use the Internet. At a minimum, you'll need the following:
- A browser to surf the Internet

A Browser is a program that allows a person to read and view the contents of a web page (ex. Internet Explorer, Netscape Navigator).
 - An e-mail software to communicate with others electronically

This e-mail software is where you read or delete received messages and send new messages (ex. Outlook, Eudora)
- Coverage of Operation (National or Local)
- National providers offer service to users across the Philippines (ex. Infocom). Businessmen or those who travel around the country prefer this.
 - Local providers operate in a specific geographical location only (ex. Manila only ISP's, Davao only ISP's). This is recommended for home users only.

3. What are the Types of Internet Connections?

3.1 *Dial-up PPP (point-to-point protocol) connections.* With PPP connections, you dial your computer into a host computer that's directly connected to the Internet. Dial-up connections are the most common ones used among home users.

- 3.2 *Dial-up terminal connections.* Just as in a PPP connection, in a dial-up terminal connection, you dial your computer into a host computer. Once you're connected to that computer, your computer simply acts as a "dumb" terminal.
- 3.3 ISDN connections. An ISDN (Integrated Service Digital Network) is a digital telephone service that works over existing telephone lines. ISDN supports very high data transfer rates and allows users to speak on the phone even while online. ISDN service is better suited for business than for home users. However, it's costly to set up and maintain and isn't available in every geographical location.
- 3.4 *Cable Internet.* Many cable TV companies now offer cable modem connections at fast transfer speeds. This technology uses a special external modem that translates signals from the TV cable to information that the PC can understand. This special modem is then connected to the PC with a network interface card (NIC) and a network hub.
- 3.5 Digital Subscriber Lines (DSL). DSL refers to all types of digital subscriber lines. Similar to ISDN, DSL technology uses copper telephone wires to transfer information over a short run (less than 20,000 feet) between a switching station and your home or office at very high speeds).

4. Internet Surfing Basics

- 4.1 *Browser* – a browser is a type of software, a sort of translator. With web browsers on our computers, we can see and understand digital data. For a browser to work, it must connect to the Internet through an Internet Service Provider or ISP.

Both Netscape (Netscape Navigator) and Microsoft (Microsoft Internet Explorer) offer free copies of their browsers to anyone who would like to use them. You can download this software from their websites at <http://www.netscape.com> and <http://www.microsoft.com> respectively.

- 4.2 *Uniform Resource Locators* - To go to a site on the Web, you must type their Uniform Resource Locator (URL) in the address bar. A URL is an address for a document or a website on the Internet. The format for the URL is:

Protocol://pathname.

Here's a sample URL <http://www.b2bpricenow.com>

http:// Most URL's begin with this prefix, which stands for hypertext transfer protocol. Other prefixes include ftp:// (file transfer protocol) and gopher://

www. The letter www tend to be a standard part of a web address, they stand for World Wide Web.

B2bpricenow.com This is the domain name or the name of the host computer where the site is located. The *com* (after the dot) of a domain name distinguishes the kind of institution or organization that provides you with the account. For example, if your account is provided by a commercial service like b2bpricenow, it will be "com". If your accounts originated with an educational institution, it will be "edu".

Common domain abbreviations:

- com - commercial organization
- edu - educational institution
- gov - government
- mil - military organization
- org - organization
- net - network
- int - international organization

4.3 *Searching the Internet*

One way to find information in cyberspace in by using search engines. Many different search engines are available on the web. Because there are millions of pages on the Web, search engines were created as a way of searching through all these pages to find the ones pertinent to your research or personal interests. At the most basic level, you enter words, called *keywords*, relevant to your search. Then, you tell the engine to search through its database of websites to find only those sites that contain the word or words you entered. When it finishes searching, the search engine provides you with a list of the sites found. This list not only identifies each Web Site by name, but it also provides a link so that you can go directly to that site.

Using Web Search Engines

Suppose you'll search for information on Manila Super Mango in the Philippines. The words you might use for the search are Manila, Super, Mango, and Philippines. There are several ways to phrase your search so you get the best results.

Here are three of the basic ways of searching that are simple and yield powerful results:

1. Boolean

The term Boolean refers to a system of logical thought developed by the English mathematician and computer pioneer, George Boole. In Boolean searching, and AND between two words, for example, “Manila AND Mango”, searches for the documents containing both of the words. An OR operator between two words, “Manila OR Mango”, searches for documents containing either of the words. Putting the operator NOT between two words, “Manila NOT Mango”, will give you documents that include the word Manila, but not the word Mango.

2. Double Quotes

Double quotes tell the search engine that you’re looking only for single phrases. A search for Manila Super Mango without quotes will yield very different results from a search for “Manila Super Mango” with quotes. The first search will find all the documents that contain these words; the second will yield only those documents that have the three standing together as a phrase.

3. The Plus Sign (+) and Minus Sign (-)

The plus sign (+) tells an engine what words must be included in the results, while the minus sign (-) tells the engine what words must not be included. For instance, if you’re looking for any mango other than Manila Mango, you could limit the search by typing mango-Manila. The position of the + and – signs should be adjacent with no spaces.

4.4 *Other resources on the Internet*

The Internet grows daily. Practically every company, every interest, every government entity has a site. If you need help with any aspect of being a consumer, the Internet is the place to turn.

4.4.1 Banking

You can access your account, check balances, transfer funds, and pay your bills all from the comfort of your home computer through the Internet. The next time you’re at the bank, ask about banking online.

4.4.2 Shopping

The number of stores and manufacturers with online sites grow daily. They range from clothing, CD's, and books to sending flowers via online. Search for products or business from which you would like to buy and see if they're available. You will have a virtual shopping cart where you can place all the products you wish to buy. Once you're done shopping, you will then enter your shipping and payment details. Your order will be brought to your doorstep.

4.4.3 Health

Telemedicine is increasingly popular. Many hospitals have web sites that describe their services and even provide health professionals to answer questions about sickness, health, and medicine that people e-mail to them.

4.4.4 Education

Most colleges and universities now offer some online programs and there are even a couple of reputable institutions that operate only in cyberspace. You can chat with your classmates and download course notes straight from the Internet.

4.5 On Privacy

These days, many reliable sites have published privacy statements. If you do offer personal information, see if the privacy statements are available and read what they intend to do with the information that you're about to give them. Having a privacy statement is no guarantee, of course, but it does indicate that the site has concern for its user's welfare.

4.6 On Security Measures

Whenever you transact online (ex. giving out credit card details), make sure that the protocol on the URL box is "https" or that the "lock" icon (drawing) at the bottom of the browser exists. This means the site is using the Secured Sockets Layer (SSL) protocol in passing the information you will be providing. This prevents intruders from accessing your very confidential and private information.

5. Electronic Mail or E-mail

Electronic mail or e-mail lets you communicate with people all over the world in matter of seconds. You can send unlimited-length messages to and receive messages from anyone with an e-mail account anywhere in the world. Like the postal service, messages are delivered to a “mailbox”, which the recipient then accesses at his or her own convenience.

5.1 E-mail addresses

Internet e-mail addresses generally take the following form:
[username@domain.com](#)

Username – The name you select as your account name. Most people try to select a username that’s easy to remember. Using parts of your real name is a good idea. For example, if your name is Juan dela Cruz, you might choose *juandelacruz* or *jdacruz* as your username.

Domain – is the name of the computer that “hosts” or houses your e-mail mailbox. This is generally the name of your ISP. For example, if Yahoo hosts Juan dela Cruz’s account, his e-mail address might be *jdacruz@yahoo.com*.

.Com – The last 3 letters (after the dot) of a domain name distinguishes the kind of institution or organization that provides you with your account.

5.2 Creating E-mail Account (*Using Yahoo*)

- 5.2.1 Type in the address box the URL of Yahoo for E-mail, that is, <http://mail.yahoo.com>, then press Enter.
- 5.2.2 Right click on the Sign In Portion. The application form for opening an e-mail account is flashed on the screen.
- 5.2.3 Fill out the form with the details required, then click "Submit".

5.3 Login/Sign In

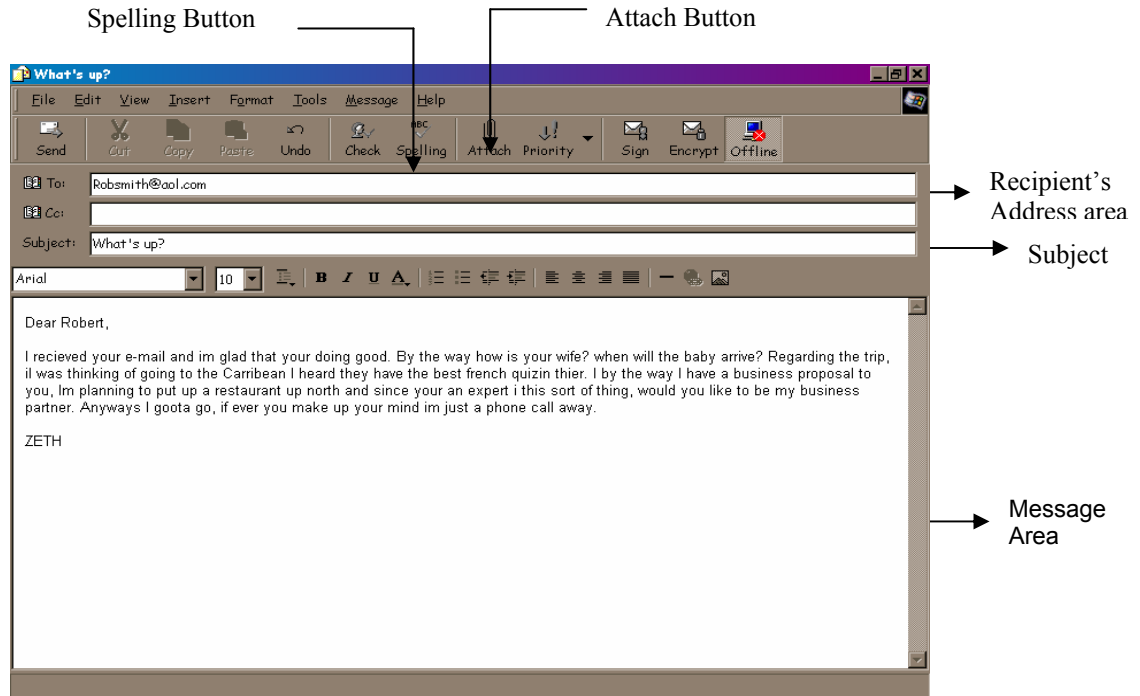
- 5.3.1 Enter your Yahoo ID (username) and Password
- 5.3.2 Click on [Sign In]

5.4 Writing New Messages

- 5.4.1 Login
- 5.4.2 Click on [Compose] or [New Message]
- 5.4.3 Enter the required fields:

- To - type the email address of the recipient
- Subject - type in the subject of your message
- Body - type in your message

5.4.4 Click on [Send]



A typical e-mail form looks like.

5.5 Reading Messages

- 5.5.1 Login
- 5.5.2 Click on [Check Mail] or [Inbox]
- 5.5.3 A list of messages will be displayed. Click on the Subject of the message you wish to read.
- 5.5.4 When done reading the message, you can go back to the list by clicking on [Inbox] or [Check Mail]
- 5.5.5 Note that a message that was read has a different color attribute than the unread ones.

5.6 Replying to Messages

- 5.6.1 Read the message
- 5.6.2 Click on [Reply]
- 5.6.3 Enter necessary fields similar to Writing New Messages
- 5.6.4 Click on [Send] then a confirmation that the message has been sent will be displayed.

5.7 Deleting Messages

5.7.1 Go to the list of messages

5.7.2 Check the box beside the message(s) you wish to delete.

5.7.3 Click on [Delete]

5.8 Logout/Sign Out - Click on the [Sign Out] link.

6. Connecting to the Internet

Procedures in connecting to the Internet

1. Secure an Internet Account
2. Connect the modem (Hardware)
3. Install the modem's driver (Software)
4. Create the Connection
5. Connect
6. Open Internet Explorer

6.1 Secure an Internet Account

6.1.1 Choose between Prepaid (preferred) or Plan

6.1.2 Choose an ISP

6.1.3 Get the following Internet Account Information:

- Username
- Password
- Access Number(s)
- Primary and/or Secondary DNS (optional)

6.2 Connect the Modem (H/W)

6.2.1 Connect the modem to the computer through the serial (COM) port.

6.2.2 Connect the modem to the phone line through the phone jack.

6.2.3 Connect the modem to the AC outlet through its adapter.

6.3 Install the modem's driver (S/W)

Note: Modems usually have CD's that automatically run when inserted in the CDROM drive. Choose [Install Driver]. If not...

6.3.1 Double-click the icons representing the [My Computer]-[Control Panel]-[Modems]; or if no icon, click on [Start]-[Settings]-[Control Panel]-[Modems]

6.3.2 Click on [Add...]

6.3.3 Follow the instructions in installing the modem driver. Choose the exact modem model as much as possible.

6.4 Create the Connection

6.4.1 Double-click the icons representing [My Computer]-[Dial-Up Networking]-[Make new connection]

6.4.2 Follow the instructions in creating the connection. Use access number(s) you gathered from "Secure an Internal Account".

6.4.3 Right click on the connection and choose [Properties]

6.4.4 Uncheck the "Use area code and Dialing Properties" box

6.4.5 Click on the [Server Types] tab above

6.4.6 Uncheck "Log on to network", "NetBEUI", and "IPX/SPX Compatible"

6.4.7 If your ISP did not give you DNS entries, skip to Step 11

6.4.8 Click on [TCP/IP Settings...]

6.4.9 Choose "Specify name server addresses" and enter the Primary and/or Secondary entries

6.4.10 Click [OK]

6.4.11 Click [OK]

6.5 Connect

6.5.1 Double click on [My Computer]-[Dial-Up Networking]

6.5.2 Double click on the connection you created (the icon)

6.5.3 Enter your username and password then click on [Connect]

6.6 Open Internet Explorer

You can open Internet Explorer through several ways:

6.6.1 Click on [Start]-[Programs]-[Internet Explorer]

6.6.2 Double click the [Internet Explorer] icon on the desktop

6.6.3 Click on the Internet Explorer (e) logo on the Quick Launch Bar

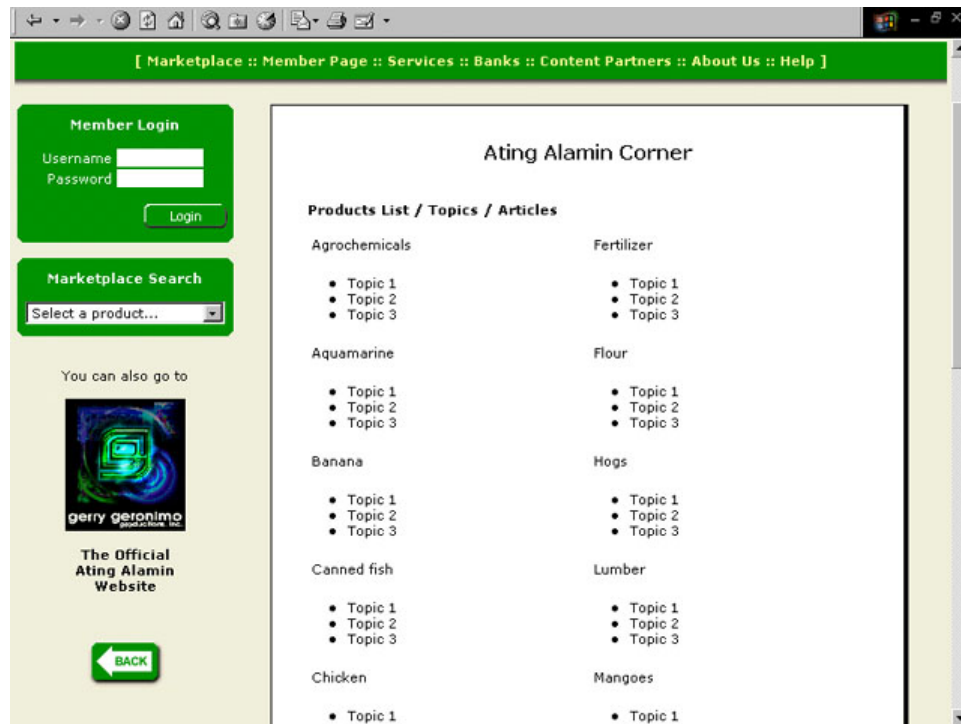
Module IV: B2BPRICENOW.COM

1. What is B2Bpricenow.com?

B2B	-	Business to business
Price	-	The most important marketing information
Now	-	Up to the minute price update
Com	-	Commerce or commercial

2. What are the things you can do at B2Bpricenow.com?

- 2.1 *Canvass Prices* - users, whether member or non-member, can browse the marketplace menu and preview the current prices of agricultural commodities of their interest as posted by member buyers and sellers.
- 2.2 *Research* - The 25-year program Ating Alamin provides the technology content from their researches and can be accessed by interested parties.



- 2.3 *Advertise* - Users can promote their organizations by placing an advertisement at the website.
- 2.4 *Sign-up* - Anybody can be a member for free just by filling out the application form. Certain privileges await the member once signed up.
- 2.5 *Sell* - Once a member, he can post his product for sale at the website.
- 2.6 *Buy* - A member can also register the products that he wanted to buy.

2.7 *On-line Trading* - A transaction, from posting to payment, can be completed at the website.

The flow of transaction generally follows these steps:

- Buyer (B) and Seller (S) meet in the market place
- Being interested in S products, B posts an inquiry
- S sees inquiry, then creates a contract with terms such as product, price, quantity, inspection, delivery, payment, etc.
- If B approves contract, B signs contract by entering Username and Password
- If not, B replies with counter offer
- S reviews B's counter offer and changes terms of contract if necessary
- B or S conducts product inspection (depending on the terms)
- B pays partial payment (depending on the terms)
- S delivers products
- B pays full payment
- B and S post feedback about transaction and rate each other

3. Opening the Website

Type in the URL of B2b in the address bar, that is, b2bpricenow.com, then press Enter (keyboard). You will then be prompted to the home or main page of b2bpricenow.com.

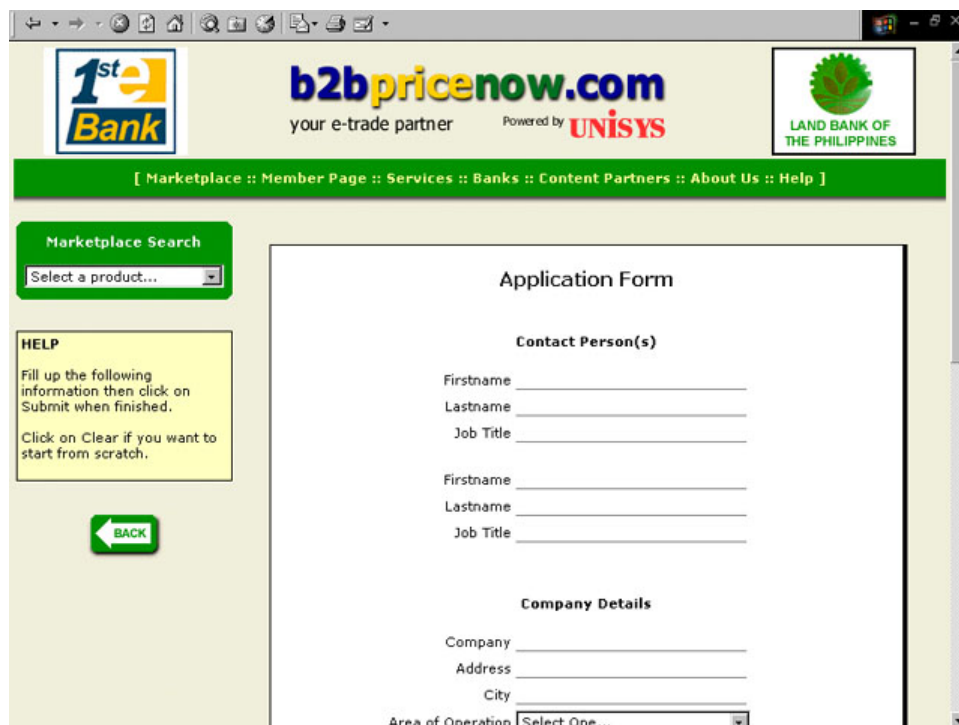


4. Sections of b2bpricenow.com

A. Sign-Up Link - Be a member for FREE!

A.1 There are several ways to sign-up or apply as a member:

- Click the sign-up link to give you the sign-up page or the application form
- Click the Member Page and click [Sign Up]



The screenshot shows a web browser window displaying the b2bpricenow.com website. The header includes the 1st Bank logo, the website name "b2bpricenow.com" with the tagline "your e-trade partner" and "Powered by UNISYS", and the Land Bank of the Philippines logo. A green navigation bar contains links: [Marketplace :: Member Page :: Services :: Banks :: Content Partners :: About Us :: Help]. On the left side, there is a "Marketplace Search" box with a dropdown menu and a "HELP" box with instructions: "Fill up the following information then click on Submit when finished. Click on Clear if you want to start from scratch." Below the help box is a green "BACK" button. The main content area is titled "Application Form" and contains two sections: "Contact Person(s)" and "Company Details". The "Contact Person(s)" section has fields for Firstname, Lastname, and Job Title, each with a bolded label. The "Company Details" section has fields for Company, Address, and City, each with a bolded label, and an "Area of Operation" dropdown menu with "Select One..." as the current selection.

A.2 Fill out the details being asked in the form, particularly the entries in **BOLD** as they are required fields.

Notes in filling out the form:

- The contact person(s) must be the official representative of the cooperative in all transactions, which are usually the Manager and the Chairman or the Information Officer of the Coop.
- Indicate full name of the cooperative; do not abbreviate.
- If the address is not a city, just type in the province.
- Username and passwords must be at least six (6) characters. The username to be registered should be that of the cooperative and the password should be known by the contact person(s). Please do not forget these!
- The coop must have e-mail address as this is where all communications will pass through.

A.3 Check if all required information is filled out; then, right click on the “Submit” button at the base of the form. A confirmation will appear on the screen when you’ve successfully signed-up.

A.4 If not, an instruction will appear on the screen on how to complete the application process. Failed application is may be due to one of the following situations:

- There’s already a member with the same Username.
- Required entries (those in bold) were not filled out.
- Username and password are less than six (6) characters.

A.5 Once the application is successful, you are now an official member of B2Bpricenow.com.

B. Market Place Search – where products of the three (3) major categories (Agriculture, Construction, and Chemicals) traded in the website are located. This is where members can post products and canvass prices of commodities. Non-members, however, can canvass prices only.

B.1 To see the product group page of a particular commodity, you can do one of the following:

- Click the agriculture industry link to go to the Agriculture Industry Page, then click the category covering the product of your choice – Crops, Livestock, or Fisheries.



The Agriculture Industry Page

- Click the down arrow button of the Market Place Search link, then click to your selected product. You will then be prompted to that selected product group page.

The screenshot shows the b2bpricenow.com website interface. At the top, there are logos for Land Bank of the Philippines and UNISYS. A green navigation bar contains links: [Marketplace :: Member Page :: Services :: Banks :: Content Partners :: About Us :: Help]. Below this, there's a 'Pay Online...' section and a main heading 'Agricultural > Coffee'. On the left, a sidebar lists 'Agricultural Products' with columns for 'Product', 'Buy', and 'Sell'. The 'Sellers' section features a table with columns: Product Description, Company, Location, Qty, and Price. Below the table is a button 'Post a new Offer to Sell' and a 'Buyers' section with a table that currently shows 'No record found.'.

Product	Buy	Sell
Agrochemicals	0	1
Aquamarine	0	1
Banana	0	0
Canned fish	0	0
Caragenan	0	0
Chicken	0	1
Cocoa	0	0
Coconut	0	0
Coffee	0	2
Corn	0	0
Cut flowers	0	0
Feeds	0	0
Fertilizer	0	0
Flour	0	0
Hogs	0	0
Mangoes	0	0
Milk	0	0
Pineapple	0	0
Plywood	0	0
Rice	0	1
Seeds	0	0
Silk	0	0

Product Description	Company	Location	Qty	Price
Native Coffee	PRRM-Nueva Vizcaya Branch	Nueva Vizcaya	100	P100.00/box
Ginger Tea	PRRM-Nueva Vizcaya Branch	Bayombong, Nueva Vizcaya	100	P100.00/200 grams/

The Coffee Product Group Page

- B.2 Post a New Offer to Sell – To post the product you wish to sell, click the product group page concerned, then click “Post a New Offer to Sell” after the Sellers Area. The form for Offer to Sell is flashed on the screen.

The screenshot shows the 'Offer to Sell' form on the b2bpricenow.com website. The form is titled 'Offer to Sell' and includes instructions: 'Please provide the following information. Required fields are in bold letters.' The form fields are: Description (with example 'Malagkit Rice'), Qty (with example '1230'), Location (with example 'Cagayan de Oro'), Expiry Date (with example '8/10/2000'), Unit (with example 'sack'), Price (with example '999.50'), Remarks (with example 'Fresh from the farm'), Username, and Password. There is also a 'HELP' section on the left with instructions on how to fill out the form.

Fill out the form with the details of the product you wish to sell. Again, all fields in bold letters are required. Click the submit button to post the product. It will be automatically registered to that product group page.

- B.3 Post a New Request to Buy – If you want to post a certain product you wish to buy, click the product group where it belongs, then click “Post a New Request to Buy” after the Buyers Area. The form for Request to Buy is flashed on the screen.

The screenshot shows a web browser window displaying the b2bpricenow.com website. The page header includes the 1st Bank logo, the website name 'b2bpricenow.com', the tagline 'your e-trade partner', and 'Powered by UNISYS'. The Land Bank of the Philippines logo is also present. A green navigation bar contains links: [Marketplace :: Member Page :: Services :: Banks :: Content Partners :: About Us :: Help].

The main content area features a 'Marketplace Search' box with a dropdown menu labeled 'Select a product...'. Below it is a 'HELP' box with instructions: 'Fill up the following information then click on Submit when finished. Click on Clear if you want to start from scratch.'

The central focus is the 'Request to Buy' form. It contains the following fields and examples:

- Description** | _____ (Ex. Malagkit Rice)
- Qty** _____ (Ex. 1230)
- Location _____ (Ex. Cagayan de Oro)
- Expiry Date _____ (Ex. 8/10/2000)
- Unit** _____ (Ex. sack)
- Price** _____ (Ex. 999.50)
- Remarks _____ (Ex. Fresh from the farm)

Below the form, there is a prompt: 'Please check all your entries above. If they are correct, please provide the ff:'. This is followed by two fields: 'Username' and 'Password', each with an input line.

Fill out the form with the details of the product you wish to buy. Again, all fields in bold letters are required. Click the submit button to post the product. It will be automatically registered to that product group page.

- B.4 To check whether you're postings were accepted, click on the product group page concerned and check if registered.
- C. Login Window – where registered members enter their usernames and passwords to access their customized member pages.
- C.1 To login, click the box after the Username, then type the username registered by the member in the application form.
- C.2 Click the box after the Password and type the corresponding password.

- C.3 Click the Login button to go to the Member's Desktop in which the member's Canvass Page is displayed.
 - C.4 If the member forgot his password, a new password has to be acquired. Click on the Get New Password Button to reset password. The system will create a 10-character randomly-generated alphanumeric password and will send it to your e-mail inbox. Once you have your new password, you can use it to access your member page and change it to a more familiar password. To change password, refer to the Member Page Menu below.
- D. Menu Bar – This tool is used in navigating through the different pages of the website. Once an item is clicked, submenus will popup.

D.1 Market Place

- D.1.1 Home – click here to go back to the main or home page of the site
- D.1.2 Agriculture – click here to see the agricultural products traded in the site.
- D.1.3 Construction – click here to see the construction products traded in the site.
- D.1.4 Chemicals – click here to see the chemical products traded in the site.

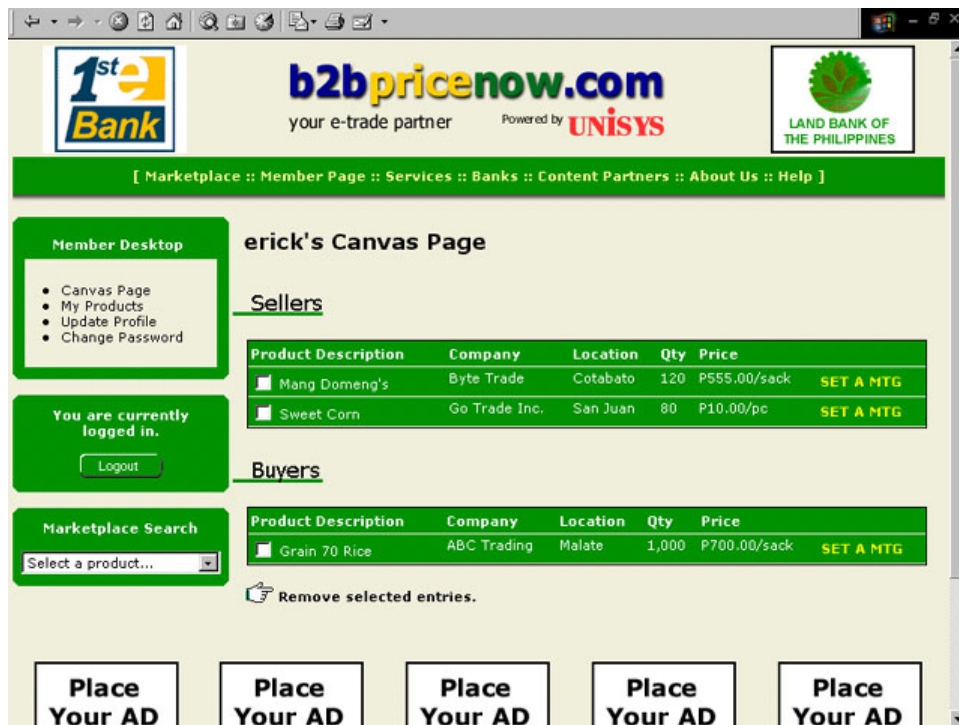
- D.2 Member Page – Exclusive for members' use only. Click the "Login to your account" if you're already a member otherwise click the "Sign Up!" if you wish to be a member.

Under this page, members are offered with the following features as reflected in the Member Desktop:

- D.2.1 *Canvass Page* – products that the member has pre-selected are seen on this page.

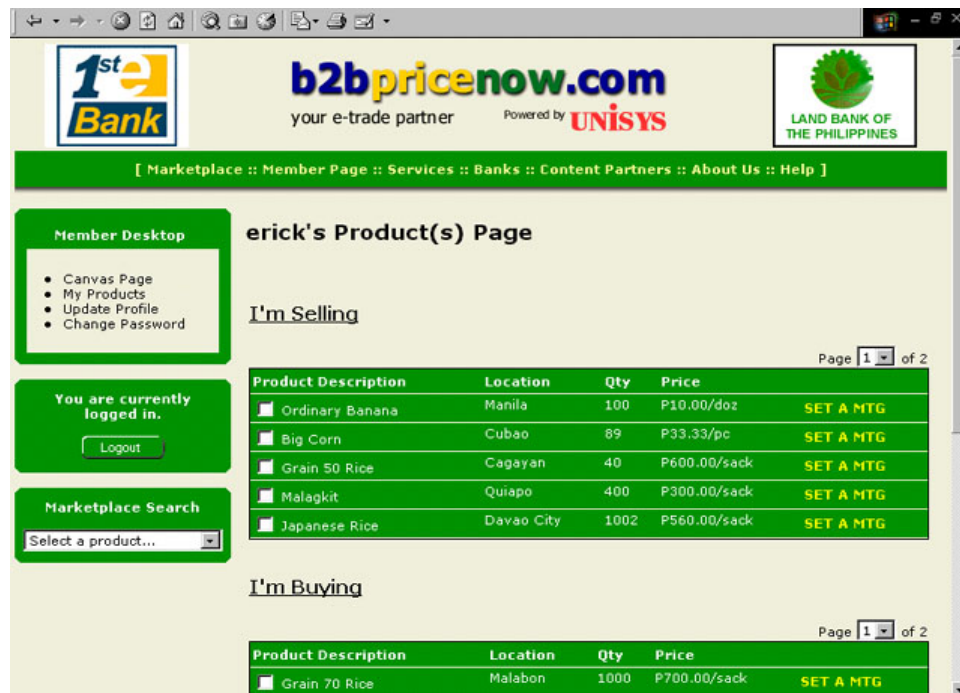
To add products, select in the market place search and click on the product group you wish to add, then click the boxes opposite the company you like to add then click "Add to my Canvass Page".

To remove, just click on the checkboxes you wish to remove, then click "remove selected entries".



A Member's Canvas Page

D.2.2 *My Products Page* – this is where the products being sold as well as being bought by the member can be seen.



A Member's Product Page

To add products to sell or buy, go to that particular product group page, then click the “Post a New Offer to Sell” or the “Post a New Request to Buy” whatever is appropriate.

To remove products, just click the checkbox corresponding to the product you wish to delete, then click “remove selected entries”.

To update or change product details, click the product you want to change and the product detail form will appear on the screen.

The screenshot shows a web browser window displaying the b2bpricenow.com website. The header includes logos for UNIONBANK, b2bpricenow.com (your e-trade partner, Powered by UNISYS), and LAND BANK OF THE PHILIPPINES. A green navigation bar contains links: [Marketplace :: Member Page :: Service Providers :: Services :: Partners :: About Us :: Help]. On the left, there is a green box stating 'You are currently logged in.' with a 'Logout' button, and another green box for 'Marketplace Search' with a dropdown menu 'Select a product...'. The main content area is titled 'Update/Change Product Details' and contains a form with the following fields: Company (testme), Product ID (259), Description (Test Product), Unit (pc), Price (56.00), Location, Quantity (100), Expires (8/1/01), and Remarks. At the bottom right of the form are 'Update' and 'Back' buttons. Arrows labeled 'A' and 'B' point to the form fields and the 'Update' button respectively.

Make the necessary changes in the form (A) then click “Update” (B).

D.2.3 *My SMS (Short Message Service) Page* – this is similar to canvass page, the difference is that the products to be selected are limited.

To add products, select in the market place search and click on the product group you wish to add, then click the boxes opposite the company you like to add then click “Add to my SMS Page”.

To remove, just click on the checkboxes you wish to remove, then click “remove selected entries”.

To inquire or canvass prices using SMS of a Cellphone:

➤ Go to Write Message, type

B2B <username> <password>

and send to 2333 for Globe users, 211 for Smart users.
Wait for reply.

To update prices using SMS of a Cellphone:

➤ Go to Write Message, type

B2B >username> <password> <product id> <new price>

and send to 2333 for Globe users and 211 for Smart.
Wait for reply.

D.2.4 *Update Profile* – the member's profile can be updated through this page.

The screenshot shows a web browser window displaying the 'b2bpricenow.com' member page. The page header includes logos for '1st Bank', 'b2bpricenow.com your e-trade partner Powered by UNISYS', and 'LAND BANK OF THE PHILIPPINES'. A green navigation bar contains links: [Marketplace :: Member Page :: Services :: Banks :: Content Partners :: About Us :: Help].

The main content area is titled 'Company Details' and contains a form with the following fields:

- Company: UPI Trading
- Address: Esteban cor Dela Rosa Sts.
- City: Makati City
- Area of Operation: Regional (dropdown menu)
- Business Industry: Fisheries and Aquamarine (dropdown menu)
- Business Type: Manufacturer (dropdown menu)
- Lastname: Kalugdan
- Firstname: Erick
- Job Title: Web Developer
- Email: erick.kalugdan@ph.unisys.com
- Phone: 892-2011 loc 8060
- Fax: (empty field)

On the left side of the page, there is a 'Member Desktop' sidebar with a menu: Canvas Page, My Products, Update Profile, and Change Password. Below this is a 'You are currently logged in.' section with a 'Logout' button. At the bottom of the sidebar is a 'Marketplace Search' section with a dropdown menu labeled 'Select a product...'.

Make the necessary revisions on the update profile form then click "Update".

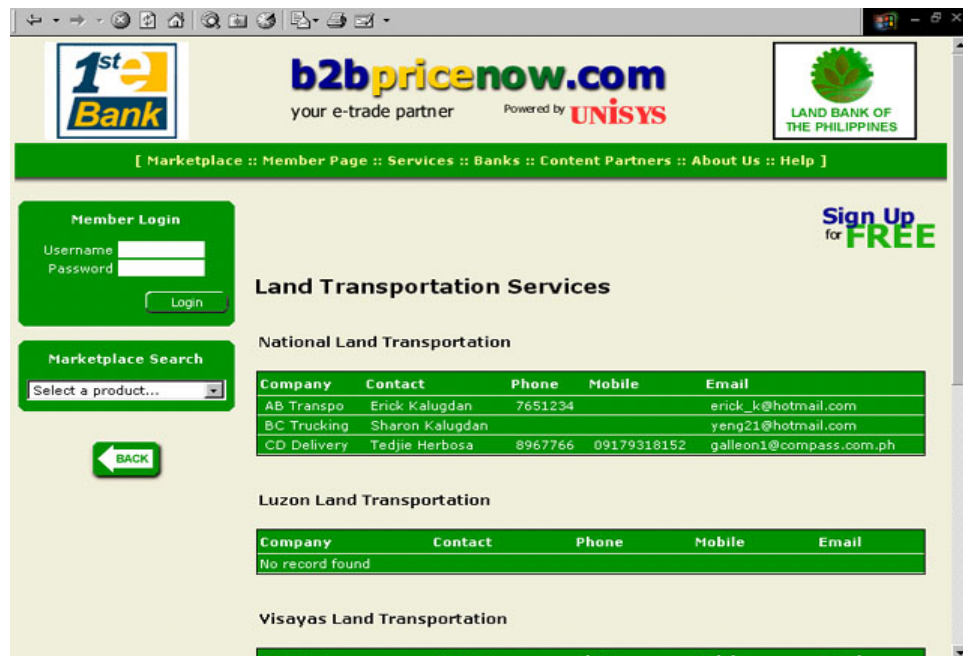
D.2.5 *Change Password* – the member, for security purposes, can change the personalized password using this section.



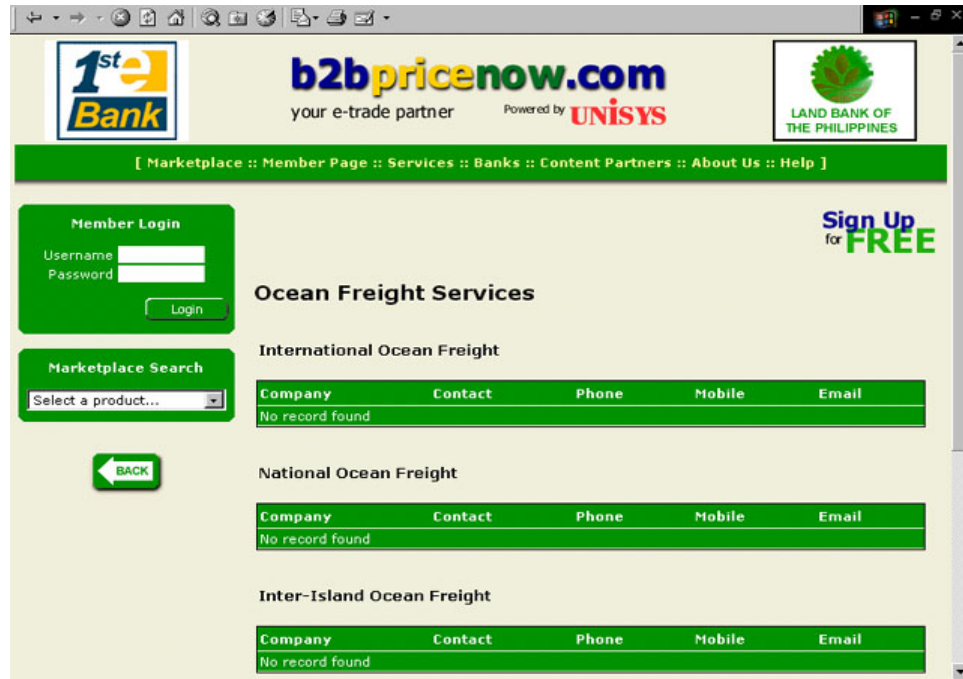
D.2.6 *Log-Out* - If you're in the member page, it's a must that you log-out so that information on your page could not be altered by anyone. Click the "Log-Out" button to exit your page.

D.3 Service Providers – the following service providers can be accessed in this sub-menu. An end-to-end solution is being provided by the website through these services.

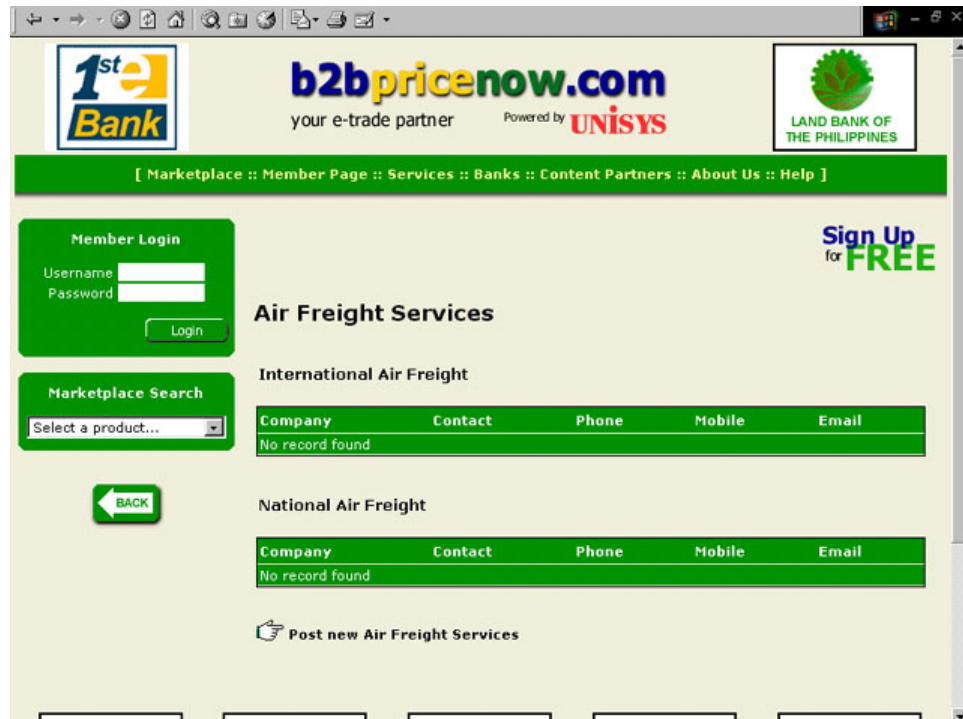
D.3.1 *Land Transport* – hauling and other land transport services can be seen in this section.



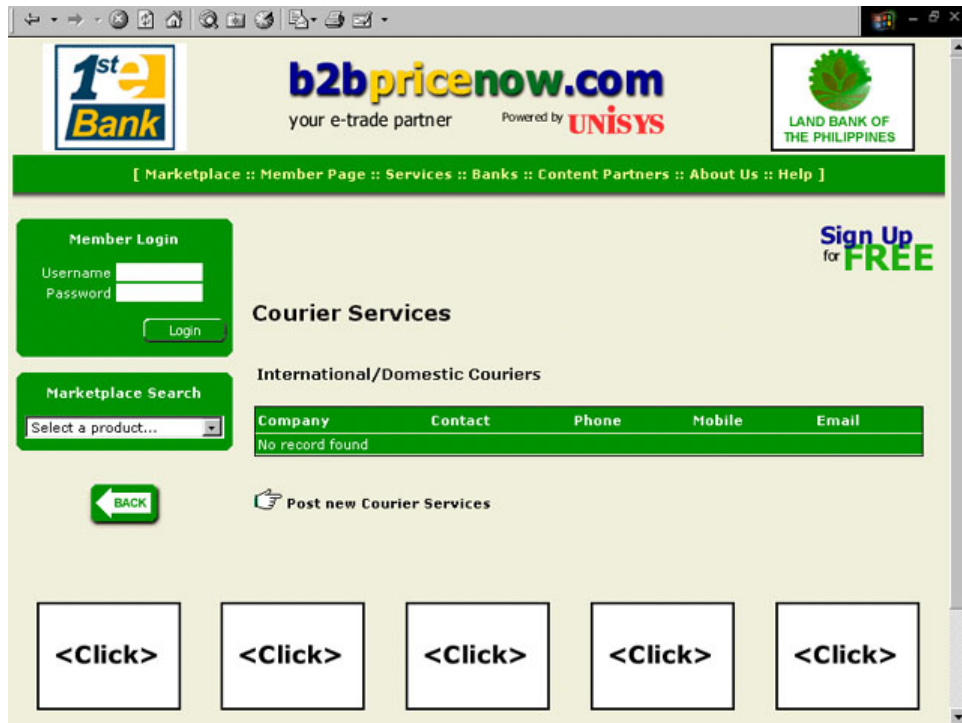
D.3.2 *Ocean Freight* – shipping vessels/freight are listed in this section.



D.3.3 *Air Freight* – air cargoes/freight providers can be accessed in this section.

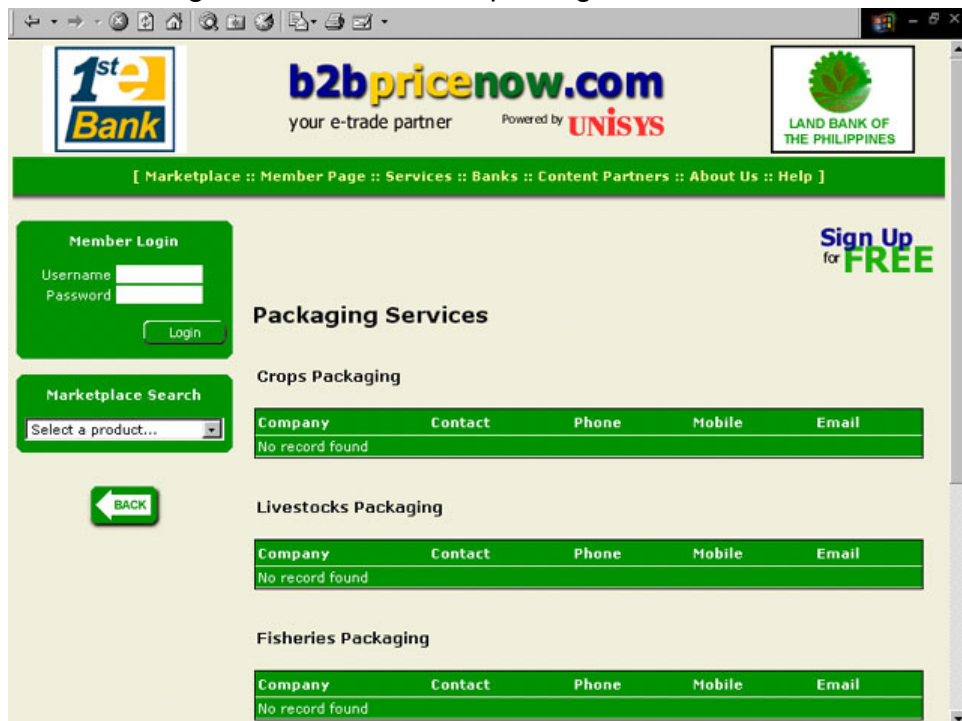


D.3.4 *Courier* – couriers are listed in this section.



D.3.5 *Insurance* – insurance for cargoes/produce can also be done here.

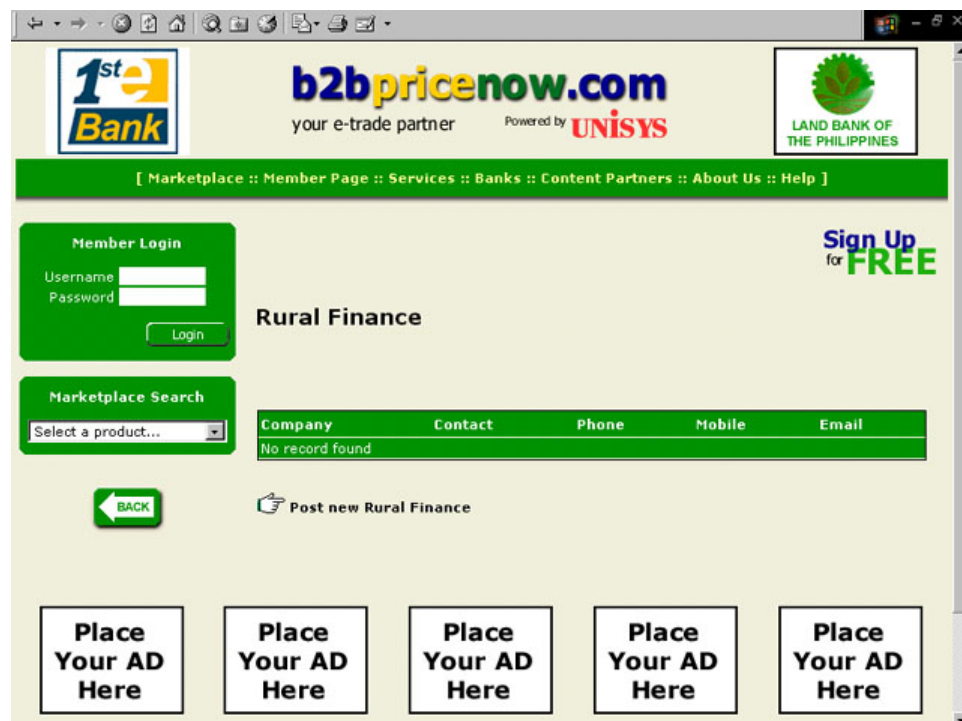
D.3.6 *Packaging* – packaging of produce can also be done through contracts of listed packagers.



D.3.7 *Machinery & Equipment* – this section provides companies who leases the needed machinery and equipment.



D.3.8 *Rural Finance* – for those who needs additional financing, a list of rural financial institutions are listed in this section.



D.3.9 *Consulting & Management* – for consultancy and management services, members can access this section

D.4 Services – the website provides or earns through the following services:

D.4.1 Advertising – companies or organizations can transact their advertising needs through this section.

To be a member, click here (IT'S FREE!)

Member Login

Username
Password

Marketplace Search

Select a product...

Advertisers

You can advertise your products or services and place your ads in our website at a very minimal cost.

Listed below are the rates of our advertisements.

Ad Space	Dimensions	Price/Month
Left & Right Ear	120x90 pixels	Php 15,000.00
Left & Right Bottom Banner	280x80 pixels	Php 10,000.00
Product Buttons	120x90 pixels	Php 5,000.00

If you are interested in placing your ads in our site, you can inquire by providing the following information. Click on **Inquire** when done.

Contact Person
Email

Organization/Company Info

Organization/Company's Name:
Location:
Tell us something about your organization/company...

D.4.2 Mobile Phone – mobile phone charges can be seen through this section.

D.4.3 Web Development – the website provides service for development of web pages of interested companies or organizations.

To be a member, click here (IT'S FREE!)

Member Login

Username
Password

Marketplace Search

Select a product...

Web Development

We can develop your own website at a very minimal cost. Please provide the following information then click on **Submit**.

Contact Person
Email

Organization/Company Info

Organization/Company's Name:
Location:
Tell us something about your organization/company...

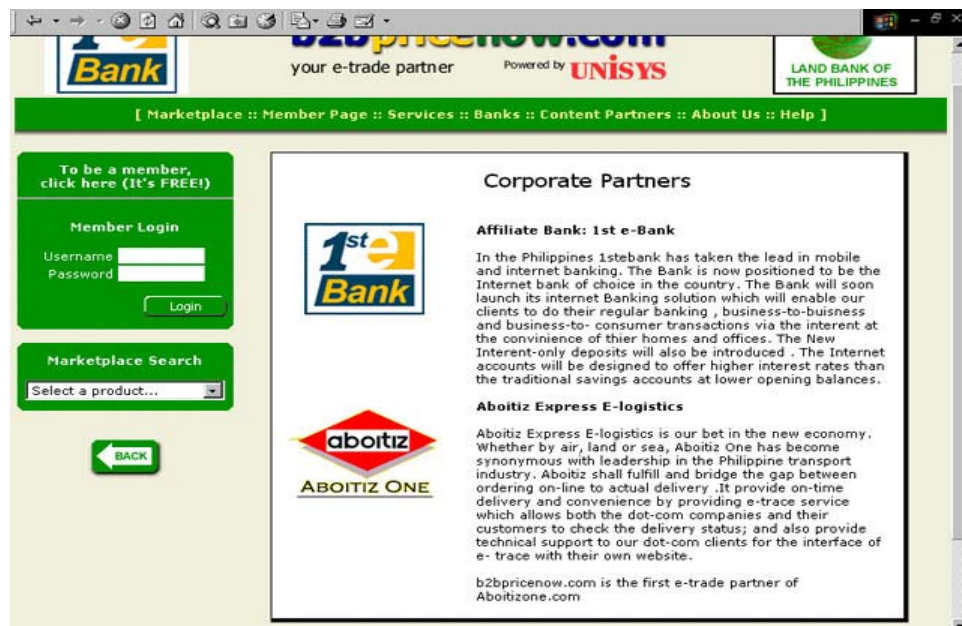
D.4.4 Transactions – the supplier or the seller is charged ¼ of 1% if the transaction is completed (from canvassing to payment on-line) through the website. However, transactions done outside the website are not charged.

D.5 Partners – the website also features the partners of the website.

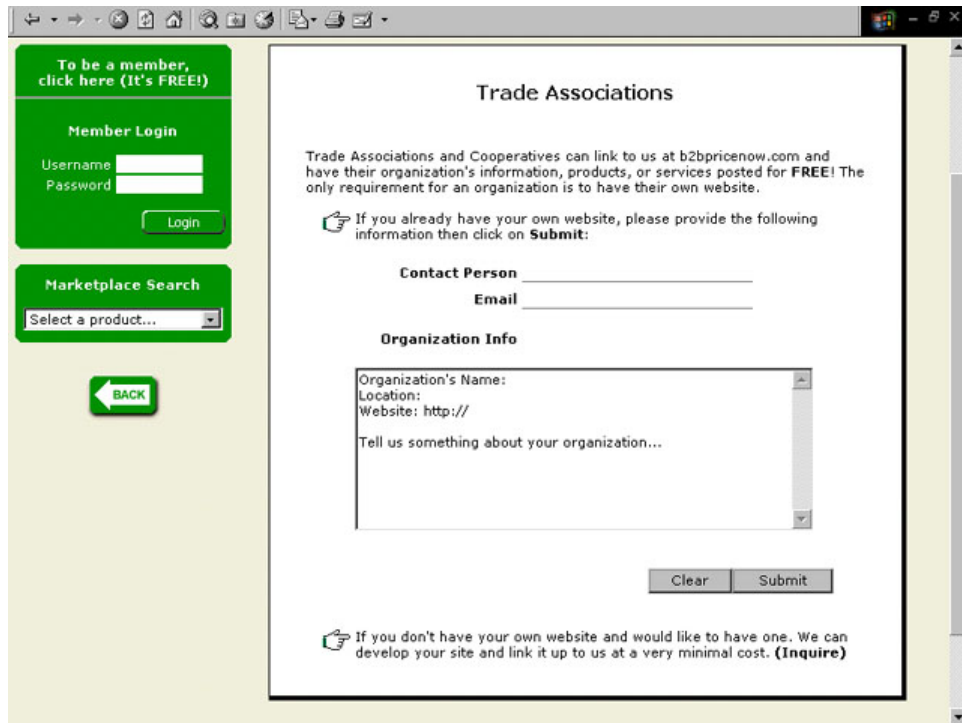
D.5.1 *Strategic* – partners that provide information and educational supports are featured in this section.



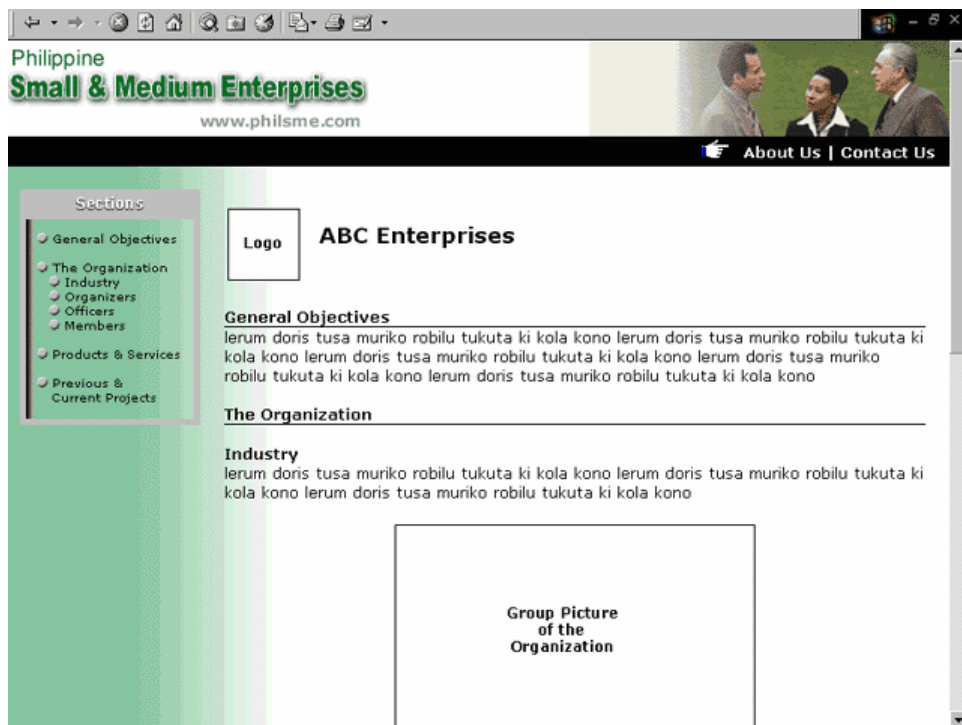
D.5.2 *Corporate* –partners like affiliate banks are listed in this section.



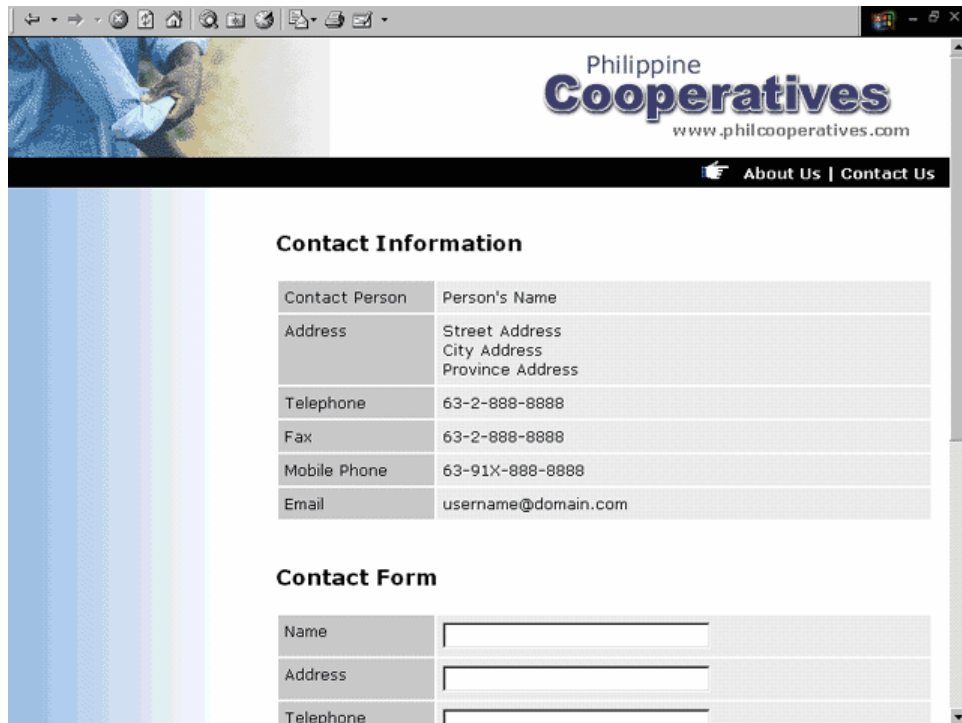
D.5.3 *Trade Associations* – associations that used the website to develop their webpage/site can be seen in this section.



D.5.4 *SME's* – Small and Medium Enterprises that utilized the service of the website to develop their webpage/site can be seen in this section.



D.5.5 *Cooperative* – cooperatives that employed the service of the website to develop their webpage/site are presented in this section.



D.6 About Us – refers to the person(s) behind the creation of B2Bpricenow.com. Brief backgrounds of each person are also indicated in this portion.

D.6.1 *Management Team* - this section previews the management team of B2Bpricenow.com.



D.6.2 *Senior Advisers* – advisers of the website are listed in this section.

The screenshot shows a web browser window displaying the b2bpricenow.com website. The page features a green header with the 1st Bank logo, the site name 'b2bpricenow.com', and the text 'your e-trade partner Powered by UNISYS'. A navigation menu includes 'Marketplace :: Member Page :: Services :: Banks :: Content Partners :: About Us :: Help'. On the left, there is a 'Member Login' form with fields for 'Username' and 'Password', and a 'Login' button. Below it is a 'Marketplace Search' section with a dropdown menu labeled 'Select a product...' and a 'BACK' button. The main content area is titled 'Senior Advisers' and lists three individuals: Raul A. Boncan (former Undersecretary of the Department of Trade and Industry), Enrique M. Herbosa (former President and Chief Operating Officer of United Coconut Planters Bank), and Tomas I. Alcantara (former Undersecretary of the Department of Trade and Industry). The footer contains copyright information for GalleonOne.com and contact details for erick.kalugdan@ph.unisys.com.

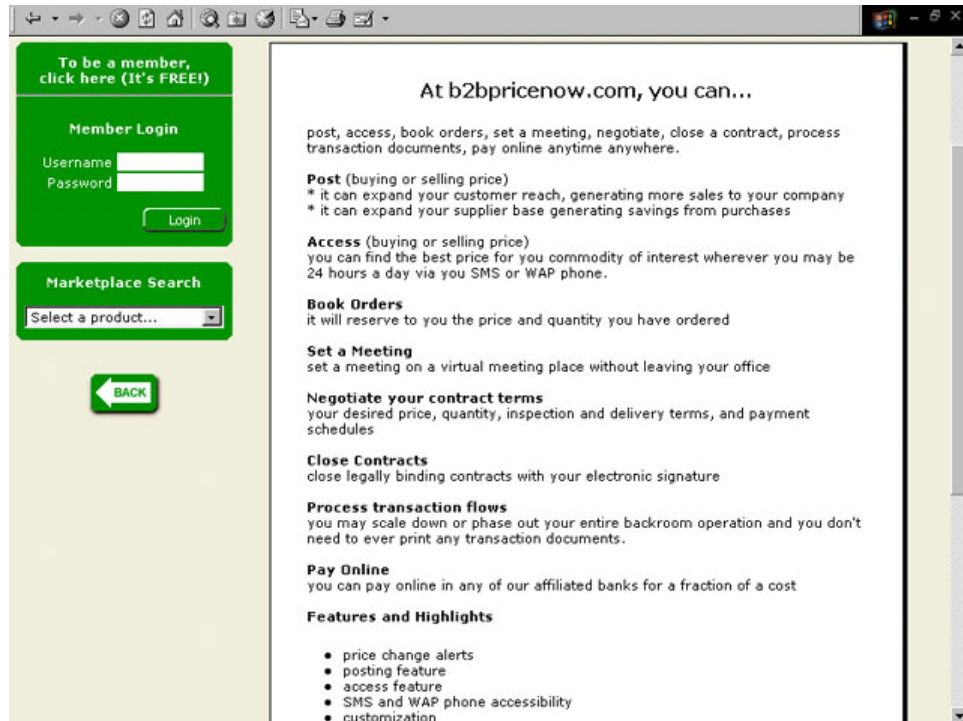
D.6.3 *Development Team* – those people who developed the website are featured here.

The screenshot shows the same web browser window as above, but the main content area is titled 'Web Development Team'. It lists two individuals: Gary Yaneza (Project Manager at UNISYS Philippines, Inc.) and Erick Kalugdan (Web Developer at UNISYS Philippines, Inc.). The rest of the page layout, including the header, navigation menu, login form, search section, and footer, remains identical to the previous screenshot.

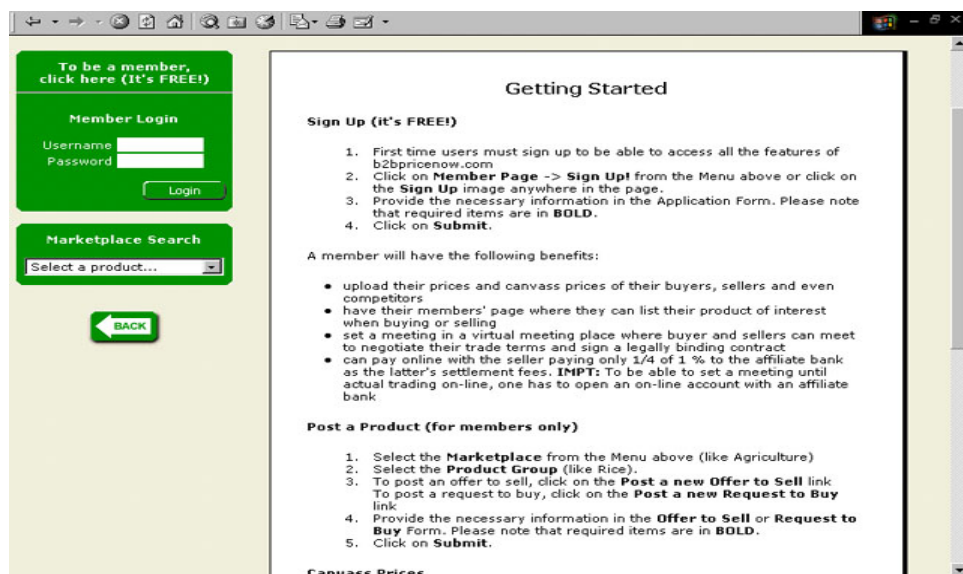
D.6.4 *Press Releases* – news articles regarding the website / company / development are seen in this part.

D.7 Help – for those in need of assistance, a help menu is provided in this section.

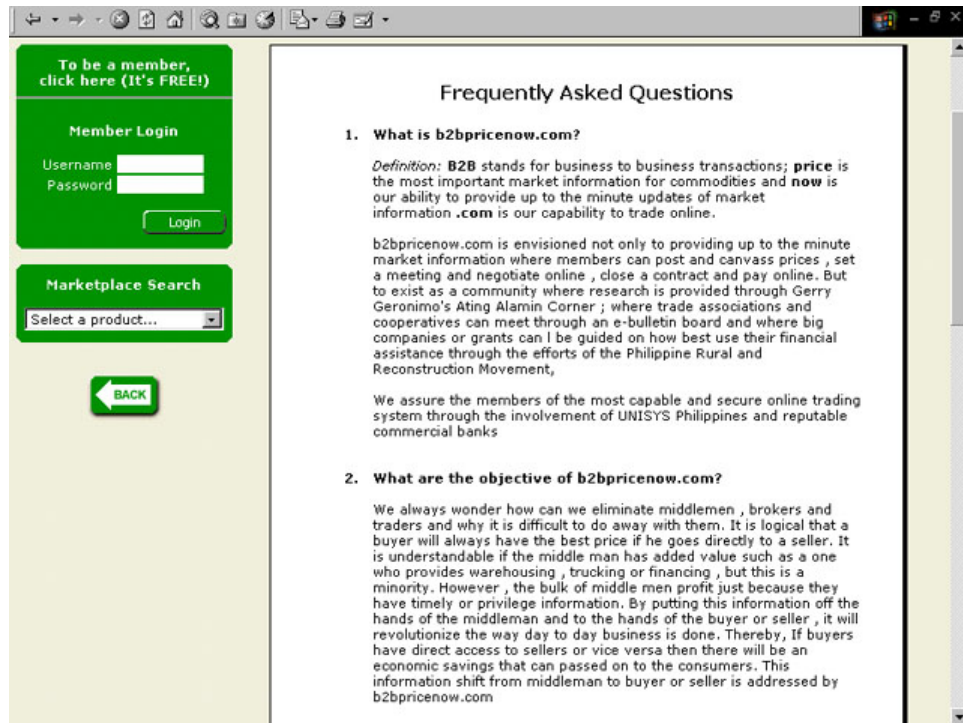
D.7.1 Website Features – the website's sections and uses are detailed in this section.



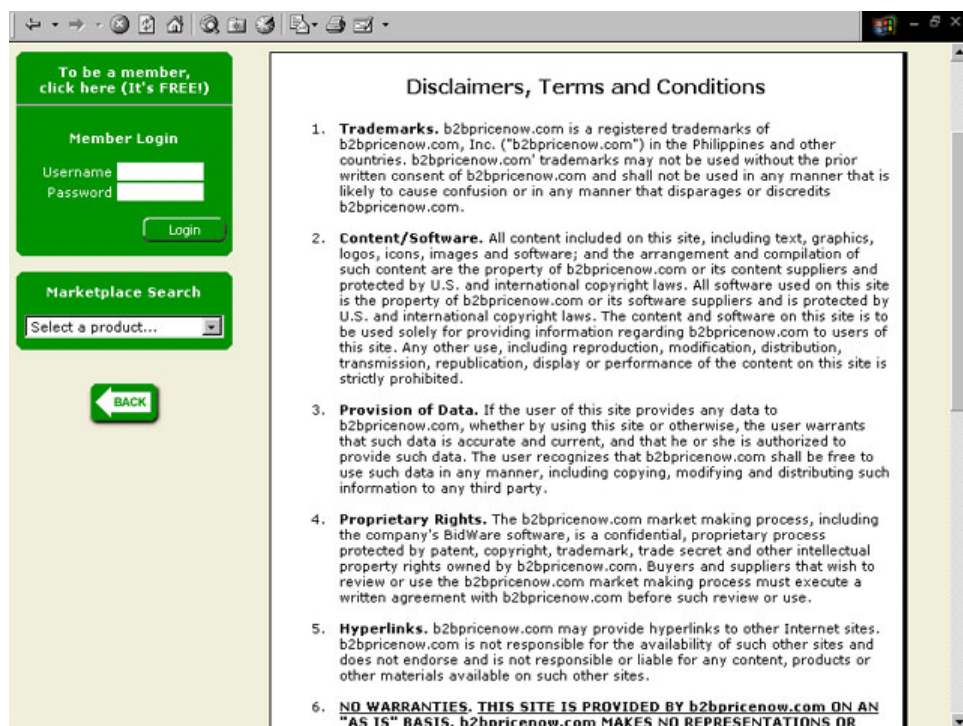
D.7.2 Getting Started – a getting started assistance is also provided by the website.



D.7.3 FAQ – frequently asked questions and their answers are featured here.



D.7.4 Disclaimer, Terms and Conditions – disclaimers, terms and conditions of the website can be viewed in this section.



- D.7.5 Suggestions – users of the system are encouraged to provide their suggestions/comments for further improvement of the website.

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HELP
Fill up the following information then click on Submit when finished.
Click on Clear if you want to start from scratch.

← BACK

Suggestions

Any suggestion for the improvement of the site or for us to give you a better service is always welcome.

Name

Email

Suggestion

Clear Send



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