Editor's Notes

The present generation is faced with a multitude of choices that not only set the direction of their lives but also establish the kind of future that shall be made available to the succeeding generations.

Most of these available choices come from technological innovations that have been utilized almost to the fullest by various industries.

For many years now, technology has been the driving force behind radical changes. The logical response to these changes has been the overwhelming transformation in almost all aspects of our lives, from the sociocultural to economic to political.

It is really up to us to embrace and make use of the available options. How

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W Who would ever imagine sending mails electronically across miles? Or researching for a project without having to visit the library? Or going shopping online? And all at the touch of a few keys! Technology—specifically Internet—has indeed made the most common activities of our everyday lives easier to perform and less expensive as well. Most importantly, it has given accessibility a new and significant meaning. The Internet has indeed gone a long way since its introduction. From a limited network for research institutions mainly in the United States (US), it has evolved into a global infrastructure for a faster, more user-friendly communication.

Internet spawns e-commerce

A number of sectors in society has not been immuned to technology. Commerce, for instance, is not only responsible for introducing technological innovations but is also the primary user of these modern tools. In return, the Internet has provided a very attractive venue for commerce to flourish because of the former’s far-reaching features.

The result of these technological innovations and adoption of commerce is the latest trend we know as electronic commerce or e-commerce. Simply defined, e-commerce refers to transactions completed over a computer-mediated network that involves the transfer of ownership or rights of use of goods and services.

Basically, online transaction is not new. What is new is the use of the Internet as a “platform where customers directly deal with producers/
sellers and/or intermediaries offering a wide range of goods and services.”

The extensive use of the Internet has even attracted a number of governments that see the Internet as a viable platform to facilitate delivery of services or procurement of goods. This brings the number of players in e-commerce to three: business, consumers and government (Table 1).

In the Philippines, e-commerce has made possible the growth of virtual shopping malls, which feature a wide range of products and services from appliances, food, electronics, books, cellular phones, apparel, flowers, magazines, music and fashion to online cinema reservation. To name a few, there are www.estore-exchange.com, www.glorietta5.com, www.my ayla.com, www.pinoyauctions.com and www.infinitymalls.com. These online shopping sites are examples of business-to-consumer (B2C) opportunities in e-commerce as earlier mentioned.

### Developments and initiatives in e-commerce

Developments and initiatives in e-commerce, particularly in the ASEAN region, are described below.

#### Trends in transaction values

There are several patterns that may be gleaned from the e-commerce transaction values estimated for the recent and coming years.

One is that the transactions have been heavily concentrated in the US, with the latter accounting for almost three-fourths of the transaction values in 2000. This is, however, expected to decline to less than half or 47 percent in 2004.

What is seen to grow rapidly is the Asia-Pacific region, which is expected to capture US$1.6 trillion of the predicted revenue from e-commerce in 2004 of US$6.8 trillion (representing 8.6% of the total worldwide retail sales as seen in Table 2). Asia-Pacific is also expected to have a higher average growth rate of 85.6 percent from 2000 to 2004 as compared to the average world growth rate of 58.4 percent during the same period.

Another pattern that may be drawn is that despite the rapid growth of e-commerce, it is still at its embryonic stage. This is evident in the 1996-1997 figures where e-commerce revenues represented only three percent of credit card purchases and two percent of direct purchases. For the whole of OECD countries, their revenue from e-commerce was just 0.5 percent of total retail sales. And although the proportion of the values will increase to 54 percent of US credit card sales, to 42 percent of direct purchases and to 15 percent of total retail sales in OECD countries by 2003-2005, said values are still relatively small when compared to common benchmarks. Moreover, even if the B2C transactions are growing phenomenally, e-commerce is still dominated by business-to-business or B2B transactions using proprietary protocols and private lines.

It should also be mentioned that a number of websites are still not

### Table 1. E-Commerce Matrix

<table>
<thead>
<tr>
<th></th>
<th>Business</th>
<th>Consumer</th>
<th>Government</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Business</strong></td>
<td>B2B Businesses offering to sell or buy products or services to other businesses</td>
<td>B2C Businesses offering to sell products or services to consumers</td>
<td>B2G Businesses offering to sell products or services to government</td>
</tr>
<tr>
<td><strong>Consumer</strong></td>
<td>C2B Consumers offering to sell products or services to businesses</td>
<td>C2C Consumers offering to buy and sell products or services to other consumers</td>
<td>C2G Consumers offering to sell products or services to government</td>
</tr>
<tr>
<td><strong>Government</strong></td>
<td>G2B Government offering to sell products or services to businesses</td>
<td>G2C Government offering to sell products or services to consumers</td>
<td>G2G Government offering to buy and sell products or services to other government agencies</td>
</tr>
</tbody>
</table>
Table 2. Worldwide E-Commerce Growth (In US$ billion)

<table>
<thead>
<tr>
<th>Region</th>
<th>2000 Level</th>
<th>%</th>
<th>2004 Level</th>
<th>%</th>
<th>CAGR* 2000-2004</th>
<th>% of total sales in 2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>657.0</td>
<td>100.0</td>
<td>6789.8</td>
<td>100.0</td>
<td>58.4</td>
<td>8.6</td>
</tr>
<tr>
<td>North America</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>509.3</td>
<td>77.5</td>
<td>3456.4</td>
<td>50.9</td>
<td>47.9</td>
<td>12.8</td>
</tr>
<tr>
<td>Canada</td>
<td>488.7</td>
<td>74.4</td>
<td>3189.0</td>
<td>47.0</td>
<td>46.9</td>
<td>13.3</td>
</tr>
<tr>
<td>Mexico</td>
<td>17.4</td>
<td>2.6</td>
<td>160.3</td>
<td>2.4</td>
<td>55.5</td>
<td>9.2</td>
</tr>
<tr>
<td>Mexico</td>
<td>3.2</td>
<td>0.5</td>
<td>107.0</td>
<td>1.6</td>
<td>87.7</td>
<td>8.4</td>
</tr>
<tr>
<td>Asia-Pacific</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>53.7</td>
<td>8.2</td>
<td>1649.8</td>
<td>24.3</td>
<td>85.6</td>
<td>8.0</td>
</tr>
<tr>
<td>Australia</td>
<td>31.9</td>
<td>4.9</td>
<td>880.3</td>
<td>13.0</td>
<td>82.9</td>
<td>8.4</td>
</tr>
<tr>
<td>Korea, Republic of</td>
<td>5.6</td>
<td>0.9</td>
<td>207.6</td>
<td>3.1</td>
<td>90.3</td>
<td>16.7</td>
</tr>
<tr>
<td>Taiwan</td>
<td>5.6</td>
<td>0.9</td>
<td>205.7</td>
<td>3.0</td>
<td>90.1</td>
<td>16.4</td>
</tr>
<tr>
<td>All other</td>
<td>6.5</td>
<td>1.0</td>
<td>175.8</td>
<td>2.6</td>
<td>94.0</td>
<td>16.4</td>
</tr>
<tr>
<td>Western Europe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>87.4</td>
<td>13.3</td>
<td>1533.2</td>
<td>22.6</td>
<td>71.6</td>
<td>6.0</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>20.6</td>
<td>3.1</td>
<td>386.5</td>
<td>5.7</td>
<td>73.3</td>
<td>6.5</td>
</tr>
<tr>
<td>France</td>
<td>17.2</td>
<td>2.6</td>
<td>288.8</td>
<td>4.3</td>
<td>70.5</td>
<td>7.1</td>
</tr>
<tr>
<td>Italy</td>
<td>9.9</td>
<td>1.5</td>
<td>142.4</td>
<td>1.1</td>
<td>74.6</td>
<td>4.3</td>
</tr>
<tr>
<td>Netherlands</td>
<td>7.2</td>
<td>1.1</td>
<td>142.4</td>
<td>1.1</td>
<td>74.6</td>
<td>4.3</td>
</tr>
<tr>
<td>All other</td>
<td>6.5</td>
<td>1.0</td>
<td>98.3</td>
<td>1.4</td>
<td>67.9</td>
<td>9.2</td>
</tr>
<tr>
<td>Latin America</td>
<td>25.9</td>
<td>3.9</td>
<td>410.8</td>
<td>6.1</td>
<td>69.1</td>
<td>6.0</td>
</tr>
<tr>
<td>Rest of the world</td>
<td>3.6</td>
<td>0.5</td>
<td>81.8</td>
<td>1.2</td>
<td>78.1</td>
<td>2.4</td>
</tr>
<tr>
<td>All other</td>
<td>3.2</td>
<td>0.5</td>
<td>68.6</td>
<td>1.0</td>
<td>76.6</td>
<td>2.4</td>
</tr>
</tbody>
</table>

Note: Totals may not equal sum of rows due to rounding.
CAGR = compounded annual growth rate
Source: Forrester, April 2000

Communications infrastructure
This determines the ease of online transactions. From the seller’s point of view, servers and hosts are indicators of e-commerce development. However, secured servers or those that use encrypted transactions would be a better indicator because these are more likely to be used for business purposes. The number of hosts has been growing annually at 54 percent between 1995 and 2000 and as of July 2000, there were already 93 million hosts worldwide. In Southeast Asia, the growth rates of hosts are even higher compared to that of the worldwide average.

Meanwhile, consumers have several options in accessing the Internet.

There are personal computers (PCs) connected via fixed lines, dial-up or cable connections, web-enabled TV, web-enabled game consoles, or mobile phones with wireless application protocol or WAP features. Although ownership or access to these machines is a good infrastructure indicator, a better indicator would be the number of Internet users. In measuring the growth of e-commerce, the best measure would be the proportion engaged in the actual buying and selling of goods and services via the Internet. According to the Nua Internet Surveys.

1 Mann et al. (2000).

Infrastructure
The growth of e-commerce depends on three infrastructure systems, namely:

- Communications infrastructure
  - This determines the ease of online transactions. From the seller’s point of view, servers and hosts are indicators of e-commerce development. However, secured servers or those that use encrypted transactions would be a better indicator because these are more likely to be used for business purposes. The number of hosts has been growing annually at 54 percent between 1995 and 2000 and as of July 2000, there were already 93 million hosts worldwide. In Southeast Asia, the growth rates of hosts are even higher compared to that of the worldwide average.

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in July 2000, the number of online population is 359.8 million or 5.9 percent of the world population. As expected, Asia-Pacific online population is growing faster than the average worldwide rate.

Singapore leads the group with the following figures: a PC density per population of 46 per 100 inhabitants; an expected 3.2 million dial-up accounts in 2004; a telephone connection of 58 per 100 inhabitants; a cellular phone connection of 47 per 1000; and 21 percent of households with cable connection, the highest in Asia.

Surprisingly, with the rapid growth of hosts/servers connected to the Internet and online population in the Asian region, only a small percentage made actual purchases. The Philippines and Hong Kong have the highest percentage at 12 percent. Malaysia and Indonesia follow at second and third while Taiwan and China occupy the lowest. This low rate of online sales could mean that the level of mistrust of Internet users with regard to online transactions is high.

**Payments infrastructure**

Given that Internet users still have high reservations on doing online transactions for security reasons, there is a need for a reliable and secured system of payment over the Internet. Although credit cards or the more advanced “smart” cards are used to pay for online purchases, most cardholders (in the Philippines, for example) are still hesitant to give credit card information online. Hence, while credit card usage rate can be an indicator of the potential growth of e-commerce, it is rather weak indicator since these cards are more often used in over-the-counter transactions.

With the low level of trust in sending credit card information over the Internet, there is therefore a need to provide for an alternative mode of payment. Some ASEAN countries have already initiated electronic payments solutions, which involve the teaming up of foreign electronic payment companies with local service providers.

**Socioeconomic, cultural and legal environment**

It is argued that commercial transactions are reflections of social and cultural attitudes.

The socioeconomic and cultural dimension of e-commerce can be characterized by the level of access and acceptance of electronic transactions by the population. This boils down to affordability or the cost of getting online relative to per capita income and the level of comfort in doing electronic transactions. These are associated with the level of education and diffusion of using the Internet. These conditions emanate from disparities in the level of development in some ASEAN countries.

In terms of cultural acceptability, it may largely be dependent on the introduction of information and communication technologies (ICT) in the educational systems of some countries as well as on the leadership that government provides in the use of IT.

Meanwhile, in terms of the legal environment, some ASEAN countries have enacted e-commerce related laws. These include Singapore, Malaysia and the Philippines. Thailand is soon to follow while Indonesia is currently working on a legislation.

**Regional and national initiatives**

There have been initiatives in both the regional and national levels in a number of ASEAN countries to develop
their e-capabilities.

The E-ASEAN task force, for one, is a joint public and private sector advisory body composed of representatives from 10 ASEAN member nations whose overall mandate is to develop a comprehensive action plan for ASEAN to plug into the global e-space. The action plan aims to establish a regional information infrastructure, create an e-commerce-friendly legal environment, facilitate the freer flow of trade and investment in ICT goods and services within ASEAN and address societal concerns with the respective governments leading through example.

At the same time, some ASEAN countries have developed their own programs to improve their IT capabilities. Singapore has its IT2000 Masterplan, which is the existing blueprint for using IT in government. It spawned SingaporeOne in 1996 that aimed to deliver a new level of interactive, multimedia applications and services to homes, business and schools nationwide. Beyond the Internet, it aims to deliver broadband infrastructure of high capacity networks and switches as well as advanced applications and services using high capacity networks. Singapore is currently preparing its ICT21 Masterplan that aims to transform itself into a vibrant and dynamic global ICT capital with a thriving and prosperous net economy by the year 2010.


Thailand and Vietnam may have some problems in pushing their IT programs because of existing monopolies in their communications sector.

In the local scene, the Philippines launched the National Information Technology Plan for the 21st Century (IT21) in 1997. It envisions the country to be the Knowledge Center in Asia in the next 7 to 15 years in the areas of IT education, IT-assisted training and application of IT-information and knowledge to business, professional services and the arts. IT21 relies on government and the private industry to play lead roles in pushing forward the use and production of IT in the country.

So far, the government’s achievement in this area includes the recent passage of the E-Commerce Act that mandates government agencies to push for the use of e-commerce solutions. Related to this, it launched another project called the Government Information System Plan (GISP) that provides the framework for the utilization of IT in government operations.

What e-commerce delivers

The various benefits from e-commerce could be analyzed from the points of view of the supplier, consumer and society.

First, e-commerce provides the supplier with the following:

* worldwide reach;
* a 24-hours-a-day, 7-days-a-week presence;
* a potential to eliminate intermediaries;
* an updated catalogue in real time and potential personalized offerings;
* lower transaction costs; and
* efficient customer support in terms of order tracking, self-service information retrieval and individualized dialogue.

In short, the Internet allows the supplier to deal directly with the consumer and cater personally to his customer’s needs. In the process, intermediation is avoided and costs are lowered.

Second, consumers are able to:

* shop anytime from the comfort of their homes;
* access worldwide choices, cost competition and market information;
* test and immediately download digital products;
* receive personalized service;
* avoid waiting lines and sales persons; and
* be serviced by intelligent agents to facilitate sale.

Simply put, consumers are able to do so much browsing of quality products in so little time, thereby saving on time and money.

Finally, the social and economic impact of e-commerce includes the following:

...The Internet allows the supplier to deal directly with the consumer and cater personally to his customer’s needs. In the process, intermediation is avoided and costs are lowered.
Ttripartite arrangements among the government, business owners and the labor sector should be strengthened so as to eliminate social tensions associated with labor displacements as a result of globalization.

Dr. Virginia Teodosio, administrator of the Cooperative Development Authority and a professor at the University of the Philippines School of Labor and Industrial Relations, emphasized this point in a paper1 presented during a conference on HRD, Labor and Globalization held in La Union province. Said conference was jointly organized by the Philippine APEC Study Center Network (PASCN), the National Economic and Development Authority (NEDA) Region 1 office and the Philippine Institute for Development Studies (PIDS).

Teodosio said that globalization, coupled with the emergence of labor-displacing technologies, has strategically positioned business owners such that they manipulate employer-employee relations to their advantage. She pointed out that the presence of surplus labor or a high unemployment rate in the country has made it more difficult for workers to negotiate with employers.

"Potency of strikes as a bargaining tool of workers has been significantly diminished with the mechanization of the workplace and the use of sophisticated manufacturing machines. Trade union membership is consistently declining as a result of the adoption of advanced production machines and flexible labor arrangements by many companies," she noted.

Thus, Teodosio proposed that tripartite bodies composed of interest groups should be granted greater access to government decisionmaking in order that they can respond accordingly to the challenges of global competitiveness. Moreover, she stressed that greater interdependence, mutual openness and closer coordination among the three sectors (business owners, the labor sector and the government) are required in order to respond effectively to the process of global integration.

"The tripartite experience of the past should move beyond traditional negotiation which starts from a limited conflicting set of positions to a principled one where legitimate interests are recognized, people are held accountable for their actions and mutual interests are met," Teodosio said.

She also emphasized the need for the government to implement successful strategies and policy alternatives to manage its industrial relations. "The role of the state has been to create an overall environment conducive to social cooperation and competition. It should be able to forge critical political bargains to mediate between domestic and external pressures in order to eliminate the heavy costs that globalization imposes on the local labor sector," she elaborated.

Although Teodosio acknowledged that the government’s decision to include tripartism as an important tool for macroeconomic management has greatly changed the perspective of most sectors toward tripartism in the country, she commented that the existing tripartite agenda has not done much in delivering/promoting employment, job security and an effective enforcement of labor law.

"Any attempt to engage in an evaluative discussion of tripartism gets caught up in the larger question of its inability to close the gap between policy statements and practice in our society where there exists real divisions. Instead, contentious problems were intensified rather than resolved," Teodosio concluded. GRG

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1 The paper came out as PASCN Discussion Paper 2000-07 entitled "Reassessing Tripartism and the Role of the State in a Period of Restructuring Under Globalization."
The adoption of the ASEAN Free Trade Area-Common Effective Preferential Tariff (AFTA-CEPT) in Southeast Asia will compel the local automotive industry to institute radical reforms in order to survive the increased competition brought by a more liberalized market.

This was the contention of Rafaelita Aldaba, a research associate at the Philippine Institute for Development Studies (PIDS), in her paper entitled “Implementing the AFTA-CEPT Scheme: Will the Philippine Automotive Industry Survive?”

Aldaba pointed out that the adoption of the AFTA-CEPT scheme poses both risks and opportunities. The scheme would result in a very low and almost uniform tariff structure ranging from zero to five percent, thus, reducing the effective protection in the automotive industry. Likewise, it will allow the entry of relatively cheaper imports which is expected to heighten the competition in the industry. Aldaba acknowledged that the implementation of the AFTA-CEPT will benefit consumers since greater competition will bring wider choices for vehicle models and cost advantages.

Given these prospects, Aldaba urged the local automotive industry to improve its competitiveness, particularly in the absence of government protection. This would require improvements in efficiency and productivity of both domestic assemblers and parts manufacturers. Firms should also reduce their production costs relative to the costs and quality of their counterparts abroad.

Aldaba added that in order for the local automotive assembly industry to compete globally, it needs to export successfully. But it is obvious from recent export data that the Philippines has been lagging behind its neighbors in Southeast Asia. As of 1998, for example, the local automotive industry was only able to export 496 vehicles while exports of automotive firms in Indonesia for the same period totaled 8,458 units. Thailand, on the other hand, took the lead with 71,549 units followed by Malaysia with 20,761 units.

Meanwhile, Aldaba said that the government has an important role in securing the future structure of the local automotive industry. The government, according to her, must provide a stable industry policy so that firms can set their targets and plan their investments in the light of market opportunities. Recent inconsistencies in implementing the rules on completely knocked down (CKD) importation as well as on excise taxes must be immediately corrected so as to be avoided in the future. She also urged the government to continue its plan to reduce tariff protection and to remove the local content program in order to create a competitive domestic market. She explained that these moves will pressure domestic firms to improve their performance, reduce costs and increase productivity. Aldaba warned that delaying the reforms would simply delay the realization of potential benefits.

At the same time, Aldaba advised the parts and components sector, which is dominated by small and medium enterprises (SMEs), to abandon their “mom-and-pop” style of operations. She emphasized that while SMEs’ access to capital and technology is crucial to their development, this does not justify the continuation of the local content program. Aldaba noted that this program, which requires assembly firms to use 40 percent domestic parts, has failed in the past to promote the growth and development of SMEs. She argued that regardless of the local content requirement, domestic assemblers would source their parts and components locally as long as the prices and quality of these materials are at par with their imported counterparts. GRG
The failure of major industries in the Philippines to recover from the series of economic downturns that struck the Asian region in mid-1980s and late 1990s can be compared to an individual suffering from HIV-AIDS or Human Immune Virus/Acquired Immune Deficiency Syndrome.

Dr. Frank M. Little, a visiting research fellow at the College of Public Affairs of the University of the Philippines at Los Baños (UPLB), made this analogy during a recent Pulong Saliksikan sponsored by the Philippine Institute for Development Studies (PIDS).

Little blamed the collapse of the private sector after the 1983-1985 crisis to the widespread lack of technological competence at the level of individual firms.

He noted that the root of this incompetence lies somewhere in the context of environment, deep in the country’s institutions or culture. Thus, he asserted that the marked upsurge in foreign debt or the policy of import substitution has nothing to do with this problem.

“Foreign borrowing did not cause the collapse of the incorporated private sector in 1985. Rather, it was the inability of the overwhelming number of Philippine industries to transform their structure in a way that was consistent with economic development and utilize foreign resources productively,” Little said.

To develop technological competence, he suggested that individual firms should develop the necessary organizational and technical skills for corporate learning and problem solving. He explained that technological competence is acquired by institutionalizing these skills within the firm’s corporate behavior. However, he reiterated that structural change within each sector or firm is only possible if there is a desire to innovate.

“As a self-organizing process, development embodies structural transformations which then determines future growth rather than the other way around. This change is then reflected in the composition of industrial output or employment,” he said further.

Little also noted that the economic imperative of development should involve changes in how output is produced because the focus should be on production and not on market processes. He explained that changes in production follow the increased specialization associated with development. This pattern, he said, is reflected in the increased shares of intermediate inputs in production brought about by the management’s modification of their production processes at the plant- or firm-level. These modifications are acts of corporate learning which lead to the building of technical and organizational skills.

To illustrate, Little showed a hierarchical ordering wherein each system can be seen as a building block in determining the macro outcomes from micro performance. He said that structural development brings about competence, which in turn, builds firms, firms build industries and industries build economies.

He pointed out the inapplicability of traditional economic theories in determining the causes of poor economic performance of a country. He pointed out that behavioral outcomes cannot be determined from the geometry of the economic and social spaces considered separately. He stressed that interactions tend to produce behavior ‘seriously different’ from that found in either space alone.
The Bangko Sentral ng Pilipinas (BSP) should adopt risk-based supervision for banks offering microfinance loans. An appropriate set of rules and regulations will enhance the capabilities of banks and other financial institutions involved in microfinance or small-scale lending.

Dr. Gilberto M. Llanto, vice-president of the Philippine Institute for Development Studies, made this recommendation in his study entitled “Risk-based Supervision of Banks Involved in Microfinance.”

Llanto’s recommendation is in agreement with the General Banking Law of 2000 (otherwise known as R.A. 8791) that mandates the Monetary Board—the policymaking body of BSP—to formulate appropriate rules and regulations on microfinance operations, which involve rural banks, credit cooperatives, credit granting nongovernmental organizations and other banks providing microcredit.

Llanto stressed that a risk-based regulation and supervision of banks offering microfinance loans is more appropriate to the nature and set-up of these institutions compared to the traditional procedure used by BSP. Under the proposed approach, the BSP should consider a broader spectrum of risks affecting these banks instead of focusing on the lack of formal financial information, documentation and loan collateral. Some of the relevant risks include credit risk, liquidity risk, interest rate risk and transaction risk.

For example, Llanto suggested that the BSP can create a risk profile of a bank offering microfinance loan and use this as reference in assessing its financial condition and performance. This could also be used to anticipate and prevent systemic risk in the microfinancial markets. To ensure asset quality, he maintained that said bank should focus on the portfolio at risk and should have more adequate loan loss provision than that required of traditional banks. He added that a portfolio-at-risk approach will require the BSP to check on the historical record of the loan portfolio instead of using a spot loan-by-loan review.

“As in informal credit markets, timely and reliable information is a key to effective loan management. Thus, banks involved in microfinance should also be allowed to use information, projected cash flows, and unconventional collateral in their client screening and loan approval process,” he said.

At the same time, he recommended that the BSP should require banks offering microfinance loans to have an adequate management information system that enables them to keep a daily track of loan approvals and releases, collection, arrearages, loan restructuring and refinancing. He argued that the inability to track loan performance on a daily basis constrains the efficiency of these banks.

“A good management information system is indispensable in the formulation of an internal mechanism and set of audit procedures for...”
E-commerce provides an alternative market and lifestyle to producers, intermediaries and consumers, thus revealing its encompassing effect. However, e-commerce may usher in a new level of inequity termed as digital divide. This is because only those suppliers and consumers who have access and ownership of the essential devices will have the freedom and comfort to engage in online transactions. In addition, only countries with better telecommunications facilities would have the advantage at exploiting the many benefits of such transactions.

Challenges in e-commerce

There are accompanying challenges and issues brought about by the utilization of e-commerce. Simply stated, these fall under two areas: infrastructure (including communications, payments and distribution) and the socioeconomic, cultural and legal environment.

There is not much problem in the business side of infrastructure because as long as entrepreneurs perceive that e-commerce is picking up and they can benefit from its growth, they will put up more and more servers. As noted earlier, it is from the consumer side that will pose more problem because of acceptability and access issues.

Maximizing the full potential of e-commerce needs to be a multisectoral undertaking with the government taking the lead in particular areas. Initial actions have been put in place such as e-commerce laws enacted in a few ASEAN countries. Other challenges in the promotion of e-commerce include the following:

* Measures to promote competition to bring down Internet access rates;
* E-commerce laws that will improve the level of confidence similarly accorded to normal over-the-counter transactions across countries;
* ICT introduction and promotion to improve cultural acceptance of electronic transactions;
* Credit card ownership or some other form of electronic payment facilities to complete e-commerce transactions;
* Reliable domestic distribution and delivery system to complement e-commerce; and
* Taxation of e-commerce.

For many ASEAN countries, consumer benefits will be limited for some time due to the poor state of their telecommunication infrastructure. Nevertheless, there are real opportunities that can be tapped even at the present infrastructure condition.

For example, platforms to connect the many small and medium enterprises (SMEs) in the region could be provided. The government can also lead by example in the promotion of ICT. The government can do this by using the Internet in the provision of basic public services, setting up an electronic procurement system, supporting the establishment of big business exchanges using the Internet rather than proprietary protocols and private lines to enable small players to participate, and setting up public Internet kiosks.

References


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cause outcomes tend to embody properties of emergent complexity.

“That behavior will be governed by a culture which pervades other social and administrative institutions, thus, producing a self-reinforcing socioeconomic system. Changing those behavior patterns means changing that system, which cannot be done by focusing only on one aspect, such as industry, of those institutions within that socioeconomic system, “ Little stated.

In this light, he suggested that off-site surveillance is extremely necessary because of BSP’s limited supervisory resources. Llanto stressed that similar to traditional banks, institutions involved in microfinance should also adhere to the accepted accounting and auditing standards and thus provide information that is reflective of their true financial condition.

In addition, Llanto recommended that banks offering microfinance loans should be allowed to charge market-based interest rates. He explained that interest rates on microfinance loans should enable the lender to recover financial and operational costs and to generate a profit margin. He stated that charging lower-than-existing market rates ceiling constrained the sustainability of these banks’ operations.

Lastly, Llanto proposed that microfinance clients and operations should be defined in the BSP circular that will implement the microfinance provisions of the revised General Banking Law. GRG

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**BSP...from page 9**

fraud prevention. The huge number of microfinance clients and the daily turnover nature of the operation ordains the need for effective fraud prevention for the institution,” Llanto added.

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**HIV/AIDS...from page 8**

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**Development Research News**

Vol. XIX No. 3
May - June 2001
ISSN 0115-9097

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**DEVELOPMENT RESEARCH NEWS** is a bimonthly publication of the PHILIPPINE INSTITUTE FOR DEVELOPMENT STUDIES (PIDS). It highlights the findings and recommendations of PIDS research projects and important policy issues discussed during PIDS seminars.

PIDS is a nonstock, nonprofit government research institution engaged in long-term, policy-oriented research. This publication is part of the Institute’s program to disseminate information to promote the use of research findings.

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The lack of adequate research and development (R&D) manpower is keeping the Philippines behind its neighboring nations in terms of technological innovation.

Dr. Caesar B. Cororaton, senior research fellow at the Philippine Institute for Development Studies (PIDS), stated that the absence of competent R&D manpower places the country in an extremely disadvantaged position in catching up with the world’s cutting-edge technology producers.

He explained in his study entitled “Technological Innovations in Japan and S&T Experiences in the Philippines: Drawing Policy Lessons for the Philippines” that this condition presents a big stumbling block because new available technologies are already in an advanced state and require special technical skills to operate.

Cororaton estimates that the ratio of R&D manpower to the total population is about 197 scientists and engineers per one million Filipinos. This is way below the 380 scientists per million population estimate of the United Nations Educational, Scientific and Cultural Organization (UNESCO) to effectively implement the application of technologies. In fact, in a recent PIDS survey, it was observed that majority of the R&D personnel have only basic college degrees. A small percentage has doctoral degrees, mostly in social sciences. Among the Ph.D. holders, very few are in engineering and technology.

“Problems in this area can be traced to the Philippine educational system, which is very difficult to reform. Even if reforms are successfully implemented, it would take a long time before the economy could benefit from them. The required time to properly educate and equip children with necessary skills and talents before they enter the workforce usually takes about 15 to 20 years,” he explains.

He adds that there is a lack of technologically adept manpower in almost all sectors. Thus, he advocates for an urgent reform in the science and technology (S&T) education system in order that the country can sustain a long-term growth. In fact, investment in S&T education is the most crucial investment that needs to be made now. Otherwise, it would be too late since returns to this investment have usually very long gestation period or time lag,” he says.

Cororaton enumerates a number of factors behind this problem. He notes that there is a dilemma in the present educational system at the tertiary level because of educational mismatch. While there is a great demand for technical and engineering-related graduates by local industries, private tertiary schools continue to offer nontechnical courses because they cannot afford to provide capital-intensive laboratory resources required by technical courses.

At the secondary level, Cororaton notes that other than a bachelor’s degree in general education, a substantial portion of elementary and high school science teachers have no formal training in science and mathematics. Thus, he recommends a curricular revision in mathematics and physics in both the elementary and high school levels and, consequently, the enhancement of both the quantity and quality of science and mathematics teachers in the country.

“While the Philippine educational system produces one of the biggest numbers of college students compared to other countries, it generates one of the smallest number of graduates with science and engineering skills,” he states.