

*Turning  
Analog Women  
into  
A Digital Work  
Force*

Plugging Women into the  
Asia-Pacific Economy



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## Introduction

### *The Internet is for Everyone*

The Internet has emerged as THE new place to conduct business, to purchase goods and services, to streamline corporate functions, and to alter the traditional supply chain of nearly every industry. Ninety-two percent of CEOs worldwide believe the Internet will have a major impact on the global marketplace within three years.<sup>1</sup> Yet, in the Asia-Pacific region, three-fourths of women have not even pressed the “**Power**” button to get them into the new economy.

In the U.S., for the first time in the history of the Internet, women are outnumbering men in Internet usage, and their ranks continue to grow at a faster rate. While the total number of U.S. Internet users grew by 22.4% in the last year, the number of female users grew by 34.9%.<sup>2</sup>

**In Asia, this is not the case.** Men represent 78% of all Internet users in Asia, while women account for only 22%.<sup>3</sup> Women are so overlooked in the Asia-Pacific online economy that leading market-research firms “don’t have growth projections for the niche.”<sup>4</sup>

In Asia, most women are not yet players in the new economy at a personal or business level. “Of our 15,000 business women members, only 12% have e-mail accounts. I know these women struggle daily with what they consider “an enormous challenge” to become comfortable with computers and the Internet,” says Suryani Sidik Motik, President of IWAPI, Indonesia’s largest businesswomen’s association.

What are the economic implications for the Asian region? With business women by and large absent from the Asian Internet, the bottom line is a drag on economic growth and a threat to the entire region’s global competitiveness.

Technology skills are fiercely in demand and an Internet savvy work force will be essential for attaining and maintaining a stable and emergent national and international economy. Most international companies implement their strategic plan on an international level. They plan globally, market goods and services globally, and recruit workers globally. Women must be included and empowered to compete in this Internet-driven global economy. The economic stakes are too high to do otherwise.

A huge opportunity exists to tap into a technology-trained female work force that will play a major role in the transformation to a New Economy for Asia.

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1 Booz-Allen Hamilton and The Economist. 1999

2 Media Metrix/Jupiter Communications. August 2000

3 Emarketer.com May 2000

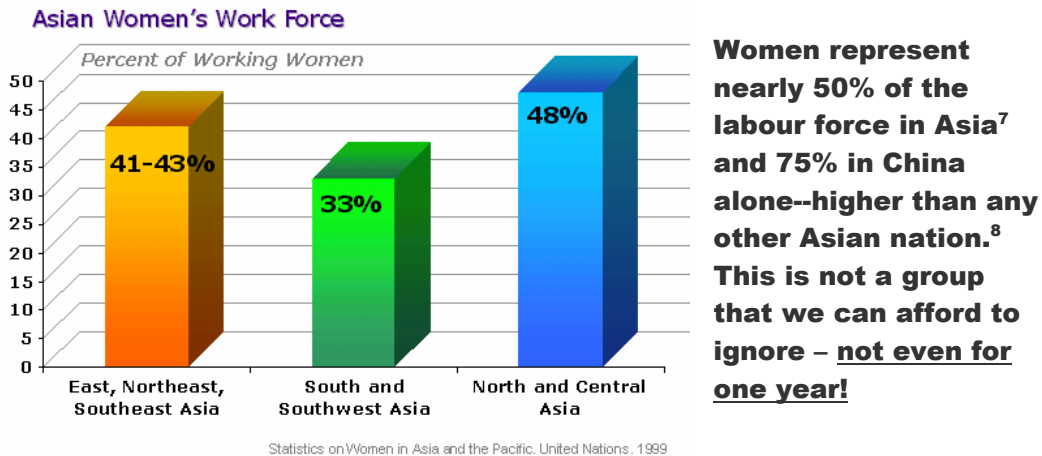
4 Wall Street Journal Europe. July 1999

## The Need

### *Asia needs to close the Gender Digital Divide*

The Internet has gone mainstream for an estimated 332 million people around the world.<sup>5</sup> All business is becoming e-business and by next year e-business transactions will account for \$30 billion in Asia.<sup>6</sup> These projections are based on the assumption that women workers, entrepreneurs, and consumers in Asian countries have the skills to use the Internet and other related technologies.

Women in Asia's work force must be prepared to work in the Internet world. Without this fully trained and enabled work force, a fundamental bottleneck may throttle the growth rate of Asian economies.



This vital component of the Asian work force extends an opportunity for corporate action and governments involvement to create a more educated and valuable workforce?

5 NUA Internet Survey. June 2000

6 International Data Corporation. 1999

7 Statistics on Women in Asia and the Pacific. United Nations. 1999

8 Ritu R. Sharma, Executive Director, Women's EDGE. Remarks at Asia Society. December 1999

## 1. WOMEN IN THE WORK FORCE

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### WANTED—NEW ECONOMY LABOUR

In Asia as in North America, recruiting, training, and retaining a skilled labour force has become a growing challenge. A shortage of IT workers is spanning the globe. Asia's work force has sufficient resources to meet this growth challenge only if it includes women in the IT work force. It is by now considered a basic premise that industrialization in the context of globalization is as much female-led as it is export-led.<sup>9</sup>

*We can already see the negative impact on the economy being caused by the gender digital divide in the 10 countries we serve.*

Anamah Tan, President,  
ASEAN Confederation of Women's  
Organizations (ACWO)

### CORPORATE EFFICIENCY

Historically, it is women who work in secretarial and clerical positions in corporate offices, handling the paperwork, scheduling, filing and routine communications. In efficient companies, nearly all these tasks are now Internet-based.

The role of support staff now means proficiency in online scheduling, Web-based data collection and communications, and electronic preparation and transmission of files. A survey of professional women in the U.S. showed that nearly three-quarters attributed their advancement at work to their use of technology.<sup>10</sup>

### COST SAVINGS

Moving corporate functions like purchasing and human resources online saves money. Dell's Asia-Pacific division finds that it is 14 times cheaper to advertise a job on the Web than in print. Oracle reports saving US\$1 billion since enabling e-commerce inside its own company.

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<sup>9</sup> 1999 World Survey on the Role of Women in Development: Globalization, Gender and Work. United Nations  
<sup>10</sup> Avon Corporation Survey, 1999

**NEW BUSINESS DEVELOPMENT**

Businesses now outsource opportunities globally through the Web. Western companies are increasingly turning to Asia for offshore sources of less costly, technology-skilled labour. Data processing alone presents significant growth opportunities for the Asian economy, if there is an inclusive work force of women as well as men to take advantage of it.

**BRAIN DRAIN**

Just as challenging is that women are migrating faster than men in four of six global regions, including Asia. (i.e. they are leaving the country to work/live elsewhere). "Women's numbers (as migrants) have also been increasing within the growing 'transnational communities' of highly skilled professional worker. A small but rising number of these transnational professional jobs are held by women."<sup>11</sup>

*The Internet is revolutionizing women's lives. Not only is it empowering all of us women to lead our own ventures, it is empowering women worldwide who are homebound to participate for the first time, from the U.S., China, India, and virtually anywhere we women can get to an Internet connection!*

Suzanne Kai, Co-Founder,  
AsianConnections.com

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<sup>11</sup> 1999 World Survey on the Role of Women in Development: Globalization, Gender and Work. United Nations

## 2. WOMEN AS ENTREPRENEURS

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The Internet, more than any other technological tool, has leveled the playing field, empowering women in business by allowing them access to information and networking opportunities traditionally closed to them, especially in Asian societies.

“A key element in the entrance by women into important sectors and influential positions of Asian economies will initially be their development of small to medium-sized enterprises (SMEs) especially in Internet-related businesses,” says Kim Sung-joo, CEO, Sungjoo International, Republic of Korea.<sup>12</sup>

Over the next few years, SMEs are projected to grow rapidly as the Web opens distribution and network channels globally to the manufacturing and other sectors.

**SMEs make up 95% of all enterprises in Asia-Pacific, employing up to 84% of the work force and contributing 30-60% of GDP of each APEC economy. SMEs account for about 35% of all exports from the APEC region<sup>13</sup>**

In Asia, 35% of SMEs are already headed by women.<sup>14</sup> In China, women account for 25% of all new business starts.<sup>15</sup> In Japan, the percentage is much higher—now four out of five Japanese small businesses owners are women. Women entrepreneurs in Asia are significant engines of economic growth.

Women-owned businesses can experience substantial cost savings and efficiencies thanks to the CEO's Internet savvy. Doan Thi Minh Chau, a Vietnamese travel agent reports that cost-efficiency is the greatest benefit her company received from using the Internet and computers. “When there was no access for private enterprises to an ISP in Vietnam - just a couple of years ago - I paid a monthly average of US\$2,000 for phone calls and faxes around the world. Now, with more access to information useful to my company, our communications with clients and business partners are increasing to about 3 times more, but the present monthly cost is around US\$200.”

*Around the world, women-owned firms comprise between 25%-33% of the business population.”*

Norman Mineta  
US Secretary of  
Commerce

*This New Economy requires a work force that is flexible, adaptable and “self-programmable.”*

Manuel Castells, Professor of  
Sociology, University of  
California

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12 Quoted from the Korea Herald

13 APEC SME E-Commerce Study. September 1999

14 Asia Pacific Economic Cooperation (APEC)

15 Ritu R. Sharma, Executive Director, Women's EDGE. Remarks at Asia Society. December 1999

Other businesses are tiny, but their economic impact changes a community. In one village, an organization formed by indigenous women of two tribes revived the craft of hand-weaving large hammocks from locally grown cotton. Then they set up a Web site. Last year, they sold 17 hammocks to people around the world for as much as US\$1,000 apiece, a significant addition to the economy of their small village. In Bangladesh, the Grameen Bank gave women a loan to buy a cell phone, and the “phone ladies” have a thriving business selling minutes to their unwired neighbors. These stories of entrepreneurial success can be duplicated anywhere women have access to technology to create revenue and jobs.

*Between 1987 and 1999 the number of woman-owned businesses in the U.S. increased by 103% with sales quadrupling to over US\$3.5 trillion a year.*

*U.S. National Foundation for Women Business Owners*

**Women in business are adding value to the economy at unprecedented rates.** They must be empowered to participate in the global economy of the new millennium if that economy is to grow.<sup>16</sup>

For women, the advantage of the Web is often that it can more easily allow them to start a successful home-based business. In many instances, a successfully deployed home-based business that relies on technology spells the difference between a meager living and a profitable enterprise. The ability of women to earn income at home—with the technology to efficiently market goods and services, process orders, and perform accounting tasks — is adding to the attraction of the Internet for women.

Laina Raveendrana Greene’s Singapore-based IT consultancy, GetIT Ptd. Ltd., first took off when she started a consultancy business from home with the help of an Internet connection. She serviced local and international clients over the Internet, generating huge costs savings while maintaining a global presence. Later her business expanded into providing CDROMs, and leading the creation of a trade association.

Women-owned companies can have a profound social impact. They often soften the harsh line traditionally drawn between family and work: they are quicker to put into place family leave, flexible work hours, profit sharing and other types of family-focused benefits than are companies owned or operated by men.<sup>17</sup>

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16 APEC Women Leaders Network. Brunei conference. June 2000

17 Dana Peebles, Review of Gender Implications of E-Commerce. 2000



### 3. WOMEN AS CONSUMERS

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Internet usage in the Asia-Pacific region is projected to grow by 139% by 2003.<sup>18</sup> These projections assume women know how to use the Internet for purchases.

Again, if the U.S. is a guide, women's access to the Web is an increasingly critical component of retail growth. In the U.S., almost 2 in 3 online shoppers are women. They are projected to become the primary online shoppers in terms of revenue, with e-commerce driving U.S. economic growth.<sup>19</sup>

Asian women constitute a huge potential market as consumers of products and services. Yet, it is a market barely tapped. In Japan, women account for less than 17% of transactions at e-commerce Web sites in a recent study<sup>20</sup>. Because e-commerce sites in Asia are exploding—in China alone the number of e-stores grew from 100 to over 600 last year—this represents an enormous opportunity to prepare women for online commerce.

### 4. THE INVISIBLE DIGITAL DIVIDE

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Younger people and students in Asia are more likely to be “*wired*.” But the substantial female work force aged 25 and older is facing huge challenges with technology. Lower level female wage earners are untrained or under-trained in Internet-related skills. “Management-level women may sport fancy computers on their desks – but are often not comfortable or knowledgeable enough to use them. If she's lucky, she has a secretary who prints out her e-mail so she can dictate a response.”<sup>21</sup>

A 30-year old woman has typically thirty more years in the work force. Her chances of a sustainable and fulfilling career without technology skills are very low. Her earning power and her ability to contribute to the GDP of the country will continue to diminish as the new economy relies more on an information-based economy.

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18 Computer Economics Research. March 2000

19 PeopleSupport. 2000

20 Nikkei Market Access with cooperation from JCB Co., Ltd., a major Japanese credit card company. August 9, 2000

21 Rosemary Brisco, CEO, WomenAsia.com

## The Solution

### *The Digital Empowerment of Women*

#### **Moving into the electronic age requires new skills, knowledge and expertise.**

While much can be achieved through individual effort, digital empowerment is the responsibility of both the private sector and forward-thinking governments to ensure that business women achieve parity with men. A long-term training strategy to provide access to and encourage use of technology is vital to continued prosperity for business women.

The Gender Digital Divide has suddenly become a topic of discussion at many levels of government and in the private sector. The APEC Women Leader's Network recently recommended to Asia's country Ministers that they recognize and take note of the impact, opportunities and challenges that women face in the new economy and in particular globalization.

A variety of solutions exist.

#### **1. TRAIN WOMEN TO ACCESS AND USE TECHNOLOGY**

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On-site Internet training, along with better cheaper access to computers and online services, are two of the key needs identified for Asia's new economy growth by the head of the United Nations Conference on Trade and Development.<sup>22</sup> "Training of a skilled work force" is one of the top three principles of the World Economic Forum Task Force on the Global Digital Divide.<sup>23</sup>

***"Women's use of today's digital technology and our definition of tomorrow's technology is critical for our future and the world's."***

Anita Borg, Ph.D., President, Institute for Women and Technology.

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<sup>22</sup> Bruno Lanvin, head of the e-commerce section of the United Nations Conference on Trade and Development (UNCTAD) Conference in Sri Lanka on e-commerce for Asia and the Pacific. 1999

<sup>23</sup> World Economic Forum. Global Digital Divide Initiative 2000. Statement of Principles. March 2000

During my time in Asia, I developed and taught Internet training seminars in Singapore in a “taught by women for women” environment. Doan Thi Minh Chau, a travel agent in Ho Chi Minh City, Vietnam, was one of the students to take that training in 1997. She had a small travel agency, and wanted to find a way to expand it to an international audience. The Canadian International Development Agency (CIDA) paid for her training on how to use the Internet. Now Minh Chau connects with partner travel agencies and individual clients around the world to coordinate business conferences, trade fairs, seminars and tours tailored for foreign executives. “It made the difference between being a small regional business and a growing global one,” she says. (For a technology-savvy story in a larger woman-owned company, see Appendix I.)

Our team has the experience, the courses, and the commitment, but we and other groups ready to train women in Internet use need the support of private industry -- most notably hi-tech companies wishing to expand market presence -- and of government agencies in order to reach enough business women to make an economic impact.

**This is a unique “seize the day” moment in history to re-shape the future by providing Internet training for Asia’s business women in environments that encourage learning, self-confidence, and empowerment.**

It’s not just good political and social strategy; it’s the only way Asia will be fully engaged in the new economy.

***Fundamental access to technology and the Internet is crucial for women-- not only so they can take their rightful place in globalization by marketing their goods and services to the world, but also for timely access to training, information, markets, business models, support and communication. The best way for business women in Asia to get up to Web speed, fast, is through active involvement by women-focused companies like WomenAsia.com that ALREADY have credibility and presence in Asia.***

Andrina Lever, President, Lever Enterprises Canada, and an ABAC Member for Canada.

## **2 . P R O V I D E C O R P O R A T E S P O N S O R S H I P S**

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Corporations must step forward to lead the way in work force Internet training. This provides an opportunity to both create and serve the Asian market. Many women—whether working inside a company, or heading their own companies—also need creative solutions for purchasing their own computers. Corporations can provide low-cost or even free computers combined with a small monthly charge for Internet access. Since smaller companies are contributing up to 60% of GDP and 35% of these smaller companies in Asia are owned by women, it is a well-placed investment.

Corporations will be the primary beneficiaries of these initiatives in the short and long term. It is more cost effective to retrain and retain current employees than to attempt recruiting from an already insufficient pool. Training not only teaches a set of technology skills but also begins the process of self-education for women at all levels of business.

For high-tech companies, training forums provide an opportunity to introduce their products and services to a new market during the early learning and adoption stage. If this early experience is favorable, they have a good chance of capturing a customer who will be making purchasing decisions not only for herself, but also for her household and perhaps her workplace.

### 3. USE GOVERNMENT SUBSIDIES

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Part of the government's basic responsibility is to educate its citizens. Historically, this has meant providing for elementary and secondary education through direct and indirect government funding, and for grants and loans at the university level. Now, it also means lifelong learning in the information technologies, with particular incentives for the substantial portion of its work force now excluded from these opportunities.

Constant government attention to technology education and application for all its workers is now critical. These initiatives must come from heads of state, and be coordinated across agencies and ministries, as the World Economic Forum Global Digital Task Force has recommended<sup>24</sup>. An employee must continuously expand his or her skill sets to remain a contributor to the economy. If left unattended, employees will not only be passed over for promotions; they may find themselves out of a job as corporations outsource—to foreign companies—technology functions that can no longer be handled by an in-house staff.

Governments must step forward with funding for continuous education. They can support corporate initiatives through tax and other incentives that reward companies doing the most to promote a New Economy work force, and encourage small companies to get up to speed.

Japan is projecting a commitment of US\$15 billion in public and private funding over five years as part of a G-8 initiative to address the international digital divide, including “know-how for using the Internet.”<sup>25</sup>

The Singapore government has committed US\$2.8 billion for Lifelong Learning. The purpose is to ensure workers' continued employability in the New Economy -- to bridge the digital divide through ensuring their ability to find new jobs.<sup>26</sup>

*We can already see the negative impact on the economy being caused by the gender digital divide in the 10 countries we serve.*

Anamah Tan, President,  
ASEAN Confederation of  
Women's Organizations (ACWO)

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24 World Economic Forum. Global Digital Divide Initiative 2000. Statement of Principles. March 2000

25 The Government of Japan. Kyusho-Okinawa Summit Meeting 2000

26 Singapore Ministry of Manpower. August 2000

#### 4. CREATE TECHNOLOGY-FRIENDLY WORKPLACES

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Employers can reap considerable long-term benefits by instituting policies and procedures that encourage IT learning. Not only will this encourage loyalty and productivity -- it will be an indication to the work force that they are working for a progressive company.

We have seen that even the most basic Internet skills can make a huge difference to women in business.

**Employers can offer:**

- Bonuses for women who attend and complete Internet training
- On-site training courses during working hours
- Full-payment of off-site training, with child care provided
- Negotiated discounts with Internet Access Providers, and computer hardware and software companies, for staff to purchase home computers
- Bonuses, vacation days for those employees with IT skills who teach others in the company
- An *Each One Teach One*® program, for company-wide mentoring
- Mandatory e-mail in the office environment
- Voluntary in-house “lunchtime” mini courses (with lunch included)

## Call to Action

### *Let's Begin Today*

**This vital component of the Asia-Pacific work force demands immediate corporate action and governmental involvement if the region is to remain competitive in the new economy.**

#### **The Challenge:**

- Women comprise nearly 50% of the labour force in Asia—and nearly 75% in China.
- 35% of all small and medium enterprises (SMEs) in Asia-Pacific are headed by women; these SMEs make up 95% of all enterprises.
- Internet usage is projected to grow by 139% by 2003, assuming women know how to use and have access to the Internet for purchases.
- Yet, in Asia, women represent only 22% of Internet users. This is in stark contrast to the U.S., where women are now the majority of the online population.

#### **The Opportunity:**

Even in Asian countries with powerful disincentives for women to enter the work force, the reality is that whether she is at home or in an office, her ability to get online will shape the country's growth rate, information flow, and its position in the global economy.

Our experience—supported by academic research on the learning environments for girls and women—has shown that the most effective technology training will set the stage of self-education.

*Turning Analog Women Into A Digital Work Force* is a call to action to bring business women online in the new Asia-Pacific economy. Corporations and governments have the opportunity to transform the realities outlined here into a unique advantage. By closing the Gender Digital Divide with Internet and IT training and access, it opens the way for new corporate efficiencies and cost-savings, higher GDP, a stronger growth curve, and unparalleled market opportunities.

A significant percentage of those who could contribute to the global marketplace are ready to be players. There is no time to lose.

## APPENDIX I

### *A Technology Success Story – Malaysia*

**16th August 2000**  
Dr. Clara Chee (Ph.D)  
Chief Principal  
Clara International Beauty Gi  
Sdn Bhd

Clara International Beauty Group, established in 1977, has more than 45 branches located throughout Malaysia, Singapore, and China, plus overseas associates in USA, Hong Kong, India, and Mauritius. With the technology we now have in place, we are actively looking for franchisees to reach a wider range of consumers. Traditionally, clients have had to visit the salon to purchase our products and services. Now, they can do it on our Web site as well ([www.claraibg.com](http://www.claraibg.com)). We used to receive enquiries via post, which was too slow and much more time-consuming for us. Our customers are really pleased with our immediate response on the Web, and our ability to attach more information for them. We are sure that this will help to build our revenue.

The continual emphasis on the research and development of new products remains an important factor for the Clara International Beauty Group. Accessibility to the Net has certainly boosted the R & D division's capabilities to identify potential product improvements and to keep abreast of the latest and most scientific technology available. It helped us succeed in formulating a gentle and effective product for treatment of acne which has helped thousands of customers maintain their skin texture.

In our administration office, we've moved from manual transaction in book-keeping to automated accounting packages, which has greatly increased the work efficiency. But we've spent a great deal of money in this initial acquisition of hardware and software, and employing professionals to upgrade and maintain our computers. However, in another two to three years, we should see some cost efficiencies. On the other hand, with the Internet and our venture into franchising and contract manufacturing, we will certainly see expansion of our business significantly. The efficiencies of the technology is what has put us into a position to expand. All our staff, in turn, will be computer literate; our group is in the process of achieving ISO9002 certification. The staff will be more efficient in their work, and this will cut down cost of hiring additional personnel.

In the area of general work, the introduction of electronic mails and electronic Commerce is a new, profitable way to stay connected to our suppliers world-wide. In the past, we were often faced with delay in receipt of products to fill orders from customers, and documents were often lost in mails. Now, we are indeed grateful for the Internet which not only eases our workload, saves time and the cost of paper, but also allows us to immediately get valuable feedback on supply availability on toiletry products, raw materials and beauty equipment. Because this now happens without delay, it assures our customers, contractors and franchisees of our competence and efficiency in doing business, which gives them a greater confidence in us.