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In a recent report by Forrester Research, BCG received the highest overall score among all major e-business consulting firms on its ability to help meet clients’ e-commerce needs. Our insights have been featured in many leading publications, including the Asian Wall Street Journal, Fortune Magazine, Internet Asia and the Harvard Business Review. Founded in Boston in 1963, BCG has worked with companies in every major industrial and global market to develop and implement strategies for competitive success. Visit the BCG web site (http://www.bcg.com) for further information.

NetBizAsia is the name given to a series of BCG Strategy Reports on issues of importance to e-commerce businesses in Asia.

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Playing to Win: Lessons for Asia-Pacific Online Retailers 29

Country Snapshots: Hot, and Not-So-Hot, Spots 35

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E-commerce is revolutionizing business. It will bring about dramatic changes, and require a response far beyond simply establishing a Web site for your company. Success in e-commerce fundamentally includes strategy, and strategy includes having a clear view of the dynamics and changes underway in the business environment.

The latest groundbreaking e-commerce strategy report from The Boston Consulting Group (BCG) provides this clear view for retail (business-to-consumer) e-commerce in Asia. E-tail of the Tiger: Retail E-commerce in Asia-Pacific draws upon our experience with similar strategy reports in other regions, and utilizes our network of e-commerce strategy consultants in 12 offices across Asia. These consultants, and those in 35 more offices worldwide, are deeply involved in e-commerce strategy with many of the world's pioneering e-businesses.

This is the first comprehensive report on retail e-commerce in the region. BCG developed the report's unique fact base and analysis through 482 in-depth interviews and questionnaires, involving most major online retailers in Asia. To complete the picture of the region's online retail market, BCG supplemented this information with publicly available data for all other online retailers of consequence. As you will see, the report uncovers some surprises about retail e-commerce in the region.

This Strategy Report is the first of several in our NetBizAsia series. It will be complemented by reports on each of Asia's major sub-regions, and by a forthcoming strategy report on business-to-business e-commerce in Asia. It is also the latest in a worldwide series of BCG reports on online retailing, covering the US, Latin America, Europe and now Asia. These reports support BCG's core business: strategy consulting for the top management teams of the world's leading corporations.

We hope you find this report stimulating and insightful. We welcome your feedback, and encourage you to contact us at NetBizAsia@bcg.com. E-mail us here as well to request notification of other Strategy Reports. You can learn more about BCG at our Web site, www.bcg.com.

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Summary of Key Findings

Online retailing is speeding ahead in Asia-Pacific, reaching US$2.8 billion in 1999
- Online retail revenue in 1999 exceeded US$1 billion for the first time, rising to US$2.8 billion
- Growth was extremely rapid, up almost 200%, from less than US$1 billion in 1998
- Internet use also surged with 27 million new users and 66 million total online in 1999, according to the Yankee Group

Japan leads in size, but online retailing has gained most ground in Korea and Australia
- Online retail revenue in 1999 reached US$1.5 billion in Japan, US$720 million in Korea and US$380 million in Australia
- Online retail revenue per capita is US$20 in Australia, US$15 in Korea and only US$12 in Japan
- Online penetration of the retail sector is 0.3% for Australia and Korea, and less than 0.1% for Japan

Outside of Japan, Korea and Australia, the market is still tiny
- Online retail revenue in the rest of Asia reached only US$180 million in 1999, as most markets have less than US$30 million in total revenue

Growth potential is high
- The retail e-commerce market is still small compared with the US, which topped US$36 billion in 1999
- Online penetration of the retail sector in Asia is only 0.1%, compared to 1.2% in the US
- Online retail revenue per capita is just US$0.98, compared with more than US$100 in the US
- Growth of more than 150% from 1999 is expected this year, with online retail revenue topping US$7 billion in 2000

Leading online retail categories are computer hardware and software, and financial services
- These two categories make up 53% of the market in 1999, with US$780 million and US$700 million in revenue, respectively
- The next most important categories are travel, books and tickets, with revenue for each between US$120 million and US$320 million
- By comparison, the US's three leading categories are computer hardware and software, travel and financial services

However, category mixes also vary widely by country
- Often driven by the activities of a few aggressive players
- Expect the mix to change as markets evolve and new entrants jump in

Consumer interest in online shopping is rising
- The online population in Asia is expected to reach 230 million by 2003, according to the Yankee Group
- Surveys show the ratio of Internet users who have shopped online is increasing

Retail e-commerce will have deep ramifications for traditional retailing in Asia
- Asia's wealthiest will shop online
- More of Asia's women will shop online
- Expectations in terms of selection, price, customer service and convenience will rise rapidly
- Traditional retailers who lose this segment will suffer
Retailers, old and new, are rushing online
  - 1,650 sites in Asia, outside of Japan, are actively selling online
  - Many more new entrants are expected, particularly traditional retailers

Online-only retailers (pure-plays) outnumber multichannel retailers (online and offline), but multichannel players attract most of the revenue
  - 52% of retail e-commerce Web sites, outside of Japan, are operated by pure-players
  - Multichannels have a 74% share of revenue across Asia, compared to 62% in the US
  - Multichannel players earn more than 70% of online retail revenue in Singapore, Korea, New Zealand, Malaysia, Hong Kong, Japan and Taiwan
  - Reflects advantages multichannel players have in pre-existing assets and capabilities

A number of barriers have created difficulties for online retailing in Asia, but these are beginning to recede
  - Access to the Internet has been difficult and costly in the past, but is improving
  - Delivery platforms in many countries are fragmented and not scaleable, though online retailers are developing imaginative solutions
  - Credit card use is low in many countries, but online retailers are finding alternatives

Asia’s less-developed countries remain very difficult retail e-commerce environments
  - Consumers in Thailand, Malaysia and Philippines are slow in showing interest in retail e-commerce
  - India, Indonesia and China markets remain small, reflecting low wealth levels and poor infrastructure
Ten lessons for online retailers in Asia-Pacific

1. **Concentrate on converting visitors to buyers**
   - Many new Internet users are coming online
   - Most are unfamiliar with purchasing online and wary of security
   - But when consumers are “imprinted,” they can be loyal

2. **Learn from your customers every day**
   - Behavior of Internet consumers is changing rapidly
   - Gain consumer insight and react fast

3. **Win customers with strong brands and personalized service**
   - Many buyers are experimenting
   - Buyers are also very sensitive to breakdowns in any step of the purchase experience
   - Strong brand and service capability are difficult to replicate

4. **Ensure your online solution addresses real offline compromises**
   - Must have a clear value proposition that beats offline options, or shoppers will stay away
   - Difficult in major cities with well-developed retail sectors
   - Difficult where various e-commerce enablers are not in place

5. **Realize that without talent you don’t have a business**
   - To be successful in online retailing, a wide range of capabilities must be acquired
   - All Asian markets are short of e-commerce expertise
   - Your organization must be designed and structured to attract and retain talent

6. **Use partnerships to lock in key capabilities**
   - Asian online retailers will not have all required capabilities in-house
   - Creating new capabilities is difficult and time-consuming
   - Exclusive relationships can be a key defensible strength

7. **Create defensibility from day one**
   - Competition will intensify, so a defensible business model is essential
   - Moving first is important but not enough
   - Exploit scale and network effects to increase defensibility

8. **Use the Internet to develop and cement relationships with new customer communities**
   - New communities are forming on the Internet
   - Effective use of communities improves retailer economics
   - Three key overseas communities are also important: Asians living abroad, tourists who have visited Asia and overseas residents interested in Asia

9. **Secure early options for category or market expansion**
   - New demographics and categories are emerging
   - Find balance between quickly seeking out categories and markets with potential, and delaying entry until they are large
   - Must think ahead and reserve your right to play

10. **Focus on creating a supply chain that is both scaleable and flexible**
    - Customer expectations on fulfillment service are growing
    - Many current systems are not able to handle orders on a large scale
    - Must create a scaleable infrastructure in order to grow
INTRODUCTION: THE E-TAIL OF THE TIGER

E-commerce will soon transform consumer markets throughout Asia. The impact of this transformation will be deep and far-reaching. Asia's shoppers will enjoy new benefits of increased selection, greater price transparency, improved product information and better customer service. Large numbers of new businesses have already appeared and started to flourish; pure-players (i.e. retailers whose business is conducted exclusively online) and "clicks and mortar" hybrids. Traditional retailers will see their competitive landscape transformed as their best customers are lured online. Local and smaller scale retailers will have unprecedented exposure to thousands of potential customers.

But the success of e-commerce in Asia is by no means assured. It depends on the development and lasting strength of four basic factors.

• It needs a critical mass of potential online buyers. We are rapidly reaching this point. Local surveys indicate that there are already more than 10 million Asians who have bought online, and many more indicate an interest in doing so. The demographics of these early online shoppers are attractive. They are among the wealthiest consumers in Asia. They are typically young and educated. However, in many countries, large groups of people are unlikely to be potential buyers any time soon. Not all categories in all countries will have a critical mass of buyers.

• Asian e-commerce needs sellers. They are appearing. Over the past year, new players have been rushing online in Asia, and there are now more than 1,650 Asian Web sites outside Japan selling to consumers online.

• Asian e-commerce requires an attractive value proposition to bring online buyers and sellers together. E-commerce has the power to raise radically expectations about convenience, selection, product information and customer service. However, this requires building sophisticated online businesses with a deep understanding of how to serve customer needs. Such propositions are emerging, but unevenly.

• E-commerce needs enablers to supply the building blocks of a successful business. These are also rapidly emerging, again unevenly. In the past year, Asia has seen the emergence of e-commerce venture capitalists and incubators, Web site design firms, banks that offer online credit card validation and new government policies supporting e-commerce. Still, major enabler deficiencies remain in many Asian markets.
As these four elements emerge across Asia, the stage will be set for the continued growth of retail e-commerce. The pattern will not be uniform, not everyone will shop online, nor will every retail e-commerce business succeed. However, retail e-commerce will bring dramatic changes in the Asian consumer environment, and quickly create space for creative new business models to succeed.

**MARKET SIZE ESTIMATES**

Market size estimates are based on a bottom-up methodology of totaling the online retail revenue of all major online retailers in Australia, China, Hong Kong, India, Indonesia, Japan, Korea, Singapore, Malaysia, New Zealand, Taiwan, Thailand, and the Philippines. In addition to detailed data from 300 retailers who participated in the survey and 182 in-depth industry interviews, BCG also collected all publicly accessible revenue data for online retailers who were not part of the survey. For markets outside of Japan, BCG was able to identify revenue data for 87% of the estimated market size. The other 13% of the market was estimated for retailers who did not participate in the survey and disclosed no public data. For Japan, where the market has thousands of small-scale retail e-commerce Web sites, BCG relied more heavily on third-party information. Our forecasts are based on our own proprietary forecasting techniques.

**ASIAN ONLINE RETAILING MARKET IS STILL SMALL BUT GROWING FAST**

Demand for online products and services across the region totaled US$2.8 billion in 1999. Asian online retailers accounted for US$2.4 billion, while sales from non-local sites accounted for another US$400 million.

But business-to-consumer sales in Asia are still small compared with the US, which had estimated online retail revenue of more than US$36 billion in 1999. Asia is also slightly smaller than Europe, which had estimated retail revenue of US$3.4 billion in 1999.

Even at this early stage, the market is growing very quickly. Overall growth in 1999 was almost 200%, compared with 145% in the US and more than 200% in Europe. Despite this rapid growth, overall Asian online retail penetration is still low at 0.1% and lags behind the US and Europe where penetration is 1.2% and 0.2%, respectively. In Asia-Pacific, the countries with the highest online penetration are Australia and Korea (0.3% in both markets). Japan, by comparison, has less than 0.1% penetration.
THREE ASIAN COUNTRIES ACCOUNT FOR THE VAST MAJORITY OF ONLINE SALES

The three leading markets - Japan, Korea and Australia - account for 94% of the total market.

Japan is by far the largest online retail market in the region at US$1.5 billion, representing 54% of the total Asian market. This reflects Japan's large lead in Internet use, with more than one-third of all users in Asia, a user pool that is almost 50% bigger than the next largest country in Asia. Other indicators, however, show Japan has been somewhat slower in embracing e-commerce. Online retail revenue per capita is behind the US, Britain and Germany, as well as Australia and Korea. Online penetration of Japan's retail sector is lower than in each of these countries.

Korea, at US$720 million, is the second largest online retail market following very rapid growth in the online broking sector since mid-1999. In addition, online retailers such as Hansol CS Club and Samsung Internet Shopping Mall have very aggressively promoted online retailing, which has also encouraged the growth of other product segments in Korea.

Australia is the third-largest market with US$380 million in online retail revenue. It has benefited from a relatively wealthy population, advanced telecommunications and an English-speaking culture. Active global and local players put Australia on the threshold of significant change over the coming years.

Taiwan, with a market size of US$50 million, is a distant fourth. Retail e-commerce has yet to catch on widely, as seen in Taiwan's lower level of online retail revenue per capita. Nevertheless, the building blocks for rapid growth are in place, including a burgeoning online broking sector and the appearance of many new e-commerce Web sites. Surveys also show Internet users in Taiwan are increasingly interested in shopping online. In the coming year, Taiwan might yet be the e-commerce breakthrough story for the region.

Other markets in Asia are still very small. The most developed of these, such as Hong Kong, Singapore and New Zealand, lag even on a per capita basis. For Hong Kong and Singapore, this might reflect the difficulty online retailers have in developing compelling offerings in urban environments that have convenient offline shopping venues. For New Zealand, the small population base limits the potential for local e-commerce offerings and has consequently slowed the pace of development.
Three Major Categories Lead Retail E-Commerce Overall, with Exceptions by Country

Computer hardware and software, online broking and travel are the three largest categories in Asia, representing 28%, 25% and 11% of the total market. These categories are also the three leaders in the US.

However, category breakdowns in individual countries do not follow the same pattern. In Japan, computers and travel are the two largest categories, while online broking is still small. In Korea, online broking is by far the largest segment. In Australia, computers lead by a wide margin, while online broking edges travel for second place. In Asia’s smaller retail e-commerce markets the same inconsistency in the pattern of category breakdowns appears, often because these markets are driven by a few aggressive players. As Asia’s e-commerce environment matures, these category rankings will continue to shift.

- Computer hardware and software is the leading category in Asia, as Asia’s early Internet shoppers tend to be technology focused. Foreign players, including Dell, Gateway and Compaq, have been particularly aggressive in this category. Many are leveraging their extensive online selling experience in their home markets as well as their strong brand names.
FOREIGN-BRAND PLAYERS ARE SURPRISINGLY SMALL BUT MAY CATCH UP FAST

Foreign-brand online retailers have taken two routes in Asia so far. One is to ship only from their home markets. Book and CD retailers, such as Amazon and CDNow, have largely followed this route. The other route is to develop local infrastructure in Asia and ship regionally or locally. Computer retailers, such as Dell and Gateway, have been most aggressive in Asia pursuing this strategy. Aside from these PC-makers, very few players have set up Asian distribution networks at this point.

Overall, we estimate foreign-brand retailers had sales in the region of US$400 million in 1999, just 14% of total online retail revenue. The largest share went to online computer hardware and software retailers, though books, collectibles and music were also significant. However, English-speaking markets are an exception, with, for example, about half of Australia’s online retail sales going to foreign-brand retailers.

Why the limited "on the ground" presence of foreign players? Setting up local operations is costly and complex. Major foreign players have been preoccupied with battles in their home markets, while they also wait to see the true scope of Asia’s potential. The next two years, however, will see many major foreign players move into Asia, especially those who already have high brand awareness in the region. These players must find entry strategies that will deliver the payoff for this brand awareness.
At this Early Stage, Most Asian Markets Are Highly Concentrated

All of Asia’s markets, except for Japan, are highly concentrated. The leading 10 players in each market typically account for more than 50% of online retail revenue. The leading 50 players account for more than 80% of online retail revenue. By contrast, the more mature US market is less concentrated, with the leading 10 players accounting for 43% of the market and the leading 50 players accounting for 71%.

Some Asian markets are highly concentrated because they have only a few early categories and consequently only a few early players. For example, in Korea, the five leading online broking firms control 95% of the segment. In Malaysia, computers are the largest segment, driven primarily by Dell. This high concentration also means many Asian online retailers, outside of Japan, have virtually no current sales.

Japan, with several thousand online retailers, is less concentrated. The leading 10 players account for just 26% of the market and the leading 50 players occupy 54% of the market. This lower concentration compared with the US implies that many current online retailers could be sub-scale and the online market might face consolidation.

Source: E-tail of the Tiger, A Boston Consulting Group NetBioAsia Strategy Report; The State of Online Retailing 2.0, a Shop.org Study conducted by The Boston Consulting Group
MULTICHANNELS HAVE THE LION’S SHARE OF THE MARKET - BUT THIS IS JUST THE BEGINNING

Multichannel players have 74% of the online market in Asia, compared to 62% in the US, while pure-players have 26% of the market. Why? First, thorny fulfillment issues give an edge to existing multichannels. Second, a lack of funding has hampered pure-play start-ups in some markets. Third, in some key categories and markets, aggressive multichannel players have driven growth in their segments.

However, in small markets such as China, India, Philippines and Indonesia, pure-players have simply been much faster than traditional retailers. For example, in China, state-run retailers have yet to stir, while India’s fragmented retailers are not well-positioned to create large-scale online businesses. Few see the logic of investing far ahead of demand.

Overall, multichannel players will continue to play a major role. Their brands, infrastructure, and ability to leverage scale in areas such as purchasing and advertising will be important advantages in many markets.
SPOTLIGHT ON JAPAN: WHERE INNOVATION TAKES E-COMMERCE IN NEW DIRECTIONS

Japanese retail e-commerce stands out because of its size and its advanced development. At US$1.5 billion, it is the largest retail e-commerce market in Asia, and the third-largest worldwide. In addition, it has well-developed payment systems, a strong telecommunications and Internet service provider base and four major nationwide delivery companies. The Internet access and fulfillment challenges that beset e-commerce in some Asian nations are not obstacles in Japan.

However, Japan has much untapped potential. Online retailing has achieved less than 0.1% penetration of the total retail market, due largely to relatively low PC penetration and consumer distrust of online purchasing. Already, Japanese companies have been innovative in addressing these issues and have pioneered some unique business models.

E-commerce via mobile phones is one such example. Mobile phone penetration, at 43%, exceeds PC penetration of 30%. Mobile operator NTT DoCoMo, via its new i-mode service, allows users to access online information (such as news, weather, and movie schedules) and perform transactions (such as purchasing event tickets). Daiwa, DLJdirect SFG and other brokerages now allow i-mode users to trade stocks at their Web sites especially set up for i-mode users. I-mode has attracted more than 2 million subscribers since it appeared in February 1999.

I-mode is also paving the way for W-CDMA technology, expected to reach Japan in early 2001. This new technology will give Japanese users the first broadband third-generation cellular network in the world. These new networks will allow expanded information and transaction services via mobile phone.

Given i-mode's success and its implications for the potential of wireless access, Japanese retailers will need to adapt their offerings to this new medium. Wireless access will help them reach new customer segments, particularly female users. Indeed, two thirds of i-mode subscribers are female, even though women currently represent only 21% of overall Internet users in Japan.

Another obstacle to retail e-commerce is concern about security and reliability. According to a Nikkei BP survey, only 33% of online buyers in Japan are willing to pay by credit card, and only 25% actually pay online. To address these concerns, Japanese retailers have introduced flexibility into their payment policies, allowing customers to pay via electronic fund transfers and cash on delivery, as well as by credit card.

For example, customers of Bookservice, a subsidiary of courier Yamato, order products through Bookservice's online store and pay the Yamato courier on delivery. Another innovative model uses convenience stores. Through a partnership with 7-Eleven, online retailers like Softbank venture e-Shopping! Books allow customers to pick up their purchases and pay for them at their local convenience store. As many Japanese live close to one of these stores, this method is convenient for consumers, and addresses their preferences by letting them pay in cash once they have received their products.
UNDERSTANDING ASIA:
A REGION OF VAST DIVERSITY

Size is one of the major attractions of the Asian market - it’s home to 2.8 billion people. On the other hand, size is also a significant deterrent - there are many small countries, and even large, developing countries actually consist of smaller “city markets.” Languages and cultures also vary widely across, and within, countries.

These distinctions are fundamental to retail e-commerce. For example, according to International Data Corporation, 83% of Chinese-speaking Internet users and 78% of Korean-speaking users prefer Web sites in their native language. Moreover, 68% of both user groups prefer to shop from local retailers rather than from foreign Web sites.

Thus, local-language content is vital for online retailers hoping to compete in countries where English is not commonly used. Yet “local language” itself differs in many countries by region or ethnic group.

Essentially, online retailers in Asia must consider a “multi-local” approach and tailor offerings to local tastes. In some cases, this approach may be as simple as quoting prices and offering purchase settlement in local currency (particularly for English-speaking countries). In others, it may mean building a new Web site from the ground up in the local language, providing country-specific product mix and full-time support in a variety of local dialects. But “multi-local” is not cheap or simple.

Dell is one of few global players to go “multi-local,” though it limits this to pricing in local currencies and arranging delivery in multiple markets.

The multiplicity of ways to describe online retailing in Asia’s local languages provides a taste of the region’s diversity. In some languages, when the terms for “online retail” are directly translated, it reveals that not only the term, but the idea of virtual selling itself is perceived differently around the region. For example, in Hong Kong, the phrase means “shop on the Net.” In Taiwan, it is “electronic commerce.” In Malaysia, it is “sell through Internet.”

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The Opportunity: Thinking Ahead About Retail E-Commerce in Asia

While current retail e-commerce is relatively small, Asia is on the threshold of a consumer revolution. Access costs will fall. Internet infrastructure will improve. According to the Yankee Group, as many as 230 million new Internet users are expected to move online in the next three years. As they start to spend, businesses able to quickly develop defensible positions will share in this significant new wealth creation.

The opportunities are enormous, and our research highlights many areas for growth and advantage.

NEW ONLINE SHOPPERS: FROM EARLY ADOPTERS TO MAINSTREAM

With so many people coming online, the Web will become available and acceptable to a wider spectrum of potential customers. Demographics will change fundamentally, and retailers must prepare for this shift in their customer landscape.

For example, online retailers can attract new customers by tailoring their sites, product offerings, marketing efforts, and promotional activities to the most plentiful and attractive customer types. Online retailers will no longer be restricted to serving men, who account for more than 75% of users in Japan and China and more than 70% in India. Instead, they can begin to target many customer groups and use that focus to build personalized and lasting relationships. In particular, sites serving the emerging female market - such as ebabycare.com in China and machiko.or.jp in Japan - will increase as women begin to use the Internet in increasing numbers.

Online spending per capita will increase as payment systems improve, fulfillment stabilizes, and online shopping becomes more mainstream. Online retailers must increase the lifetime value of their existing customers to capture these extra dollars. Focused marketing, such as special promotions and loyalty clubs, and top-notch customer service are among the vital differentiating factors for retailers.
E-COMMERCE BUSINESS MODELS:  
FROM FREESTANDING TO INTEGRATED

Modern consumers use a variety of channels during the purchasing process. They might research a product online to get specifications and pricing, test them offline in a shop, and actually buy wherever they get the best service guarantee and price. This process favors multichannels, given their preexisting offline assets and relationships, yet most have not yet taken advantage of this opportunity.  
For multichannel retailers who have been slow to get online, acquiring or partnering with a pure-play can provide a quick fix. For pure-plays, establishing a relationship with a brick and mortar retailer can give them access to vital offline services and relationships. Companies combining leading offline positions with strong online offerings will build defensible businesses.

A version of this "clicks and mortar" model is already emerging in Asia. Flying Pig in New Zealand has taken over the online operations of bookseller Whitcoulls. Similarly, several online broking firms in the Greater China region maintain offline branches that are dedicated to helping online customers.

ONLINE PRODUCTS:  
FROM INITIAL SEGMENTS TO KILLER CATEGORIES

Killer categories - categories with large offline revenue and strong online growth potential - will begin to emerge. Financial services, and online broking in particular, is currently the killer category in Asian retail e-commerce, but others are in the wings. Travel, automotive and real estate all represent significant "white space" opportunities. An explosion in online purchasing in any of these categories could trigger revenue and growth possibilities.

Moreover, there are a number of strong offline, regional, and global players with undervalued assets waiting to trigger this explosion. Regional airlines - Cathay Pacific, Singapore Airlines, JAL, and Qantas - could dominate the lucrative travel market by focusing on the online sector. Similarly, major automakers in each market could command the automotive category if they move online.

INTERNET ACCESS:  
FROM PC ONLY TO WIRELESS

Multiple forms of Internet access will be common across Asia. Wireless access, in particular, is likely to be the most common of the non-PC based mediums because cellular technology already enjoys high penetration levels across Asia and mobile phones are less expensive and more portable than PC’s and set-top boxes. Data upgrade paths such as GPRS and EDGE are also in development for Asia’s GSM-based mobile phone system.

The spread of wireless access means online retailers will have to meet the new needs of these customers - mothers, business man on the run, single working women - with new services. Given the access speed and display limitations of wireless technology (at least until third-generation cellular and optimized companion devices are widespread and inexpensive), Web sites will need to streamline their sites for simplicity and efficiency to satisfy these consumers.
ON-LINE STOCK TRADING: EARLY KILLER APP IN ASIA

Online stock trading has emerged as the "killer app" of retail e-commerce in many Asian markets. Across the region, online trading is 25% of overall retail e-commerce, and is growing quickly. Some of the most visible online players in key markets - Boom.com in Hong Kong, Phillip Securities in Singapore, Polaris Securities in Taiwan, and Sejong Securities in Korea - are online brokerages.

Why is online stock trading a killer app? First, the consumer benefits of added convenience, information control, and commission savings have triggered rapid growth, in some markets quickly disrupting the entire retail financial services market. The fulfillment challenges of other retail categories are not an issue. The retail financial services industry is only starting to come to grips with the significant changes entailed by this very rapid adoption.

Second, it brings a very attractive group online, and gets them familiar with Internet transactions. Online stock traders tend to be young, wealthy, and comfortable with technology. Our research shows online stock traders are interested in making other Internet retail purchases. Advertisers want to reach this group, and stock information sites are among the most successful in bringing Asian advertisers into e-commerce.

Third, it will be one of the first e-commerce applications to transcend the PC and move to other platforms, such as wireless. In Korea, Taiwan, Hong Kong, and Japan, online brokers are already supporting trading over mobile phones.

However, continued development of online stock broking will require further deregulation in several markets. In countries with developed online trading, such as Korea and Taiwan, commissions have been deregulated and adoption has been strong. Japan, which recently deregulated, and India, with deregulation slated for mid-2000, will see strong growth in the coming year. Hong Kong and Singapore already have significant online trading revenue, but deregulation has yet to occur. China has significant long-term potential because of the sheer size of its population and its emerging, but active, domestic stock markets. Even today, sharing stock information via the Internet in China is very popular, and online stock trading has just started, though it is not yet clearly regulated.

How will major North American players such as E*TRADE, Charles Schwab, and others approach the region? Going it alone in Asia is likely to prove untenable for most, given the range of regulatory and other barriers. In Japan, E*TRADE, DLJ Direct, Charles Schwab and T.D. Waterhouse have typically chosen to form joint ventures. However, the attractiveness of online trading is likely to bring more North American players into the region this year, raising the standards and intensifying online financial services competition.

ONLINE ENABLERS: SELLING TOOLS TO THE GOLD MINERS

Information technology firms, web design companies, payment gateway providers, and distribution companies will emerge to serve a growing demand for their services as the number and size of e-businesses increase.

Companies with these capabilities can benefit from the boom by serving Internet retailers' core needs, while avoiding some of the risks. Local firms providing these services are already starting to appear, but this is also a key segment for foreign players, who can leverage the knowledge and technical capabilities they have gained in other markets.

E-TAILER EVOLUTION: FROM MANY HOPEFULS TO A CORE OF SURVIVORS

Despite a flood of new start-ups and offline retailers going online, the online retailing market will consolidate as the competition intensifies and major players establish their positions. Many small firms will be forced out of business or acquired by larger online retailers.

Indeed, the majority of Asia's online retailers today are unprofitable - the downside of the high market concentration noted earlier. Many players will find they are not targeting a segment of sufficient size, that their value proposition is not compelling, or that their economics do not allow future profitability. Moreover, in many markets, the competition from strong multichannel or overseas players has yet to begin.

Success will come from careful thinking about business models and business strategy. In some markets and categories, it is too late. In others, it is too early. And where the timing is right, getting the model right is not easy. Later in this report we offer lessons that online retailers can use in developing their businesses.
The Challenges: Overcoming The Barriers To E-Commerce

As we have seen, Asia’s retail e-commerce development is uneven to date, and influenced significantly by many barriers. At their worst, these barriers include poor infrastructure and high Internet access costs, poor delivery platforms, and cumbersome payment structures. While these barriers have delayed the growth of e-commerce throughout the region, many of these problems are gradually being resolved and more favorable conditions are beginning to emerge.

INTERNET ACCESS COST AND AVAILABILITY REMAINS A BIG CHALLENGE

Low telephone penetration rates are a problem in several markets. According to the International Telecommunications Union, countries in North Asia, Australia and New Zealand have telephone penetration rates that approach the US level of 60 lines per 100 inhabitants. But the ITU also reports that China, Southeast Asia (excluding Singapore) and India have penetration rates that are far lower, from about 20 lines per 100 people in Malaysia to less than five lines in China and India.

Low PC penetration is also an issue for some markets. Countries in the region fall into three groups: those that are close to the US level of nearly 50% (Australia and Singapore), those that are one half to two-thirds the US level (Japan, Hong Kong, New Zealand, Taiwan and Korea), and others which have penetration levels of less than 5%.

Access costs also vary. Amongst Asia’s wealthier nations, Internet access costs are more expensive than the US, particularly in Japan and Australia. In Japan, a high per-minute call charge is the main culprit, while in Australia the main factor is expensive computers. Other countries share a combination of these factors.

Among Asia’s developing countries, access costs are generally similar to the US, however, given lower wealth levels, these costs still present a significant barrier. In most cases, Internet access costs represent more than 15% of a household’s monthly income in these countries (as much as 48% in China and 35% in India), far more than the 1% for the US.
However, this picture is changing. First, Internet access is becoming cheaper in many countries. For example, in Japan, NTT recently introduced a new rate plan offering a 60% discount. In Singapore, major ISPs Starhub, Singnet and Pacific Internet have started providing free Internet access from January of this year. Second, Internet users do not only go online at home. According to a survey by IDC, Asian users are equally likely to use the Internet while at work. Where individuals may not be able to afford the cost of using the Internet, businesses can.

In some cases, Asian countries are pushing beyond current infrastructure barriers. In Japan, many people are using game machines such as Sega's DreamCast and Sony's PlayStation 2 as access platforms. Several countries already have, or are now building, broadband networks to support high-speed Internet access. Hong Kong, Singapore and Australia already have networks in place. Japan, Taiwan and Korea are in the process of building them. Others are exploring alternatives to the computer-centered model for Internet access. In China, Microsoft is working with local companies Legend and Haier to create a system, called Venus, for television-based Internet access. Japan and Korea have begun to introduce wireless Internet access solutions, with other countries planning to follow soon.

DELIVERY INFRASTRUCTURE IS A MAJOR ROADBLOCK IN MANY COUNTRIES

Efficient, convenient delivery is a crucial link in the online retailer's supply chain. The customer's satisfaction and the retailer's economics both depend upon it. Here Asia's online retailers will face some of their greatest challenges.

In many countries, retailers do not have a single solution for their delivery needs. Unlike in the US, where package and document handlers such as UPS and FedEx can cover the whole country, delivery companies in many Asian countries are fragmented and have limited reach.
Furthermore, many of these handlers cannot provide adequate customer support. Very few local delivery companies offer automated package tracking, instead relying on cumbersome, paper-based processes. The capabilities of delivery companies in countries such as Japan, Australia, Hong Kong and Singapore are much better than in some others, but frequently still fall short of online retailers' expectations and needs.

National postal systems become the fallback option for most online retailers. They offer national coverage, though not necessarily door-to-door service. They are relatively cheap compared with privately-owned delivery firms. But this solution also has problems. Delivery times can be slow, and tracking is manual, if done at all.

The cost of shipping quickly into and around the region is also a barrier. A comparison of delivery rates showed that, for a parcel of books weighing approximately 4.5kg (10 pounds) and valued at US$100, the cost of in-country delivery typically was 5% to 15% of the cost of the parcel (for delivery in 3-5 days). For delivery within the region (Sydney to Wellington or Hong Kong to Bangkok, for example), delivery cost jumped to 30% to 50% of the parcel’s value. Shipment from the US was more than twice that at 110%.

PAYMENT SYSTEM SLOWLY TAKING SHAPE

Most Asians are not used to using credit cards to settle transactions. While some countries like Australia and Hong Kong have credit card penetration levels approaching US levels, penetration in many markets is low—Taiwan and Malaysia about 30%, Thailand and Philippines 20%, according to Lafferty Cards Databank Asia-Pacific. In Japan, where Lafferty reports that credit card penetration is more than 60%, only 25% of Japanese Internet shoppers use credit cards to settle online payments. Recent surveys have shown many consumers in Asia still worry about security and vendor reliability over the Internet.

Two common factors keep banks from providing good solutions in several countries: legacy IT systems and difficult e-business credit assessment. For example, none of the big four state-owned banks in China provide a reliable real-time payment gateway. So far, Hong Kong banks have been reluctant to assume fledgling e-tailers' merchant accounts. Online retailers report the same to be true in Australia and New Zealand. Many traditional bankers cannot easily assess the credit-worthiness of a start-up company that has no proven track record and is still unprofitable.

Therefore, other options have developed in several markets: bank transfers, cash on delivery and third-party settlement. For example, in China, customers are asked to settle the bill with a local Post Office before delivery of goods. In Japan, goods can be delivered to a local convenience store and customers can settle payment there.

AN ONLINE RETAILER’S SEARCH FOR BANK SUPPORT IN HONG KONG

Despite its status as a global financial center, Hong Kong still has gaps in its support for e-commerce. One online retail start-up reported the challenges he faced in getting a major local bank to provide him with the merchant services he needed to accept credit cards.

After receiving his proposal, losing it twice, and taking three months to deliberate, the bank said they would process credit-card transactions for him, but only if the customer lived in Hong Kong. The retailer must also post a large cash deposit with the bank for this limited service.

Clearly such terms are unreasonable for an e-commerce business with a multi-country market and tight cash flow. This online retailer went with a bank in Bermuda, which supports online merchants, but only in return for a large percentage fee for each transaction.

Such policies put start-ups at a disadvantage to pre-existing retailers.
This payment issue will evolve. Credit card transactions will grow as consumers become more comfortable with security. For example, in Korea, one leading online mall saw credit-card use surge from 20% to 70% in less than 12 months after shoppers realized settlement was reliable and safe. The regional banking systems are also beginning to adapt to changing needs. Non-traditional payment gateways, such as FirstECom in Hong Kong, are starting to flourish, and merchants without track records now have local access to alternative payment intermediaries. China Merchant Bank, a new-generation bank in China has recently launched an online payment solution for local merchants.

PUBLIC POLICY SUPPORT IS AN ISSUE

Government policies towards the Internet have varied. Nearly all express support for e-commerce, but tangible support is inconsistent. Where governments have taken a role, support often takes the form of providing land, funds or infrastructure for Internet start-ups. For example, Taiwan has devoted US$600 million to Internet infrastructure and US$2.8 billion for a new high-tech business park. Hong Kong recently launched its Cyberport project and Singapore has nearly completed its Singapore ONE program.

In other cases, governments have taken a hands-off approach to e-commerce and let it evolve on its own. And most e-commerce entrepreneurs in the region agree that less government involvement is better than too much. However, our interviews with online retailers have also revealed some practical ways the government can become involved in e-commerce.

• Embrace practical egovernment: Governments are major purchasers of services and products in any economy. Many government services, such as school enrollment, car registration and tax returns, could go online. Putting procurement activity online would serve as a strong impetus for a local business-to-business Internet economy. Governments could also lay out operating standards for online retailers, and certify those that meet them to raise trust and confidence shoppers have in buying online.

• Avoid penalizing domestic online retailers: Online retailers complain that local tax issues can create an uneven playing field. For example, some governments have local sales taxes which goods mailed from abroad escape. This erodes the price position of local online retailers relative to their offshore competitors. Online retailers also have difficulty competing with the prices offered by "gray" market shops, since many of these stores manage to avoid sales taxes imposed by the government.

• Encourage foreign investment and capability transfer: There is a large pool of overseas capital ready to help build e-commerce businesses across Asia. Countries that do not create a stable and attractive environment for investment are likely to lose to those that do.

• Modernize the postal system and make it e-commerce friendly: The postal system is the fallback delivery option for online retailers. Services such as guaranteed delivery dates, next day delivery, package tracking and quick compensation for damaged goods will enhance, rather than discourage, e-commerce. Moreover, value-added services such as inventory and returns management can prove profitable for postal systems.

• Open up the telecom market: In some countries, such as China, the local market is still very restricted. Only a few companies control domestic backbone links and international gateway access. Internet access costs therefore remain high, deterring the growth of Internet business. Many retailers believe access costs will fall much faster than to date, if governments speed up liberalization.
**Retail Web Site Experience: Asia Has the Basics Right**

Global online retailers entering Asian markets will be surprised if they expect a slick Web site will help them dominate at the local level. Asia’s leading sites have already replicated many of the strongest features of their US counterparts. Leading online book retailers in eight Asian markets have Web sites offering the same basic functionality as global leader Amazon.com. However, advanced features - including a deep electronic catalog, more sophisticated user reviews and ratings, and improved interactive merchandising based on past shopping histories - are generally missing.

The biggest performance gaps (outside these advanced features) are usually in inventory and shipping functions - often the failing of local suppliers and couriers who lack information systems to provide services such as delivery tracking and real-time inventory management. Online retailers who can forge data-intensive links with supply chain partners will be breaking new ground and building vital customer loyalty.

### Basic Functions Offered by Leading Local Web Sites

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</tr>
<tr>
<td>Bookland.com.tw (Taiwan)</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Ease Of Use**

- Personalization
- Load Speed
- Product News/Reviews
- Merchandising

**Customer Service**

- Customer Service Policy
- Order Status/Delivery Tracking
- Help/Customer Service On Home Page

**Product Offering**

- Search Function
- Product Description
- Inventory Availability

**Fulfillment/Payment**

- Online Payment
- Security
- Privacy
- Delivery Options

**Source:**

BCG Analysis

**Note:**

1. Home page loaded in less than 30 seconds
2. Web site offers secure transactions and security guarantee
3. Web site provides detailed privacy policy
Playing To Win: Lessons For Asia-Pacific On-Line Retailers

Success for any one online retailer will not come easily. Most often, success will not be accidental, and it will not be the result of one factor, such as “first to market” or “amassing eyeballs.” Instead, it results from getting several factors right at the same time, and fully exploiting the luck that does come along.

There are a number of success factors involved in the development and execution of an online retail business model.

1. **CONCENTRATE ON CONVERTING VISITORS TO BUYERS**

Online retailers must build trust and credibility with potential customers, who are often attuned to person-to-person transactions.

A reputable, well-known brand image is an important stepping-stone, and to create a stronger sense of security, retailers must be prepared to discuss sales and privacy policies with consumers.

Retailers also must fulfill their price and delivery promises. Any breakdowns will lead to distrust and a lost customer.

**BUILDING TRUST AND CREDIBILITY: HANSOL CS CLUB (KOREA)**

Hansol CS is among the most successful online malls in Korea, with sales of US$20 million in 1999. Much of that success is due to the high degree of trust it has created with consumers.

Prior to going online in 1997, Hansol was already one of Korea’s largest and best-known mail order companies. Building on this reputation and experience, Hansol upgraded its warehouse and delivery capabilities to meet online challenges. It designed a real-time system linking products on the site to the inventory control system in the warehouse. Customer orders are re-confirmed almost instantly. Hansol promises one-to-two day delivery in the Seoul area and three-to-five days elsewhere in Korea. The status of an order is tracked via a specially designed system. Hansol also pledges compensation (up to US$17) for late delivery. The company also has assembled a team of 150 customer support personnel to make “happy calls” to each customer (i.e. calls made after the delivery to ensure customer satisfaction).
2. LEARN FROM YOUR CUSTOMERS EVERY DAY

Online retailers can expect rapid changes as e-commerce evolves. In particular, the mix of customers, their behavior and their choices will change. Those retailers that are quick to react to these changes will have an advantage. Fortunately, the Internet is an excellent medium for gathering customer information. Online surveys are simple to create and distribute, and therefore can have wider reach.

Most online retailers have at best a cloudy idea of who their customers are. Asian online retailers would be well-served by mining customer data through their Web site, analyzing it thoroughly and adjusting their product line or service accordingly.

DISCOVERING THE CUSTOMER: STOCKSTAR.COM (CHINA)

Stockstar.com is one of China’s most successful financial portals. Founded in 1997 as one of China’s first consumer Web sites, Stockstar.com provides financial information and community services to stock investors on China’s domestic stock exchanges. Since its launch, Stockstar.com has developed a large and loyal user base, but lacked in-depth customer insights to develop premium services and effective advertising.

The company carried out an aggressive online survey of its 500,000 users. Over several weeks, the focus of the surveys progressed from basic demographic information, to preferences regarding the site’s services, to preferences relevant to potential advertisers. The firm complemented the survey with informal discussion groups with selected respondents.

The results led to dramatic new insights on building the site and the business model, as well as attracting advertisers.

3. WIN CUSTOMERS WITH STRONG BRANDS AND PERSONALIZED SERVICE

Failure to convert first-time buyers into loyal customers is deadly for an online retailer. A dissatisfied customer is almost impossible to win back.

Web site interfaces and post-purchase service levels vary widely from one online retailer to another. Once a customer has completed several satisfactory purchases, he or she becomes familiar with the process at that retailer and is reluctant to switch without a compelling reason.

Online retailers must encourage customers to return to their site and “imprint” on it. The first step is getting the basics right - timely and reliable order fulfillment, friendly and responsive customer support, good selection and competitive prices. Next, retailers can introduce functions that engage customers, such as chat rooms and customer product reviews.

It generally takes three purchases for a customer to imprint. The first is a trial as the customer samples the online experience. The second is confirming, as the customer re-visits the site and purchases again. The third purchase cements the relationship and marks the point where loyalty and affinity develop.

4. ENSURE YOUR ONLINE SOLUTION ADDRESSES REAL OFFLINE COMPROMISES

E-tailers must design their offering to beat offline alternatives on key comparison points, including price, selection and convenience. In Asia, the effort required to improve upon offline options varies by country and by category. E-tailers must understand where the offline shopping experience leaves consumers dissatisfied. They then must focus their online alternative in those areas to give customers a positive experience and compel them to return. By responding quickly to demand, online retailers can create a shopping experience that will surpass the offline equivalent and evolve with their customers.
USE THE INTERNET TO IMPROVE THE SALES PROCESS: GENERAL MOTORS (TAIWAN)

General Motors started to sell cars online in Taiwan in the second quarter of 1999. Concentrating on site design and back-end service support, the aim was to create a top-notch online shopping experience and GM took steps to understand the lifestyle, needs and shopping behavior of core customers before tailoring its Web site accordingly.

The company noticed that the offline auto purchasing experience fell short in two areas: convenience and richness of product information. To heighten the site’s convenience, GM designed a virtual online test drive and offered door-to-door delivery of a test drive vehicle. The site also provides abundant car-related content to lure buyers and strengthen the bond with existing owners. Additional features, such as online car financing and maintenance scheduling, are also planned.

Jennie Lin, creator of the GM site, reveals that online customer orders now account for more than 10% of the company’s business in Taiwan.

5. REALIZE THAT WITHOUT TALENT YOU DON’T HAVE A BUSINESS

Successful online business requires a wide range of new capabilities. Beyond the obvious technical requirements, a new range of skills are needed in management, business development, partnership formation, sales and marketing. Fundraising and corporate finance skills are also key for many new ventures.

All Asian markets are short of such expertise, not only in developing markets such as China and Southeast Asia, but also in developed markets such as Japan, Korea and Australia. While the best and brightest talents of Asia’s more traditional companies are moving into e-commerce, the shortage of skilled people remains a core issue. However, accessing premier non-technical resources, such as advertising agencies and strategists, can mitigate this problem.

It is essential to design and structure an e-commerce organization to attract and retain the best talent. This means companies need to offer non-traditional compensation, a flexible working environment and an entrepreneurial atmosphere if they want to encourage creativity and increase employee retention.

6. USE PARTNERSHIPS TO LOCK IN KEY CAPABILITIES

E-tailers in Asia rarely have all the capabilities they require for an online business. Frequently, they must develop technical infrastructure, business operations and fulfillment capabilities in a short time. Creating everything internally is usually not an option, and is rarely the best one.

Therefore, partnerships are particularly important for pure-players since they can gain access to capabilities, industry expertise, and fixed assets they could not build on their own. However, it is increasingly clear that even multichannels must forge alliances or partnerships for the specific e-commerce expertise they need.

And partners can also fill other roles. Online retailers can develop relationships with content and service providers to increase traffic and give customers incentives to stay by increasing the overall value of their shopping experience.

FORM POWERFUL PARTNERSHIPS: 7-ELEVEN (JAPAN)

7-Eleven, Japan’s largest convenience-store operator, is about to establish a joint venture with seven other companies to sell a wide variety of goods online. The site, 7dream.com, aims to use 7-Eleven’s nationwide store and distribution network to support the e-commerce service. In-store multimedia terminals will capture impulse purchases. Aside from paying online by credit card and requesting home delivery, Internet buyers can also elect to pay for, and pick up, their purchases at a neighborhood 7-Eleven store.

7dream.com’s major partners include NEC, Nomura Research Institute, Sony, Mitsui, Japan Travel Bureau and Kinotrope - instant system and product suppliers. NEC will design and operate the venture’s Web site and produce the multimedia terminals, while NRI will house the Web servers in their data center. Sony will provide music data downloading for the MiniDisc platform, as well as other technologies. Other partners (including some not investing in the venture) will offer concert/travel tickets, information/entertainment services, mobile phones, and other products. The partners have set a US$1.4 billion sales target for fiscal year 2001.
EXPLORE YOUR CUSTOMER BASE:
ROYAL SELANGOR (MALAYSIA)

Royal Selangor, a manufacturer and retailer of gift items, is one of Malaysia’s premier brands. Founded in 1885, the company established itself as a premier manufacturer and retailer of pewter gifts long before it started online retailing in 1998.

Royal Selangor’s online entry strategy was to focus on customers already familiar with its brand and products. Targeting tourists who had been to Malaysia in the past, Royal Selangor found its online store enabled it to transform a single purchase into a lasting customer relationship. Innovative features, such as allowing customers to design or customize gifts online, have received much praise from customers.

Now, about 60% of Royal Selangor’s online sales are to international customers.

EXPLOIT FIRST-MOVER ADVANTAGE:
CITYLINE (HONG KONG)

Cityline is a multichannel player selling movie tickets in Hong Kong. It began selling tickets using a computer-based phone-in service and subsequently became the first company to take movie ticket sales online in Hong Kong. Even now, Cityline is the only site in Asia to offer online seat selection.

Online revenue now accounts for a significant portion of overall company sales. However, the company has not been idle despite its strong market position. It has forged a partnership with Chase Manhattan Bank, which allows Chase credit card holders to earn points and redeem them for free movie passes. It has also continued to improve the functionality of its Web site, including a popular service that allows users to rate current films.

By moving first on a variety of levels - offering the product on line, securing exclusive partnerships and adding functionality to its Web site to create a user community - Cityline has secured and maintained a dominant position. Competitors will find it difficult to challenge this position, especially given Cityline’s mutually beneficial partnership with Hong Kong’s top movie theatres.

8. USE THE INTERNET TO DEVELOP AND CEMENT RELATIONSHIPS WITH NEW CUSTOMER COMMUNITIES

New communities are forming on the Internet, free of geography constraints. These communities are defined by interest (golfers), experience (frequent travelers) and culture (overseas ethnic communities) and the Internet allows retailers to reach groups previously closed to them. This opportunity is particularly important for retailers in smaller markets, where the local population may not be a sufficient market for certain products.

Successfully identifying the right Internet community for your product can be a boon, even for Asia’s smallest retailers. For example, a stamp collector in Towau, a town in East Malaysia on the island of Borneo, did not realize there were many international collectors interested in his North Borneo stamps until he offered them for sale on E-bay. He has now turned his hobby into a small Internet business.

Internet communities also benefit when online alternatives offer improved service. Several sites in India, such as Saregama, target overseas Indian communities who face high prices and limited selection when buying “home” products through traditional channels.
9. SECURE EARLY OPTIONS FOR CATEGORY OR MARKET EXPANSION

E-tailers must balance between seeking out potential growth areas and rushing into a market before it is ready. They can achieve this balance by building flexibility into their business models, allowing rapid movement into new categories or markets when they see the opportunity.

Smart e-tailers will observe changing demographics to anticipate category and market shifts. Many countries in Asia are already seeing new demographics emerge, particularly teens and women, and some aggressive online retailers are already anticipating their arrival on the Internet.

But online retailers should not blindly seek first-mover advantage. They must analyze each category and market. How big is the target community? Is the market large enough (or soon to be) to sustain the business?

10. FOCUS ON CREATING A SUPPLY CHAIN THAT IS BOTH SCALEABLE AND FLEXIBLE

Strong supply chain capability is the engine that powers a successful e-commerce business model, because customers are acutely sensitive to supply chain breakdowns. Late or unfulfilled orders are a leading source of customer complaints.

But building a supply chain that is fully scaleable and avoids breakdowns as orders escalate is an even greater challenge. Right now, the manual, paper-based systems of many online retailers, particularly in developing Asian markets, are not scaleable and will not be able to handle growth in demand.

Online retailers must invest money and time to improve this important aspect of their business. They must also encourage their partners - including courier services and front-end suppliers - to similarly enhance their own internal processes.

STAKE OUT TERRITORY EARLY: THE SPOT (AUSTRALIA)

The Spot is an umbrella brand for multi-product specialist sites in Australia. Australia’s online shoppers are still largely male, but the Spot focuses on female buyers, whom the company believes will soon be the major online buying group. Its brand image promises quality, service and reliability. The Spot will extend that image across different categories as they become viable. By creating new Spot sites (e.g. ToySpot, BookSpot, CDSpot, etc.), the company plans to gain quick results in these categories before strong competitors emerge.

As a “multi-specialist,” the Spot is investing heavily in each category. For example, the company has invested in information systems and physical warehousing space for each of the categories it covers. In addition, in areas such as vendor selection and procurement management, dedicated resources are required for each category.

E-CHRISTMAS 1999: DID SANTA ARRIVE ON TIME?

Many online retailers have developed fulfillment systems that are not scaleable. To put retailers to the test, BCG went shopping during the peak of the Christmas season in Australia to buy gifts for local charities. Two weeks before the Christmas deadline, a shopping list of 44 Australian online retailers was drawn up, a mix of prominent and less well-known sites. Of the 44 sites, only 25 delivered the gifts in time for Christmas. The average delivery time for these was 4.5 days. Overall customer service was poor: only 20 stores sent an order confirmation, and most were slow to respond to e-mail inquiries. But a few online retailers did an excellent job - gifts arrived within a day or two and were well-presented and neatly packaged.

Many retailers will learn painfully that failing to invest in fulfillment will cost them customers.

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<th>Time</th>
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INDIA: INFANT MARKET WAITING TO MATURE

Indian retail e-commerce is in its infancy, as a result of several factors: poor infrastructure; low Internet penetration; lack of an online payment facility; customer discomfort with ordering online; and inadequate marketing by Web sites. Fortunately, ISPs and private telcos are starting to build the necessary infrastructure - fixed lines, cable and wireless networks - while payment and delivery players are beginning to appear. However, the process will take time. Until then, online players will have to be patient to fully realize India’s great potential.

Several online retailers target the domestic, high-income customers, but early attempts have often met with obstacles. For example, one online retailer managed less than US$15,000 in five months of operation, and has since focused its efforts on the business-to-business market.

Rather than struggle with a small consumer market at home, many Web businesses have focused instead on content. This focus on viewer traffic has generated sufficient advertising revenue to provide further content and logistics development, which has in turn created higher traffic.

Online retailers have also generally targeted Indians living abroad. Sites such as chennaibazaar.com and samachar.com have found a niche selling to expatriate Indians, whether by selling them Indian products not available overseas or shipping gifts to their relatives back in India.

Each of these approaches could grow into strong domestic e-commerce businesses as infrastructure and wealth levels improve. For portals, the key step will be converting their captive visitor base into loyal purchasers. At the same time, those online retailers with an overseas focus will need to transfer knowledge from their current business to the local market as they shift to a domestic focus.

**Vital Statistics**

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**Different paths to build domestic e-commerce business**

- **Market readiness**
  - **Low**
    - Provide portal services to attract traffic
    - Target Non-Resident Indian shoppers only
    - Focus on domestic high-income niche
  - **High**
    - Build captive visitor base
    - Focused targets for e-commerce
    - Build internal knowledge of e-commerce
    - Expand local customer e-commerce

Southeast Asia presents a major set of challenges and opportunities to on-line retailers. As a collection of diverse small markets ranging from Singapore (low population, high Internet penetration) to Indonesia (high population, extremely low Internet penetration), the state of on-line retailing varies considerably by country.

Singapore has emerged as the early regional leader. Its well-developed telecommunications, legal and logistics infrastructure, coupled with the government’s active promotion of e-commerce, has led to emerging e-tailers in several categories, including Fraser Securities in online brokerage, WizOffice in office supplies and DiscVault in music CDs. Financial services is the leading category, although brokerage commissions are not yet deregulated. While Singapore enjoys the highest number of e-tail sites per capita in the Asia Pacific region, its domestic market will support only a few viable on-line businesses in each category. Regional expansion will be the critical next challenge for Singapore online retailers.

By comparison, Malaysia’s on-line retailing environment is less developed, with many sites having come on-line in recent months. On-line retail activity is picking up with several sites that began as content or community sites, but are now beginning to support transactions. Potential success stories are already emerging in several categories - Royal Selangor in gifts, AsiaTravelMart and MarIMari.com in travel. Recent developments will no doubt help on-line retailing. For example, the government is considering issuing new ISP licenses, while customer service levels are expected to improve as a result of increased competition.

Given Thailand’s flourishing tourism industry, travel and tourism-related sites have regional and international appeal. The local market is still small and centered around Bangkok. Regional and global players entering the Thai market must address cultural and language issues as in other Asian markets. Local players who develop their brand and fulfillment infrastructure are likely to be attractive partners for global players.

Deregulation of key sectors such as telecommunications and ISPs has accelerated the development of the Philippines’ Internet landscape. The large Filipino community now residing in the United States is also promoting the local industry’s development. Close ties to relatives and friends in the Philippines have led to the development of several community-based sites and a healthy e-commerce network should grow from this foundation.

**Vital Statistics**

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<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Internet population (individual users)</td>
<td>(99)</td>
<td>5 M</td>
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<tr>
<td></td>
<td>(03)</td>
<td>37 M</td>
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<tr>
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<td>Annual online retail revenue per capita</td>
<td>(99)</td>
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<tr>
<td>Largest online categories</td>
<td>Travel, Financial Brokerage, Computer Hardware/Software</td>
<td></td>
</tr>
</tbody>
</table>

Source: E-tail of the Tiger, A Boston Consulting Group NetBizAsia Strategy Report; BCG Analysis, Yankee Group

(1) Includes Singapore, Malaysia, Thailand, Indonesia, Philippines

**MUSTAFA’S**: A SOUTHEAST ASIAN PIONEER IN E-COMMERCE

Mustafa’s, a Singaporean discount retailer popular with both locals and tourists, was one of the region’s pioneers in on-line retailing. Its mail-order experience led it to see the potential of on-line retailing sooner than most and the site enjoyed considerable early success. The on-line channel became popular, particularly with tourists who had returned to their homes but wanted to purchase items available at Mustafa’s. Recently, Mustafa’s ran head on into the challenge of credit card fraud on international orders. Fortunately, solutions to this problem already exist and Mustafa’s is currently examining its options to determine which one to adopt. Look for Mustafa’s to once again enjoy on-line success once these solutions are implemented.
Indonesia, with the largest population in Southeast Asia, but the lowest Internet penetration, lags behind the rest of the region. Local on-line retailing is currently limited to a collection of sites serving niche markets. These sites are focused on Jakarta, where Internet penetration is significantly higher than the national average, or travel and leisure, targeted at foreign tourists. Lack of developed infrastructure will continue to constrain the development of a local on-line retailing industry.

Set against the backdrop of small addressable national markets, e-tailers in Southeast Asia must seek innovative ways to attain critical mass in terms of market size. There is no "right" way to do this and any approach depends on regulatory constraints, fulfillment issues, and the e-tailer’s specific product or service. A range of models have been used to date, from integrating with off-line players serving one national market, to employing a multi-country strategy or serving large overseas ethnic communities.

**ASITRAVELMART: THINKING REGIONALLY IN TRAVEL**

Malaysia’s AsiaTravelMart.com has taken a regional approach from the outset. It has signed on suppliers of travel-related services around the region, and has also customized its approach to buyers in different markets. For example, it will soon be possible for customers in each of the major markets to view travel-related offerings in their own language with prices quoted in their local currency. Customers can have their tickets delivered to them or pick them up from an international network of travel agents who have signed up as fulfillment agents.
GREATER CHINA: E-COMMERCE A CATALYST FOR CHANGE

The Internet environment varies greatly in the Greater China markets of Taiwan, Hong Kong and China.

Taiwan is the biggest market, but is underperforming compared with markets of similar population and wealth, such as Australia with US$380 million in online retail revenue. However, the future looks bright. Many new e-commerce sites have appeared, and with sound economic fundamentals, this sleeper market could see strong growth this year.

Hong Kong trails Taiwan in total market size, but is twice as large on a per capita basis. An established telecom infrastructure and a dynamic environment for Internet incubation have encouraged this growth, but it will be limited by the market’s small population.

China is still in a nascent stage of development. Shopping on the Net is a very new concept. Online brokerage, a major online category elsewhere, continues to be restricted in China. However, many observers expect China to become the biggest market in the region, due to its huge retail base and ineffective offline retail market. How long will China take to realize its online potential and when will be the best time to enter the market? Positive signs, such as the WTO accord and the continuing liberalization of the finance sector, are appearing. But many other obstacles persist - access cost is still high, payment takes days to complete and door-to-door delivery is unreliable - and China will take time to reach its full potential.

Effective fulfillment in Greater China is particularly challenging, as online retailers in all three markets grapple with supply chain problems. In the book category, for example, there are more than 600 major publishers, many specializing in only one or two categories. Many online booksellers cannot process large-scale orders due to manual inventory monitoring and order processing systems at many of these publishing houses. Without EDI-capable inventory and reliable distribution systems, consistently error-free order fulfillment is impossible and customer satisfaction has suffered.

Now, online retailers in Greater China are struggling to find the winning formula. To avoid problems, some booksellers have limited customer choice by eliminating hard-to-find books from their electronic catalogue. Others have encouraged suppliers to improve their inventory systems, but have encountered resistance.

In the near term, online retailers must choose their suppliers strategically, where possible, and continue pressuring them to upgrade their systems. Given the fragmented supply chains, this will be difficult and efficiency gains will be small. Nevertheless, careful supplier selection may improve performance.

In books, for example, determining which publishers have the most popular titles or the deepest stock of classic works will help retailers select the right relationships to develop. Since publishers often specialize in one or two literary categories, online booksellers can also improve their service by becoming “sub-category specialists” in popular local genres (maximizing their potential market size while maintaining a minimum of supplier relationships. These efforts help them identify which publishers to pressure for system reforms. Such efforts may provide helpful “quick hit” solutions for the near future.
However, supply chains in certain segments in Greater China (and Asia as a whole) are likely to be fundamentally ill-suited for e-commerce. In the long term, e-commerce will be a catalyst to radically transform these supply chains, rather than simply patch them up. For example, online booksellers could disintermediate highly fragmented publishers by enabling authors to publish directly on the Web. Alternatively, they could use new "print on demand" techniques or electronic books (currently under development) to respond directly and rapidly to individual customer orders. By removing publishers from the supply chain, these retailers could open an important new link between authors and readers, and position themselves at the center of this relationship.
AUSTRALIA AND NEW ZEALAND: TIME FOR THE MAJORS TO MOVE

Australia and New Zealand have many key ingredients for online retailing in place: high PC, Internet and credit card penetration; strong payment systems; widespread fulfillment networks; and developed economies. As English-speaking countries, they have been quick to copy and develop models tried in the USA. Local consumers are early adopters of new technologies, and have been quick to embrace the Internet. Some global players are already active in Australia.

However, investing to build leading brands and Web sites in Australia and New Zealand is not without risk. A feature of both countries is the size of the online market. While large compared with most Asian countries, Australia and New Zealand are smaller than the US and European markets, and lack the growth potential of emerging economies such as China and India. The markets may be too small to justify the expense of building local market position. The small size of the New Zealand market, in particular, has discouraged global players from entering. Many are choosing to enter New Zealand from Australia, which will slow the development of the New Zealand online retailing market.

A feature of both Australia and New Zealand is the heavily concentrated offline markets, dominated by retailing giants. They will make formidable online competitors - they have strong local brands, extensive offline assets, have already mastered their supply chains, and have the resources to quickly fulfill online. But capitalizing on offline strengths will not be easy for such giants. They have been ambivalent about online retailing, and fear cannibalizing existing channels.

New pure-players will capitalize on these weaknesses of large incumbent multichannels, and many small start-ups have taken early leadership positions. They lack cumbersome IT legacy systems and do not have offline assets they need to protect. However, sustaining the lead might be difficult. Many are new to retailing, and developing scaleable fulfillment will require substantial investment. While they have excelled at the "front end" of retailing, many will struggle to build the "back end" they need.

This sets the scene for further change in the retail e-commerce environment in Australia. Major offline retailers are likely to make online moves this year. Strong media brands and telcos will also move more significantly into e-commerce, although it is unclear whether this will involve direct development, acquisition or partnering with newer players.

Either way, a "clicks and mortar" approach is likely to emerge in many sectors. Already, pure-player DStore allows returns through the offline stores of Rebel Sports, one of its owners. Focusing on customers rather than on stores, products or channels, these players are taking online retailing in a new direction.
KOREA: FOCUS EFFORTS TO PLAY AT THE HIGHEST LEVEL

With 1999 revenue of US$720 million, the Korean retail e-commerce market lies second behind Japan - the result of extraordinary growth in online broking, 70% of the total market. The market is dominated by online brokerages and shopping malls established by large multichannel players and major conglomerates, though smaller pure-play sites are competing in several categories.

The retail e-commerce market will become much more competitive in coming years. Financial services will continue to grow, but categories such as books, computers, and travel will also expand quickly. Large players such as SK and Dacom, which have had little online presence, are now planning to launch online businesses or make significant investments. At the same time, small and mid-sized players, bolstered by venture capital funding, will continue to enter the market.

Next to online broking sites, online shopping malls are the most popular retailing Web sites in Korea. Many of these malls are operated by large conglomerates leveraging offline assets, sales experience, and relationships to build their online offerings. Outstanding brand equity, in particular, has helped them attract inexperienced online shoppers, while strong fulfillment has retained them.

Despite the dominance of these large multichannel, multi-product e-tailers, there is room for smaller players in the Korean retail e-commerce market. These retailers - agile and hungry - must focus on a particular demographic or category to attract sophisticated shoppers who demand specific service and expertise. This is the category killer role.

One example of this new breed is Fashionplus, a pure-play selling apparel online. The company developed their product line specifically for young Internet users. This product line offers popular accessories, casual and semi-casual clothes, all in the mid-end price range and all from well-recognized brands. Fashionplus also invested heavily in traditional advertising channels, and its products are frequently advertised in movie theatres. As a result, Fashionplus sales equal the sales at some of the leading online malls in Korea.

But to develop strong customer relationships and succeed, category-specific e-tailers must provide products, service and expertise superior to that of online malls - and at competitive prices.

<table>
<thead>
<tr>
<th>Vital Statistics</th>
<th>(99) -</th>
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<th>11%</th>
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<td>(individual users)</td>
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<td>Internet penetration</td>
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<td>Online retail spend</td>
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<td>Annual online retail revenue per capita</td>
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<td>Largest online categories</td>
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<td>Financial Brokerage</td>
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<td>Computer Hardware/Software</td>
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<td>Travel</td>
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<td>Consumer Electronics</td>
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Source: E-tail of the Tiger, A Boston Consulting Group NetBizAsia Strategy Report, Yankee Group, BCG Analysis
Japan is the largest retail e-commerce market in Asia-Pacific and has the largest population of Internet users. Online shopping interest is also among the highest in the region, with almost half of Internet users having made at least one online purchase at an average spend of US$200 per shopper.

Japan is also the toughest market to crack. It already has more than 10,000 e-tailers in the market. Industry concentration is lower than in the U.S., as the leading 50 players have 54% of the market revenue, compared with 71% in the U.S. Consumer behavior also is very different, compared with the U.S. Credit cards, for example, are not the most popular payment method, even for offline purchases. Alternative access devices such as mobile phones and hybrid business models like the 7-Eleven venture will be important themes in Japan.

In Japan, global e-tailers must put aside Western customer paradigms, act locally and think with an open mind. For example, when Gateway entered this market in 1995, it adopted a strategy different from its usual practice. By opening offline retail stores to support online activities, Gateway was able to develop customer trust in a traditional way, rather than alienate the market with an unfamiliar concept. This “click-and-mortar” business model now works well for Gateway. Customers order through the Web site, the retail store or by phone. The offline stores demonstrate new products and answer inquiries about orders made via the site.

Gateway’s online business also adopted the various payment systems commonly used by Japanese consumers - besides credit cards, consumers can use electronic fund transfer (EFT) through bank accounts or pay cash on delivery. The company also increased spending on television advertising in Japan, again a departure from its practice in other regions, because Japanese consumers trust products promoted on television, so it is an important medium.

Gateway is now widely regarded as a leader in Japan’s retail e-commerce market. Other international players have also successfully entered the Japanese market. Many are partnering with local players. For example, Yahoo!, E*TRADE, 

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### Vital Statistics

<table>
<thead>
<tr>
<th>Category</th>
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<td>54 M</td>
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<td>Internet penetration</td>
<td>19%</td>
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<td>Online retail spend</td>
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<tr>
<td>Annual online retail revenue per capita</td>
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</table>

Largest online categories: Computer Hardware/Software, Travel, Books/Magazines, Event Tickets.

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**Flow of order and delivery**

![Diagram of Gateway Japan's order and delivery process]

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CarPoint and InsWeb with Softbank, and DLJdirect with Sumitomo. Many e-tailers in Japan see lack of resources or talent as one of the biggest barriers. Web designers can be found, but the number of people who understand both Internet and business is extremely limited. Global-local partnerships offer foreign players a shortcut to accessing local talent and to customer knowledge, while providing local players with access to global e-commerce expertise.

Joint ventures between Japanese and foreign players, however, bring significant complexity, and this situation will be little different in the e-commerce world. All parties must have their “eyes wide open” about this fact and other challenges of retail e-commerce in Japan.
前候補
変換（次候補）
Myths And Realities

Myth: Asian countries are several years behind the US.
Reality: E-commerce readiness varies widely by country. More developed countries like Japan, Hong Kong, Singapore and Australia are approaching US levels in key areas such as PC penetration and Internet penetration. Several countries lead the US in wireless phone penetration, and wireless Internet browsing by phone may be the access method of choice in the next decade. Other nations such as Malaysia, Taiwan and Thailand are growing very quickly in PC, Internet and wireless penetration.

Myth: Asian e-commerce Web sites and business models are unsophisticated.
Reality: The best Asian Web sites have the same basic functions as their US counterparts, and are starting to add more advanced features. Some business models in Asia are also sophisticated and innovative. However, the underlying supply and distribution infrastructure must improve to meet the needs of these sophisticated new businesses.

Myth: US business models can be readily exported to Asia.
Reality: Some models may be portable, but most will require some adjustment to ensure success at the local level. Major overhauls and redesigns may even be necessary in some cases, while other successful US models might work at all in Asia.

Myth: Asian countries will follow the same development cycles as the US.
Reality: The explosion of e-commerce and the Internet in America has set a precedent for phenomenal growth, brought increased investment to Asia and provided a number of important lessons for local Internet entrepreneurs. As a result, many Asian markets could develop even faster than the US, especially if third-generation wireless technology lives up to its promise.

Myth: Asian entrepreneurs have limited access to funding.
Reality: Driven by the desire to replicate the wealth creation and continue the incredible growth seen in the US, venture capitalists, major technology firms such as Microsoft and Intel are planning investments in Asian Internet plays. The recent success of NASDAQ listings such as China.com and Indian firm Satyam Infoway has only added to the sense of urgency.

Myth: E-commerce means home PC’s, credit cards and a mailbox.
Reality: E-commerce in Asia will be a mixture of many elements. Unique access, payment and distribution methods are already developing, and new technology will only lead to new permutations and further evolution.

Myth: American online retailers and investment will drive the growth of the market in Asia.
Reality: Foreign sales accounted for just 14% of the total Asian market in 1999. While American investments and the US example have certainly helped Asia’s growth, local investment has been strong. Japanese Internet investment firm Softbank, in particular, has invested heavily in Asian Internet ventures.
Methodology

The report on online retailing in Asia prepared by BCG had one primary objective: to estimate the current size and growth rate of the business-to-consumer online retail industry.

In estimating the size and growth of the online retail industry for 1999, the BCG survey was a primary - but not the only - source of revenue information. BCG also drew on public sources, interviews, company reports and other online revenue proxies. To calculate online retail penetration, BCG took revenue from all categories, except for financial services and travel, and measured it against total retail market size in each country reported from public sources. The following section details the methodology used to estimate the size and growth of the online retail industry.

The market size estimate was based on a bottom-up methodology defined by adding retailers' online retail revenue, including transactional, agency, offline referral fees, and affiliate fees. Estimates for gross transactional value of agency revenue were also calculated and included in the overall market. BCG collected data for the first three-quarters of 1999 and estimates for the last quarter of 1999 and full year 2000.

In addition to detailed data from 300 retailers who participated in the survey, BCG also conducted 182 in-depth industry interviews across the region and collected publicly accessible revenue data on online retailers who were not part of the survey. For markets outside Japan, BCG identified revenue data for 87% of the estimated market size. The remaining 13% of the market was extrapolated by estimating the average size of remaining retailers. For Japan, where the market has thousands of small e-tailers, the BCG survey, market interviews and public sources were used to identify a lower percentage of the market, 45%. The remainder was extrapolated by computing the average size of remaining retailers and checking against third-party estimates.

Scope and Categories of the Business-To-Consumer Market

Retailers in the business-to-consumer industry sizing included: online retailers with Asian domains (.my, .sg, .th, .ph, .id, .jp, .kr, .au, .nz, .hk, .cn, .tw), Asian retailers with dot-com or dot-net domains, and non-Asian online retailers selling products and services to Asian consumers (excluding information and content providers such as CNN and The Wall Street Journal).

Retailers were grouped into 17 primary categories. Online retail revenue of online malls was allocated to and distributed among the respective categories proportionately to reported data or product split. In order to avoid double counting of online retail revenue, the already recorded revenue of online businesses also represented in online malls was taken out. For the same reason, the revenue streams of aggregators and portals not selling directly to consumers were not included in the report.
Defining Revenue Streams

Defining revenue, BCG included transactional revenue, broker/agency revenue and offline referral fees. Financial brokerage revenue included commission, but not the gross transactional value of the shares traded. The gross transaction value of agency sales for collectibles, event tickets and travel was included in the overall number. The report has excluded electronic mail-based ordering, but has included revenue from sites that allow ordering online, but offline settlement.

For companies with multichannel operations, only the revenue attributed to their online operations was included. Similarly, for sites and companies that sell both to businesses and consumers, only the revenue attributed to consumer transactions were included.

Estimating Industry Size

BCG used a five-step bottom-up methodology to estimate market size:

1. BCG compiled a list of companies with online retail operations by category and tiered those companies based on size.

2. BCG captured all actual total online revenue available through surveys, interviews, official filings and other third-party sources.

3. BCG then estimated online revenue for other companies where relative proxies could be appropriately applied (e.g. site traffic, relative online and offline market share, quality of Web site).

4. Total online revenue for the remaining companies was extrapolated when data sources were exhausted.

5. The final step involved determining the revenue streams of online retailers - namely whether they were transactional, broker/agency, or from offline referral, advertising/marketing, or customer memberships.

Estimating Growth Rates

Growth rates for 1999 were calculated by comparing overall market revenue for 1999 with third-party estimates of market size for 1998. Estimation of the growth rate for 2000 was based on interviews and experience from other global markets.
### Retail Category Definitions

For the category split, the report took a product category perspective, not a business model perspective. Hence the revenue of online malls and other multi-category retailers has been divided into different product categories. The product categories are:

<table>
<thead>
<tr>
<th>Primary Category</th>
<th>Sub-Categories</th>
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<tr>
<td></td>
<td>• Accessories</td>
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<tr>
<td></td>
<td>• Shoes</td>
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<tr>
<td>Automotive</td>
<td>-</td>
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<tr>
<td>Books/Magazines</td>
<td>• Books</td>
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<td></td>
<td>• Magazines</td>
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<tr>
<td>Cards/Flowers/Gifts</td>
<td>• Cards</td>
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<td></td>
<td>• Gifts</td>
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<tr>
<td>Collectibles (person-to-person auctions)</td>
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<tr>
<td>Computer Hardware and Software</td>
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<td>• Computer Software</td>
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<td>Financial Brokerages</td>
<td>• On-line Stock Brokerage</td>
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<tr>
<td>Food/Wine</td>
<td>• Grocery</td>
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<td></td>
<td>• Wines and Spirits</td>
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<td>• Food Products</td>
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<tr>
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<tr>
<td>Home/Garden</td>
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<td>• Pet Supplies</td>
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<td>• Home Furnishings</td>
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<td>• Garden Supplies</td>
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<tr>
<td>Music/Video</td>
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<td>Real Estate Services</td>
<td>-</td>
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<td>Sporting Goods</td>
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<tr>
<td>Event Tickets</td>
<td>• Movie Tickets</td>
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<td></td>
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<tr>
<td>Toys/Games</td>
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<td>Travel</td>
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<td></td>
<td>• Car Rental</td>
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<td></td>
<td>• Tour reservations</td>
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<td>• Hotel Reservation</td>
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</tbody>
</table>
Additional regional and country-specific BCG E-commerce Strategy Reports are available. Please contact your local BCG office to obtain copies.


E-Commerce in Deutschland: Vom Goldrausch zur Goldgewinnung (E-commerce in Germany: From Gold Rush to Gold Mining). A report by The Boston Consulting Group, October 1999. (Available in German and English)

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Van Online Naar Bottom Line: E-retailing in Nederland (Online Retailing in the Netherlands). A report by the Boston Consulting Group, February 2000. (Available in Dutch)

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