THE ASEAN E-COMMERCE DATABASE PROJECT
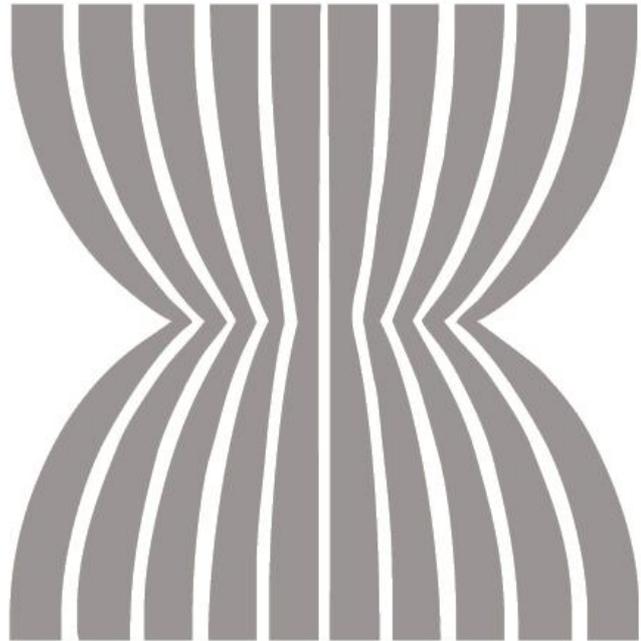
Ref No: *DTI/ASEANTELSOM/01*

PROJECT IMPLEMENTATION:

THE DEPARTMENT OF TRADE AND INDUSTRY
THE COMMISION ON INFORMATION AND
COMMUNICATIONS TECHNOLOGY
AND SUPERIUS CORPORATION

Project Consultant: Dustin B. Andaya
Project Manager: Alvin M. Juban

November 2010

PREFACE

In the March 2008 meeting of the ASEAN Working Group on E-Commerce and ICT Trade Facilitation, it was deemed that there is no overall and comprehensive picture of the state of E-Commerce within the ASEAN region. It was observed that there are only bits and pieces of information generated and maintained by different organizations in each member-country.

The group agreed that there is a need to develop a project to establish an ASEAN E-Commerce database, in order to gather and consolidate sufficient and comprehensive information on the state E-Commerce activities within ASEAN. Moreover, it was determined that it is necessary to have a common means of evaluating and measuring the level of accomplishment in the implementation of E-Commerce, which would help ASEAN benchmark itself against other markets.

The Department of Trade and Industry (DTI), Philippines, as the implementing agency for this project in line with its mandate under Sec. 29 of the Electronic Commerce Act of 2000 (Republic Act No. 8792), has undertaken the project on behalf of the ASEAN Telecommunications and ICT Senior Officials' meeting (ASEAN TELSOM).

PROJECT SUMMARY

Superius Corporation developed a logistically viable research approach that could be managed with the cooperation of Responsible Agencies across all ten member states. All Responsible Agencies were assigned by the ASEAN TELSOM Focal Point groups, in cooperation with the TELSOM Leaders and communicated through the ASEAN Secretariat.

As Responsible Agencies were identified from each member-nation, each was supplied with a Research Manual containing the prescribed methodologies, reportorial requirements and questionnaire, survey guides, and online document guides.

The project was executed using four (4) research instruments namely:

- **Country Profile** (Form A) - To gather basic Country Data

- **E-Commerce Indicators** (Form B) - To gather key E-Commerce indicators

- **Consumer Survey** - Individual's usage based on consumer application perspective

- **Business Survey** - Business/corporate usage and utilization

Forms A & B were pre-filled by the Consultant requiring only a review and research effort to fill-in country specific items.

The prescribed medium of the Consumer Survey was through an Online Survey application although the Agencies that chose to engage it opted for the use of a paper-based delivery system. A Complementary Online Consumer Survey was launched by Superius to supplement and support the research efforts across all agencies.

The Business Survey was successfully executed by some Agencies and provides insight into Business Executives' perspective of Industry practice with regards to E-Commerce usage of the Internet.

These four (4) instruments are tools used for the unified presentation of data as prescribed by the ASEAN TELSOM. Hence, this report will provide the results required to give a uniform overview of E-Commerce activity across the ASEAN.

ACKNOWLEDGEMENTS

We would like to acknowledge and extend our gratitude to the following people who made the engagement and completion of this project possible:

HON. IVAN JOHN E. UY
Secretary and Chairman
Commission on Information and Communications Technology
Philippines

HON. RAY ANTHONY C. ROXAS-CHUA III
Former Secretary and Chairman
Commission on Information and Communications Technology
Philippines

HON. MONCHITO B. IBRAHIM
Commissioner
Commission on Information and Communications Technology
Philippines

HON. THOMAS G. AQUINO
Former Senior Undersecretary
Department of Trade and Industry
Philippines

ANGELO TIMOTEO M. DIAZ DE RIVERA
Former Commissioner/Director General
Commission on Information and Communications Technology
National Computer Center
Philippines

PHILIP A. VARILLA
Director
Policy, Planning and Research Support Service
Commission on Information and Communications Technology
Philippines

MARIA LOURDES A. YAPTINCHAY
Director
E-Commerce Office
Department of Trade and Industry
Philippines

MARIA CRISPINA S. REODICA
Chief Trade and Industry Development Specialist
E-Commerce Office
Department of Trade and Industry
Philippines

NUR SULYNA ABDULLAH
Director, International Affairs
Malaysian Communications and Multimedia
Director, ASEAN ICT Centre
Malaysia

MIMA SEFRINA
Technical Officer
Infrastructure Division
ASEAN Economic Community Department
ASEAN Secretariat

PROJECT TEAM

DUSTIN B. ANDAYA
Project Director & Lead Consultant

ALVIN M. JUBAN
Project Manager

DR. LEONARDO R. GARCIA JR.
Chief of Research
GlobEra

CATHY M. LICAS
Researcher
GlobEra

JAN DELA PEÑA
Researcher
GlobEra

NORBERTO L. SILVA
Senior Programmer & Developer

MELANY G. MERCADO
Technical & Research Coordinator

MARIVIC I. GARCIA
ARGEE L. BUSTAMANTE
PEDRO Q. ZUNO
JOHN JOBIE B. BAÑEZ
Senior Technical Staff

CONTRIBUTORS

BOARD OF DIRECTORS
Superius Corporation

PAUL S.A. HUBBARD MBE
Managing Director
YES Group, Manila - Hong Kong - Barcelona
www.YESpayments.com

JANETTE C. TORAL
Digitalfilipino.com

RESPONSIBLE AGENCIES

Country	Responsible Agency	Focal Point
Brunei Darussalam	Noradhlina Prof. Madya Dr Hj Hashim	Mr. Wallace Koh Hoe Aik Haji Zaini Bin Haji Pungut Mr. Hamdani Gani
Cambodia	Ms. Le May Phoeung	Mr. Leng Sreng Mr. Sar Ratana Mr. Sithy Sieng
Indonesia	Mrs. Sri Cahaya Khoironi Mr. Noor Iza	Ms. Sofi Soeria Atmadja Mr. Sri Sunardi
Lao PDR	Mr. Sirithip Souksavath	Mr. Snith Xaphakdy Mr. Chaleun Sibounheuang
Malaysia	Mr. Lee Soon Hoe	Mr. Mohamad Akbar Hj Mahbat Mr. Lee Soon Hoe Ms. Farhana Shabbdin
Myanmar	Mr. Kyaw Oo	Mr. U Naing Lin Mr. Than Htun Aung
Philippines	Ms. Maria Lourdes Yaptinchay	Mr. Philip Varilla
Singapore	Ms. Rachelle Lee Ms. Melinda Tan	Ms Evelyn Goh Ms. Rachelle Lee Ms. Lina Chua
Thailand	Ms Phontip Warungyooratana	Ms Tip-arpa Thiralitkamhang Ms. Thasawan Samorwong
Viet Nam	Dr. Le Quoc Hung Dr. Ho Sy Loi	Mr. Trieu Minh Long Mr. Nguyen Thanh Nam

Contents

Note: ANNEXES has been compiled separately and will be submitted as an attachment to this report.

INTRODUCTION

The Internet has sparked a revolution of information and communications technology (ICT). This new digital environment has changed the way people view, access and deliver information. ICT and the tools that support it enabled consumers to acquire a vast landscape of advance and real-time communications; paperless and borderless transactions; easy and available access to comprehensive references; increased market networking; an elevated selling and advertising medium; and an innovative recreation and entertainment environment.

In this study, the Internet readiness and usage related to E-Commerce was examined according to individual's usage based on consumer application perspective and some highlights on business/corporate usage and utilization when information was available.

This data was levied against each Country Profile in combination with additional E-Commerce indicators to create a basic measurement standard for the ASEAN member nations. Many of these E-Commerce indicators were gathered from reliable sources and studies made around the world. This data set was aligned with most prominent views of E-Commerce descriptions, particularly with Organization for Economic Co-operation and Development (OECD); allowing benchmarking against the non-ASEAN market. Several economic indicators were also compiled and used alongside the E-Commerce Indicators to provide a more in depth view of the state of E-Commerce within the region.

Lastly, this consolidated report made use of surveys to add a behavioral dimension to the database. The **Consumer Market** section of this report used a *snowball research survey* [1] aiming to capture a *"best practice"* 600-respondent consumer survey. To supplement the effort, a unified Online Consumer Survey (English only) was also launched by the Consultant to aid each Responsible Agency to achieve best practice levels. The **Business Survey** is a purposive survey that used the telephone, fax and email as an interview medium to target 100 corporate Internet users among the top 1,000 companies within each economy.

---

[1] *Snowball sampling is a well-known, nonprobability method of survey sample selection that is commonly used to locate hidden populations. This method relies on referrals from initially sampled respondents to other persons believed to have the characteristic of interest. Limitations of this approach include nonrandom selection procedures, correlations between network size and selection probabilities, reliance on the subjective judgments of informants, and confidentiality concerns. Advantages include cost and efficiency.* Snowball Sampling, Johnson, July 2005.

A. OBJECTIVES

The objective of the project as stated in the official tender is as follows:

"To establish an ASEAN E-Commerce database - in order to gather and consolidate sufficient and comprehensive information on the state E-Commerce activities within ASEAN."

The database shall serve as a common means of evaluation as well as measurement of the level of accomplishment in the implementation of E-Commerce. This shall help ASEAN benchmark against other markets.

To achieve this goal, the Consultant aimed to deliver the following:

- The establishment of a baseline for measuring E-Commerce readiness across the ASEAN;
- The development of a practical methodology model for data collection applicable across the ASEAN;
- To provide the cooperating agencies of the ASEAN with this data collection model for simultaneous gathering of information and;
- Finally, to upload the findings to the ASEAN online database.

B.   SCOPE & LIMITATIONS

It was imperative to give the research design qualities that make it implementable across ASEAN member economies that vary widely in financial and logistical capabilities. The research focused on the most crucial data that will yield a definitive gauge for E-Commerce readiness across the ASEAN membership base.

Regardless of how data was collected, the final result was fixed upon the degree of cooperation of all stakeholders to implement the methodology and plans set forth by Superius Corporation.

Responsible Agencies vary in human resources and relative experience in actual field research. As such, a "mobilization period" was instituted prior to the official start of all data gathering activities.

For effective data gathering, the implementation plan was focused and designed for simple execution. Only the crucial and basic indicators were identified, key to creating a database collection method that is practical to implement across all ASEAN Member economies.

C. RESEARCH FINDINGS: THE STATE OF ASEAN E-COMMERCE

1. POPULATION & INTERNET USERS

With more than 600 million people, the ASEAN region is a formidable presence in the Internet. As of 2010, it represents around 9% of the world's population and its Internet users represent approximately 6% of all Internet users worldwide - this shows clear potential for active E-Commerce activities. **Figure 1 (Below)** shows the number of Internet users in each ASEAN country.

Country	Internet Users
Brunei Darussalam	318,900
Cambodia*	173,675
Indonesia	30,000,000
Lao PDR	527,400
Malaysia	16,902,600
Myanmar	110,000
Philippines	29,700,000
Singapore	3,658,400
Thailand	17,486,400
Viet Nam	24,269,083
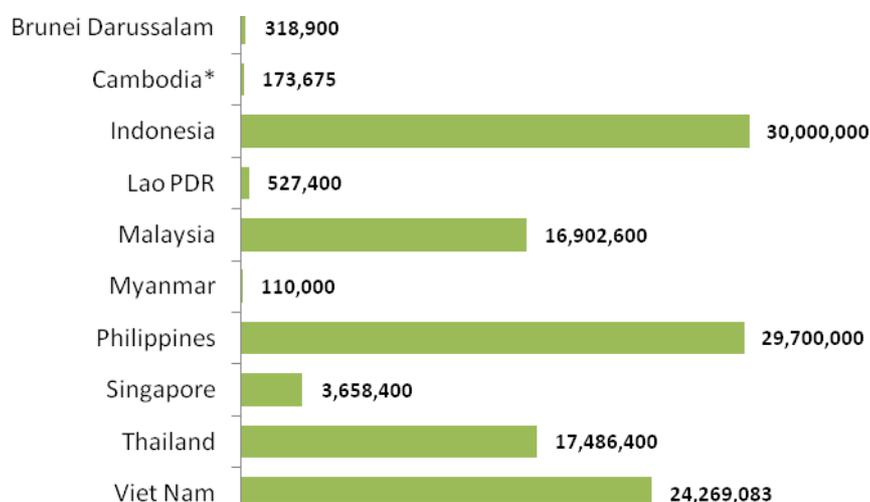
Figure 1: Internet Users per ASEAN Member State. IWS 2010 est.
*Updated through The Ministry of Posts and Communications, Cambodia.

Among the ASEAN countries; Indonesia, the Philippines and Viet Nam lead the way in terms of Internet users with approximately 30, 29, and 24 Million users respectively. The **Table 2 (Below)** ranks each country in terms of its number of Internet Users.

Rank	Country	Internet Users 2010	Population 2010
1	*Indonesia*	**30,000,000**	242,968,342
2	*Philippines*	**29,700,000**	99,900,177
3	*Viet Nam*	**24,269,083**	89,571,130
4	*Thailand*	17,486,400	66,404,688
5	*Malaysia*	16,902,600	26,160,256
6	*Singapore*	3,658,400	4,701,069
7	*Lao PDR*	527,400	6,993,767
8	*Brunei Darussalam*	318,900	395,027
9	*Cambodia**	173,675	13,800,000
10	*Myanmar*	110,000	53,414,374

Table 1: Total ASEAN Internet Users ranked in descending order. IWS 2010 est.
*Updated through The Ministry of Posts and Communications, Cambodia.

2. ASEAN POPULATION & INTERNET PENETRATION

Internet penetration rates refer to the number of a country's Internet users with reference to its population. This measures a country's success in getting its population to use the Internet. *Table 3* **(Below)** shows the Internet Penetration Rates as a part of total population.

Country	Population 2010	Internet Penetration 2010	Internet Users 2010
Brunei Darussalam	395,027	81%	318,900
Cambodia*	13,800,000	1.3%	173,675
Indonesia	242,968,342	12%	30,000,000
Lao PDR	6,993,767	8%	527,400
Malaysia	26,160,256	65%	16,902,600
Myanmar	53,414,374	0.2%	110,000
Philippines	99,900,177	30%	29,700,000
Singapore	4,701,069	78%	3,658,400
Thailand	66,404,688	26%	17,486,400
Viet Nam	89,571,130	27%	24,269,083
ASEAN	604,308,830	20%	123,146,458

Table 2: ASEAN population and Internet Penetration. IWS 2010 est.
*Updated through The Ministry of Posts and Communications, Cambodia.

The table below ranks the economies from highest to lowest Internet penetrations rates:

Rank	Country	Internet Penetration 2010	Population 2010	Internet Users 2010
1	*Brunei Darussalam*	**81%**	395,027	318,900
2	*Singapore*	**78%**	4,701,069	3,658,400
3	*Malaysia*	**65%**	26,160,256	16,902,600
4	*Philippines*	30%	99,900,177	29,700,000
5	*Viet Nam*	27%	89,571,130	24,269,083
6	*Thailand*	26%	66,404,688	17,486,400
7	*Indonesia*	12%	242,968,342	30,000,000
8	*Lao PDR*	8%	6,993,767	527,400
9	*Cambodia**	1.3%	13,800,000	173,675
10	*Myanmar*	0.2%	53,414,374	110,000
	ASEAN	20%	604,308,830	123,146,458

Table 3:Internet Penetration ranked in descending order. IWS 2010 est.
***Updated through The Ministry of Posts and Communications, Cambodia.**

In this regard, Brunei Darussalam (81%), Singapore (78%), and Malaysia (65%) can be considered to be the most successful in encouraging usage and providing its population with Internet access having the highest Internet Penetration Rates.

3. ASEAN POPULATION & INTERNET USERS

Figure 2 (Below) shows a comparison between each ASEAN country's contribution to the overall population of the ASEAN bloc and the contribution of each ASEAN country in terms of Internet users.

Country	Population	Internet Users
Brunei Darussalam	395,027	**318,900**
Cambodia*	13,800,000	**173,675**
Indonesia	242,968,342	**30,000,000**
Lao PDR	6,993,767	**527,400**
Malaysia	26,160,256	**16,902,600**
Myanmar	53,414,374	**110,000**
Philippines	99,900,177	**29,700,000**
Singapore	4,701,069	**3,658,400**
Thailand	66,404,688	**17,486,400**
Viet Nam	89,571,130	**24,269,083**
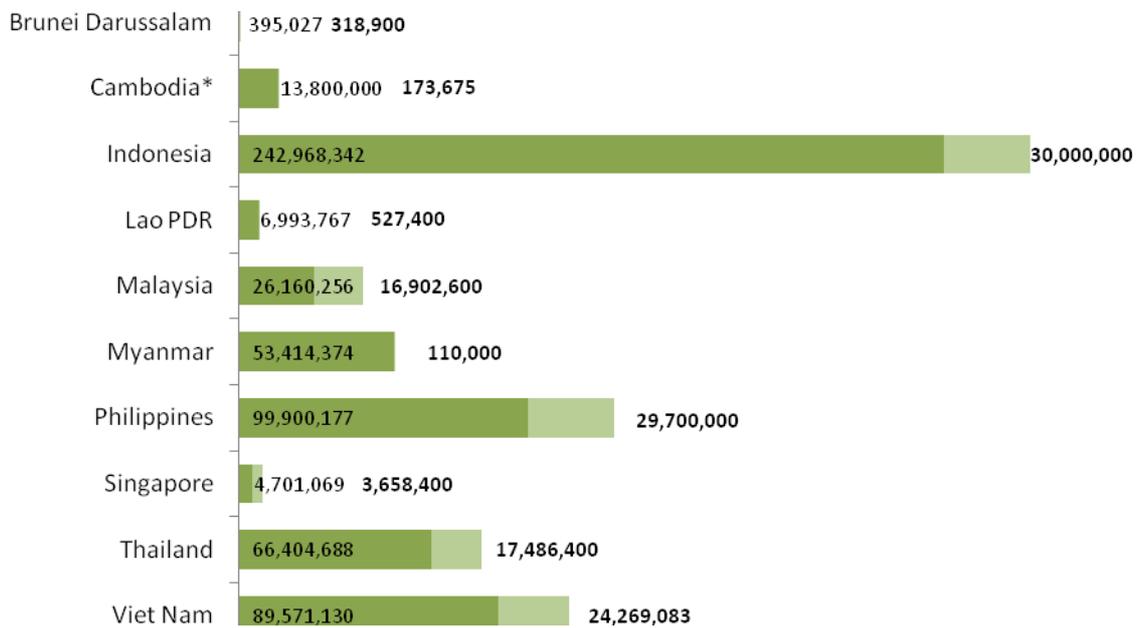
Figure 2: ASEAN comparison of population vs. Internet Users

4.   ASEAN POPULATION INTERNET USERS, PERCENTAGES

Although Internet penetration in countries such as Brunei Darussalam and Singapore are high, they contribute less than 4% of the all the online users in the region because of the relatively large population of their neighboring countries.   Indonesia, the Philippines, Viet Nam, and Thailand contribute greatly to the number of Internet users in the region despite having lower Internet penetration rates because of their large population. **Figure 3 (below)** compares the breakdown of the ASEAN population against the breakdown of Internet users per country.
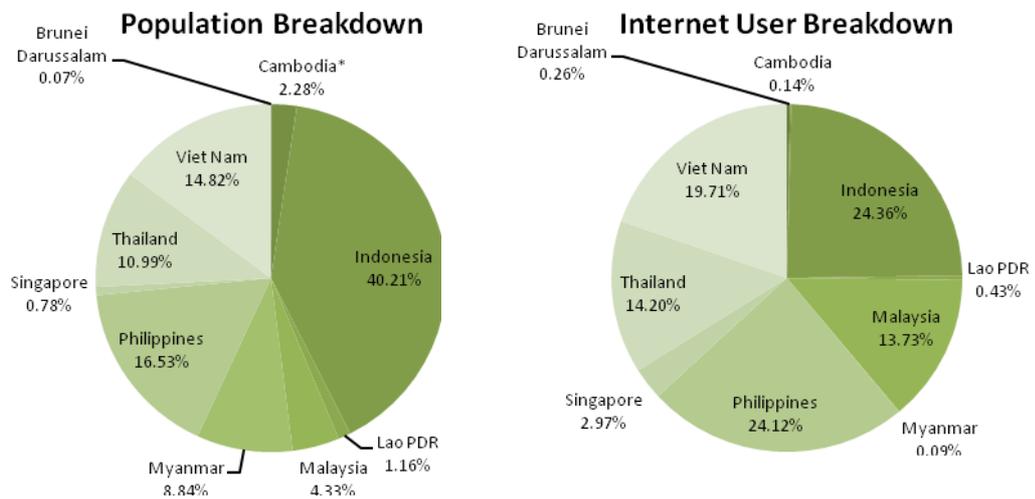
Figure 3: ASEAN breakdown in contribution to population vs. Internet users.

Table 5 (Below) shows the exact number of Internet users compared to the population of each country as well as the total ASEAN Internet population and percentage breakdown in table form.

Country	Population 2010	Internet Users 2010	% of Total Internet Users 2010
Brunei Darussalam	395,027	318,900	0.3%
Cambodia*	13,800,000	173,675	0.1%
Indonesia	242,968,342	30,000,000	24.4%
Lao PDR	6,993,767	527,400	0.4%
Malaysia	26,160,256	16,902,600	13.7%
Myanmar	53,414,374	110,000	0.1%
Philippines	99,900,177	29,700,000	24.1%
Singapore	4,701,069	3,658,400	3.0%
Thailand	66,404,688	17,486,400	14.2%
Viet Nam	89,571,130	24,269,083	19.7%
ASEAN	604,308,830	123,146,458	100.0%

Table 4: Internet Users per Country and % of total. IWS 2010 est.
Updated through The Ministry of Posts and Communications, Cambodia.

Clearly, the potential for E-Commerce will depend greatly on the ability of highly populated ASEAN countries to increase Internet penetration rates.

5. INTERNET PENETRATION: VS. BENCHMARKS

The ASEAN region still lags behind the United States (US), European Union (EU), Republic of Korea (ROK), Japan (JPN) and China (CHN) in terms of Internet penetration. As a group, the ASEAN surpasses both Japan and ROK in terms of number of Internet users. The population size of the ASEAN region shows potential to overtake the US and to an extent, even the EU, if Internet penetration rates surpass 50% of the total population. **Figure 4 and Table 6 (Below)** compare the benchmark regions compared to the ASEAN.
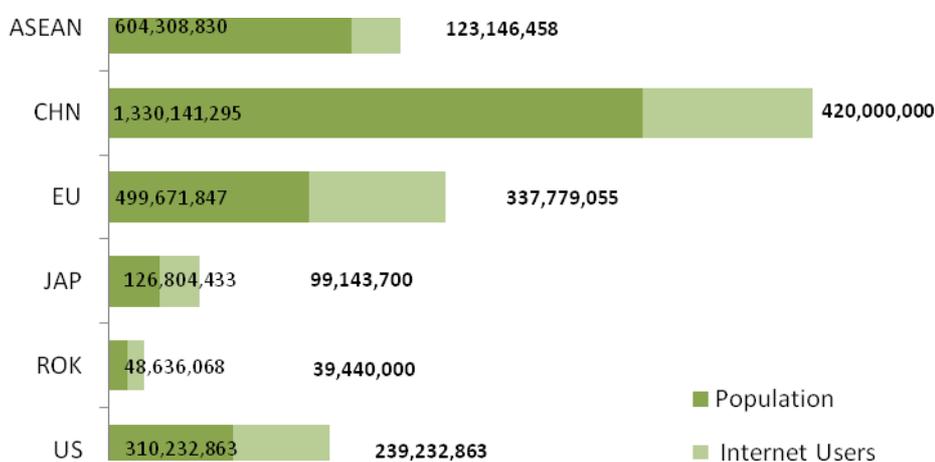
Figure 4: Composition of Population vs. Internet Users for benchmark blocs/countries

Country/Bloc	Population	Internet Penetration	Internet Users
	2010	**2010**	**2010**
ASEAN	604,308,830	20%	123,146,458
CHN	1,330,141,295	32%	420,000,000
EU	499,671,847	68%	337,779,055
JAP	126,804,433	78%	99,143,700
ROK	48,636,068	81%	39,440,000
USA	310,232,863	77%	239,232,863

Table 5: Table form for Figure 4 (above). IWS 2010 est.
Updated through The Ministry of Posts and Communications, Cambodia.

6.   POPULATION AND INTERNET USER COMPOSITION: VS. REST OF THE WORLD

While the ASEAN region comprises over 9% of the world population, its 123,050,783 Internet users only comprise 6% of the world Internet users due to lower overall penetration rates. **Figure 5** shows the ASEAN contribution to overall world population and number of Internet users in graph and table form. **(Table 7)**
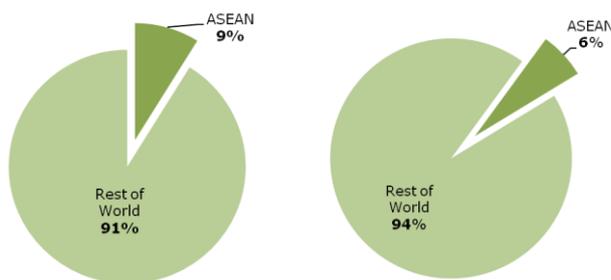
Bloc	Population	Internet Users
	2010	**2010**
ASEAN	604,308,830	123,146,458
Rest of World	6,240,347,810	1,843,464,033
TOTAL	6,844,656,640	1,966,610,491

Figure 5: ASEAN percentage of population and Internet Users
Table 6: ASEAN totals of population & Internet users vs. Rest of the World. IWS 2010 est.

7.   ECONOMIC CONDITIONS AFFECTING E-COMMERCE TAKE-UP

Higher GDP per capita countries such as Brunei Darussalam, Singapore and Malaysia have higher Internet penetrations rates. Lower GDP countries such as Cambodia, Lao PDR and Myanmar have lower Internet Penetration Rates. However, for the mid GDP per capita countries, there seems to be no direct correlation between GDP per capita and Internet penetration. The Philippines, Viet Nam and Thailand, for example, have similar Internet penetration rates despite having a prominent disparity in GDP per capita. **Table 8** shows the correlation between Gross Domestic Product (GDP) per capita and Internet penetration rates.

Country	GDP (US$ million) 2009	GDP/Capita (US$ PPP) 2009	Internet Penetration 2010
Brunei Darussalam	14,146.7	49,267	81%
*Cambodia**	10,368.2	1,802	1.3%
Indonesia	546,527.0	4,175	12%
Lao PDR	5,579.2	2,431	8%
Malaysia	193,107.7	13,594	65%
Myanmar	24,972.8	1,093	0.2%
Philippines	161,357.6	3,525	30%
Singapore	182,701.7	49,766	78%
Thailand	264,322.8	8,072	26%
Viet Nam	96,317.1	3,068	27%

Table 7: ASEAN Economic indicators and Internet penetration in percent
Updated through The Ministry of Posts and Communications, Cambodia.

Table 9 attempts to suggest a possible reason for low Internet penetration by showing GDP per capita and minimum wages alongside annual Internet costs per country. As defined, Internet Costs is the average costs of Internet access for 20 hours in a month. The wide variations of Internet costs monthly may be because some countries such as the Philippines, Thailand and Malaysia offer popular "prepaid" or "pay as you go" plans that allow users to pay for the exact hours they spend online. This may be a reason for higher Internet penetration rates even in low GDP per capita countries.

Country/Bloc	GDP/Capita (US$ PPP) 2009	Min. Wage High Range/Annual (US$) 2006-2010	Internet Cost Annual (US$) 2005-2006
Brunei Darussalam	49,267	-	223
Cambodia	1,802	600	396
Indonesia	4,175	1,344	220
Lao PDR	2,431	-	331
Malaysia	13,594	5,832	91
Myanmar	1,093	-	556
Philippines	3,525	2,956	24
Singapore	49,766	24,533	258
Thailand	8,072	2,247	89
Viet Nam	3,068	626	125

Table 8: ASEAN GDP per capita, minimum wage (annual), and Internet Cost (annual).
ASEAN, WDI, Department of Labor and Employment Philippines, July 2010 and ITU 2008.

Note: Internet Cost- Price basket x 12 mos. for Internet is calculated based on the cheapest available tariff for accessing the Internet 20 hours a month (10 hours peak and 10 hours off-peak). Nationmaster.com, Source: ITU 2008

As expected, high GDP per capita countries in the benchmark group have higher Internet penetration rates as shown in **Table 10.**

Country/Bloc	GDP (US$) 2009	GDP/Capita (US$ PPP) 2009	Internet Penetration 2010
Brunei Darussalam	14.1 B	49,267	81%
*Cambodia**	10.3 B	1,802	1.3%
Indonesia	546.5 B	4,175	12%
Lao PDR	5.5 B	2,431	8%
Malaysia	193.1 B	13,594	65%
Myanmar	24.9 B	1,093	0.2%
Philippines	161.3 B	3,525	30%
Singapore	182.7 B	49,766	78%
Thailand	264.3 B	8,072	26%
Viet Nam	96.3 B	3,068	27%
ASEAN	**1.4 T**	**4,829**	**20%**
CHN	4.9 T	6,600	32%
EU	14.4 T	32,500	68%
JPN	5.1 T	32,700	78%
ROK	1.4 T	28,100	81%
USA	14.1 T	46,000	77%

Table 9: Economic indicators, Internet Penetration vs. benchmarks. ASEAN 2009, IWS 2010
Updated through The Ministry of Posts and Communications, Cambodia.

8. EFFECT OF INFRASTRUCTURE AND ICT INDICATORS

a. Fixed Telephone Lines

Availability of basic telecommunication devices such as fixed phone lines was a traditional measure of the potential for Internet connectivity. However, the advent of wireless technology coupled with the widespread use of mobile devices such as mobile phones, handhelds and mini laptops have changed the way people access the Internet.
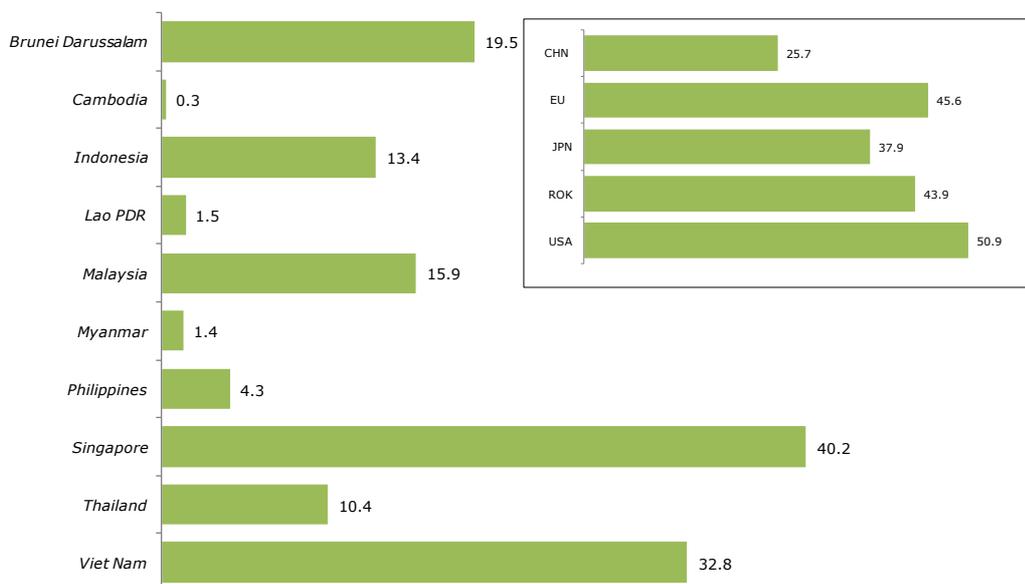
Figure 6: Fixed telephone lines per 100 population, ASEAN vs. benchmarks (inset). WDI 2009 est.

Today, there is a diminishing correlation between the availability of fixed telephone lines and Internet access. For developing countries, fixed telephone lines would be necessary to jumpstart Internet access but through the Brunei Darussalam, Indonesia, Malaysia, The Philippines, and Thailand examples, it is clear that good Internet penetration rates can still be established even with basic fixed telephone line infrastructure.

b. Mobile Phone and Personal Computer Usage

Availability of Mobile Phones and Personal Computers has also been a traditional gauge of potential Internet access. As the main forms of Internet access, availability of one or the other can increase Internet penetration rates.
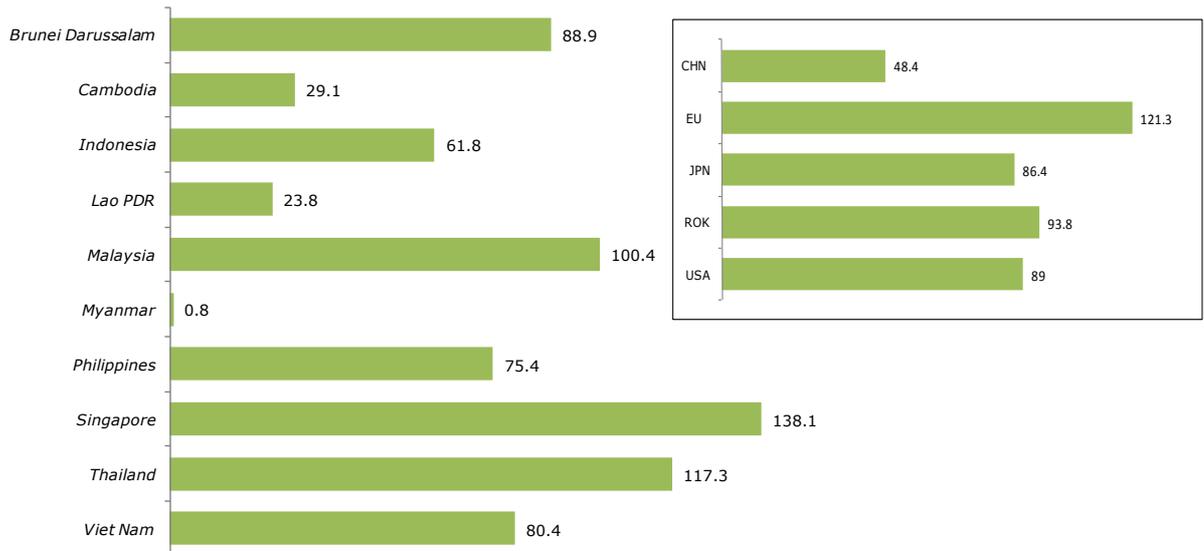
Figure 7: Mobile Phones per 100 population, ASEAN vs. benchmarks (inset). WDI 2009 est.

Many developing economies in the ASEAN have comparable mobile phone availability. As mobile phone Internet access continues to improve, have the potential to become a primary way to access the Internet in the ASEAN region.
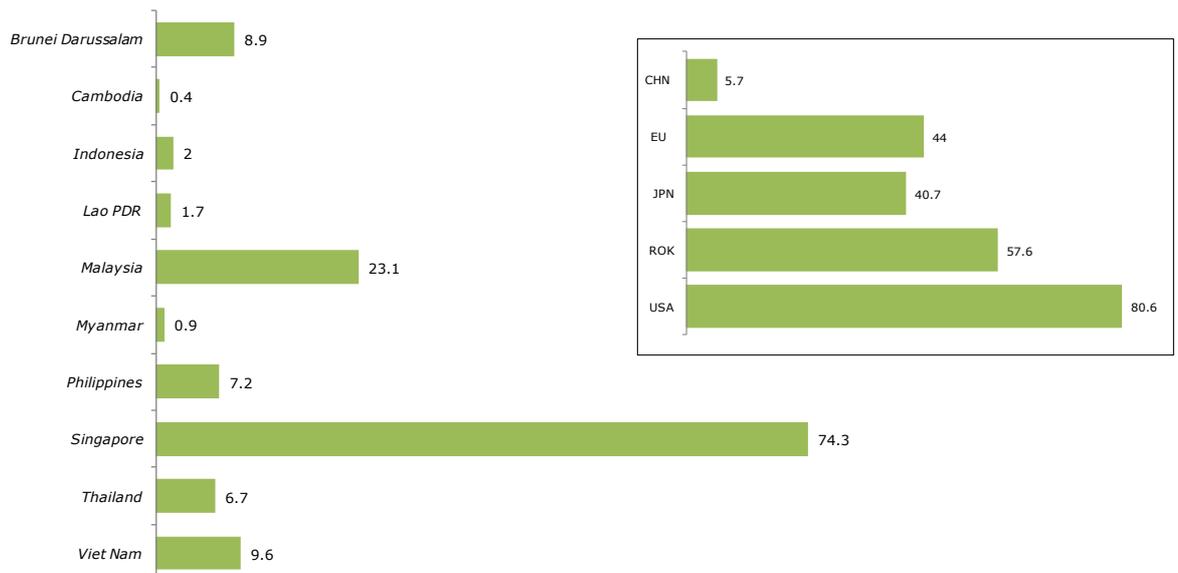
Figure 8: PCs Per 100 Population vs. Benchmarks (inset)

Ref No: DTI/ASEANTELSOM/01 – *Superius Corporation*

Availability of personal computers (Fig. 8, above) in ASEAN are generally low compared to developed benchmarks such as the USA, EU, ROK and JPN.

c. Road Networks

The ratio of roads to the total area of the country may be used as an indicator of the capacity of E-Commerce retail firms to deliver physical goods across the country. Table below shows the ratio of roads for every square kilometer:

Country	Road Length (km) 2009	Total Land Area (km2) 2009	Roads per Area Ratio 2009
Brunei Darussalam	2,971	5,765	0.52
Cambodia	38,093	181,035	0.21
Indonesia	437,759	1,860,360	0.24
Lao PDR	29,811	236,800	0.13
Malaysia	98,721	330,252	0.30
Myanmar	30,902	676,577	0.05
Philippines	201,910	300,000	0.67
Singapore	3,356	710.3	4.72
Thailand	180,053	513,120	0.35
Viet Nam	222,179	331,051	0.67
TOTAL	1,245,755	4,435,670	

Table 10: Capacity to deliver physical goods. ASEAN 2009

9. TOP WEBSITES IN ASEAN

The top websites in the region may serve as a good indicator of the depth of E-Commerce activities in the country. This part of the report aims to isolate the most viewed websites per country and partially assess the preferences of ASEAN nations when it comes to Internet related activities. **Table 12 (Below)** shows the most viewed websites in each ASEAN economy.

Brunei Darussalam	Cambodia	Indonesia	Lao PDR	Malaysia
TOP SITES				
www.facebook.com, www.google.com.bn, www.youtube.com, www.yahoo.com, www.google.com, www.live.com, www.blogger.com, www.msn.com, www.wikipedia.org, www.mediafire.com	www.google.com, www.yahoo.com, www.facebook.com, www.google.com, www.youtube.com, www.dap-news.com, www.blogger.com, www.wikipedia.org, www.kohsantepheapdaily.com.kh, www.windows live.com	www.facebook.com, www.google.com.id, www.google.com, www.yahoo.com, www.blogger.com, www.kaskus.us, www.youtube.com, www.wordpress.com, www.detik.com, www.4shared.com	NA	www.facebook.com, www.google.com.my, www.yahoo.com, www.google.com, www.youtube.com, www.blogger.com, www.live.com, www.wikipedia.org, www.maybank2u.my, www.msn.com
TOP RETAIL SITE				
www.shopping.com.bn	www.isale.com.kh	www.amazon.com	NA	www.amazon.com
TOP LOCAL SITE				
www.bruneidirect.com	www.dap-news.com	www.kaskus.us	NA	www.thestar.com.my
TOP BANKING / FINANCE / PAYMENT GATEWAY				
www.paypal.com	none in top 50 sites	www.paypal.com	NA	www.maybank2u.my
TOP SEARCH ENGINE				
www.google.com.bn	www.google.com	www.google.com.id	NA	www.google.com.my
TOP LOCAL NEWS / MAGAZINE SITE				
www.bruneidirect.com	www.dap-news.com	www.detik.com	NA	www.thestar.com.my

Myanmar	Philippines	Singapore	Thailand	Viet Nam
TOP SITES				
NA	www.facebook.com, www.yahoo.com, www.google.com.ph, www.google.com, www.youtube.com, www.blogger.com, www.wikipedia.org, www.twitter.com, www.friendster.com, www.multiply.com	www.facebook.com, www.google.com.sg, www.yahoo.com, www.youtube.com, www.google.com, www.live.com, www.blogger.com, www.msn.com, www.wikipedia.org, www.twitter.com	www.google.com.th, www.facebook.com, www.live.com, www.google.com, www.youtube.com, www.sanook.com, www.yahoo.com, www.hi5.com, www.blogger.com, www.pantip.com	www.google.com.vn, www.yahoo.com, www.vnexpress.net, www.zing.vn, www.google.com, www.facebook.com, www.dantri.com.vn, www.youtube.com, www.24h.com.vn, www.mediafire.com
TOP RETAIL SITE				
NA	www.amazon.com	www.amazon.com	www.amazon.com	www.enbac.com
TOP LOCAL SITE				
NA	www.sulit.com.ph	www.hardwarezone.com.sg	www.sanook.com	www.vnexpress.net
TOP BANKING / FINANCE / PAYMENT GATEWAY				
NA	www.paypal.com	www.dbs.com	*none in top 50 sites*	*none in top 50 sites*
TOP SEARCH ENGINE				
NA	www.google.com.ph	www.google.com.sg	www.google.com.th	www.google.com.vn
TOP LOCAL NEWS / MAGAZINE SITE				
NA	www.inquirer.net	www.hardwarezone.co	www.sanook.com	www.vnexpress.net

Table 11: Top Websites in ASEAN. www.alexa.com 2010

a. Most Visited Websites in the ASEAN Region

The most popular websites in the ASEAN region are dominated by US-based websites such Facebook, Google and Yahoo which dominate the top spots. YouTube, Blogger, Wikipedia, Live (MSN) also occupy dominant positions in most of the ASEAN countries.

Among the ASEAN countries with recorded data, only Viet Nam has four local websites in the top ten followed by Thailand with two local websites and Malaysia with one local website in the top ten lists. All the ASEAN-based websites in the top ten lists are driven by local content. Technology-heavy websites in the list such as search engines, social networks and high capacity networks are US based.

b. Benchmarking

In contrast, Asian economies such as Japan, ROK, and China many of the top ten websites are local. ROK and Japan for example have local websites holding dominant positions. In China, local websites outnumber US based websites.

c. Top Local Websites

Most of the top local websites are driven by local content such as news or local listings. It can be noted that the top local websites in Brunei Darussalam and the Philippines are classified ad listing sites that, in a broader sense, are E-Commerce websites.

d.   Most Visited Retail Websites

In most ASEAN countries, Amazon.com of the US is the top retail website. Only Brunei Darussalam, Cambodia and Viet Nam have local shopping/retail sites that have traffic greater than Amazon.com

e.   Top Financial Websites

This indicator aims to extract the maturity of local online banking and financial services in each country. Cambodia, Thailand and Viet Nam have no financial institution in their top 50 most viewed websites.

Brunei Darussalam, Indonesia and the Philippines register US-based Paypal as the top finance-based website, while Malaysia and Singapore have local financial institutions within their top 50 websites. This is an indicator that financial transactions are actively taking place in these countries.

f.   Top Search Engines and Directories

The ASEAN region is dominated by US-based search engines Google and Yahoo. This indicated that technology-driven content services are still weak in the ASEAN region. Although information search, in theory, can be dominated by localized services, ASEAN Countries still prefer to use foreign search services.

g.   Most Popular News Websites

All ASEAN countries recorded have a local news or magazine content website. This shows that content is still best served on a local level with local content websites able to compete with top foreign sites.

Local content sites are of primary importance because this keeps advertising revenues within the country of origin. Local content sites also have the ability to earn foreign advertising dollars from companies wishing to advertise locally.

10. FACEBOOK FACTS

As one of the most visited websites in each ASEAN country, the number of Facebook user accounts is an interesting and relevant way to compare the potential number of advertising audience through this medium in each country.

The **Table 13** shows exactly how much user accounts are reachable or accessible through Facebook:

Country/ Bloc	Facebook Users Accounts 2010
Brunei Darussalam	191,360
Cambodia	167,000
Indonesia	30,108,220
Lao PDR	30,620
Malaysia	8,893,160
Myanmar	NA
Philippines	18,124,220
Singapore	2,424,780
Thailand	6,167,260
Viet Nam	154,800
ASEAN	66,261,420
CHN	3,565,700
EU	131,609,140
JPN	1,696,560
ROK	1,782,880
USA	143,583,400

Table 12: Number of Facebook accounts. www.facebook.com Nov 2010

Note: China figures composed mostly of Hong Kong based users due to some restrictions in China's Internet access for websites such as Facebook.

D.   RESEARCH FINDINGS: CONSUMER INSIGHTS

1.   THE RESPONDENTS' PROFILE

Most respondents to the survey were male except for Singapore, which had more female respondents and Viet Nam that had an equal number of male and female respondents. A majority of the respondents to the survey were married, while Thai and Vietnamese respondents had the fewest single respondents. The survey attracted highly educated respondents mostly with College degrees or higher. Income ranges of the respondents vary greatly from country to country depending on the country's economic status and most of the respondents also came from the urban sector.

Gender

	Male	Female
Brunei Darussalam	61%	39%
Cambodia	82%	18%
Indonesia	74%	26%
Lao PDR	68%	32%
Malaysia	57%	43%
Myanmar	60%	40%
Philippines	51%	49%
Singapore	47%	54%
Thailand	51%	49%
Viet Nam	59%	41%

Marital Status

	Single	Married
Brunei Darussalam	55%	45%
Cambodia	75%	25%
Indonesia	76%	24%
Lao PDR	55%	45%
Malaysia	66%	34%
Myanmar	68%	33%
Philippines	71%	29%
Singapore	62%	38%
Thailand	78%	22%
Viet Nam	62%	38%

Place of Residence

	Urban	Rural
Brunei Darussalam	77%	23%
Cambodia	88%	12%
Indonesia	76%	24%
Lao PDR	93%	7%
Malaysia	75%	25%
Myanmar	88%	12%
Philippines	70%	30%
Singapore	93%	7%
Thailand	77%	23%
Viet Nam	72%	28%

Education

	High School	College Grad	Voc/Tech School	Post Grad	Some College
Brunei Darussalam	7.8%	35.3%	16.3%	35.3%	5.2%
Cambodia	10.1%	48.0%	3.4%	30.4%	8.1%
Indonesia	25.0%	51.1%	5.0%	11.1%	7.8%
Lao PDR	3.8%	50.6%	6.3%	31.6%	7.6%
Malaysia	18.4%	36.8%	8.4%	20.5%	15.9%
Myanmar	7.9%	39.5%	5.3%	36.8%	10.5%
Philippines	1.6%	52.0%	2.1%	21.9%	20.9%
Singapore	10.8%	40.5%	1.4%	44.6%	2.7%
Thailand	3.7%	51.7%	2.2%	39.3%	3.0%
Viet Nam	2.3%	82.7%	8.8%	2.3%	3.6%

Age

	Brunei Darussalam	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Under 18	1%	3%	5%	0%	3%	0%	0%	2%	0%	0%
18-23	16%	32%	41%	15%	40%	8%	29%	8%	18%	6%
24-30	41%	41%	31%	37%	17%	23%	26%	52%	29%	81%
31-36	22%	11%	14%	17%	9%	25%	16%	27%	22%	13%
37-42	7%	6%	6%	10%	9%	25%	12%	5%	12%	0%
43-48	7%	3%	2%	8%	11%	18%	7%	5%	7%	0%
49-54	6%	1%	1%	9%	4%	0%	5%	1%	9%	0%
55-60	1%	1%	0%	3%	3%	3%	4%	0%	3%	0%
Over 60	0%	0%	0%	0%	6%	0%	1%	0%	0%	0%

Income

	Brunei Darussalam	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
USD$ 199 & below	4%	24%	51%	33%	26%	60%	32%	5%	20%	34%
USD$ 200-399	4%	27%	24%	20%	8%	24%	25%	1%	36%	31%
USD$ 400 - 599	4%	16%	11%	14%	8%	8%	17%	1%	16%	21%
USD$ 600 - 799	8%	7%	5%	2%	15%	5%	9%	0%	10%	7%
USD$ 800 - 999	8%	4%	3%	7%	17%	3%	6%	5%	6%	4%
USD$ 1,000 & above	72%	22%	6%	23%	26%	0%	12%	88%	12%	4%

2.   TIME SPENT ONLINE

Most respondents from Singapore and Viet Nam spend more than 6 hours connected on the Internet while the rest of the other members follow close behind with an average of over 3 hours. But when asked about being "active" on the Internet, the average lies between 1 and 3 hours. The top activities during these hours generally are for General Information Search, Connecting with Friends and Entertainment.

Hours Online

	Brunei Darussalam	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
1 -3	20%	54%	31%	38%	21%	46%	26%	12%	20%	16%
3 - 6	33%	22%	37%	35%	43%	32%	32%	16%	36%	33%
6 -10	24%	21%	18%	19%	26%	18%	23%	47%	26%	43%
10 -14	13%	2%	7%	4%	6%	2%	9%	18%	10%	8%
14 & up	10%	2%	8%	4%	5%	2%	9%	7%	9%	0%

Active Hours Online

	Brunei Darussalam	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
1 -3	41%	74%	97%	62%	39%	74%	40%	23%	46%	50%
3 - 6	34%	11%	1%	28%	40%	14%	38%	41%	32%	47%
6 -10	15%	8%	0%	5%	8%	5%	12%	24%	4%	3%
10 -14	6%	2%	1%	5%	8%	7%	10%	12%	14%	1%
14 & up	4%	6%	0%	0%	5%	0%	0%	0%	3%	0%

Activities Online

	Brunei Darussalam	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
General information search	90%	89%	83%	84%	89%	83%	96%	92%	80%	85%
Research/Academics	72%	61%	59%	48%	68%	38%	55%	57%	68%	64%
Work/Business	77%	63%	53%	63%	67%	65%	73%	86%	57%	64%
Entertainment	80%	64%	72%	61%	77%	48%	77%	84%	88%	81%
Connect with Friends	91%	84%	83%	78%	94%	69%	86%	90%	89%	92%
View catalogs Online/ Purchase Online	63%	18%	34%	24%	48%	19%	36%	59%	36%	39%

3. ACCESS

Most ASEAN countries access the Internet through the personal computer only. However, it is important to note that more than 25% of respondents in all countries access the Internet through both a personal computer and a mobile device showing a very important trend in the diversification of Internet access from the traditional personal computer.

A number of the Internet users surveyed had no Internet connection at home indicating that they go online using a work computer, a privately-shared computer, or an Internet café. More than 40% of Myanmar's Internet users do not have a connection at home. More than 10% of Cambodia, Indonesia, and Lao PDR Internet users do not have a connection at home while the rest of the ASEAN had less than 7% of which had no Internet connection at home. Nearly every online user in Brunei Darussalam and Singapore has home based Internet connections.

Web Access

Country	PC/Laptop/Netbook	Mobile Phone/Gadget (e.g. iPod, PSP)	Both
Brunei Darussalam	34%	6%	73%
Cambodia	66%	4%	35%
Indonesia	66%	8%	36%
Lao PDR	73%	4%	28%
Malaysia	73%	4%	28%
Myanmar	86%	4%	20%
Philippines	70%	1%	30%
Singapore	39%	8%	64%
Thailand	69%	4%	27%
Viet Nam	54%	1%	45%

■ PC/Laptop/Netbook   ■ Mobile Phone/Gadget (e.g. iPod, PSP)   ■ Both
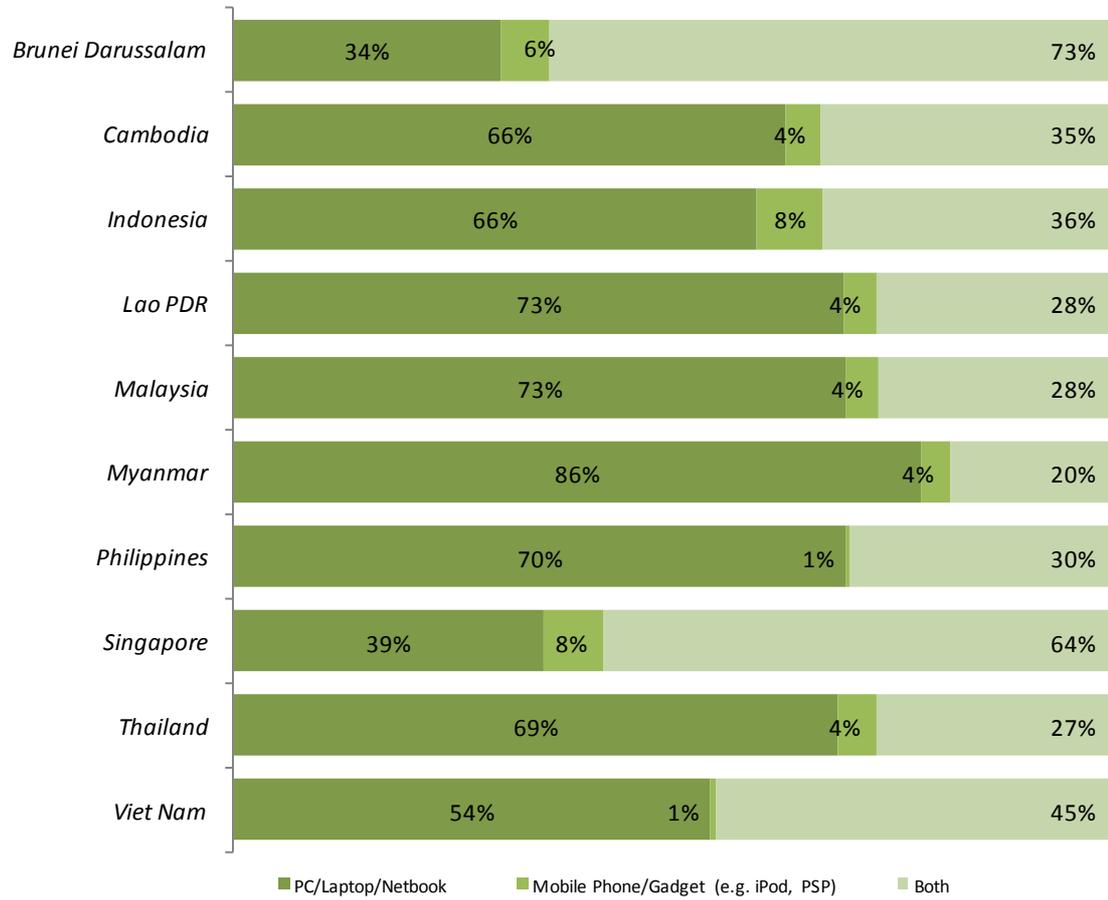
Internet Connection

Wired and wireless broadband connections are the most dominant Internet connection used by more than 40% of Internet subscribers in all countries.

Country	None	Dial-up	Cable or ISDN	Broadband - DSL Line	Broadband - Wireless	T1 or Faster
Brunei Darussalam	3%	1%	14%	29%	52%	1%
Cambodia	17%		13%	23%	21% / 24%	1%
Indonesia	13%	10%		35%	15% / 26%	2%
Lao PDR	11%	17%	12%	24%	35%	2%
Malaysia	3% / 1%	8%	40%		46%	1%
Myanmar	41%		13% / 2%	24%	20%	
Philippines	6%	1% / 4%	52%		35%	2%
Singapore	2%	12%	27%		57%	2%
Thailand	7%	8%	4%	52%	25%	1%
Viet Nam	6%	5% / 2%	40%		47%	
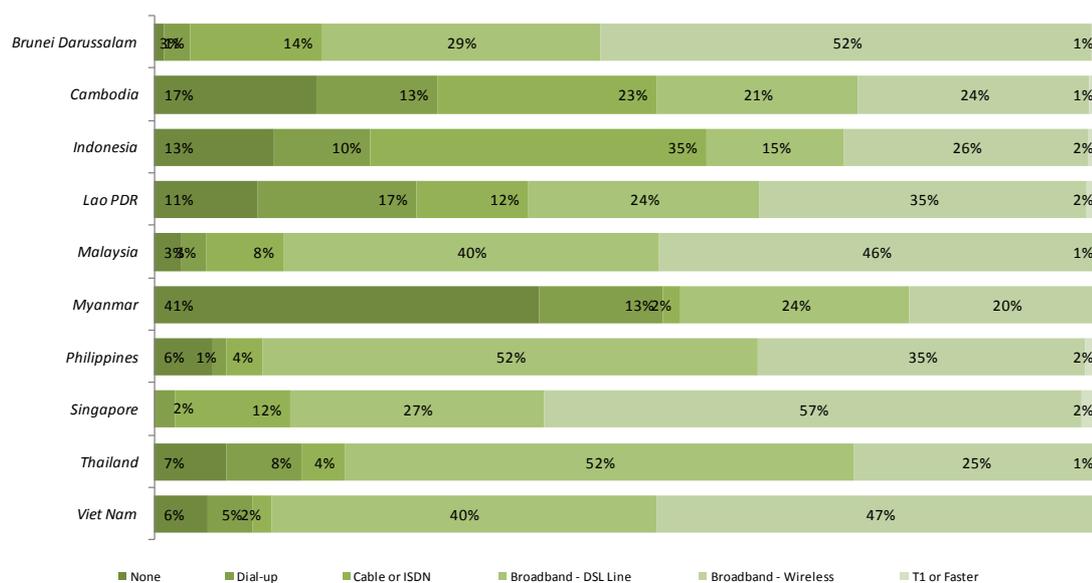
Singapore and Brunei Darussalam had the most number of respondents that access the Internet both through a mobile device and personal computer. This is indicative of the Internet infrastructure and availability of mobile Internet devices in the two countries. These two economies also represent the largest GDP per capita and the smallest land areas among the ASEAN nations. The combination of wealth with relatively smaller land areas to cover may be the reason for such high usage of mobile devices.

4.   FREQUENCY OF ACTIVITIES

On a daily basis, Consumers across the ASEAN use the Internet for email, news, visiting social networking sites, viewing photos and research.

Gaming is not a significant preference in Brunei Darussalam, Cambodia, Lao PDR and Myanmar. Browsing for merchandise/services is only a second level daily preference for most countries except for Indonesia and Viet Nam, while Singapore notes it is at least a once a week activity. Only 28% of respondents from Singapore use the Internet for Job hunting once a month, and it is not a preferred activity for all others.

Buying and Trading online, Job Hunting, and Banking rank as some of the least practiced activities on the Internet among ASEAN countries. This shows that the Internet is primarily a social rather than a business or transactional tool. It is highly possible that E-Commerce will always comprise of a small share in the time spent on the Internet.

Following the example of more modern economies such as Singapore, the use of the Internet for buying, banking or transactional purposes can be improved to a more significant level wherein 21% buys/trades online and 37% bank at least once a month. If these figures are achieved in the highly populated economies of the ASEAN, E-Commerce can become a significant transaction tool.

Detailed results per country are illustrated in the tables below:

Brunei Darussalam	Daily	1/wk	2-3/wk	1/mo	2-3/mo	Not at all
Check or send e-mail messages	89%	6%	4%	2%	1%	0%
Read online news or magazines	62%	13%	19%	3%	2%	4%
Look for job opportunities	6%	10%	10%	19%	13%	44%
Play games	28%	9%	16%	8%	15%	29%
Visit social networking sites	78%	8%	10%	1%	1%	3%
View photos/videos	55%	13%	21%	4%	5%	5%
Search or download files	31%	18%	25%	15%	6%	7%
Read/Write blogs	22%	16%	23%	14%	9%	20%
Visit retail sites looking for merchandise/ service	31%	33%	42%	43%	22%	30%
Buy/Trade online	10%	7%	13%	24%	16%	32%
Bank online/Pay bills	5%	9%	10%	33%	10%	36%

Cambodia	Daily	1/wk	2-3/wk	1/mo	2-3/mo	Not at all
Check or send e-mail messages	78%	6%	13%	1%	1%	1%
Read online news or magazines	57%	13%	13%	6%	5%	5%
Look for job opportunities	21%	14%	15%	13%	17%	21%
Play games	17%	8%	7%	10%	12%	47%
Visit social networking sites	80%	11%	9%	2%	0%	0%
View photos/videos	42%	21%	16%	9%	7%	6%
Search or download files	28%	28%	23%	10%	9%	4%
Read/Write blogs	19%	22%	12%	15%	5%	29%
Visit retail sites looking for merchandise/ service	25%	27%	24%	27%	20%	78%
Buy/Trade online	7%	4%	2%	7%	5%	75%
Bank online/Pay bills	5%	5%	1%	8%	5%	76%

Indonesia	Daily	1/wk	2-3/wk	1/mo	2-3/mo	Not at all
Check or send e-mail messages	61%	16%	14%	4%	3%	3%
Read online news or magazines	64%	13%	13%	3%	2%	5%
Look for job opportunities	19%	18%	12%	12%	6%	33%
Play games	43%	12%	9%	5%	7%	25%
Visit social networking sites	90%	6%	3%	0%	0%	1%
View photos/videos	61%	15%	15%	5%	2%	2%
Search or download files	44%	27%	18%	7%	3%	4%
Read/Write blogs	34%	21%	13%	11%	4%	18%
Visit retail sites looking for merchandise/ service	41%	35%	31%	26%	10%	59%
Buy/Trade online	6%	6%	7%	18%	10%	54%
Bank online/Pay bills	7%	6%	5%	12%	7%	63%

Lao PDR	Daily	1/wk	2-3/wk	1/mo	2-3/mo	Not at all
Check or send e-mail messages	84%	6%	9%	2%	0%	0%
Read online news or magazines	52%	22%	22%	0%	0%	5%
Look for job opportunities	14%	13%	13%	11%	11%	36%
Play games	12%	17%	16%	8%	8%	39%
Visit social networking sites	71%	17%	9%	3%	0%	2%
View photos/videos	34%	29%	24%	5%	5%	2%
Search or download files	33%	27%	18%	6%	6%	10%
Read/Write blogs	22%	25%	16%	10%	9%	19%
Visit retail sites looking for merchandise/ service	26%	32%	39%	24%	12%	69%
Buy/Trade online	7%	5%	9%	9%	2%	68%
Bank online/Pay bills	8%	9%	7%	8%	2%	68%

Malaysia	Daily	1/wk	2-3/wk	1/mo	2-3/mo	Not at all
Check or send e-mail messages	66%	10%	20%	1%	2%	1%
Read online news or magazines	48%	18%	22%	4%	5%	4%
Look for job opportunities	12%	12%	18%	21%	12%	24%
Play games	32%	10%	12%	14%	11%	21%
Visit social networking sites	74%	3%	17%	5%	1%	0%
View photos/videos	55%	9%	28%	3%	4%	3%
Search or download files	31%	15%	23%	14%	10%	7%
Read/Write blogs	24%	19%	28%	10%	5%	14%
Visit retail sites looking for merchandise/ service	26%	32%	43%	43%	19%	38%
Buy/Trade online	7%	12%	19%	18%	12%	33%
Bank online/Pay bills	12%	10%	22%	13%	14%	31%

Myanmar	Daily	1/wk	2-3/wk	1/mo	2-3/mo	Not at all
Check or send e-mail messages	92%	6%	4%	2%	2%	4%
Read online news or magazines	49%	13%	21%	9%	6%	9%
Look for job opportunities	18%	10%	8%	13%	8%	44%
Play games	15%	5%	8%	8%	8%	58%
Visit social networking sites	43%	11%	21%	0%	2%	23%
View photos/videos	17%	38%	11%	4%	9%	21%
Search or download files	40%	23%	21%	9%	11%	6%
Read/Write blogs	26%	9%	16%	14%	14%	21%
Visit retail sites looking for merchandise/ service	21%	31%	21%	23%	22%	82%
Buy/Trade online	3%	3%	3%	3%	14%	75%
Bank online/Pay bills	3%	0%	0%	3%	0%	94%

Philippines	Daily	1/wk	2-3/wk	1/mo	2-3/mo	Not at all
Check or send e-mail messages	76%	5%	16%	1%	2%	0%
Read online news or magazines	53%	11%	25%	4%	4%	3%
Look for job opportunities	15%	14%	17%	20%	8%	27%
Play games	41%	7%	19%	9%	3%	21%
Visit social networking sites	86%	2%	11%	0%	0%	0%
View photos/videos	60%	10%	24%	3%	1%	2%
Search or download files	24%	17%	25%	13%	14%	7%
Read/Write blogs	17%	12%	24%	13%	12%	22%
Visit retail sites looking for merchandise/ service	29%	26%	39%	35%	24%	46%
Buy/Trade online	4%	4%	6%	19%	8%	59%
Bank online/Pay bills	3%	5%	4%	12%	11%	65%

Singapore	Daily	1/wk	2-3/wk	1/mo	2-3/mo	Not at all
Check or send e-mail messages	92%	2%	6%	0%	0%	0%
Read online news or magazines	61%	15%	19%	1%	4%	1%
Look for job opportunities	10%	6%	6%	28%	24%	27%
Play games	29%	17%	14%	11%	4%	26%
Visit social networking sites	67%	13%	10%	5%	2%	3%
View photos/videos	41%	32%	18%	3%	1%	3%
Search or download files	24%	31%	11%	11%	11%	13%
Read/Write blogs	19%	22%	8%	15%	14%	22%
Visit retail sites looking for merchandise/ service	21%	70%	24%	35%	20%	31%
Buy/Trade online	6%	12%	7%	21%	12%	41%
Bank online/Pay bills	5%	21%	9%	37%	13%	16%

Thailand	Daily	1/wk	2-3/wk	1/mo	2-3/mo	Not at all
Check or send e-mail messages	82%	7%	8%	4%	1%	0%
Read online news or magazines	46%	25%	20%	5%	2%	3%
Look for job opportunities	16%	12%	3%	15%	24%	31%
Play games	46%	14%	14%	5%	4%	20%
Visit social networking sites	89%	8%	3%	0%	0%	0%
View photos/videos	61%	22%	11%	5%	1%	0%
Search or download files	46%	18%	20%	7%	6%	4%
Read/Write blogs	32%	25%	16%	9%	7%	11%
Visit retail sites looking for merchandise/ service	27%	56%	26%	33%	19%	40%
Buy/Trade online	4%	14%	10%	18%	15%	40%
Bank online/Pay bills	3%	14%	8%	20%	7%	47%

Viet Nam	Daily	1/wk	2-3/wk	1/mo	2-3/mo	Not at all
Check or send e-mail messages	85%	4%	8%	0%	2%	2%
Read online news or magazines	92%	2%	4%	0%	2%	0%
Look for job opportunities	20%	17%	13%	17%	13%	20%
Play games	44%	12%	12%	10%	6%	18%
Visit social networking sites	90%	4%	6%	0%	0%	0%
View photos/videos	62%	12%	14%	6%	2%	4%
Search or download files	55%	14%	20%	8%	0%	4%
Read/Write blogs	44%	22%	8%	4%	10%	12%
Visit retail sites looking for merchandise/ service	50%	34%	23%	21%	27%	44%
Buy/Trade online	13%	11%	4%	11%	7%	53%
Bank online/Pay bills	4%	9%	4%	13%	0%	69%

5.   EMAIL, SEARCH ENGINE & WEB OWNERSHIP PREFERENCES

Gmail is top webmail, followed closely by Yahoo in the Philippines and Viet Nam while Hotmail is still dominant in Thailand. When ranked according to preference, Google remains the top choice of search engines with Yahoo and MSN/Bing as distant second and third choices. More than half of the respondents report not owning or maintaining a personal or business website.

Detailed results per country are illustrated in the tables below:

 Email Preference

Brunei Darussalam	Yahoo	14%
	Google	93%
	Bing/MSN	11%
Cambodia	Yahoo	42%
	Google	86%
	Bing/MSN	14%
Indonesia	Yahoo	30%
	Google	92%
	Bing/MSN	0%
Lao PDR	Yahoo	29%
	Google	95%
	Bing/MSN	15%
Malaysia	Yahoo	49%
	Google	63%
	Bing/MSN	5%
Myanmar	Yahoo	24%
	Google	94%
	Bing/MSN	6%
Philippines	Yahoo	31%
	Google	66%
	Bing/MSN	3%
Singapore	Yahoo	21%
	Google	86%
	Bing/MSN	2%
Thailand	Yahoo	2%
	Google	95%
	Bing/MSN	3%
Viet Nam	Yahoo	14%
	Google	86%
	Bing/MSN	0%

Brunei Darussalam	1	2	3	NA	Cambodia	1	2	3	NA
Gmail	58%	29%	7%	7%		69%	19%	8%	3%
Yahoo Mail	25%	30%	26%	20%		55%	38%	6%	1%
Hotmail	54%	26%	18%	3%		26%	15%	41%	19%
Indonesia	1	2	3	NA	Lao PDR	1	2	3	NA
Gmail	57%	32%	8%	3%		54%	18%	19%	9%
Yahoo Mail	54%	40%	5%	1%		40%	38%	18%	4%
Hotmail	9%	13%	51%	27%		49%	33%	16%	1%
Malaysia	1	2	3	NA	Myanmar	1	2	3	NA
Gmail	61%	27%	8%	4%		93%	4%	0%	2%
Yahoo Mail	41%	51%	6%	2%		7%	73%	13%	7%
Hotmail	19%	9%	62%	9%		6%	19%	63%	13%
Philippines	1	2	3	NA	Singapore	1	2	3	NA
Gmail	69%	25%	0%	6%		65%	23%	6%	6%
Yahoo Mail	56%	44%	0%	0%		35%	39%	12%	14%
Hotmail	14%	0%	43%	43%		42%	29%	19%	10%
Thailand	1	2	3	NA	Viet Nam	1	2	3	NA
Gmail	32%	44%	13%	11%		63%	26%	9%	3%
Yahoo Mail	14%	31%	28%	28%		58%	38%	4%	0%
Hotmail	74%	14%	10%	2%		13%	17%	17%	52%

Search Engine Preference

Brunei Darussalam	1	2	3	NA	Cambodia	1	2	3	NA
Yahoo	14%	48%	24%	14%		42%	37%	12%	9%
Google	93%	5%	1%	1%		86%	10%	3%	1%
Bing/MSN	11%	27%	44%	18%		14%	16%	43%	27%
Indonesia	1	2	3	NA	Lao PDR	1	2	3	NA
Yahoo	30%	70%	0%	0%		29%	35%	29%	6%
Google	92%	0%	8%	0%		95%	4%	1%	0%
Bing/MSN	0%	0%	100%	0%		15%	44%	29%	12%
Malaysia	1	2	3	NA	Myanmar	1	2	3	NA
Yahoo	49%	40%	9%	2%		24%	67%	5%	5%
Google	63%	35%	2%	1%		94%	4%	0%	2%
Bing/MSN	5%	10%	75%	11%		6%	33%	56%	6%
Philippines	1	2	3	NA	Singapore	1	2	3	NA
Yahoo	31%	63%	5%	0%		21%	58%	16%	5%
Google	66%	32%	15%	0%		86%	14%	0%	0%
Bing/MSN	3%	5%	92%	17%		2%	22%	66%	10%
Thailand	1	2	3	NA	Viet Nam	1	2	3	NA
Yahoo	2%	51%	34%	17%		14%	61%	20%	9%
Google	95%	1%	3%	1%		86%	20%	0%	0%
Bing/MSN	3%	48%	29%	16%		0%	19%	80%	32%

Website Ownership

	Brunei Darussalam	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
No	64%	67%	65%	72%	69%	80%	46%	69%	67%	64%
Yes, I maintain a personal website	19%	18%	27%	12%	19%	15%	45%	20%	20%	27%
Yes, I maintain a business website	7%	5%	3%	7%	4%	2%	2%	6%	5%	8%
Yes, I maintain both a personal and business website	10%	10%	6%	8%	8%	2%	6%	6%	9%	2%

6.   ONLINE PURCHASING

Across the ASEAN, many consumers look at the Internet before purchasing in a retail store but a large percentage across all countries has never purchased anything online. Among those who have purchased online, many use online payment methods and a majority has bought something in the past 3 months.

Considered purchasing item / service in retail store that was seen online.

	Brunei Darussalam	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Yes	82%	81%	80%	89%	63%	70%	80%	87%	78%	82%
No	18%	19%	20%	11%	37%	30%	20%	13%	22%	19%

Has Purchased Online

	Brunei Darussalam	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Yes	80%	29%	47%	36%	50%	22%	43%	82%	66%	57%
No	20%	71%	53%	64%	50%	78%	57%	18%	34%	43%

Purchased item/ service online using site's online payment system (Among those who purchased online)

	Brunei Darussalam	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Yes	85%	75%	72%	81%	75%	60%	80%	87%	78%	59%
No	15%	25%	28%	19%	25%	40%	20%	13%	22%	41%

Last Online Purchase (Among those who purchased online)

	Brunei Darussalam	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Within the last 3 months	75%	70%	69%	69%	51%	36%	70%	73%	76%	59%
Within the last 6 months	9%	13%	17%	11%	26%	9%	0%	21%	10%	15%

Among online buyers, only Viet Nam predominantly uses cash when buying online. Indonesia uses Debit/ATM cards and Money Transfer equally. The rest of the ASEAN economies prefer to use credit cards.

Mode of Payment Used

	Brunei Darussalam	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Credit Card	79%	62%	34%	63%	67%	63%	40%	92%	56%	19%
Debit Card/ATM Card	26%	32%	46%	31%	31%	63%	30%	31%	36%	42%
Money transfer/ Remittance/ Bank deposit	16%	22%	46%	23%	22%	0%	50%	23%	53%	39%
Virtual wallet	6%	6%	8%	6%	5%	0%	0%	10%	2%	0%
Cash	19%	22%	18%	23%	13%	38%	30%	14%	25%	58%
Check	2%	10%	1%	9%	3%	0%	0%	0%	3%	8%

When asked about the preferred mode of payment, online buyers in all countries except Indonesia and Viet Nam (prefers Money Transfer and Debit cards respectively) prefer credit cards.

Preferred Mode of Payment

	Brunei Darussalam	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Credit Card	65%	59%	21%	53%	54%	43%	50%	74%	40%	16%
Debit Card/ATM Card	21%	18%	28%	21%	27%	29%	30%	10%	24%	44%
Money transfer/ Remittance/ Bank	3%	10%	38%	12%	13%	0%	20%	10%	24%	16%
Virtual wallet	3%	2%	5%	3%	2%	0%	0%	3%	0%	0%
Cash	7%	6%	8%	12%	4%	14%	0%	3%	10%	24%
Check	1%	4%	0%	0%	0%	14%	0%	0%	2%	0%

Among those who use online banking viewing transaction history seems to be the most common although all standard online banking activities seem to be utilized.

Type of Online Banking Transactions Used

	Brunei Darussalam	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
View my transaction history	93%	82%	75%	91%	81%	100%	100%	100%	75%	81%
View my statement of account (for credit cards/loans)	93%	67%	46%	86%	83%	67%	80%	83%	56%	81%
Pay bills online	79%	47%	43%	64%	85%	67%	40%	81%	63%	57%
Transfer money between accounts	66%	65%	70%	91%	62%	67%	80%	89%	75%	71%

High GDP per capita countries such as Brunei Darussalam, Singapore and Malaysia have a substantial majority of Internet users using online banking.

Uses Online Banking

	Brunei Darussalam	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Yes	61%	32%	35%	24%	63%	12%	28%	83%	52%	48%
No	39%	68%	65%	76%	37%	88%	72%	17%	48%	52%

7. BARRIERS TO ONLINE PURCHASE

Besides not having tried purchasing online in the past, trust related issues (such as trust in online vendor, credit card safety) along with lack of more information and convenience (faster to buy offline) are the major barriers to online purchase.

	Brunei Darussalam	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Not applicable	22%	33%	24%	31%	15%	49%	36%	20%	19%	23%
Don't trust vendor	38%	37%	24%	23%	32%	6%	18%	13%	55%	46%
Never tried it	57%	53%	44%	54%	44%	24%	46%	33%	32%	36%
Don't trust that my credit card number will be secure	38%	46%	31%	22%	24%	6%	27%	7%	42%	18%
Too complicated to place order. No receipt/ documentation	14%	29%	20%	15%	18%	6%	9%	0%	13%	5%
Faster/easier to purchase locally or in the store	27%	19%	20%	14%	32%	12%	18%	33%	36%	41%
Slow Internet connection	8%	22%	19%	26%	20%	18%	0%	0%	16%	5%
Not enough information to make a decision	11%	34%	28%	28%	32%	15%	9%	7%	42%	41%
Not familiar with vendor	27%	20%	24%	25%	30%	9%	18%	7%	23%	27%
Generally uncomfortable with the idea	19%	22%	15%	20%	23%	9%	36%	20%	19%	14%

8.   ONLINE BANKING PERCEPTIONS

The online banking question aims to measure the concerns of online banking customers. The following tables show the perception of the respondents from each country.

Brunei Darussalam	Not at all like me	Not like me	Like me	Just like me
I'm worried that my internet speed will affect my online banking transactions.	14%	29%	**31%**	26%
I'm worried that my online bank may not process payments correctly.	15%	30%	**37%**	19%
I'm worried that I may lose money due to careless mistakes such as sending the wrong amount or sending money to the wrong account.	13%	27%	**44%**	17%
I'm worried that in case of transaction errors, my bank would not be able to help me.	14%	30%	**40%**	17%
It would take me a lot of time to learn how to use online banking.	43%	**46%**	9%	2%
I'm worried that unauthorized people may be able to access my account.	15%	27%	**44%**	15%
I do not feel secure sending sensitive/private information online.	17%	28%	**41%**	15%
I never had the opportunity to do online banking.	**68%**	30%	1%	1%

Cambodia	Not at all like me	Not like me	Like me	Just like me
I'm worried that my internet speed will affect my online banking transactions.	18%	**33%**	27%	22%
I'm worried that my online bank may not process payments correctly.	11%	**42%**	38%	9%
I'm worried that I may lose money due to careless mistakes such as sending the wrong amount or sending money to the wrong account.	11%	**39%**	36%	14%
I'm worried that in case of transaction errors, my bank would not be able to help me.	7%	**48%**	27%	18%
It would take me a lot of time to learn how to use online banking.	33%	**43%**	21%	2%
I'm worried that unauthorized people may be able to access my account.	10%	24%	**37%**	29%
I do not feel secure sending sensitive/private information online.	13%	23%	**40%**	25%
I never had the opportunity to do online banking.	36%	**41%**	17%	7%

Indonesia	Not at all like me	Not like me	Like me	Just like me
I'm worried that my internet speed will affect my online banking transactions.	16%	31%	**46%**	7%
I'm worried that my online bank may not process payments correctly.	18%	**38%**	**38%**	5%
I'm worried that I may lose money due to careless mistakes such as sending the wrong amount or sending money to the wrong account.	15%	28%	**48%**	8%
I'm worried that in case of transaction errors, my bank would not be able to help me.	18%	28%	**47%**	7%
It would take me a lot of time to learn how to use online banking.	31%	**37%**	27%	5%
I'm worried that unauthorized people may be able to access my account.	13%	20%	**53%**	13%
I do not feel secure sending sensitive/private information online.	13%	21%	**54%**	12%
I never had the opportunity to do online banking.	34%	**44%**	18%	3%

Lao PDR	Not at all like me	Not like me	Like me	Just like me
I'm worried that my internet speed will affect my online banking transactions.	10%	19%	**67%**	5%
I'm worried that my online bank may not process payments correctly.	18%	**46%**	36%	0%
I'm worried that I may lose money due to careless mistakes such as sending the wrong amount or sending money to the wrong account.	14%	**43%**	38%	5%
I'm worried that in case of transaction errors, my bank would not be able to help me.	14%	**48%**	29%	10%
It would take me a lot of time to learn how to use online banking.	**45%**	40%	15%	0%
I'm worried that unauthorized people may be able to access my account.	19%	**38%**	**38%**	5%
I do not feel secure sending sensitive/private information online.	24%	**38%**	29%	10%
I never had the opportunity to do online banking.	**48%**	43%	10%	0%

Malaysia	Not at all like me	Not like me	Like me	Just like me
I'm worried that my internet speed will affect my online banking transactions.	15%	**50%**	23%	12%
I'm worried that my online bank may not process payments correctly.	12%	**50%**	26%	12%
I'm worried that I may lose money due to careless mistakes such as sending the wrong amount or sending money to the wrong account.	7%	**46%**	35%	12%
I'm worried that in case of transaction errors, my bank would not be able to help me.	8%	**44%**	36%	12%
It would take me a lot of time to learn how to use online banking.	**58%**	31%	10%	2%
I'm worried that unauthorized people may be able to access my account.	7%	**44%**	35%	14%
I do not feel secure sending sensitive/private information online.	12%	**48%**	29%	10%
I never had the opportunity to do online banking.	**75%**	20%	3%	2%

Ref No: DTI/ASEANTELSOM/01 – *Superius Corporation*

Myanmar	Not at all like me	Not like me	Like me	Just like me
I'm worried that my internet speed will affect my online banking transactions.	**100%**	0%	0%	0%
I'm worried that my online bank may not process payments correctly.	**100%**	0%	0%	0%
I'm worried that I may lose money due to careless mistakes such as sending the wrong amount or sending money to the wrong account.	**100%**	0%	0%	0%
I'm worried that in case of transaction errors, my bank would not be able to help me.	0%	**100%**	0%	0%
It would take me a lot of time to learn how to use online banking.	**100%**	0%	0%	0%
I'm worried that unauthorized people may be able to access my account.	**50%**	0%	0%	**50%**
I do not feel secure sending sensitive/private information online.	0%	0%	0%	**100%**
I never had the opportunity to do online banking.	**100%**	0%	0%	0%

Philippines	Not at all like me	Not like me	Like me	Just like me
I'm worried that my internet speed will affect my online banking transactions.	**60%**	20%	20%	0%
I'm worried that my online bank may not process payments correctly.	**40%**	20%	**40%**	0%
I'm worried that I may lose money due to careless mistakes such as sending the wrong amount or sending money to the wrong account.	20%	20%	**60%**	0%
I'm worried that in case of transaction errors, my bank would not be able to help me.	**40%**	20%	**40%**	0%
It would take me a lot of time to learn how to use online banking.	**60%**	20%	20%	0%
I'm worried that unauthorized people may be able to access my account.	0%	20%	**60%**	20%
I do not feel secure sending sensitive/private information online.	0%	20%	**60%**	20%
I never had the opportunity to do online banking.	**80%**	20%	0%	0%

Singapore	Not at all like me	Not like me	Like me	Just like me
I'm worried that my internet speed will affect my online banking transactions.	17%	**44%**	32%	7%
I'm worried that my online bank may not process payments correctly.	16%	36%	**42%**	6%
I'm worried that I may lose money due to careless mistakes such as sending the wrong amount or sending money to the wrong account.	4%	32%	**54%**	10%
I'm worried that in case of transaction errors, my bank would not be able to help me.	7%	**45%**	38%	10%
It would take me a lot of time to learn how to use online banking.	**48%**	**48%**	3%	1%
I'm worried that unauthorized people may be able to access my account.	13%	38%	**41%**	9%
I do not feel secure sending sensitive/private information online.	10%	**48%**	38%	4%
I never had the opportunity to do online banking.	**65%**	35%	0%	0%

Thailand	Not at all like me	Not like me	Like me	Just like me
I'm worried that my internet speed will affect my online banking transactions.	18%	21%	**42%**	18%
I'm worried that my online bank may not process payments correctly.	9%	36%	**42%**	12%
I'm worried that I may lose money due to careless mistakes such as sending the wrong amount or sending money to the wrong account.	9%	18%	**49%**	24%
I'm worried that in case of transaction errors, my bank would not be able to help me.	12%	21%	**36%**	30%
It would take me a lot of time to learn how to use online banking.	30%	**33%**	30%	6%
I'm worried that unauthorized people may be able to access my account.	12%	18%	**52%**	18%
I do not feel secure sending sensitive/private information online.	9%	21%	**58%**	12%
I never had the opportunity to do online banking.	**67%**	9%	18%	6%

Viet Nam	Not at all like me	Not like me	Like me	Just like me
I'm worried that my internet speed will affect my online banking transactions.	25%	**60%**	15%	0%
I'm worried that my online bank may not process payments correctly.	21%	**37%**	**37%**	5%
I'm worried that I may lose money due to careless mistakes such as sending the wrong amount or sending money to the wrong account.	11%	39%	**44%**	6%
I'm worried that in case of transaction errors, my bank would not be able to help me.	11%	32%	**47%**	11%
It would take me a lot of time to learn how to use online banking.	33%	**39%**	28%	0%
I'm worried that unauthorized people may be able to access my account.	21%	21%	**47%**	11%
I do not feel secure sending sensitive/private information online.	11%	**50%**	28%	11%
I never had the opportunity to do online banking.	**53%**	26%	11%	11%

E. RESEARCH FINDINGS: BUSINESS CONSUMER INSIGHTS

Most employees in top corporations have access to the Internet with email being the primary use.

Most respondents say that the Internet is very important in day to day operations of the company but according to them, less than half of their revenues can be directly attributed to the use of the Internet. Efficiency is the largest motivation for using the Internet.

1. Proportion of employees with Internet Access	Myanmar	Philippines	Singapore	Viet Nam
A. More than 90%	14%	**38%**	**81%**	**43%**
B. More than half but less than 90%	**26%**	22%	15%	17%
C. Around Half	17%	26%	0%	9%
D. Less than half but more than 10%	23%	12%	4%	26%
E. Below 10%	20%	2%	0%	5%

2. Company prescribed use of the Internet	Myanmar	Philippines	Singapore	Viet Nam
A. Email	**39%**	**32%**	**26%**	**26%**
B. For research, prospecting, news…	18%	17%	22%	23%
C. Entertainment	6%	0%	3%	12%
D. Recruitment of employees / Job posting	2%	1%	14%	3%
E. Online Banking / Financial Services	6%	20%	5%	3%
F. For maintaining our Company Website	8%	5%	14%	16%
G. Purchase of goods or services	9%	4%	3%	4%
H. Selling of goods or services	8%	13%	5%	4%
I. Online Advertising and Promotion placements	3%	8%	9%	9%
J. We don't use the Internet	0%	0%	0%	0%

3. Description of Corporate Internet usage	Myanmar	Philippines	Singapore	Viet Nam
A. Crucial to the operation of company	12%	43%	**53%**	14%
B. Very Important in day-to-day operations	**52%**	**48%**	40%	**44%**
C. We use it often but not significantly	27%	4%	5%	26%
D. We use basic functionalities	9%	4%	2%	16%
E. We can do without it	0%	1%	0%	1%

4. Top 3 Corporate Internet Usages	Myanmar	Philippines	Singapore	Viet Nam
A. Email	**38%**	**33%**	**32%**	**35%**
B. For research, prospecting, news…	19%	12%	26%	15%
C. Recruitment of employees / Job posting	2%	0%	3%	4%
D. Online Banking / Financial Services	5%	0%	1%	3%
E. For maintaining our Company Website	5%	23%	20%	**20%**
F. Purchase of goods or services	15%	2%	0%	6%
G. Selling of goods or services	13%	4%	4%	5%
H. Online Advertising and Promotion placements	2%	17%	7%	12%
I. We don't use the Internet	0%	8%	0%	0%
J. Others	0%	0%	7%	0%

5. Approximate annual company revenue attributed to the use of the Internet.	Myanmar	Philippines	Singapore	Viet Nam
A. More than 90%	0%	0%	3%	2%
B. More than half but less than 90%	9%	3%	23%	8%
C. Around Half	25%	6%	26%	6%
D. Less than half but more than 10%	**28%**	28%	**31%**	22%
E. Below 10%	13%	**58%**	11%	**62%**
F. None	25%	5%	6%	0%

6. Company Motivation for Internet Use	Myanmar	Philippines	Singapore	Viet Nam
A. Image	19%	14%	16%	18%
B. Efficiency	**68%**	**49%**	**68%**	**58%**
C. Savings	6%	16%	9%	17%
D. Profit	6%	21%	6%	7%

7. In your opinion, what is your company's greatest Barrier in using the Internet in business?	Myanmar	Philippines	Singapore	Viet Nam
A. Security	25%	23%	**45%**	4%
B. Fraud	0%	9%	6%	6%
C. Misuse of personal and company information	28%	11%	6%	2%
D. Virus	**33%**	**24%**	13%	**59%**
E. Expense	3%	13%	8%	9%
F. Employee use for personal / non-official matters.	11%	18%	23%	20%

F. RESEARCH FINDINGS: ONLINE SHOPPING PREFERENCES

The following tables show the most popular online shopping items among Internet users in the ASEAN region. The online shopping preference within in each country is quite varied. Generally however, the travel industry (flights and hotels), clothing, and book industry is a favorite in most countries while groceries and household items seems to be the least purchased online.

1. PURCHASED ITEMS

Brunei Darussalam

Item	Percentage
Airline Tickets / reservations	63%
Tours / Hotel reservations	57%
Clothing / Accessories / Shoes	48%
Computer Software	45%
Videos, DVDs, Games	45%
Books, magazines, or other reading materials	44%
Music or CD's	39%
Computer Hardware	38%
Electronic Equipment (TV, Camera etc.)	32%
Event, Theater or Movie Tickets	31%
Cosmetics / Nutrition Supplements / Medicine	25%
Flowers or Gift Items	25%
Toys / Dolls / Collectibles	21%
Houseware or hardware items	16%
Sporting Goods	10%
Groceries	10%
Automotive/Motor and Accessories	8%

Cambodia

Item	Percentage
Airline Tickets / reservations	42%
Computer Software	41%
Books, magazines, or other reading materials	40%
Tours / Hotel reservations	35%
Electronic Equipment (TV, Camera etc.)	32%
Computer Hardware	29%
Videos, DVDs, Games	29%
Clothing / Accessories / Shoes	27%
Music or CD's	24%
Sporting Goods	21%
Cosmetics / Nutrition Supplements / Medicine	21%
Event, Theater or Movie Tickets	21%
Automotive/Motor and Accessories	20%
Flowers or Gift Items	20%
Houseware or hardware items	17%
Toys / Dolls / Collectibles	13%
Groceries	13%

Ref No: DTI/ASEANTELSOM/01 – *Superius Corporation*

Indonesia

Category	%
Clothing / Accessories/ Shoes	70%
Books, magazines, or other reading materials	69%
Videos, DVDs, Games	68%
Computer Software	65%
Music or CD's	60%
Sporting Goods	57%
Airline Tickets / reservations	57%
Electronic Equipment (TV, Camera etc.)	56%
Computer Hardware	54%
Event, Theater or Movie Tickets	48%
Tours / Hotel reservations	44%
Flowers or Gift Items	44%
Automotive/Motor and Accessories	42%
Houseware or hardware items	41%
Toys / Dolls / Collectibles	39%
Cosmetics / Nutrition Supplements / Medicine	34%
Groceries	28%

Lao PDR

Category	%
Airline Tickets / reservations	45%
Music or CD's	30%
Computer Software	30%
Videos, DVDs, Games	29%
Electronic Equipment (TV, Camera etc.)	28%
Computer Hardware	28%
Books, magazines, or other reading materials	26%
Tours / Hotel reservations	26%
Event, Theater or Movie Tickets	24%
Flowers or Gift Items	22%
Clothing / Accessories/ Shoes	21%
Houseware or hardware items	19%
Sporting Goods	16%
Automotive/Motor and Accessories	15%
Cosmetics / Nutrition Supplements / Medicine	14%
Toys / Dolls / Collectibles	13%
Groceries	8%

Malaysia

Category	Percentage
Airline Tickets / reservations	65%
Event, Theater or Movie Tickets	46%
Tours / Hotel reservations	45%
Clothing / Accessories / Shoes	40%
Computer Software	40%
Books, magazines, or other reading materials	38%
Videos, DVDs, Games	38%
Computer Hardware	33%
Flowers or Gift Items	32%
Music or CD's	29%
Cosmetics / Nutrition Supplements / Medicine	28%
Electronic Equipment (TV, Camera etc.)	25%
Houseware or hardware items	24%
Toys / Dolls / Collectibles	23%
Sporting Goods	20%
Automotive/Motor and Accessories	16%
Groceries	15%

Myanmar

Category	Percentage
Books, magazines, or other reading materials	50%
Cosmetics / Nutrition Supplements / Medicine	35%
Clothing / Accessories / Shoes	35%
Computer Hardware	30%
Computer Software	25%
Videos, DVDs, Games	25%
Tours / Hotel reservations	20%
Airline Tickets / reservations	20%
Event, Theater or Movie Tickets	20%
Electronic Equipment (TV, Camera etc.)	16%
Music or CD's	15%
Toys / Dolls / Collectibles	15%
Sporting Goods	10%
Groceries	5%
Automotive/Motor and Accessories	5%
Houseware or hardware items	5%
Flowers or Gift Items	5%

Philippines

Category	Percentage
Airline Tickets / reservations	55%
Tours / Hotel reservations	42%
Books, magazines, or other reading materials	31%
Videos, DVDs, Games	31%
Clothing / Accessories/ Shoes	27%
Event, Theater or Movie Tickets	27%
Computer Software	26%
Music or CD's	23%
Computer Hardware	23%
Flowers or Gift Items	22%
Cosmetics / Nutrition Supplements / Medicine	20%
Electronic Equipment (TV, Camera etc.)	19%
Toys / Dolls / Collectibles	15%
Sporting Goods	11%
Groceries	11%
Automotive/Motor and Accessories	9%
Houseware or hardware items	7%

Singapore

Category	Percentage
Event, Theater or Movie Tickets	82%
Airline Tickets / reservations	54%
Tours / Hotel reservations	52%
Clothing / Accessories/ Shoes	47%
Computer Software	45%
Videos, DVDs, Games	45%
Books, magazines, or other reading materials	43%
Flowers or Gift Items	40%
Computer Hardware	33%
Music or CD's	32%
Toys / Dolls / Collectibles	30%
Electronic Equipment (TV, Camera etc.)	22%
Cosmetics / Nutrition Supplements / Medicine	22%
Houseware or hardware items	17%
Sporting Goods	15%
Groceries	15%
Automotive/Motor and Accessories	10%

Thailand

Category	Percentage
Airline Tickets / reservations	73%
Clothing / Accessories / Shoes	60%
Tours / Hotel reservations	60%
Videos, DVDs, Games	59%
Books, magazines, or other reading materials	58%
Computer Software	56%
Cosmetics / Nutrition Supplements / Medicine	50%
Event, Theater or Movie Tickets	48%
Music or CD's	48%
Computer Hardware	47%
Flowers or Gift Items	42%
Electronic Equipment (TV, Camera etc.)	38%
Toys / Dolls / Collectibles	34%
Sporting Goods	34%
Groceries	27%
Houseware or hardware items	27%
Automotive/Motor and Accessories	22%

Viet Nam

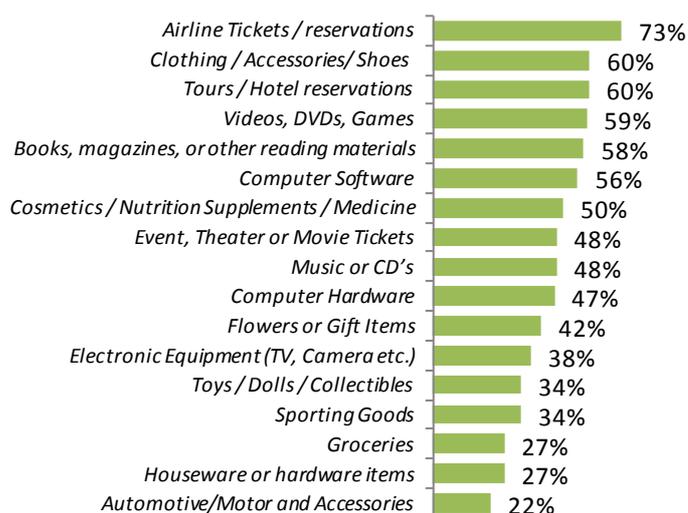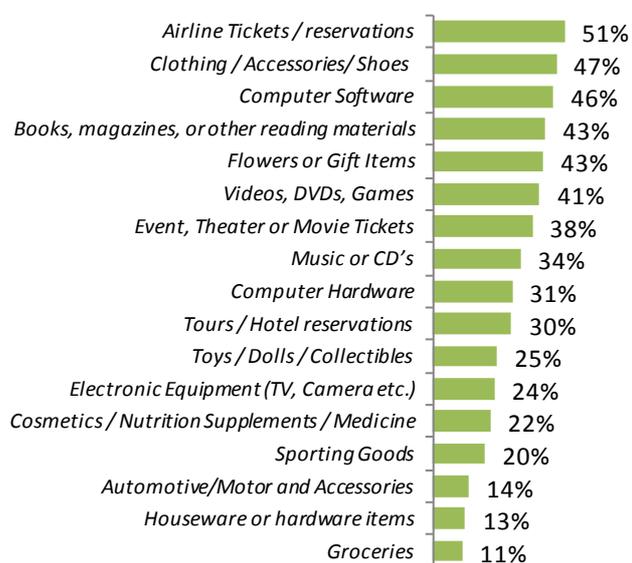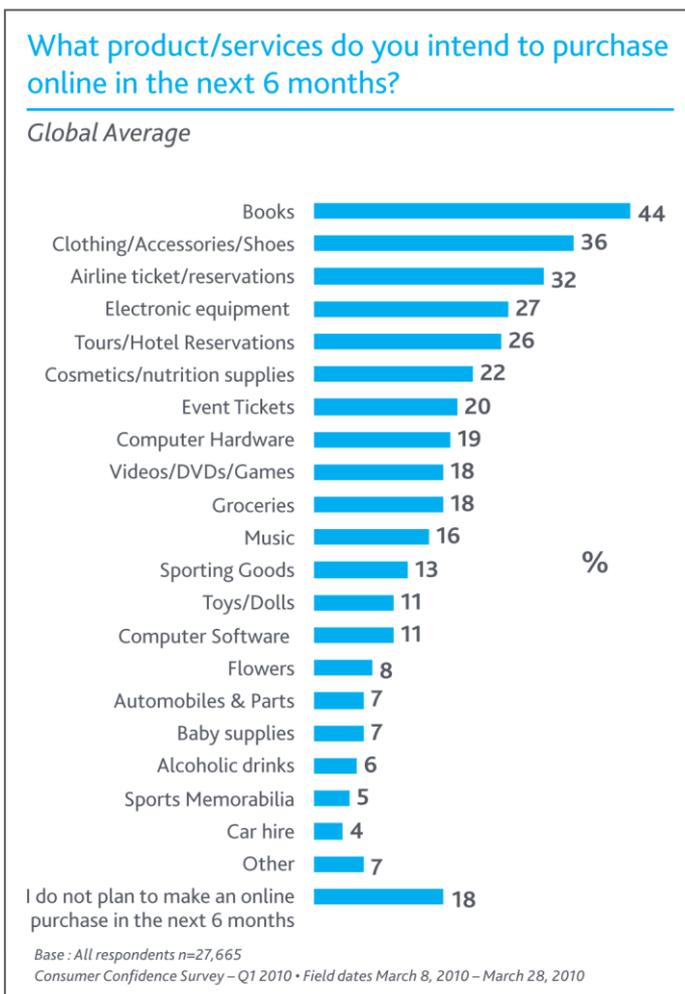| Category	Percentage
Airline Tickets / reservations	51%
Clothing / Accessories / Shoes	47%
Computer Software	46%
Books, magazines, or other reading materials	43%
Flowers or Gift Items	43%
Videos, DVDs, Games	41%
Event, Theater or Movie Tickets	38%
Music or CD's	34%
Computer Hardware	31%
Tours / Hotel reservations	30%
Toys / Dolls / Collectibles	25%
Electronic Equipment (TV, Camera etc.)	24%
Cosmetics / Nutrition Supplements / Medicine	22%
Sporting Goods	20%
Automotive/Motor and Accessories	14%
Houseware or hardware items	13%
Groceries	11%

In June 2010, the Nielsen Company came out with a global average[2] on what people intend to purchase online in the next six months. The results are below. Considering that technology and industry has gone through many changes in the last three years, there are still some noteworthy similarities among popular and unpopular items online

What product/services do you intend to purchase online in the next 6 months?

Global Average

	%
Books	44
Clothing/Accessories/Shoes	36
Airline ticket/reservations	32
Electronic equipment	27
Tours/Hotel Reservations	26
Cosmetics/nutrition supplies	22
Event Tickets	20
Computer Hardware	19
Videos/DVDs/Games	18
Groceries	18
Music	16
Sporting Goods	13
Toys/Dolls	11
Computer Software	11
Flowers	8
Automobiles & Parts	7
Baby supplies	7
Alcoholic drinks	6
Sports Memorabilia	5
Car hire	4
Other	7
I do not plan to make an online purchase in the next 6 months	18

Base : All respondents n=27,665
Consumer Confidence Survey – Q1 2010 • Field dates March 8, 2010 – March 28, 2010

---

[2] Global Trends in Online Shopping. A Nielsen Global Consumer Report. June 2010

2. MEDIA OPTIONS

To determine the possible success of digital media, online users where asked their preference regarding reading materials, music and video.

When given an option, most ASEAN the respondents prefer digital media. Except for Brunei and Singapore, most ASEAN online shoppers already prefer digital book to traditional books. In all countries, a majority of Internet users prefer downloaded music and videos over traditional CDs and DVDs.

Take note that the Internet users were asked regarding their preference rather than the medium they actually purchased.

	Brunei Darussalam	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Prefers downloadable digital books to physical books.	45%	79%	69%	69%	53%	78%	53%	39%	63%	70%
Prefers digital music to CDs.	72%	71%	80%	64%	67%	72%	74%	78%	79%	75%
Prefers digital videos to DVDs.	60%	50%	70%	61%	65%	67%	68%	72%	66%	72%

3. OTHER PURCHASE OPTIONS

Besides retail consumer items, the broad definition of E-Commerce covers all transactional uses of the Internet. The table below shows the amount of respondents who say they have availed of professional transactional services online.

	Brunei Darussalam	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Has availed of professional services (Medical, Legal Advice, etc)	27%	46%	39%	31%	33%	44%	22%	20%	43%	38%
Has availed of business services such as domain name registration, software services Online or through the Internet.	37%	60%	48%	45%	54%	44%	33%	37%	51%	47%
Has paid utility bills Online or through the Internet?(ex. electricity, water, telephone bills)	23%	26%	51%	19%	58%	27%	28%	52%	50%	23%
Has transferred funds or money Online or through the Internet.	38%	32%	40%	23%	63%	40%	31%	67%	47%	39%

The table below shows the percentage of Internet users that have access to a personal electronic payment method such as credit cards, debit cards, or an electronic wallet.

	Brunei Darussalam	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Checks credit card or bank statements Online or through the Internet.	48%	30%	42%	19%	63%	27%	31%	67%	56%	46%
Owns a credit card.	43%	44%	42%	30%	33%	33%	33%	48%	53%	54%
Owns a debit card.	33%	29%	67%	30%	53%	33%	33%	78%	66%	44%
Has an electronic wallet (ex. paypal)	32%	29%	38%	19%	37%	13%	21%	41%	44%	31%

G. DATA SUMMARY

ECONOMY	BRUNEI DARUSSALAM	CAMBODIA	INDONESIA	LAO PDR	MALAYSIA	MYANMAR	PHILIPPINES	SINGAPORE	THAILAND	VIET NAM
Gross Domestic Product (GDP) at current prices (US$ million)	14,146.7	10,368.2	546,527.0	5,579.2	193,107.7	24,972.8	161,357.6	182,701.7	264,322.8	96,317.1
	As of July 2010, www.aseansec.org/1922 6.htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/1922 6.htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/1922 6.htm	As of July 2010, www.aseansec.org/192 26.htm	As of July 2010, www.aseansec.org/192 26.htm	As of July 2010, www.aseansec.org/1922 6.htm
GDP at current prices (US$ Billion)	10.6	10.8	539.4	5.5	191.5	27.5	161.0	177.1	263.9	92.4
	CIA 2009	CIA 2009	CIA 2009	CIA 2009	CIA 2009	CIA 2009	CIA 2009	CIA 2009	CIA 2009	CIA 2009
GDP capita at current prices (US$)	34,827.0	693.2	2,362.1	942.1	6,822.1	419.5	1,749.6	36,631.2	3,950.8	1,104.2
	As of July 2010, www.aseansec.org/1922 6.htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/1922 6.htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/1922 6.htm	As of July 2010, www.aseansec.org/192 26.htm	As of July 2010, www.aseansec.org/192 26.htm	As of July 2010, www.aseansec.org/1922 6.htm
GDP per capita in international dollars (PPP$)	49,266.8	1,802.3	4,174.9	2,431.3	13,593.8	1,093.4	3,525.1	49,765.8	8,072.2	3,067.9
	As of July 2010, www.aseansec.org/1922 6.htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/1922 6.htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/1922 6.htm	As of July 2010, www.aseansec.org/192 26.htm	As of July 2010, www.aseansec.org/192 26.htm	As of July 2010, www.aseansec.org/1922 6.htm
GDP per capita in international dollars (PPP$)	51,200	1,900	4,000	2,100	14,900	1,100	3,300	52,200	8,200	2,900
	CIA 2009	CIA 2009	CIA 2009	CIA 2009	CIA 2009	CIA 2009	CIA 2009	CIA 2009	CIA 2009	CIA 2009
Total population thousand	406.2	14,957.8	231,369.5	5,922.1	28,306.7	59,534.3	92,226.6	4,987.6	66,903.0	86,024.6
	As of July 2010, www.aseansec.org/1922 6.htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/1922 6.htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/1922 6.htm	As of July 2010, www.aseansec.org/192 26.htm	As of July 2010, www.aseansec.org/192 26.htm	As of July 2010, www.aseansec.org/1922 6.htm
Population density	70	83	124	25	86	88	307	7,022	130	260
	As of July 2010, www.aseansec.org/1922 6.htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/1922 6.htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/1922 6.htm	As of July 2010, www.aseansec.org/192 26.htm	As of July 2010, www.aseansec.org/192 26.htm	As of July 2010, www.aseansec.org/1922 6.htm
Total land area km 2	5,765	181,035	1,860,360	236,800	330,252	676,577	300,000	710	513,120	331,051
	As of July 2010, www.aseansec.org/1922 6.htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/1922 6.htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/1922 6.htm	As of July 2010, www.aseansec.org/192 26.htm	As of July 2010, www.aseansec.org/192 26.htm	As of July 2010, www.aseansec.org/1922 6.htm

INFRASTRUCTURE	BRUNEI DARUSSALAM	CAMBODIA	INDONESIA	LAO PDR	MALAYSIA	MYANMAR	PHILIPPINES	SINGAPORE	THAILAND	VIET NAM
Road length km	2,971	38,093	437,759	29,811	98,721	30,902	201,910	3,356	180,053	222,179
	As of July 2010, www.aseansec.org/1922 6.htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/1922 6.htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/1922 6.htm	As of July 2010, www.aseansec.org/192 26.htm	As of July 2010, www.aseansec.org/192 26.htm	As of July 2010, www.aseansec.org/1922 6.htm
Roads per area (Ratio)	0.52	0.21	0.24	0.13	0.3	0.05	0.67	4.72	0.35	0.67
	As of July 2010, www.aseansec.org/1922 6.htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/1922 6.htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/19226 .htm	As of July 2010, www.aseansec.org/1922 6.htm	As of July 2010, www.aseansec.org/192 26.htm	As of July 2010, www.aseansec.org/192 26.htm	As of July 2010, www.aseansec.org/1922 6.htm

E-COMMERCE INDICATORS

E-COMMERCE INDICATORS	BRUNEI DARUSSALAM	CAMBODIA	INDONESIA	LAO PDR	MALAYSIA	MYANMAR	PHILIPPINES	SINGAPORE	THAILAND	VIET NAM
Number of Fixed Telephone Line Subscribers per 100	19.5	0.3	13.4	1.5	15.9	1.4	4.3	40.2	10.4	32.8
	WDI 2009 est.	WDI 2009 est.	WDI 2009 est.	WDI 2009 est.	WDI 2009 est.	WDI 2009 est.	WDI 2009 est.	WDI 2009 est.	WDI 2009 est.	WDI 2009 est.
Number of Mobile Telephone Subscribers per 100	88.9	29.1	61.8	23.8	100.4	0.8	75.4	138.1	117.3	80.4
	WDI 2009 est.	WDI 2009 est.	WDI 2009 est.	WDI 2009 est.	WDI 2009 est.	WDI 2009 est.	WDI 2009 est.	WDI 2009 est.	WDI 2009 est.	WDI 2009 est.
Number of personal computers per 100	8.9	0.4	2	1.7	23.1	0.9	7.2	74.3	6.7	9.6
	WDI 2009 est.	WDI 2009 est.	WDI 2009 est.	WDI 2009 est.	WDI 2009 est.	WDI 2009 est.	WDI 2009 est.	WDI 2009 est.	WDI 2009 est.	WDI 2009 est.
Number of Internet Subscriptions (Thousands)	162.6	31000	12,658.5	95.9	15,379.70	70	5,341	5,898.9	13,868.6	17,414.2
	2007	2009	2007	2007	2007	2010 March	2007	2009	2007	2007
Proportion of population with internet access	56%	1%	12.5%	7.7%	65.7%	0.6%	3.9%	90%	24%	28%
	2009	2009	2009	2009	2009	2010 March	Dec 2009	2009	2009	2010 May
Number of People with Access to the Internet*	217,000	74000	18,000,000	527,450	15,074,000	351,390	5,618,000	3,108,200	16,100,000	24,269,083
	2008	2008	2008	2008	2008	2010 March	2008	2009	2008	5/2010
Internet Cost (Annual, Pricebasket, USD)	223	396	220	331	91	556	24	258	89	125
	WDI 2006	WDI 2006	WDI 2006	WDI 2006	WDI 2006	WDI 2006	WDI 2006	WDI 2006	WDI 2006	WDI 2006
Monthly Subscription	17.85	33.08	17.26	27.6	7.39	30	1.15	USD 18.80 (S$25.2)	6.95	10.66
	ASEAN 2005	ASEAN 2005	ASEAN 2005	ASEAN 2005	ASEAN 2005	ASEAN 2010 March	ASEAN 2005	ASEAN 2010	ASEAN 2005	ASEAN 2005
Minimum Wage		600	1,344		5,832		2,956	24,533	2,247	626
	DOLE Latest Available	DOLE Latest Available	DOLE Latest Available	DOLE Latest Available	DOLE Latest Available	DOLE Latest Available	DOLE Latest Available	DOLE Latest Available	DOLE Latest Available	DOLE Latest Available
Internet Penetration	80.70%	0.50%	12.30%	7.50%	64.60%	0.20%	29.70%	77.80%	26.30%	27.10%
	IWS 2010 est.	IWS 2010 est.	IWS 2010 est.	IWS 2010 est.	IWS 2010 est.	IWS 2010 est.	IWS 2010 est.	IWS 2010 est.	IWS 2010 est.	IWS 2010 est.
Internet Users	318,900	78,000	30,000,000	527,400	16,902,600	110,000	29,700,000	3,658,400	17,486,400	24,269,083
	IWS 2010 est.	IWS 2010 est.	IWS 2010 est.	IWS 2010 est.	IWS 2010 est.	IWS 2010 est.	IWS 2010 est.	IWS 2010 est.	IWS 2010 est.	IWS 2010 est.
Population (Projected)	395,027	14,753,320	242,968,342	6,993,767	26,160,256	53,414,374	99,900,177	4,701,069	66,404,688	89,571,130
	IWS 2010 est.	IWS 2010 est.	IWS 2010 est.	IWS 2010 est.	IWS 2010 est.	IWS 2010 est.	IWS 2010 est.	IWS 2010 est.	IWS 2010 est.	IWS 2010 est.
Facebook Account Subscriptions	191,360	167,000	30,108,220	30,620	8,893,160	-	18,124,220	2,424,780	6,167,260	154,800
	Facebook 2010 Nov	Facebook 2010 Nov	Facebook 2010 Nov	Facebook 2010 Nov	Facebook 2010 Nov	Facebook 2010 Nov	Facebook 2010 Nov	Facebook 2010 Nov	Facebook 2010 Nov	Facebook 2010 Nov
Top 3 Websites	www.facebook.com www.google.com.bn www.youtube.com	www.google.com www.yahoo.com www.facebook.com	www.facebook.com www.google.com.id www.google.com	NA	www.facebook.com www.google.com.my www.yahoo.com	NA	www.facebook.com www.yahoo.com www.google.com.ph	www.facebook.com www.google.com.sg www.yahoo.com	www.google.com.th www.facebook.com www.live.com	www.google.com.vn www.yahoo.com www.vnexpress.net
Top Retail Site	www.shopping.com.bn	www.isale.com.kh	www.amazon.com	NA	www.amazon.com	NA	www.amazon.com	www.amazon.com	www.amazon.com	www.enbac.com
Top Local Site	www.bruneidirect.com	www.dap-news.com	www.kaskus.us	NA	www.thestar.com.my	NA	www.sulit.com.ph	www.hardwarezone.com.sg	www.sanook.com	www.vnexpress.net
Top Banking/ Finance / Payment Gateway	www.paypal.com	none in top 50 sites	www.paypal.com	NA	www.maybank2u.my	NA	www.paypal.com	www.dbs.com	none in top 50 sites	none in top 50 sites
Top Search Engine	www.google.com.bn	www.google.com	www.google.com.id	NA	www.google.com.my	NA	www.google.com.ph	www.google.com.sg	www.google.com.th	www.google.com.vn
Top Local News / Magazine Site	www.bruneidirect.com	www.dap-news.com	www.detik.com	NA	www.thestar.com.my	NA	www.inquirer.net	www.hardwarezone.com.sg	www.sanook.com	www.vnexpress.net
	www.alexa.com (2010)	www.alexa.com (2010)	www.alexa.com (2010)	www.alexa.com (2010)	www.alexa.com (2010)	www.alexa.com (2010)	www.alexa.com (2010)	www.alexa.com (2010)	www.alexa.com (2010)	www.alexa.com (2010)

CONSUMER INSIGHT

CONSUMER INSIGHT	BRUNEI DARUSSALAM	CAMBODIA	INDONESIA	LAO PDR	MALAYSIA	MYANMAR	PHILIPPINES	SINGAPORE	THAILAND	VIET NAM
Hours Online (High Ave.)	3 - 6	1-3	3-6	1-3	3-6	1-3	3-6	6-10	3-6	6-10
Active Hours Online (High Ave.)	1-3	1-3	1-3	1-3	3-6	1-3	1-3	3-6	1-3	1-3
Top 2 Activities Online	Connect with friends, General Information Search	General Information Search, Connect with friends	General Information Search, Connect with friends	General Information Search, Connect with friends	Connect with friends, General Information Search	General Information Search, Connect with friends	General Information Search, Connect with friends	General Information Search, Connect with friends	Connect with Friends, Entertainment	Connect with friends, General Information Search
Web Access										
PC/Laptop/Netbook	34%	66%	66%	73%	73%	86%	70%	39%	69%	54%
Mobile Phone/Gadget (e.g. iPod, PSP)	6%	4%	8%	4%	4%	4%	1%	8%	4%	1%
Both	73%	35%	36%	28%	28%	20%	30%	64%	27%	45%
Internet Connection										
None	1%	17%	13%	11%	3%	41%	6%	0%	7%	6%
Dial-up	3%	13%	10%	17%	3%	13%	1%	2%	8%	5%
Cable or ISDN	14%	23%	35%	12%	8%	2%	4%	12%	4%	2%
Broadband - DSL Line	29%	21%	15%	24%	40%	24%	52%	27%	52%	40%
Broadband - Wireless	52%	24%	26%	24%	35%	20%	35%	57%	25%	47%
T1 or Faster	1%	1%	2%	2%	1%	0%	2%	2%	1%	0%
Frequency of Activities (Most)	Check or send email	Visit Social Networking Sites	Visit Social Networking Sites	Check or send email	Visit Social Networking Sites	Check or send email	Visit Social Networking Sites	Check or send email	Visit Social Networking Sites	Read Online News/ Magazines
Email Preference (Most)	Gmail	Gmail	Gmail	Gmail	Gmail	Gmail	Yahoo Mail	Gmail	Hotmail	Yahoo Mail
Search Engine Preference	google	google	google	google	google	google	google	google	google	google
Website Ownership										
No	64%	67%	65%	72%	69%	80%	46%	69%	67%	64%
Yes, I maintain a personal website	19%	18%	27%	12%	19%	15%	45%	20%	20%	27%
Yes, I maintain a business website	7%	5%	3%	7%	4%	2%	2%	6%	5%	8%
Yes, I maintain both a personal and business website	10%	10%	6%	8%	8%	2%	6%	6%	9%	2%

Ref No: DTI/ASEANTELSOM/01 – *Superius Corporation*

ONLINE PURCHASING	BRUNEI DARUSSALAM	CAMBODIA	INDONESIA	LAO PDR	MALAYSIA	MYANMAR	PHILIPPINES	SINGAPORE	THAILAND	VIET NAM
Considered purchasing item / service in retail store that was seen online.										
Yes	82%	81%	80%	89%	63%	70%	80%	87%	78%	82%
No	18%	19%	20%	11%	37%	30%	20%	13%	22%	19%
Purchased item/ service online using site's online payment system										
Yes	85%	75%	72%	81%	75%	60%	80%	87%	78%	59%
No	15%	25%	28%	19%	25%	40%	20%	13%	22%	41%
Has purchased Online										
Yes	80%	29%	47%	36%	50%	22%	43%	82%	66%	57%
No	20%	71%	53%	64%	50%	78%	57%	18%	34%	43%
Last online Purchase										
Last 3 months	75%	70%	69%	69%	51%	36%	70%	73%	76%	59%
Last 6 months	9%	13%	17%	11%	26%	9%	0%	21%	10%	15%
Mode of payment used										
Credit Card	79%	62%	34%	63%	67%	63%	40%	92%	56%	19%
Debit Card/ATM Card	26%	32%	46%	31%	31%	63%	30%	31%	36%	42%
Money transfer/ Remittance/ Bank deposit	16%	22%	46%	23%	22%	0%	50%	23%	53%	39%
Virtual wallet	6%	6%	8%	6%	5%	0%	0%	10%	2%	0%
Cash	19%	22%	18%	23%	13%	38%	30%	14%	25%	58%
Check	2%	10%	1%	9%	3%	0%	0%	0%	3%	8%
Preferred Mode of payment										
Credit Card	65%	59%	21%	53%	54%	43%	50%	74%	40%	16%
Debit Card/ATM Card	21%	18%	28%	21%	27%	29%	30%	10%	24%	44%
Money transfer/ Remittance/ Bank deposit	3%	10%	38%	12%	13%	0%	20%	10%	24%	16%
Virtual wallet	3%	2%	5%	3%	2%	0%	0%	3%	0%	0%
Cash	7%	6%	8%	12%	4%	14%	0%	3%	10%	24%
Check	1%	4%	0%	0%	0%	14%	0%	0%	2%	0%
Uses Online Banking										
Yes	61%	32%	35%	24%	63%	12%	28%	83%	52%	48%
No	39%	68%	65%	76%	37%	88%	72%	17%	48%	52%
Type of Online Banking Transactions Used										
View my transaction history	93%	82%	75%	91%	81%	100%	100%	100%	75%	81%
View my statement of account (for credit cards/loans)	93%	67%	46%	86%	83%	67%	80%	83%	56%	81%
Pay bills online	79%	47%	43%	64%	85%	67%	40%	81%	63%	57%
Transfer money between accounts	66%	65%	70%	91%	62%	67%	80%	89%	75%	71%
Top 2 Barriers to Online Purchase	Never tried it, Don't trust vendor	Never tried it, Don't trust that my credit card number will be secure	Never tried it, Don't trust that my credit card number will be secure	Never tried it, Not applicable	Never tried it, Don't trust vendor	Not applicable, Never tried it	Never tried it, Not applicable	Never tried it, Faster/easier to purchase locally or in the store	Don't trust vendor, Not enough information to make a decision	Don't trust vendor, Faster/easier to purchase locally on in the store

BUSINESS CONSUMER INSIGHT	BRUNEI DARUSSALAM	CAMBODIA	INDONESIA	LAO PDR	MALAYSIA	MYANMAR	PHILIPPINES	SINGAPORE	THAILAND	VIET NAM
1. Proportion of employees with Internet Access										
A. More than 90%						14%	38%	81%		43%
B. More than half but less than 90%						26%	22%	15%		17%
C. Around Half						17%	26%	0%		9%
D. Less than half but more than 10%						23%	12%	4%		26%
E. Below 10%						20%	2%	0%		5%
2. Company prescribed use of the Internet										
A. Email						39%	32%	26%		26%
B. For research, prospecting, news…						18%	17%	22%		23%
C. Entertainment						6%	0%	3%		12%
D. Recruitment of employees / Job posting						2%	1%	14%		3%
E. Online Banking / Financial Services						6%	20%	5%		3%
F. For maintaining our Company Website						8%	5%	14%		16%
G. Purchase of goods or services						9%	4%	3%		4%
H. Selling of goods or services						8%	13%	5%		4%
I. Online Advertising and Promotion placements						3%	8%	9%		9%
J. We don't use the Internet						0%	0%	0%		0%
3. Description of Corporate Internet usage										
A. Crucial to the operation of company						12%	43%	53%		14%
B. Very Important in day-to-day operations						52%	48%	40%		44%
C. We use it often but not significantly						27%	4%	5%		26%
D. We use basic functionalities						9%	4%	2%		16%
E. We can do without it						0%	1%	0%		1%
4. Top 3 Corporate Internet Usages										
A. Email						38%	33%	32%		35%
B. For research, prospecting, news…						19%	12%	26%		15%
C. Recruitment of employees / Job posting						2%	0%	3%		4%
D. Online Banking / Financial Services						5%	0%	1%		3%
E. For maintaining our Company Website						5%	23%	20%		20%
F. Purchase of goods or services						15%	2%	0%		6%
G. Selling of goods or services						13%	4%	4%		5%
H. Online Advertising and Promotion placements						2%	17%	7%		12%
I. We don't use the Internet						0%	8%	0%		0%
J. Others						0%	0%	7%		0%
5. Approximate annual company revenue attributed to the use of the Internet.										
A. More than 90%						0%	0%	3%		2%
B. More than half but less than 90%						9%	3%	23%		8%
C. Around Half						25%	6%	26%		6%
D. Less than half but more than 10%						28%	28%	31%		22%
E. Below 10%						13%	58%	11%		62%
F. None						25%	5%	6%		0%
6. Company Motivation for Internet Use										
A. Image						19%	14%	16%		18%
B. Efficiency						68%	49%	68%		58%
C. Savings						6%	16%	9%		17%
D. Profit						6%	21%	6%		7%
7. In your opinion, what is your company's greatest Barrier in using the Internet in business?										
A. Security						25%	23%	45%		4%
B. Fraud						0%	9%	6%		6%
C. Misuse of personal and company information						28%	11%	6%		2%
D. Virus						33%	24%	13%		59%
E. Expense						3%	13%	8%		9%
F. Employee use for personal / non-official matters.						11%	18%	23%		20%

ONLINE SHOPPING PREFERENCES	BRUNEI DARUSSALAM	CAMBODIA	INDONESIA	LAO PDR	MALAYSIA	MYANMAR	PHILIPPINES	SINGAPORE	THAILAND	VIET NAM
Purchased Items										
Books, magazines, or other reading materials	44%	40%	69%	26%	38%	35%	31%	43%	58%	43%
Cosmetics / Nutrition Supplements / Medicine	25%	21%	34%	14%	28%	25%	20%	22%	50%	22%
Clothing / Accessories/ Shoes	48%	27%	70%	21%	40%	25%	27%	47%	60%	47%
Computer Hardware	38%	29%	54%	28%	33%	20%	23%	33%	47%	31%
Computer Software	45%	41%	65%	30%	40%	30%	26%	45%	56%	46%
Videos, DVDs, Games	45%	29%	68%	29%	38%	20%	31%	45%	59%	41%
Tours / Hotel reservations	57%	35%	44%	26%	45%	35%	42%	52%	60%	30%
Airline Tickets / reservations	63%	42%	57%	45%	65%	50%	55%	54%	73%	51%
Event, Theater or Movie Tickets	31%	21%	48%	24%	46%	15%	27%	82%	48%	38%
Electronic Equipment (TV, Camera etc.)	32%	32%	56%	28%	25%	15%	19%	22%	38%	24%
Music or CD's	39%	24%	60%	30%	29%	20%	23%	32%	48%	34%
Toys / Dolls / Collectibles	21%	13%	39%	13%	23%	10%	15%	30%	34%	25%
Sporting Goods	10%	21%	57%	16%	20%	16%	11%	15%	34%	20%
Groceries	10%	13%	28%	8%	15%	5%	11%	15%	27%	11%
Automotive/Motor and Accessories	8%	20%	42%	15%	16%	5%	9%	10%	22%	14%
Houseware or hardware items	16%	17%	41%	19%	24%	5%	7%	17%	27%	13%
Flowers or Gift Items	25%	20%	44%	22%	32%	5%	22%	40%	42%	43%
Media Options										
Prefers downloadable digital books to physical books.	45%	79%	69%	69%	53%	78%	53%	39%	63%	70%
Prefers digital music to CDs.	72%	71%	80%	64%	67%	72%	74%	78%	79%	75%
Prefers digital videos to DVDs.	60%	50%	70%	61%	65%	67%	68%	72%	66%	72%
Other Purchase Options										
Has availed of professional services (Medical, Legal Advice, etc)	27%	46%	39%	31%	33%	44%	22%	20%	43%	38%
Has availed of business services such as domain name registration, software services Online or through the Internet.	37%	60%	48%	45%	54%	44%	33%	37%	51%	47%
Has paid utility bills Online or through the Internet?(ex.electricity, water, telephone bills)	23%	26%	51%	19%	58%	27%	28%	52%	50%	23%
Has transferred funds or money Online or through the Internet.	38%	32%	40%	23%	63%	40%	31%	67%	47%	39%
Checks credit card or bank statements Online or through the Internet.	48%	30%	42%	19%	63%	27%	31%	67%	56%	46%
Owns a credit card.	43%	44%	42%	30%	33%	33%	33%	48%	53%	54%
Owns a debit card.	33%	29%	67%	30%	53%	33%	33%	78%	66%	44%
Has an electronic wallet (ex. paypal)	32%	29%	38%	19%	37%	13%	21%	41%	44%	31%

H. CONCLUSIONS AND RECOMMENDATIONS

1. CONCLUSIONS

On sheer population size, the ASEAN presents a very ideal environment for E-Commerce activities to flourish. With an estimated online user base in excess of 123 Million, it comprises around 6% of the world online population. Even at this size, Internet penetration rates in the ASEAN region is only at the 20% mark giving most of its 600 Million population or more than 480 Million people as a potential market to trade goods and services online.

With the widespread use of wireless technologies, the amount of traditional infrastructure such as telephone lines is less of a barrier to increase Internet penetration rates. This, coupled with the rise of affordable Internet-enabled mobile devices and computers, makes the potentials for the region very promising.

Looking at average GDP per capita figures, for most of the ASEAN, mainstream E-Commerce may be limited to basic goods and services with lower price entry points. Online banking plays a crucial role in the development of E-Commerce because the basic activity of viewing bank statements and balances is a necessity for many individuals. If banks are able to convert these users to avail of transactional services such as "bills" or "utilities" payments, then consumers will be more accustomed to transacting online.

For the ASEAN region, the Internet is used primarily for general content search as well as a communication tool. Email, Search, News/Magazines/Blogs, and Social Media are the top uses for the Internet in the region. This comes to no surprise because Information consumption will almost always be the primary use for the Internet. As more users go online to consume content, it is expected that a corresponding increase in E-Commerce activities will take place.

There are certainly a number of indications that the region is ready for E-Commerce. Most respondents in the consumer survey who have purchased items online prefer online or electronic payment methods. In addition to this, many of the respondents who have purchased online did so within the last 3 months indicating that online purchasing can become habitual after the first few purchases.

With the combination of a substantial base of online users and a keen interest in online activities, the ASEAN region is undoubtedly a good environment for E-Commerce.

2. RECOMMENDATIONS

The challenge for many ASEAN countries is to increase Internet penetration to levels that will make E-Commerce a viable venue for business. Enumerated below are some ways that can improve Internet penetration rates across the region:

1. For lower GDP per capita countries, reducing the cost of Internet subscription rates may aid in increasing online users. Prepaid or pay as you go Internet connections may be one of the keys to increasing Internet penetration rates as it will empower individuals to go online and engage in basic Internet activities for a low cost without the commitment of monthly bills.

2. Encouraging the use of affordable Internet-powered devices such as net books, handhelds, and other mobile devices is necessary. As the world accepts wireless technologies, these devices will increasingly allow easier access to the Internet.

3. Increase the consumption of free Internet content such as news, blog, online publications, information Sites, and Social media to lead to more interest in the Internet creating a bigger market for transacting online.

4. Increase the use of the Internet for basic activities such as online banking, email, and entertainment to create a bigger online user base needed to sustain a healthy E-Commerce environment.

5. It is vital to encourage internationally-accepted forms of electronic payment such as credit cards, debit cards, electronic wallets, wire transfers, and the like. Electronic payment facilities are tightly associated with Internet based transactions and are crucial for E-Commerce to flourish.

6. It is crucial to create a trustworthy environment for E-Commerce by creating and enforcing laws, regulations and guidelines pertaining to consumer and business rights to protect them from undesirable elements in the Internet.

Combining cheap Internet access and integrating the Internet into the daily lives of individuals is seen as a method to increase online users while improving electronic payment facilities and creating a trustworthy environment should encourage more online transactions to increase ASEAN E-Commerce activities.

7. Establish framework for cross border complaints and dispute resolution to discourage fraud, encourage better customer service and improve online sales.

8. Conduct capability building activities to address the recommendations above and update the ASEAN E-Commerce Database to show the progress being made with the ASEAN ICT Masterplan 2015.

3. RECOMMENDATIONS FOR FUTURE STUDIES

The ASEAN E-Commerce Database project will be an effective tool in measuring the progress of the ASEAN ICT Master Plan 2015. As such, it is important to fine tune the data gathering activities to make data collection faster and more efficient. The following recommendations are based on the lessons learned from the current data gathering activities:

1. Empower the lead consultant/researcher to be the central repository of all data gathering activities in order to alleviate pressure from responsible agencies of each country and to provide a uniform data set from compatible sources.

2. For direct data gathering of country information: Assign the lead consultant to collate information from reliable online and offline sources. Simplify the task of responsible agencies to reviewing and approving the accuracy of the data and sources used by the consultant. Responsible agencies may also give alternatives to better information sources if necessary.

3. For Consumer and Business User Surveys and Questionnaires: All countries should use a uniform online survey. The survey may be in plain English or with corresponding translation or subtitles whenever necessary. The responsible agencies in each country will be tasked to promote the online survey instead of implement it themselves. This will save a lot of time, money and coordination effort.

4. Allocate a budget for online advertising and promotions of the survey. This will enable the consultant to gather data much faster. Due to the random nature of the respondents that can be gathered from online advertising and promotions, data will also be made more accurate.

5. Trim down all surveys to the most essential pieces of Information to provide a more concise and focused document.

I. LIST OF TABLES & FIGURES

1. TABLES

2. FIGURES

Ref No: DTI/ASEANTELSOM/01 – *Superius Corporation*

J.   ANNEXES

1.   REFERENCES

www.oecd.org - Organisation For Economic Co-operation and Development Electronic Commerce in Asia, - B to C Electronic Commerce-Center of the International Cooperation for Computerization (CICC)
March, 2009

The Present ICT Data Collection and Measuring System in Myanmar (Presentation)
ASEAN Workshop on Measurement of Digital Economy
U Tin Win Aung, Secretary, Myanmar Computer Federation
Joint Secretary, e-National Task Force
E-Commerce Readiness Assessment Guide
APEC, A Partnership of the Business Community With APEC Economies
19 –20 September 2002, Bangkok Thailand

Questionnaire for E-Commerce Legal Framework in Asia-Pacific Countries APEC
28th September, 2001

ASEAN e-Measurement Initiative and Thailand Case Study
The Needs and Challenges of e-Measurement in the Developing Countries
UNCTAD Expert Meeting
Measuring Electronic Commerce
As an Instrument for the Development of the Digital Economy
8-10 September 2003, Geneva

The 2009 e-readiness rankings
Economist Intelligence Unit (White Paper)
The Economist
June 5, 2009

The 2008 e-readiness rankings
Economist Intelligence Unit (White Paper)
The Economist
March 25, 2008

The 2005 e-readiness rankings
Economist Intelligence Unit (White Paper)The Economist
April 13, 2005

UNCTAD Expert Meeting on:
Measuring Electronic Commerce as an Instrument for the Development of the Digital Economy
Draft Chairman's summary
http://www.unctad.org/ecommerce/
8-10 September 2003, Room XXVI, Palais des Nations, Geneva

E-Readiness Assessment (India)
Renu Budhiraja, Additional Director
Sameer Sachdeva, Project Consultant
Department of Information Technology E-Readiness Assessment
renu@mit.gov.in sachdeva_sameer@hotmail.com
February 9, 2004

SMEs AND E-COMMERCE (Indonesia)
Prepared for THE ASIA FOUNDATION
CastleAsia
January 2002

E-Readiness As A Tool (White Paper)
www.schoolnetafrica.org
March 27, 2002

E-Commerce in Southeast Asia: A Review of Developments, Challenges and Issues*
Aniceto C. Orbeta, Jr.**
Philippine Institute for Development Studies
December 2000

Electronic Commerce in New Zealand
A Survey of Business Use of the Internet
Brian Milne
October 13, 2000

Measuring the Information Society 2010
International Telecommunications Union

Global Trends in Online Shopping. A Nielsen Global Consumer Report. June 20

2.   LIST OF ABBREVIATIONS

ASEAN – Association of Southeast Asian Nations, Official Website www.aseansec.org.

Ref No: DTI/ASEANTELSOM/01 – *Superius Corporation*

CIA – Central Intelligence Agency. The World Factbook provides information on the history, people, government, economy, geography, communications, transportation, military, and transnational issues for 267 world entities. https://www.cia.gov/index.html. (Wiki) The Factbook is available in the form of a website, which is partially updated every week. It is also available for download for use off-line. It provides a two- to three-page summary of the demographics, geography, communications, government, economy, and military of 267 entities[3] including U.S.-recognized countries, dependencies, and other areas in the world. The World Factbook is prepared by the CIA for the use of U.S. government officials, and its style, format, coverage, and content are primarily designed to meet their requirements.[4] However, it is frequently used as a resource for academic research papers.[5] As a work of the U.S. government, it is in the public domain.[6]. www.cia.gov

ITU - is the leading United Nations agency **for** information and communication technology issues**, and the** global focal point for governments and the private sector in developing networks and services. www.itu.int

IWS - Internet World Stats is an International website that features up to date world Internet Usage, Population Statistics and Internet Market Research Data, for over 233 individual countries and world regions. Asiatic Internet Usage and Population Statistics were updated for June 30, 2010. (2) Population numbers are based on data from the US Census Bureau. (3) The most recent usage comes mainly from data published by Nielsen Online, ITU, official country statistics and other trustworthy local source. (2010) www.Internetworldstats.com

WDI – World Development Indicators from the **World Bank** is a vital source of financial and technical assistance to developing countries around the world. Our mission is to fight poverty with passion and professionalism for lasting results and to help people help themselves and their environment by providing resources, sharing knowledge, building capacity and forging partnerships in the public and private sectors. http://data.worldbank.org