# **Development and Delivery of Livelihood- based e-Service for ASEAN Women**

## **Table of Contents**

Chapter 1
Chapter 2
Chapter 3. Country-wise Analysis 3.1. Brunei Darussalam 3.1.1. Current Status of e-Services 3.1.2. Country Specific (Potential) Demand for e-Services 3.1.3. Future Directions of e-Services
<ul> <li>3.2. Cambodia</li> <li>3.3. Indonesia</li> <li>3.4. Lao PDR</li> <li>3.5. Malaysia</li> <li>3.6. Myanmar</li> <li>3.7. Philippines</li> <li>3.8. Singapore</li> <li>3.9. Thailand</li> <li>3.10. Viet Nam</li> </ul>
Chapter 4
Chapter 5

## Chapter 1

## **Chapter 2**

## **Chapter 3. Country-wise Analysis**

### **Directions**

- ✓ Fill in the blanks in the Basic Information Data Table below,
- ✓ Use the same sub-chapters with Brunei,
- ✓ Per country, at least 20 pages except the statistical tables,
- ✓ Format Detail
  - · Margin: Normal
  - · Font: Times New Roman, Size 11
  - · Line spacing: 1.15

Indicator	Data				
Basic Information					
1. Country name	Brunei	Cambodia	Indonesia	Laos	Malaysia
2. Area (km²)					
3. National population					
4. Rural population					
5. Key Economic Sector(s)					
6. Industry (%)					
6-1. Agriculture (%)					
6-2. Fisheries (%)					
6-3. Livestock industry (%)					
6-4. Other sector (%)					
7. GDP per capita					
8. Employment (%)					
8-1. Employment - Urban (%)					
8-2. Employment - Rural (%)					
Gender					
1. Education (% of female)					
1-1. Primary education (% of female)					
1-2. Secondary education (% of female)					
1-3. Higher education (% of female)					
2. Literacy (% of female)					
3. Labor Force Participation (% of female)					
3-1. Labor force in agriculture (% of female)					
3-2. Labor force in fisheries (% of female)					
3-3. Labor force in livestock industry (% of female)					
3-4. Labor force in other sector (% of female)					
ICT					

1. Telephone lines (%)			
1-1. Telephone lines - Urban (%)			
1-2. Telephone lines - Rural (%)			
2. Cell phone subscriptions (%)			
2-1. Cell phone subscriptions - Urban (%)			
2-2. Cell phone subscriptions - Rural (%)			
3. Internet use (%)			
3-1. Internet use - Urban (%)			
3-2. Internet use - Rural (%)			
3-3. Internet use - Women (%)			
4. Households with internet access			
4-1. Households with internet access - Urban (%)			
4-2. Households with internet access - Rural (%)			
5. Telecenter			
5-1. The number of telecenters - Urban			
5-2. The number of telecenters - Rural			

Indicator		Data			
Basic Information					
1. Country name	Myanmar	Phili	Singapore	Т	Viet Nam
2. Area (km²)			716.1 (as of 2013)		
3. National population			5399200 (as of 2013)		
4. Rural population			N/A		
5. Key Economic Sector(s)			Engineering & Manufacturing (Aerospace, energy, chemicals, electronics, marine & offshore, pharmaceuticals, medical), Construction, Information & communications, Services (F&B, health, tourism), Trade (retail, wholesale), Financial & Business services		
6. Industry (%)					
6-1. Agriculture (%)			0.032%		
6-2. Fisheries (%)					
6-3. Livestock industry (%)					
6-4. Other sector (%)			99.968%		
7. GDP per capita			S\$69,050		
8. Employment (%)			66.7 (June 2013)		
8-1. Employment - Urban (%)			66.7		
8-2. Employment - Rural (%)			N/A		

Gender	
1. Education (% of female aged 25 years and over, 2012)	
1-1. Primary education (% of female)	35.1
1-2. Secondary education (% of female)	20.6
1-3. Higher education (% of female)	44.3
2. Literacy (% of female)	96.4%
3. Labor Force Participation (% of female)	58.1%
3-1. Labor force in agriculture (% of female)	0.374%
3-2. Labor force in fisheries (% of female)	
3-3. Labor force in livestock industry (% of female)	
3-4. Labor force in other sector (% of female)	44.069%
ICT	Obtained from ida.gov.sg
1. Telephone lines (%)	
1-1. Telephone lines - Urban (%)	99.6%
1-2. Telephone lines - Rural (%)	N/A
2. Cell phone subscriptions (%)	
2-1. Cell phone subscriptions - Urban (%)	156.0%
2-2. Cell phone subscriptions - Rural (%)	N/A
3. Internet use (%)	
3-1. Internet use - Urban (%)	73%
3-2. Internet use - Rural (%)	N/A
3-3. Internet use - Women (%)	N/A**
4. Households with internet access (%)	
4-1. Households with internet access - Urban (%)	87%
4-2. Households with internet access - Rural (%)	N/A
5. Telecenters	
5-1. The number of telecenters - Urban	N/A
5-2. The number of telecenters - Rural	N/A

<sup>\*</sup>All statistics are obtained from singstat.gov.sg unless otherwise stated.

### 3.1. Brunei Darussalam

### 3.1.1. Current Status of e-Services

Abc

## 3.1.2. Country Specific (Potential) Demand for e-Services (any e-Service related to women. Please see the <u>Sample</u> e-Service areas in Table 1.)

<sup>\*\*</sup> Infocomm Development Authority of Singapore (IDA) does not have information on the number of women users for Internet or any other telecommunication services. Per IDA, they place great emphasis on developing infocomm capability and knowledge in our people, regardless of gender. Hence, the ICT policies are not directed at any specific gender group.

Application Areas (Examples)	Current e-Services(Examples)
General Policy Outreach	- Gender Policy Archive
	- Online Polls/ Feedback
	- Online Newsletter module
	- Widget Link for Social Networking Sites
Women's Health	- Online Search/ Archive for clinics supported by
	government
	- Online Consulting on Women Diseases, Sexual
	Violence/Abuse
	- e-Learning to Prevent Sexual Violence/Abuse
	- Online Search/ Archive for Maternal and Child
	Health
Women's Economic Participation	- Women Talent Registration Pool
	- Online Coaching for Women Start-up Business
Gender Policy Monitoring	- Data Collection Module on Women's ICT Use /
	Behavior, etc.
	- Online Gender Statistics Archive

Table 1 EXAMPLES of e-Service Areas

## 3.1.3. Future Directions of e-Services

Abc

- 3.2. Cambodia
- 3.3. Indonesia
- 3.4. Lao PDR
- 3.5. Malaysia
- 3.6. Myanmar
- 3.7. Philippines

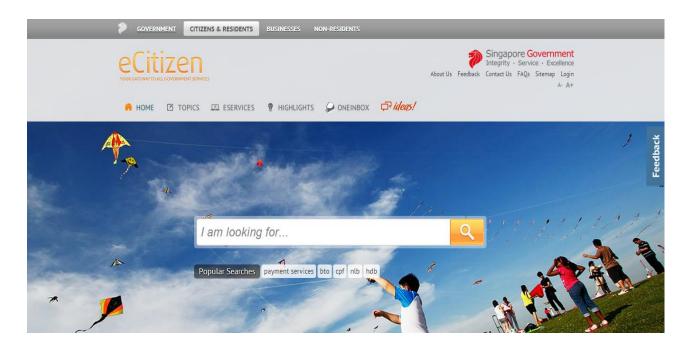
### 3.8. Singapore

### 3.8.1 Current Status of e-Services

As a country with 100% urbanized population, it is no surprise that Singapore has a 73% internet penetration rate, the highest in Southeast Asia (Huang, 2014). As a result, even the Singapore government has set up shop on the internet to allow Singaporeans to access government services from the comfort of their home, office or even on the go with their mobile devices. Today, citizens and businesses can access more than 1600 online services and 300 mobile services provided by the government. Singapore's efforts in the area of e-Government is recognized globally and has won many international accolades, which includes being ranked 1st in the Waseda University World e-Government Ranking 2013, 2nd in the World Economic Forum Global Information World Economic Forum Global Information Technology Report 2014 and 3nd in the UN e-Government Survey 2014. A survey conducted by Accenture in 2014 which ranked 10 countries in their use of "digital government" found Singapore at the top of the list in providing e-Government services, from offering online portals to access public services to employing digital channels and social media to communicate and engage with citizens (Accenture, 2014). The ranking was based on factors such as citizen service delivery experience, citizen satisfaction and service maturity.

This journey began in the late 90s, when Singapore saw the convergence of information technology with telecommunications, which transformed the concept of service delivery. This paved the way for the launch of the e-Government Action Plan (2000 - 2003) and the e-Government Action Plan II (2003 - 2006). The key objective of the first plan was to roll out as many public services online as possible, while the emphasis of the second plan was to enhance the service experience of customers. iGov2010 Masterplan (2006-2010) was developed on the basis of this strong ICT foundation. It focused primarily on creating an Integrated Government that operates seamlessly behind the scene to serve customers better (Infocomm Development Authority of Singapore, 2013). During this period, mobile services were also introduced to ride on the wave of high mobile phone penetration rate, in order to offer customers an additional channel for accessing public services. (Infocomm Development Authority of Singapore, 2013)

Today, every Singaporean holds a Singpass, which gives him/her access to the various e-government services. The various e-government services are consolidated in the eCitizen portal. The portal is a very user-friendly site that has a homepage comprising of a search box, so users can easily search for what they need.



The eCitizen portal provides a comprehensive list of articles, tips and guides to the various types of government e-Services available. This includes:

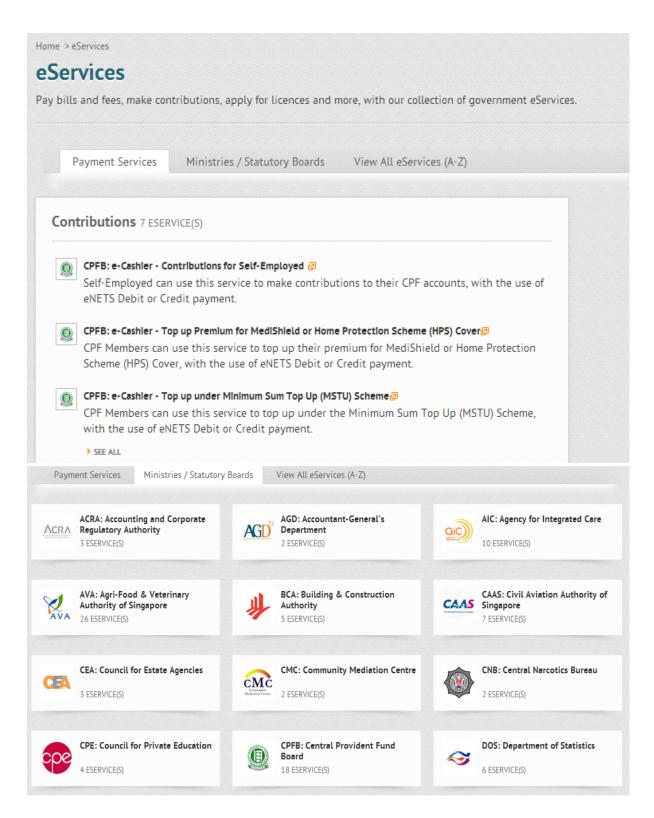
No.	Topics regarding various government e-Services	Details about articles and guides provided
1	Arts and Culture	Information about the types of arts and heritage grants available, where and how to apply, grant amounts and the administrating body.  Useful links and information about various sites providing articles and other media relevant to Singapore's heritage and culture that citizens can access online.
2	Defence and Security	Information about civil defence and the public warning system.  Information about crisis preparation and safety Emergency hotlines and services How to maintain fire safety at home Exit permit requirements for national service
3	Education	Assistance schemes for single parents, eligibility criteria and assistance amounts, and how to apply. Financial assistance available for students, benefits, eligibility criteria and how to apply. Information about home-schooling, advantages and disadvantages and how to apply for it. Applying for re-admission to schools for citizens and permanent residents returning from overseas. Information about school admission for Singaporeans, such as when to apply for admission

		and examination timelines.
4	Employment	How to hire foreign domestic helpers, how long it takes, types of levies and fees.  How to apply for government-paid adoption leave.  How to apply for government paid child care leave.  How to apply for government paid maternity benefit.  How to apply for government paid maternity leave.  How to apply for government paid paternity leave.  How to apply for government paid shared parental leave.  Help for jobseekers- information about career planning, job seeking, types of programmes for upgrading and subsidies available for training.  How to become a licensed tourist guide.  How to become a bus driver.
5	Environment	Where to find help for animal nuisances and hazards. No-smoking rules in Singapore. What constitutes pollution, where and how to report litter and pollution. Responsible dog ownership- dog training facilities, vaccinations, leashing and muzzling and other rules.
6	Family and Community	Assistance schemes for single parents. How to get help for gambling problems. Getting married for Muslims and guide to solemnization. Things to take note of getting married overseas. Marriage requirements and solemnization guide to marriage in Singapore. Government co-funding for assisted reproduction. How to apply for government-paid adoption leave. How to apply for government paid child care leave. How to apply for government paid maternity benefit. How to apply for government paid maternity leave. How to apply for government paid paternity leave. How to apply for government paid shared parental leave. Pro-family leave schemes Community disputes to resolving disputes. How to get help for drug addiction. Subsidies for infant, child and student care. Visit pass for family members.
7	Health	Assistance schemes for single parents Breast and cervical cancer screening subsidies, eligibility criteria and how to apply. Support services for dementia. Guide to choosing long term care.

		No-smoking rules in Singapore. Paying for long term care. How to get help for drug addiction.
		Subsidized healthcare for low income households.
8	Housing	Housing assistance for single parents.  Comparison between build-to-order flats and executive condominiums.  A first-timer's guide to buying a new HDB flat.  Key considerations to buying foreign property.  Flats for singles.  Housing grants for lower and middle income families.  Housing priority schemes for married couples with a family or starting one.  Housing schemes for multi-generational families.  How to monetize your flat for retirement.  How to maintain your flat.
9	Immigration and Citizenship	Getting married overseas  How to apply for and renew your passport.  Prohibited and controlled items through Singapore customs.  Reporting a lost Singapore passport.  Immigration process for returning Singapore citizens and PRs.  How to apply for Singapore citizenship.  Privileges and rights to having a Singapore citizenship.  Visit pass for family members.
10	Others	Procedures required to changing addresses.  Applying for Singpass.  How to conduct background checks on businesses.  How to get fibre broadband access in your home.  How to register a death.  How to use Oneinbox.  How to access affordable legal services and assistance.  Where to find Citizen Connect centres.
11	Savings and Taxes	Contributing to Supplementary Retirement Scheme to enjoy tax benefits.  How to get help for debt and bankruptcy.  How to access CPF information and services.  Paying for long term care.  Post death matters  Renewing road tax.
12	Sports and Recreation	Camping and chalet for holiday retreats.

13	Transport and Motoring	Carbon emissions-based rebates and surcharges for cars.  How to convert a foreign driving license. Fee rebates for green vehicles. Getting a driving license for heavy vehicles, motor cars and motorcycles. How to become a bus driver. How to pay parking fines. How driving record affects motor insurance. Renewing road tax. Applying for and renewing season parking. Senior citizen concession for cheaper train and bus rides. Paying traffic fines.
14	Travel	Duty free concession and GST relief for inbound travelers.  National service exit permit requirements.  How to find help in emergencies overseas.  Applying for and renewing Singapore passport Prohibited and controlled items through Singapore customs.  Reporting a lost Singapore passport.

The eCitizen portal also provides a comprehensive list of all government e-Services. Such services include payment services- taxes, school fees, CPF contributions, license fees and fines; and services from other ministries- applying for a new passport/ renewal of passports, enquiry of electronic driver data and checking your CPF account.



Through the eCitizen portal, Singaporeans can also access their own mail inbox- OneInbox, where they can receive electronic correspondence from the government on a secure platform. Currently, Singaporeans can only receive correspondence from the Central Provident Fund Board, Housing Development Board, Inland Revenue Authority of Singapore and Ministry of Manpower.

There is also a beta feature on the eCitizen portal known as *Ideas!* It is an avenue for the Singapore Government to organize crowdsourcing activities in the form of challenges (such as contests for ideas generation, apps development competitions, hackathons and campaigns) to leverage citizens' knowledge and gather ideas from the public to solve problems and issues that Singapore may be facing. To make it easy and convenient for the public to participate, eCitizen Ideas! serves as one-stop portal that allows the contribution of innovative ideas and solutions – whether technical, scientific or creative, to help solve challenges that are posted by all government agencies, for the benefits of Singapore. The public may also attach files, comment and vote on the best ideas, and share the challenges via their social sharing networks with their peers.

According to the e-government customer perception survey conducted for April 2012- March 2013, 88% of 1213 respondents above 15 years old who visited Government websites chose to transact with Government electronically via online services i.e. use the e-services provided by the government during the period stated. The remaining 12% who did not transact using Government online electronic services primarily do not find the need to use them or they prefer human contact/assistance in completing their transaction. More than 9 out of 10 users (96%) were satisfied with the quality of Government electronic services, of which, 73% gave a rating of 5 and above. More than 9 out of 10 users (94%) were satisfied with the quality of Government mobile services, of which, 68% gave a rating of 5 and above (Infocomm Development Authority of Singapore, 2013). However, when evaluating the primary internet activity undertaken by all users, only an average of 8% of internet users above age 15 use the internet for transactions with government/public entities (Infocomm Development Authority of Singapore, 2014). This shows that in general, Singaporeans are keen to use e-services provided by the government and those services are generally satisfactory in quality. However, there is a dearth of gender-specific data in this area.

E-services are also available for businesses, mainly Small Medium Enterprises (SMEs). The EnterpriseOne site provides business start-up and growth advice in both English and Mandarin. It provides information about government schemes to help SMEs. Managed by SPRING Singapore, EnterpriseOne is a comprehensive network where business owners can find the help and answers they need to start, grow and sustain their business. A wealth of government information and e-services can also be found here at our EnterpriseOne portal. There are over 20 sections covering a comprehensive range of topics such as venturing abroad, hiring people, Government tenders, loans, taxes and regulations. Each section pulls together information from different Government agencies so users do not have to trudge from agency to agency to look for answers. There are industry guides available and organized in sections so business owners can easily find information relevant to their business. It also provides links for business owners to contact business advisors to get more detailed and personalized help for their businesses and various government assistance and funding options for businesses. There is also a link to an online business licensing service, which makes it easier to obtain all the required licenses to start a business. There are even how-to guides and flowcharts to help business owners understand the process and requirements in applying for government assistance schemes, licenses, permits, approvals and other registrations. In the e-government Perception Survey on Businesses conducted for April 2012- March 2013, more than 9 out of 10 (93%) businesses out of a total of 1636 businesses were satisfied with the overall quality of Government electronic services, of which, 60% gave a rating of 5 and above. More than 8 out of 10 (89%) businesses were satisfied with the overall quality of Government mobile services, of which, 59% gave a rating of 5 and a bove. (Infocomm Development Authority of Singapore, 2013)

Singapore also has various e-Services catered for/targeted towards women. While they may not be run by the government ministries, many of them are run by public institutions and non-governmental organizations. One area that Singapore has focused on is the economic empowerment of women, specifically providing job opportunities and making job-seeking an easier process. This e-Service, known as the Women's Development Secretariat (WDS) listed in the table below as "Case 1", is run by the National Trade Union Congress (NTUC). The aim of this committee is to develop and implement programs and initiatives to assist women with job opportunities to enter or re-enter the workforce, enhance the employability of women through training, and helping women to remain in the workforce by promoting work-life integration. The WDS website provides information about the various initiatives the committee undertakes to assist women in seeking re-employment. They also hold events such as job fairs, conferences, job training sessions etc. Relevant information and details are provided in their website. The e-Service provides detailed job listings from companies who are registered with WDS. Women who are interested can email their resumes to an address stated on the job listings page. Telephone assistance is also available. WDS is also implementing a "Job fair on wheels" project that goes around the suburban neighborhoods and housing estates, making it more convenient for residents to take up jobs.

There are various non-governmental organizations in Singapore that support and fight for women's rights and they all have websites and services that help to counter sexual and domestic violence against women. These organizations include Aware, Singapore Council of Women's Organizations, We Can! Singapore and Pave. In this section we will mainly be focusing on Pave as it is one of the more established organization in Singapore targeting domestic violence, listed as "Case 2" in the table below. Pave provides an e-Service to women suffering from domestic violence through its website. It has various information pages and articles discussing what constitutes violence, raising awareness of domestic violence and advising its readers on how to prevent violence. Most importantly, Pave provides counselling services and services to help women seek legal protection through a Personal Protection Order at its office, and appointments can be booked through their website.

Current e-Service Status	Case 1	Case 2
Basic Information		
e-Service Name	Women's Development Secretariat	Pave
Hosting Government Department or Ministry Name	National Trade Union Congress (NTUC)	Non-Governmental Organization: Pave
Website Address	http://www.ntucwds.org.sg/wps/portal/wds/home	http://www.pave.org.sg/
Start Date		1999
Contents		
Is there e-Service providing women related issues (women's health, education, employment, sexual/domestic	Yes- women's employment	Yes- targeting sexual/domestic violence

violence etc.) managed by ministry in charge of such issues?		
What type of information/service the e-Service is providing currently? i) Health information (child, maternity, women care) ii) Education (women, child) iii) Sexual/domestic violence and abuses including prevention education iv) Job opportunity, vocational training opportunity v) Information on micro finance vi) Livelihood related information (agriculture, fishery, livestock industry etc.)	iv) Job opportunities and vocational training opportunities under the Back2Work Programme. The WDS portal helps to match women seeking employment and reemployment with registered employers.	iii) Educating women about what constitutes sexual/domestic violence, raising awareness and prevention. Provides counselling services and help for applying forlegal protection at their office.
Does the e-Service provide women related information (such as women NGO directories etc.)?	Yes- to SCWO, Mums@work etc.	Yes
Does the e-Service provide information about job and bidding opportunities?	Yes	No
Does the e-Service feature women talent pool registration?	Yes	No
Functions		
Dose the e-Service compile its user statistics?	Yes- through occasional surveys	No
Does the e-Service provide user guide (how to use the website)?	No	No- but it is straightforward and intuitive to use
Does the e-Service provide e-newsletter service?	Yes	No
Does the e-Service provide audio and/or video files as well as documents?	Yes	Yes
Does the e-Service provide online forms/documents for downloading or electronic filing?	No	Yes

Does the e-service provide e- participation tools (feedback, polls, bulletin board, Q&A, Ombudsman, satisfaction survey etc.)?	Yes- polls and surveys	Yes
Does the e-Service provide single window link for online petition, citizen proposal and information disclosure request?	No	No
Does the e-Service provide e- learning (audio, video, document etc.)?	No	Yes
Does the e-Service provide "Search" option (to easily navigate and obtain information)?	Yes	No
Does the e-Service provide contact directory for corresponding department/person in charge of the menus/issues and web manager?	Yes	Yes
Does the e-Service provide "Contact Us" option where you can directly contact web manager or person in charge and ask questions?	Yes	Yes
Does the e-Service provide security features such as log in or pin access to protect your personal information?	Yes	No
Does the e-Service provide mobile access option? (Can you access the web service with your cell phone?)	Yes	Yes
Does the e-Service provide information in multiple languages?	No	No
Does the e-Service provide access option for people with disabilities?	No	No

Another crucial e-Service caters to women's health. There are a few providers for this services and they largely focus on providing information about various conditions. The Ministry of Health website

listed as "Case 3" in the table below provides general information (a searchable directory) for various diseases and conditions and their symptoms. This e-Service also provides a searchable directory for specialist clinics and hospitals, their location and opening hours. It also has a listing of the estimated hospital bills for various conditions. However, it is not targeted to any particular gender which means that there is no section on women's health specifically, though the directories provided do include women's diseases, conditions and specialist clinics. Another provider, Singhealth, the largest public healthcare group in Singapore, has started the HealthXchange portal, listed as "Case 4" in the table below. This e-Service has an entire Women's Health section easily accessible from the home page. It provides articles about various women health issues such as birth control, breast cancer, menstrual problems, which includes information regarding conditions, causes, symptoms, risks, treatments and even frequently asked questions. This e-Service also features a community forum and an "ask the specialist" function for users to actively participate.

Current e-Service Status	Case 3	Case 4
Basic Information		
e-Service Name	MOH Online	HealthXchange
Hosting Government Department or Ministry Name	Ministry of Health	Singhealth
Website Address	http://www.moh.gov.sg/content/moh_web/home.html	http://www.healthxchange.com.sg /Pages/home.aspx
Start Date		
Contents	Yes/ No/ Others(Please specify)	Yes/ No/ Others(Please specify)
Is there e-Service providing women related issues (women's health, education, employment, sexual/domestic violence etc.) managed by ministry in charge of such issues?	Yes- women's health	Yes- women's health
What type of information/service the e-Service is providing currently? i) Health information (child, maternity, women care) ii) Education (women, child) iii) Sexual/domestic violence and abuses including prevention education iv) Job opportunity, vocational training opportunity v) Information on micro finance vi) Livelihood related information (agriculture,	i) Health Information- mainly a medical directory to search for doctors, specialists and clinics; and provide information about cost of treatments and hospitalization for specific diseases	i) Health Information- provides articles and write-ups about women's health conditions and diseases

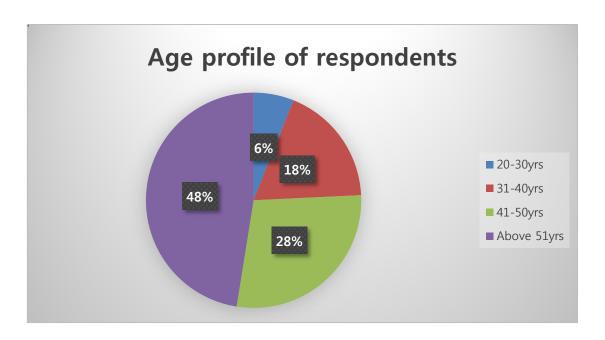
fishery, livestock industry etc.)		
Does the e-Service provide women related information (such as women NGO directories etc.)?	Yes- information about women clinics, specialists and diseases	Yes
Does the e-Service provide information about job and bidding opportunities?	No	No
Does the e-Service feature women talent pool registration?	No	No
Functions	Yes/ No/ Others(Please specify)	Yes/ No/ Others(Please specify)
Dose the e-Service compile its user statistics?	No	Yes
Does the e-Service provide user guide (how to use the website)?	No- but it is straightforward and intuitive to use	No- but it is straightforward and intuitive to use
Does the e-Service provide e-newsletter service?	No	Yes
Does the e-Service provide audio and/or video files as well as documents?	No	Yes
Does the e-Service provide online forms/documents for downloading or electronic filing?	Yes	Yes
Does the e-service provide e- participation tools (feedback, polls, bulletin board, Q&A, Ombudsman, satisfaction survey etc.)?	Yes- feedback form	Yes- Q&A, community forums
Does the e-Service provide single window link for online petition, citizen proposal and information disclosure request?	No	No
Does the e-Service provide e-learning (audio, video, document etc.)?	Yes- documents to learn about various diseases, subsidies, funding options etc.	Yes
Does the e-Service provide "Search" option (to easily navigate and obtain information)?	Yes	Yes

Does the e-Service provide contact directory for corresponding department/person in charge of the menus/issues and web manager?	Yes	Yes
Does the e-Service provide "Contact Us" option where you can directly contact web manager or person in charge and ask questions?	Yes	Yes
Does the e-Service provide security features such as log in or pin access to protect your personal information?	No	No
Does the e-Service provide mobile access option? (Can you access the web service with your cell phone?)	Yes	Yes
Does the e-Service provide information in multiple languages?	No	No
Does the e-Service provide access option for people with disabilities?	No	No

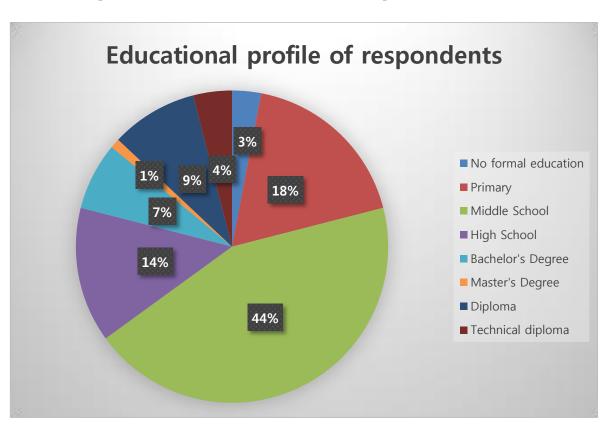
However, in our survey, 93% of our respondents are unaware of any government websites providing women related information or programs in Singapore. Only 3% have visited the website that they know about while 2% said that they have visited a government website for women but couldn't remember which one. However 3% of those that have used an e-Service have been satisfied with the e-Service. The other 2% have been unsatisfied as they felt that the information provided was irrelevant to their needs. This is despite 98% of the respondents having easy access to the internet and 55% using the internet at least once a day. The lack of e-Service usage might be due to lack of awareness of e-Services providing information or programs for women. 99% of the respondents were unaware of any government policy to support women's e-Service use in Singapore.

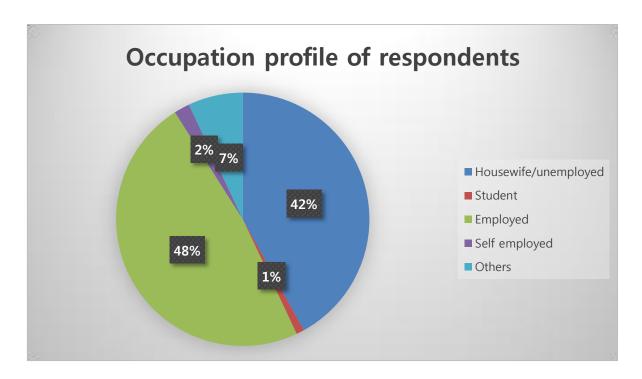
### 3.8.2 Potential Demand for e-Services

In order to understand what women in Singapore need with regards to e-Services and assess the potential demand for e-Services in Singapore, the research team lead by Irene Boey (irene@datamining.com.sg) conducted a survey of 100 Singaporean women aged 20 years and over and are not experts in e-Services on July 2014. The women we have interviewed are all capable of using the internet and do use the internet, albeit to varying degrees. The profile of our survey respondents are as follows:

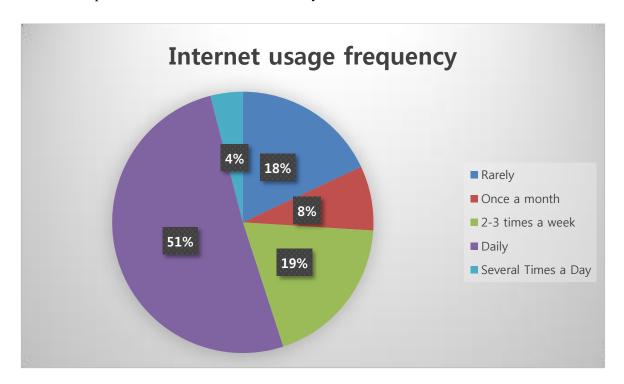


85% of our respondents are married women and 80% of the respondents have children.

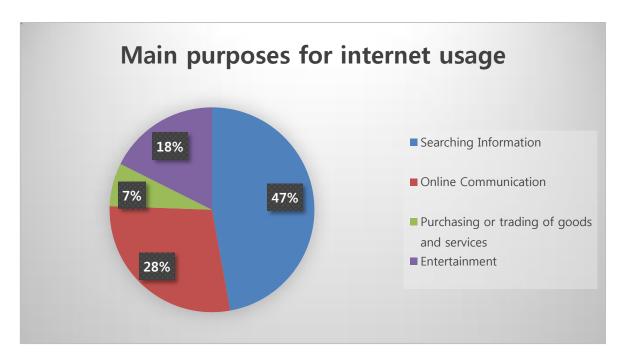


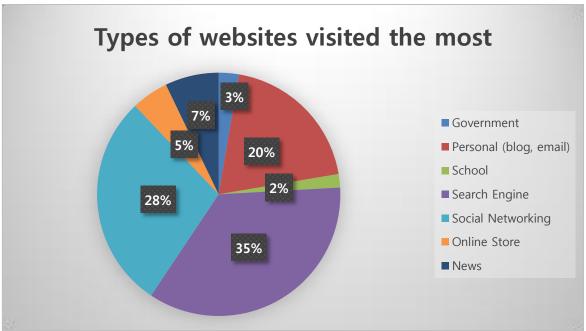


98% of our respondents stated that they have easy access to the internet. Generally, they access the internet from home and/or work, with 1 respondent accessing the internet from school and another respondent accessing the internet from public facilities in addition to access from home or work. Over 54% of our respondents use the internet at least daily.



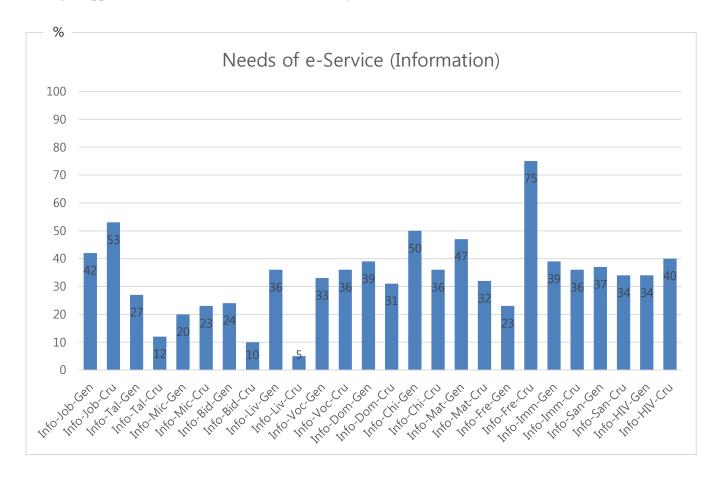
Respondents were asked to list one to two main purposes of their internet usage. Almost half indicated that they used the internet mainly for information searching. Our respondents mostly visited sites for search engines, social networking and blogs or email such as gmail, yahoo mail or outlook.



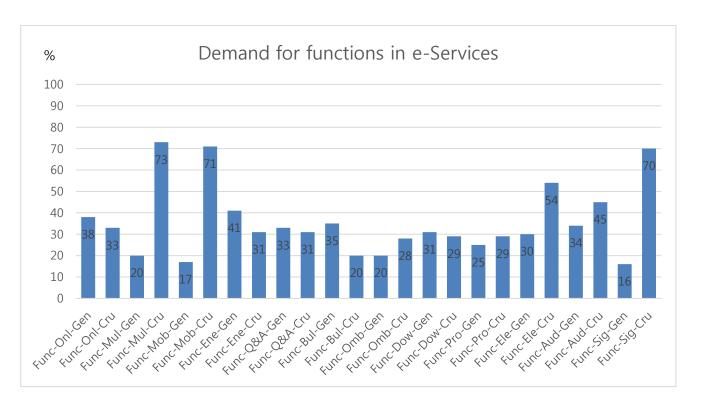


Given the internet usage behaviour of our respondents, it is reasonable to expect that 95% of our survey respondents agreed with the idea that the development of e-Service in their daily life can make their life better, especially since most people used the internet for searching information. E-services would definitely be helpful in providing useful information. There clearly is a strong demand for e-Services by the women in Singapore. The greatest demand among our respondents is for an e-Service providing information about free health clinics. 23% of respondents say that the information about free health clinics are generally useful (Info-Fre-Gen) and 75% say that information is crucial for their use (Info-Fre-Cru). The next most important e-Service is information about job opportunities, where 42% said that job information was generally useful and 53% said it was crucial. Information about

child care has the third overall highest demand- 50% deemed the service generally useful and 36% believed it was crucial. There is also significant demand among our respondents for e-Services providing information about immunization, sanitization, HIV/AIDS and maternity care. E-Services providing information about domestic/sexual violence or abuse prevention was also deemed useful and crucial by a significant number of women. Thus it can be derived from this survey that most Singaporean women are most concerned about and want to see more e-Services providing information about job opportunities, health related issues and family related themes.



The most highly demanded function is for e-Services to have multiple languages. 73% of the 100 women surveyed felt that multiple languages is crucial for their use (Func-Mul-Cru), while 20% felt that it was generally useful (Func-Mul-Gen). Given that currently many of the government e-Services are only available in English, it is easy to see why this is the most highly demanded function. The next most demanded function is for e-Services to have mobile access options- 71% deemed that crucial while 17% deemed that generally useful. Most government e-Services today are accessible via the internet browsers available on mobile phones and tablets; however most e-Services currently have no mobile applications or apps to provide direct access. 70% of our respondents also felt that it was crucial for e-Services to have sight/hearing accessibility for disabled persons. Likewise, many of the current e-Services do not have disabled access options, so this survey shows that there is a demand and a need for such a function. Our respondents also want to have e-learning and audio/video materials on e-Services.



Independent comments from our respondents indicated a demand for free e-learning services for women and senior citizens. Participants also suggested the need for websites and e-Services in Chinese, basically websites in multiple languages. Some other suggestions included the need for easy to use e-Services so that senior citizens who are less adept at using technology can easily access and use the e-Services. Some also believe that it is necessary for the government to promote greater accessibility and awareness for e-Services so that more people can benefit from those services. Additional suggestions also include providing e-Services for student care. Currently, there is an e-Service providing information regarding subsidies available for student care on the eCitizen portal, but there can be more information about where they can get student care.

Currently, there are no official surveys to assess the potential demand for e-Services in Singapore. However, in April 2013 the government data portal data.gov.sg launched a competition in conjunction with the Ministry of Finance, Infocomm Development Authority and the Singapore Land Authority to look for innovative apps that use government data. We can use the results from this competition to obtain a rough understanding about what Singaporeans want. The audience favorite app in the competition was an app that assists students to plan their education choices (data.gov.sg, 2014). Clearly, education is an area that Singaporeans are very concerned about, especially among younger people who are more attuned to technology and who use apps and e-Services more often. While this competition is non-gender specific, we can postulate from these results that the desires and concerns of the general population would somewhat be applicable to women. Thus it is likely that there is a potential demand for e- Services related to education for women. One example would be an e-Service providing information about job training such as types of qualifications necessary for certain positions and where and how women can obtain them. Another might be e-learning apps or websites that allow women to improve their skills through remote learning and therefore be able to manage their family commitments while learning.

### 3.8.3 Future Directions of e-Services

The Singapore e-Government Masterplan 2011-2015 (or eGov2015) aims to shift from a "Government-to-You" approach to a "Government-with-You" approach in the delivery of government e-services. The goal is to facilitate more co-creation and interaction between the Government, the people and the private sector to bring about greater value creation for Singapore and our people. eGov2015 is about building an interactive environment where the Government, the private sector and the people work together seamlessly, through the enabling power of infocomm technologies (Infocomm Development Authority of Singapore, 2013). The vision of a collaborative government will be achieved through the three strategic thrusts depicted in the diagram below.



Recognising the Internet as an important channel for the direct delivery of information and services to the public, the Government will continue to improve the information and services delivered through government websites. Their Website Transformation Strategy seeks to provide customers with a seamless and integrated web experience across all government websites, while developing standards, common tools and capabilities to support government agencies in improving their websites. Riding on the high smartphone penetration in Singapore, the Government will also be driving the next phase of Mobile Government (mGov) programme to deploy more feature-rich and innovative mobile services. Customers can look forward to an enhanced mobile experience while accessing information from, and transacting with, the Government on the move. With the desire to improve e-service delivery, the Government is always exploring the creation of useful e-services, including personalised e-services offered at the whole-of-government level (Infocomm Development Authority of Singapore, 2013).

The eGov2015 Masterplan will build on the iGov2010 efforts in raising awareness and engaging the citizens in the policy-making process. The Government aims to widen and deepen the e-engagement

efforts and experiment with new ways to tap on the wisdom and resources of citizens. Under eGov2015, the focus will continue to be on raising the awareness of Government's e-engagement efforts by keeping citizens informed and linking up citizens who are keen to provide views on the formulation of public policies with government agencies. Thus it can be reasonably assumed that future e-Services will be more interactive and mobile, making services more accessible and convenient for the general public as well as encourage customers to actively provide input and user feedback for the e-Services.

Singapore is building a Smart Nation and the continued delivery of quality and responsive public e-Services will continue to remain a key component of this development to improve the quality of life for citizens. It would include engaging citizens and empowering them to co-create, developing responsive e-Services to help citizens make informed decisions, and providing integrated services that are easy for citizens to use. The Singapore government intends to increase internet connectivity throughout the nation, for instance increasing free wireless hotspots, introducing fibre network coverage throughout the nation, and having an \$8 million digital inclusion fund to help low income households and individuals adopt internet access, thereby increasing Singaporeans' access to e-Services. Another initiative will be the Smart Nation Platform (SNP). Built on three focus areasconnect, collect, and comprehend--the platform will provide an operating system that all public agencies can connect to. This will enable essential data, captured and collected via sensors placed around Singapore, to be anonymized, secured, managed, and shared. Such data will be used to produce relevant insights and determine timely, and appropriate, decisions to support more responsive and "anticipatory" services for Singapore citizens. IDA believes an anticipatory government will allow issues to be resolved before they are even raised by the general public and facilitate better policy planning and creation of citizen-centric services (Yu, 2014). This would produce more responsive and comprehensive e-Services to be designed, improving the overall quality of government e-Services.

The Apps4Sg competition organized by the Singapore government's data collection authority required participants to use government data to design mobile applications that would improve the way Singaporeans live, work and play. This could be an indication of the future direction of e-Services, which is to enable Singaporeans to make use of e-Services and government data to improve their daily lives. This also indicates that the government is keen on increasing mobile access to e-Services, which is in line with our survey results where 88% of respondents felt that mobile access options or apps for e-Services would be a useful or crucial function. The submissions were judged according to the originality of the key ideas and concepts behind the application; the social or commercial value and benefits of the application; and their user friendliness. The winners of the competition were an app that assists students to plan their education choices; an app which finds a common location for people to do multiple tasks thus improving productivity by reducing travelling time; and a web-based mapping application which enables wheelchair users to find a barrier-free path between their start point and their intended destination (data.gov.sg, 2014). Clearly, education is an area that the government is very concerned about. This might indicate that the government would be moving towards providing more e-Services to offer advice regarding the types of education or training one can pursue and help Singaporeans plan their education.

NGOs like University Women's Association Singapore (UWAS) has also been driving the proliferation of more e-Services in the education genre. UWAS announced at the 2014 APEC Women

and the Economic Forum (*Women's Business Smart Technology Seminar*) in Beijing that they will be leveraging on smart technologies to roll out their Student Enrichment Platform. This intelligent platform leverages on learning analytics, artificial intelligence and semantic analysis engine to assess students' subject concept mastery skills and discover individual student's learning gaps automatically. In line with their mission to empower women & girls through lifelong education, UWAS (www.uwas.org) will be offering this to benefit under privileged students especially girls to learn English and Science through a smart collaborative learning approach.

Productivity is also another aspect the Singapore government is looking into, perhaps to provide an e-Service that helps Singaporeans make better use of time, whether it is eliminating the need to queue or reducing travelling time. This is also one major reason why government e-Services have largely received positive feedback- they provide a mobile platform on which citizens can handle transactions with the government or use government services without the hassle of queues or travelling to the ministry or statutory board.

This competition also showed that there is interest in developing e-Services for the disabled community, which makes sense especially since their mobility is limited and therefore would greatly benefit from e-Services that help them do tasks without physical travelling. Most of the current government e-Services do not provide disability access for the deaf and blind so there would definitely be room for improvement in this respect. Given that this survey also reflects a strong demand for e-Services to cater for the disabled, it is highly likely that future developments in e-Services would increase accessibility for the disabled.

In terms of the type of e-Services women in Singapore need, our respondents reflected the need for more e-Services providing information about free health clinics, job opportunities and child care. There is also significant demand for e-Services providing information about health issues such as immunization, sanitization and HIV/AIDS and family issues such as maternity and domestic/sexual violence or abuse prevention. Currently, there is a lack of e-Services providing information about free health clinics, child care and sanitization. The HealthXchange portal provided by Singhealth does contain a lot of information regarding most health issues, including an entire women's health section. There could be more comprehensive e-Services providing more information for domestic/sexual violence and abuse prevention. According to the iGov Masterplan, the government will seek to garner feedback and opinions from the public so as to improve the current state of e-Services in Singapore, hence it is reasonable to expect that there might be more comprehensive e-Services providing information about healthcare and family matters.

However, many of the e-Services in Singapore are not available in multiple languages- this may be because English is the first language used in Singapore and most Singaporeans have a reasonable level of English proficiency. But as we see in our survey, many respondents felt that the e-Services should have multiple languages, especially for the senior citizens who are more proficient and comfortable in their mother tongue (Chinese, Malay or Tamil). Mobile access is also a highly demanded function from the survey respondents- this is something that the government is already actively pursuing for all its e-Services. It is likely that there will be more mobile applications available in future for government e-Services. Our survey also reflected the need for e-Services to be more accessible for the disabled, eg deaf or blind. This is also a very plausible future direction for e-Services in Singapore as mentioned above.

### 3.8.4 Conclusion

From this research we are able to derive a rough idea of where Singapore is headed in terms of government e-Services in the future. Despite there not being a comprehensive survey to assess the demand for various types of e-Services among women until now, the current status of e-Services in Singapore is actually rather satisfactory in this aspect. There already is an e-Service to promote employment, education and training for women by NTUC; a couple of sites that provides health information for the general public including women's health; and a few NGOs in Singapore provide e-Services for women seeking help from domestic abuse. Of course, there is room for improvement for these e-Services, perhaps to make them more comprehensive, more informative and accessible for women of all ages and different language proficiencies. Given our survey results and the strong demand for more information about free health clinics, this is one aspect that the healthXchange portal and MOH Online can improved.

With a high internet penetration and continually improving telecommunications and wireless internet infrastructure due to plans for making Singapore a Smart Nation, Singaporeans have no problem gaining access to the internet. Thus potentially, every one of them should be able to use e-Services provided. However, from our survey of 100 women who use the internet rather frequently, we understand that most of these women are unaware of government e-Services for women, even though our research has shown that such services, especially in the areas of healthcare and job opportunities, are available. Thus the most crucial action to be taken here would be to promote these e-Services so that the women in Singapore are aware of and can begin to use them. According to the iGov2015 Masterplan, plans to promote e-Services are already underway, but there clearly needs to be greater effort in promoting the various government e-Services available for women.

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