International workshop: on measuring E-Commerce
"Towards a thriving Digital Economy Era"

ETDA
พพธอ
www.etda.or.th

Revolution of E-Commerce measurement in Thailand, new initiatives and standards

Ms. Kulthirath Pakawachkrilers
Project Management – Researcher

Value of E-Commerce survey in Thailand 2015
ETDA: Electronic Transactions Development Agency (Public Organization)
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Agenda

E-Commerce survey background report (2007-2013)

Figure 1 Percentage of e-Commerce Business by Types of Entrepreneurs

Business to Consumer (B2C)
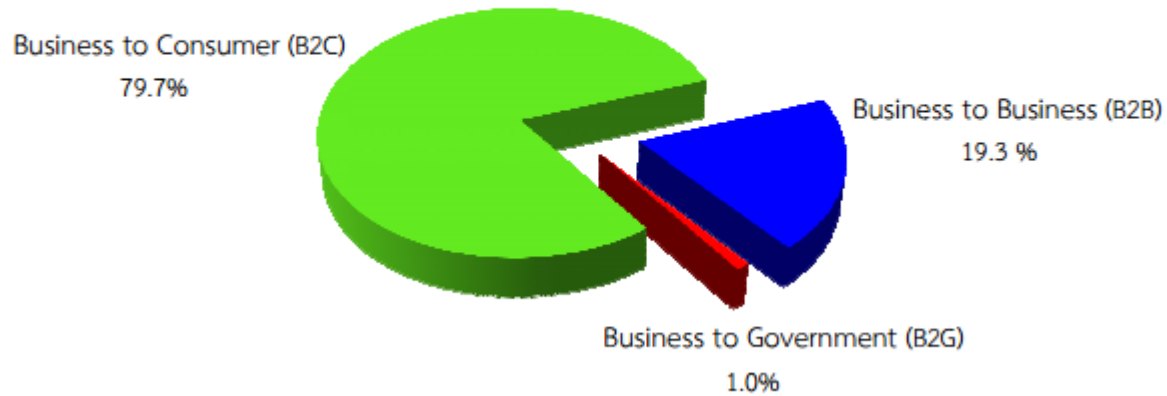79.7%

Business to Business (B2B)
19.3 %

Business to Government (B2G)
1.0%

Figure 3 Percentage of e-Commerce Business by Sizes of Business

Medium size (6 – 50 persons)
26.6 %

Small size (1 – 5 persons)
66.8%

Large size (more than 50 persons)
6.6%
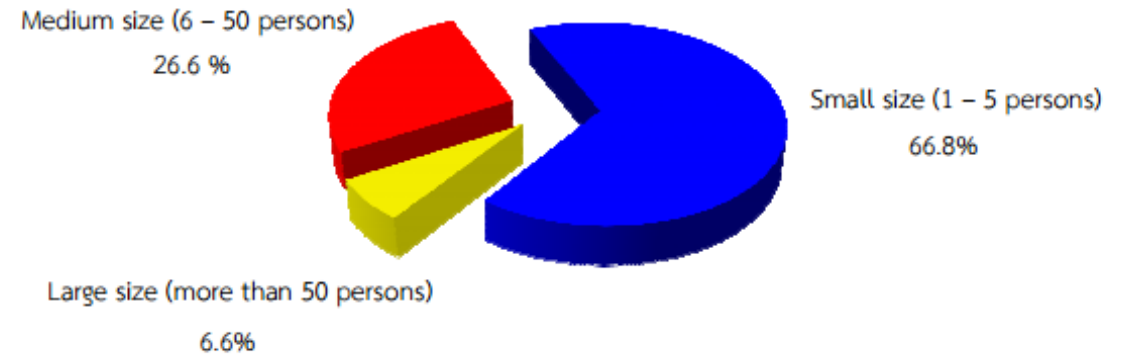
Figure 2 Percentage of e-Commerce Business by Types of Business

17.5 %
19.2%
7.0%
4.9%
4.1%
23.3%
24.0%

- Computer, Electronic Appliance
- Fashion Accessories
- Travel, Hotel and Resort
- Automotive industry and products
- Office Equipment
- Service Business
- Others
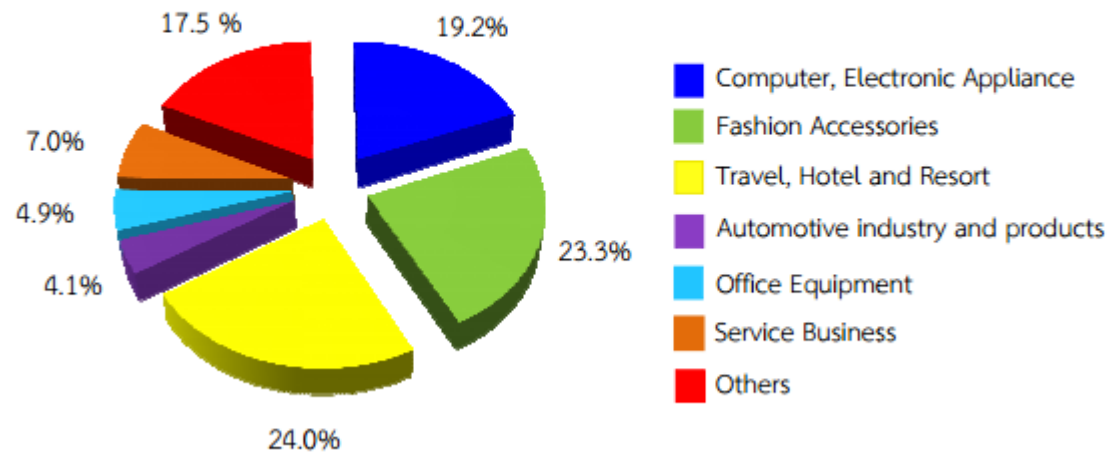
Framework of the past survey

> *Qualitative Research*
> by interviewing the registered E-Commerce enterprises/entrepreneurs with the exact locations **ONLY**
> *Limitation*
> E-Commerce with registered locations
> Lacking of corporates' information
> Not including securities business and mutual fund business
> Could not be reaffirmed and verified by E-Commerce experts payment service providers and payment gateways

Value of E-Commerce trend in 2012-2013

Table 1 Value of e-Commerce in 2012 by Selling Types of Entrepreneurs
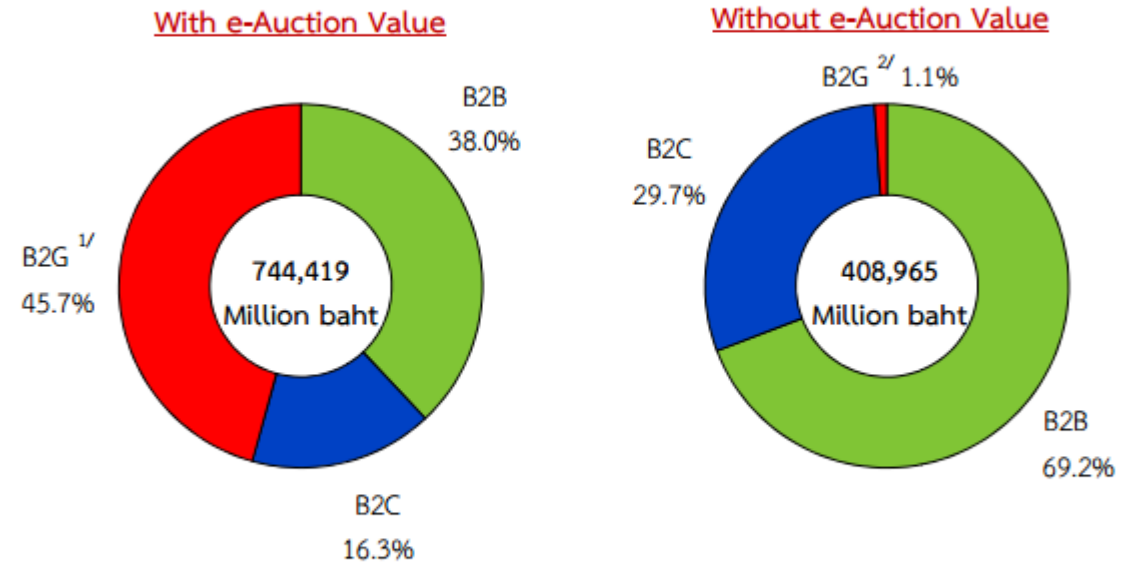
Selling	Value (Million baht)	Percentage
Total	744,419	100.0
From the survey	408,965	54.9
B2B	282,946	38.0
B2C	121,392	16.3
B2G	4,627	0.6
From procurement with the government[1]	335,454	45.1
Market[2]	408,965	100.0
Domestic	331,150	81.0
International	77,815	19.0

Note: 1/ data from Comptroller General's Department.

2/ without value from procurement with government with e-Auction. (from CGD).

Total Value E-Commerce in 2015 Estimated $21,269 Million USD

Figure 5 Value of e-Commerce in 2012 by Types of Entrepreneurs

With e-Auction Value

B2B 38.0%

B2G [1] 45.7%

B2C 16.3%

744,419 Million baht

Without e-Auction Value

B2G [2] 1.1%

B2C 29.7%

B2B 69.2%

408,965 Million baht

Notes: 1/ Value from e-Commerce survey, with value from procurement with government with e-Auction.

2/ Value from e-Commerce survey.

E-Commerce Definition argument

OECD E-Commerce definition

- An E-Commerce transaction is the sale or purchase of goods and services conducted over _computer networks_ (OECD, 2009).

- Payment and the ultimate delivery _can be both online and offline (OECD, 2011c)._

- Orders via the web, extranet or electronic data interchange (EDI) used in most _E-Commerce transactions between enterprises._

- Ordered by telephone calls, faxes and conventional emails _are excluded._

Thailand E-Commerce Enterprises response on this definition

- _Internet (OECD, 2002) adoption rather than computer networks_

- _Not aware of in some classification e.g., insurance, manufacturing, utilities_

To revamp New Framework : new initiatives and standards

1

> **Public-Private-Partnership (PPP) as an E-Commerce experts meeting – first initiatives**
>> *Collaboration from governmental sectors and E-Commerce experts and associations*

2

> **Literature review: International E-Commerce survey report and methodology**
>> *Eurostat, Singapore, UK, USA and more*

3

> **Conducting a Framework by researchers and E-Commerce experts**
>> *ETDA, NSO and E-Commerce experts*

4

> **Framework verification on Value of E-Commerce survey by PPP and experts meeting**
>> *Collaboration over 50 people from Government, Top E-Commerce enterprises, Visa, Mastercard, E-Commerce related associations, Statistics and experts*

Value of **E-Commerce** Framework in 2015

Questionnaires' design and Pre-Test

ISIC Code rev.4, 4 Dimensions: ISIC, Sizing, Business Model, Monetary

Method of data collection: Qualitative & Quantitative research

Population and Sampling: Finding "N" "n" for E-Commerce survey research

Identified Framework

Verified Value of **E-Commerce** in 2015 "Total Sales"

ETDA Survey report in 2015 Publication

2 Verifying Total Sales/ Value of E-Commerce by payment issuers By VISA MasterCard

1 Verifying Total Sales/Value of E-Commerce by representative of each E-Commerce industries (8+1)

Statistics Formulas and data analysis + Primary and Secondary sources

Launching the survey on Online survey (SMEs) and In-Depth Interview (Enterprises)

Finding "N" : E-Commerce Population

Data: E-Commerce Enterprises, SMEs, Sellers
- o Large Enterprises
- o e-Marketplaces
- o E-Commerce Platforms providers

ETDA Fundamental Data

Data: Registered E-Commerce Corporates
- o Department of Business Development (DBD)

Data: E-Commerce Census
- o National Statistical Office of Thailand (NSO)

The process will be as following;

Population: Data collection

Population: Data redundancy
(Normalization; some information are duplicated, this stage will eliminate those repeated data)

Define the population "N" of E-commerce market

Framework in 2015

Target population = 502,676

E-Commerce entrepreneurs

ISIC rev.4
Industrial Classification for Thailand E-Commerce market

ISIC Code	ISIC for Thailand E-Commerce market
C	Manufacturing
G	Wholesale and retail trade; repair of motor vehicles and motorcycles
H	Transport & storage
I	Accommodation & food
J	Information & communication
K	Financial & Insurance
R	Art, Entertainment and Recreation
S	Other services

ISIC Code	ISIC for Thailand E-Commerce market
D	Utilities (Electricity, gas, steam and air conditioning supply)

8 ISIC 24 GROUPS + 1 ISIC

No.	ISIC for Thailand E-Commerce market	ISIC
1	**Manufacturing**	C
	o Paper manufacturing and Paper product	
	o Non-Metallic Mineral Product	
2	**Retail & Wholesale**	G
	o Online retailer	
	o Fashion, clothes, jewelry and accessories	
	o Cosmetic, supplementary, perfume, health & beauty product	
	o Automotive industry and product	
	o Computer, Electronic, Appliance	
	o Furniture and Home Décor product	
	o Food, Food processing & beverage and agricultural, processed agricultural, fish & fishery product	
	o Sport equipment and Toy & gift	
	o Others. For example, Flower, Wreath and others related to Retail & Wholesale	

3	**Transport** For example, Seats reservation, Tickets reservation via internet, Taxi/car reservation and related transport.	H
4	**Accommodation & food**	I
	o Travel, Hotel, Resort, Guest house	
	o Real estate's service and rental	
5	**Information & communication** For example, Technology solution services e.g., Computer program & website/application development activity, Consulting about computer and technology, Information and technology service, Software Integrator, System Integrator, Hardware & Software system including with web hosting & cloud computing, Digital advertising and online marketing, Social media and relevance	J
6	**Financial & Insurance**	K
	o Insurance, broker and representative	
	o Financial products, Internet trading, Online Funding	
7	**Art, Entertainment and Recreation**	R
	O Education & relevant service and application	
	O Online Game	
	O Entertainment, Cinema, Music industries and e-movie	
8	**Other services** For example, bill payment and others	S

Methodology and Procedure in short

❏ **Framework: data collection**
- Mandatory VS Voluntary / collection methodology

- ✓ Voluntary since 2007 till 2015
- ✓ Online survey responded by web/mobile sites
- ✓ In-Depth responded by face-to-face, mail and telephone

❏ **Targeted population**
- Thailand E-Commerce SMEs & Enterprises

- ✓ 502,676

❏ **Sampling size**
- Yamanae (1967:886) at 95% Confidence level
- Divided equally proportion for each industry

- ✓ 2,969
(a) Top 107 Enterprises with revenue earned greater or equal to 50 Million THB per year (est. $1.4 M USD)   (b) 2,855 SMEs with revenue earned less than <50 M THB per year

❏ **Weighting of results**
- blow up the data and value

- ✓ 4 Dimensions. (1) ISIC: SMEs and Enterprises (2) Sizing S-M-L (3) Business Model: B2B/B2C (4) Monetary Analysis: Revenue

❏ **Verification the data**
- To ensure that the number would be the most realistic and acceptable

- ✓ Representative of each industries
- ✓ Checking with Secondary sources
- ✓ Verified by payment issuers/gateways

Methodology and Procedure in short

❑ **Collecting agency**	✓ **ETDA - Annually**
❑ **Data tiers for value of E-Commerce approach** - To ensure the data is the most accurate	✓ Primary sources for National Survey 2015 ✓ Secondary source for specific industry e.g., Accommodation & Food, Financial & Insurance, Utilities
❑ **Experts adoptions** - Academics, Government, Private and E-Commerce societies and associations	✓ 2 Official meeting assemble ✓ <20 Working group meeting of PPP ✓ Verification
❑ **Output details** - blow up the data and value	✓ Total E-Commerce Sales 2014 and Forecast 2015 ✓ Total E-Commerce Sales by Size of Enterprise : B2B, B2G, B2C ✓ Total E-Commerce Sales by Industries : 8 + 1 Industries ✓ Total E-Commerce Sales by products and services : 21 groups ✓ Threat of Business ✓ Manual of methodology ✓ Recommendation for development

Finding "n" sampling and sizing argument

"N" / "n" of the survey

> "N" been given by Top <30 E-Commerce players in Thailand
>
> N = 502,767 -> n = 107+2,855 Sample size

Working people does not imply and variable to the revenue "E-Commerce model

So, we has released our definition of E-Commerce: S ∫ M ∫ L

> ***"S" defines to*** *(a) a business who <u>has not registered</u> to Department of Business Development (DBD) under supervision of Ministry of Commerce. (b) revenue generating an electronic internet channel is <u>less than 1 Million THB per year</u>.*

> ***"M" defines to*** *(a) a business who <u>has registered</u> to Department of Business Development (DBD) under supervision of Ministry of Commerce, with <u>exact location</u> (b) revenue generating an electronic internet channel is <u>less than 50 Million THB per year.</u>*

> ***"L" defines to*** *(a) a business <u>who has registered</u> to Department of Business Development (DBD) under supervision of Ministry of Commerce, with <u>exact location</u> (b) revenue generating an electronic internet channel is <u>greater than 50 Million THB per year.</u>*

Limitation

❑ **Business Model**	✓ B2B, B2C ✓ B2G (e-Auction) sourced by The Comptroller General's Department under Ministry of Finance X C2C and Social media sellers
❑ **Population and Sampling** - Afraid of data undisclosed (Taxation issue) - There will be more population e.g., C2C - Not pay attention to the survey	✓ Our framework has recognized as **3/4** majority of the whole E-Commerce ecosystem market in Thailand ✓ Online survey tool – Missing data (useless) response rate: estimated **12.87%** by Online marketing and partnership approaches ✓ In-Depth survey tool - Sampling response rate: **estimated 66.35%** by connection approaches Missing data (Refuse) response rare: estimated **20%** ✓ Non-Disclosure Agreement (NDA) has been adopted for trust issue about **99%** of enterprises
❑ **Bias of filling data and answered questionnaires** - Cannot be double checked 100% accuracy	✓ Tool: Online Survey ✓ Tool: In-Depth Survey
❑ **Time constraint** - Demand from Thai government agencies, Private sectors, International investors	✓ 6 months of all period survey conduction

What to address particularly; Challenges

❑ Guideline on E-Commerce population and sampling

❑ Common ISIC code usage for E-Commerce industry

❑ Common sizing of E-Commerce industry

❑ Incentive to entrepreneurs (goal: Voluntary survey and the most accuracy level information)

❑ C2C E-Commerce survey: how to define and conduct framework

❑ Resources: Primary VS Secondary

Q & A