

**EE489 Seminar**

**Consumer behavior on Thai  
Translated Book Piracy: Case of  
The Japanese Comic Industry in  
Thailand**

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6004641624**





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03

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06

Further Improvement



# 01 Introduction

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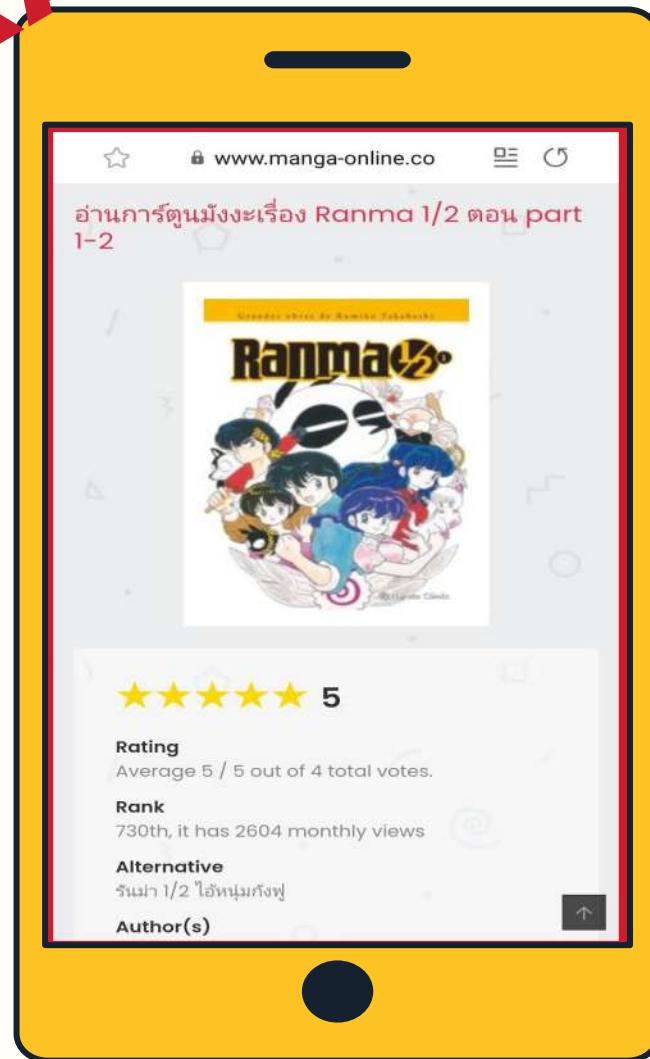
Japanese comics have played a large role and influence throughout the world, including Thailand. The popularity of Japanese manga comes with book piracy, published by a person who is not authorized by the owner of the work. Intellectual property is illegally reproduced.



# 01 Introduction

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**PIRACY**



**Scanlation**

**Scan**

**+**

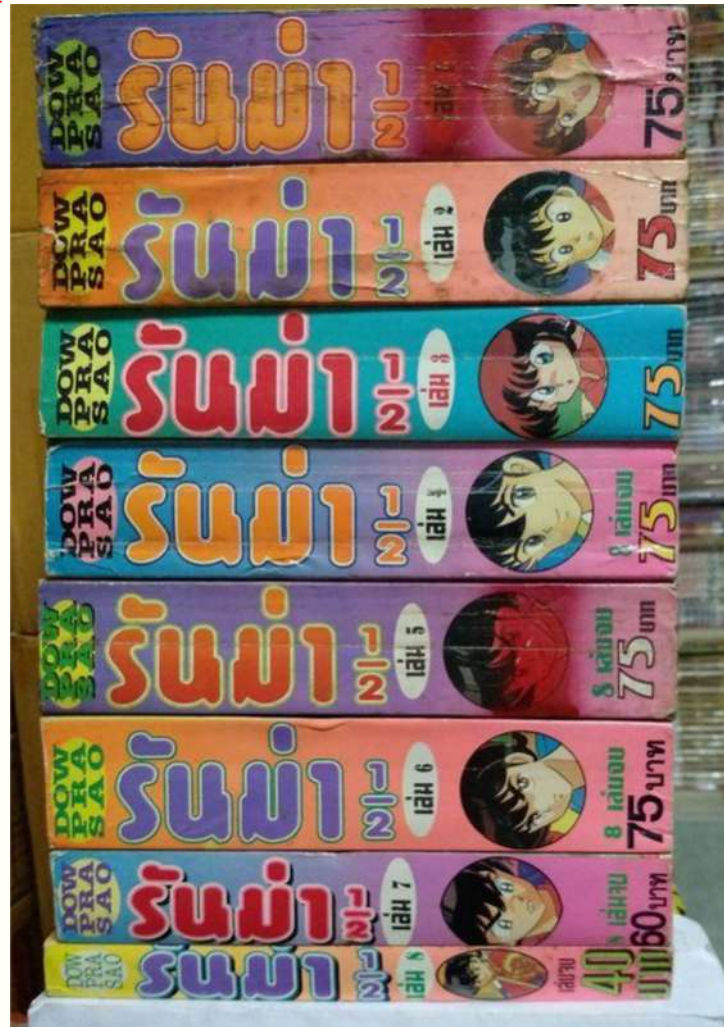
**Translation**

**Manga which is scanned from original and translated in Thai for free distribution through websites or online platforms without the right reserved or permission of the original publisher.**

# 01 Introduction

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**PIRACY**



**Physical Pirated Manga**

Publishers that translate, publish and distribute manga in physical form without the right reserved or obtaining permission from the original publisher.

ex: MK comics, Otaku, Freewill, CN +, etc.



# 01 Introduction



Legitimate Manga

|        |         |        |
|--------|---------|--------|
| Price: | Normal  | 60-95  |
|        | Premium | 120 ++ |

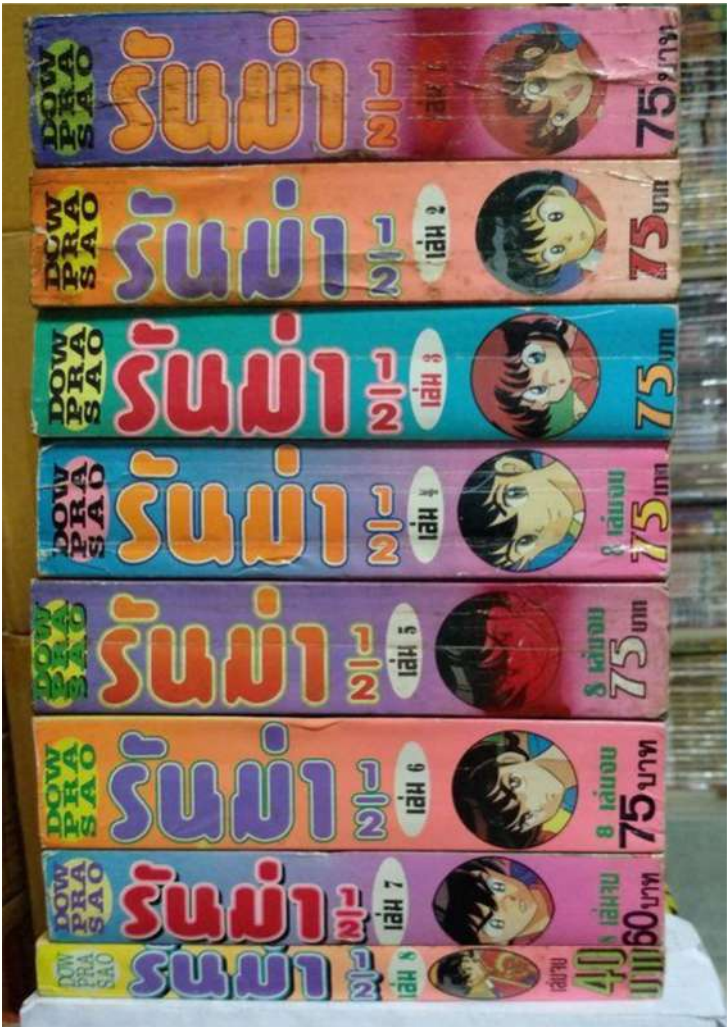
PIRACY



Scanlation

|      |
|------|
| Free |
|------|

PIRACY



Physical Pirated Manga

|        |         |        |
|--------|---------|--------|
| Price: | Normal  | 40-70  |
|        | Premium | 200 ++ |

# 01 Introduction

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## Main Research Questions

- Which factor influence consumers to consume manga piracy?
- Which recommendation strategies should legal publishers adapt to avoid getting disrupted?

## Objectives

To understand consumer behavior in Thai translated book industry by using Japanese comics as a research target. It tends to explain how legal publishers should adapt to fit with consumer behavior to increase their sales and otherwise help the industry to grow.

## 02 Literature Review

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**Tanaka T., (2019)**

**“The Effect of Internet Book Piracy: Case of Comics”**

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In this study, the effects of internet book piracy in the case of the Japanese comic book

market were examined using direct measurement of product level piracy ratio and a massive deletion project as a natural experiment. Total effect of the piracy is negative to the legitimate sales, but panel regression and difference-in-difference analysis consistently indicated that the effect of piracy is heterogeneous: piracy decreased the legitimate sales of ongoing comics, whereas increased the legitimate sales of completed comics. The latter result is interpreted as follows: piracy reminds consumers of past comics and stimulates sales in that market.

**Schiffman, L.G. & Kanuk, L.L. (2009). *Consumer behavior, 10th edition*. Pearson Education Ltd., New Jersey.**

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“Marketing activities should be designed to impart a more favourable, perhaps more relevant product image to the target consumer. This may also require a change in product features or attributes to more or better features.”



# Theoretical Framework

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Marketing Mix (4Ps)

Consumer Behavior Theory  
(6Ws 1H)





# Theoretical Framework

## Marketing Mix (4Ps)

| Product                                                                                                                                                                                                                                   | Price                                                                                                                                                 | Place                                                                                                                                                               | Promotion                                                                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>● Product Variety</li><li>● Quality</li><li>● Design</li><li>● Feature</li><li>● Brand Name</li><li>● Packaging</li><li>● Sizes</li><li>● Services</li><li>● Warranties</li><li>● Returns</li></ul> | <ul style="list-style-type: none"><li>● List Price</li><li>● Discounts</li><li>● Allowances</li><li>● Payment Period</li><li>● Credit Terms</li></ul> | <ul style="list-style-type: none"><li>● Channel</li><li>● Coverage</li><li>● Assortments</li><li>● Locations</li><li>● Inventory</li><li>● Transportation</li></ul> | <ul style="list-style-type: none"><li>● Sales Promotion</li><li>● Advertising</li><li>● Sales Force</li><li>● Public Relation</li><li>● Direct Marketing</li></ul> |

# Theoretical Framework

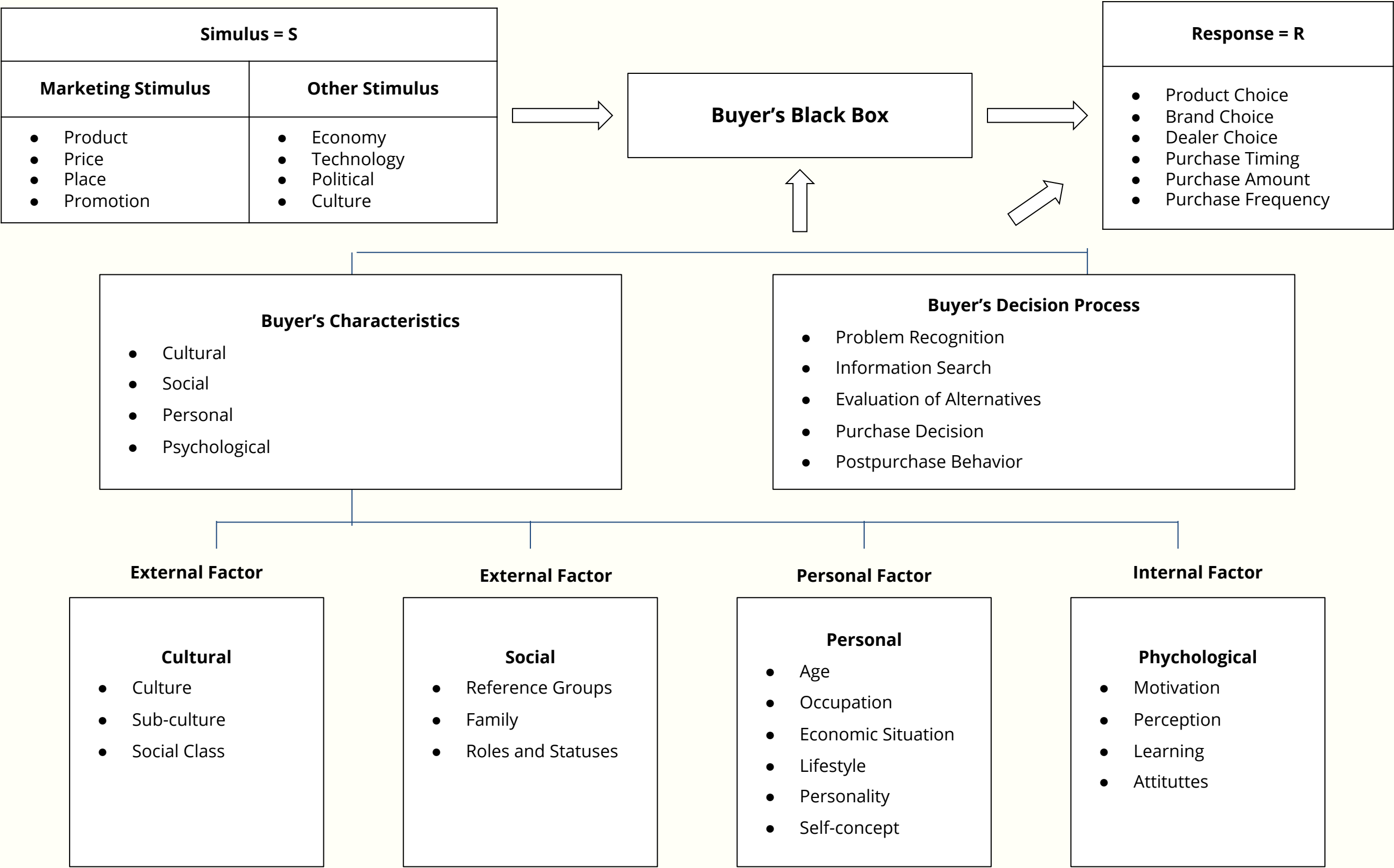
## Consumer Behavior Model (6Ws 1H)

| 6Ws 1H                             | 7 Os          | Marketing Strategies                    |
|------------------------------------|---------------|-----------------------------------------|
| 1. Who is the target market?       | Occupants     | 4Ps                                     |
| 2. What does the consumer buy?     | Objects       | Product Strategies                      |
| 3. Why does the consumer buy?      | Objectives    | Product, Promotion, Price, Distribution |
| 4. Who participates in the buying? | Organizations | Advertising & Promotion Strategies      |
| 5. When does the consumer buy?     | Occasions     | Promotion Strategies                    |
| 6. Where does the consumer buy?    | Outlets       | Distribution Channel Strategies         |
| 7. How does the consumer buy?      | Operation     | Promotion Strategies                    |



# Theoretical Framework

## Consumer Behavior Model



## 03 Methodology

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### The Questionnaire Survey

**Part 1** General Consumption Behavior

**Part 2** Legitimate Mangas  
Scanlations  
Physical Pirated Mangas

**Part 3** Demographic

**Part 4** Additional suggestions for  
publishers in Thailand

**Population:** All Thai Translated  
Manga Consumers

**Sample: 1002 Respondents**

**DATA  
ANALYSIS**

**Descriptive Statistics**

**Logistic Regression Analysis**

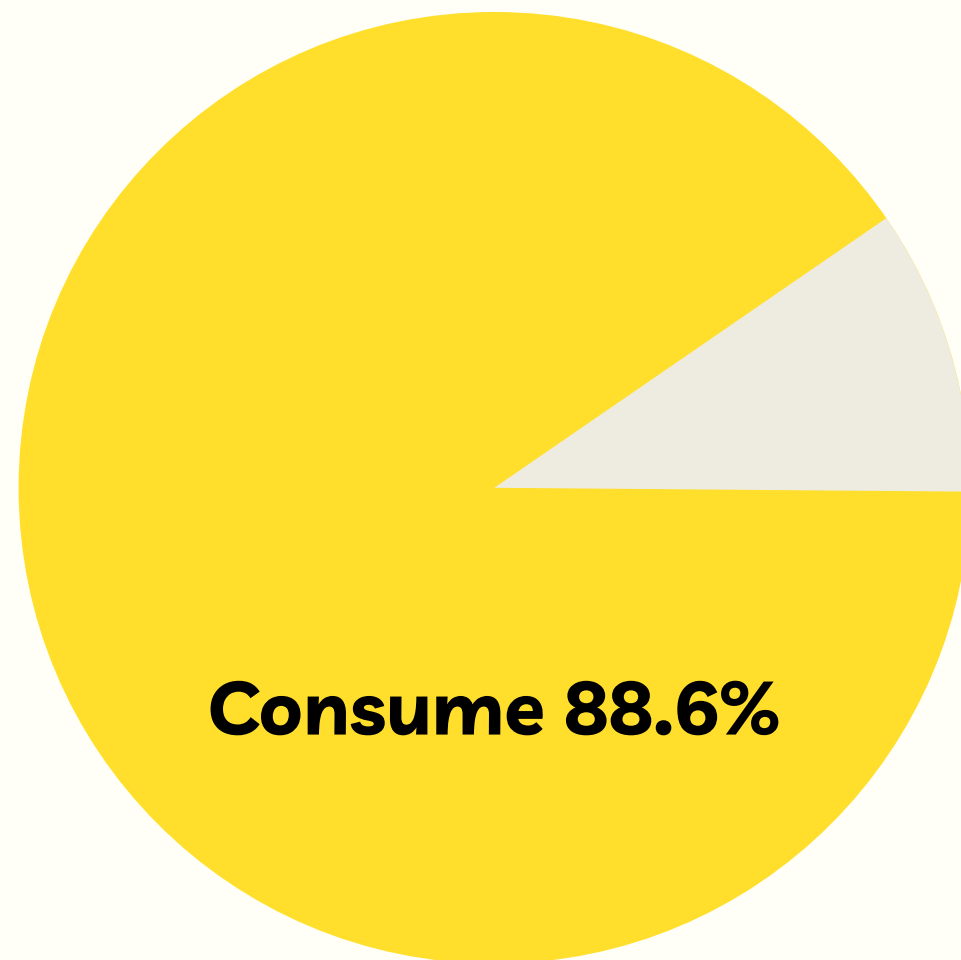
Source: IBM SPSS Statistic Ver 27.0



## 04 Results

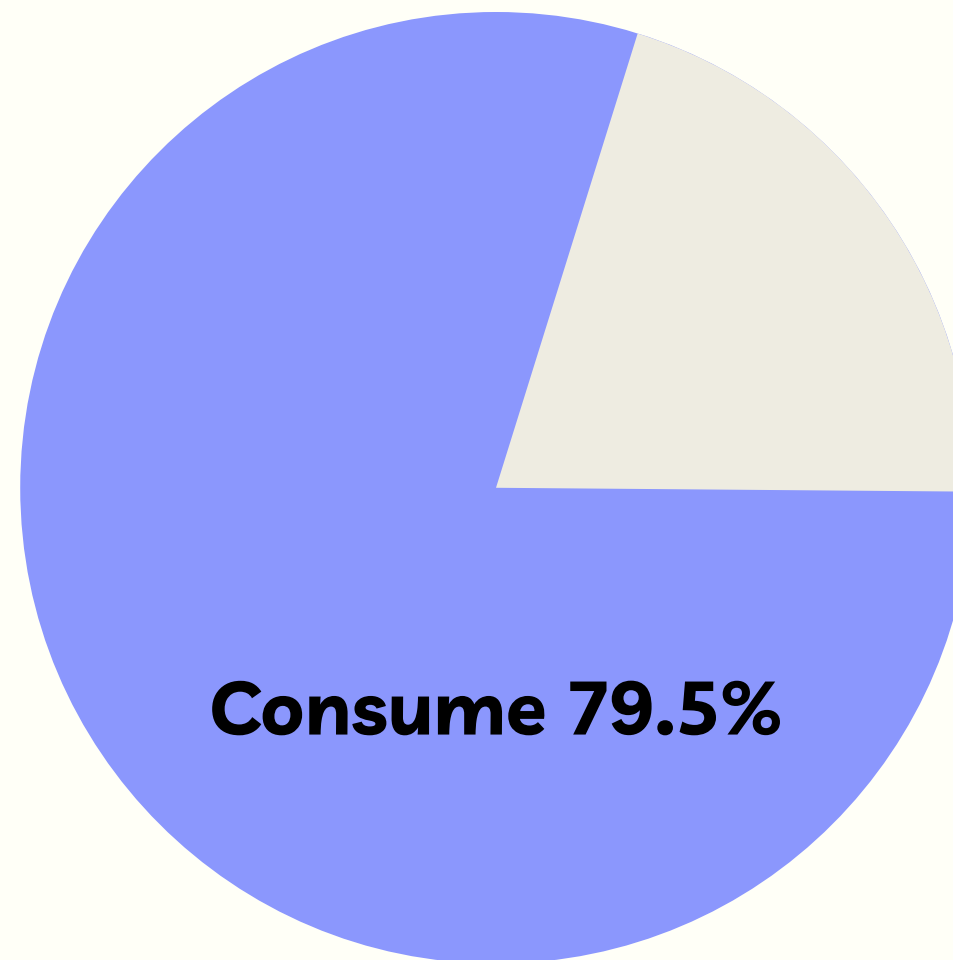
### Descriptive Statistics

888/1002



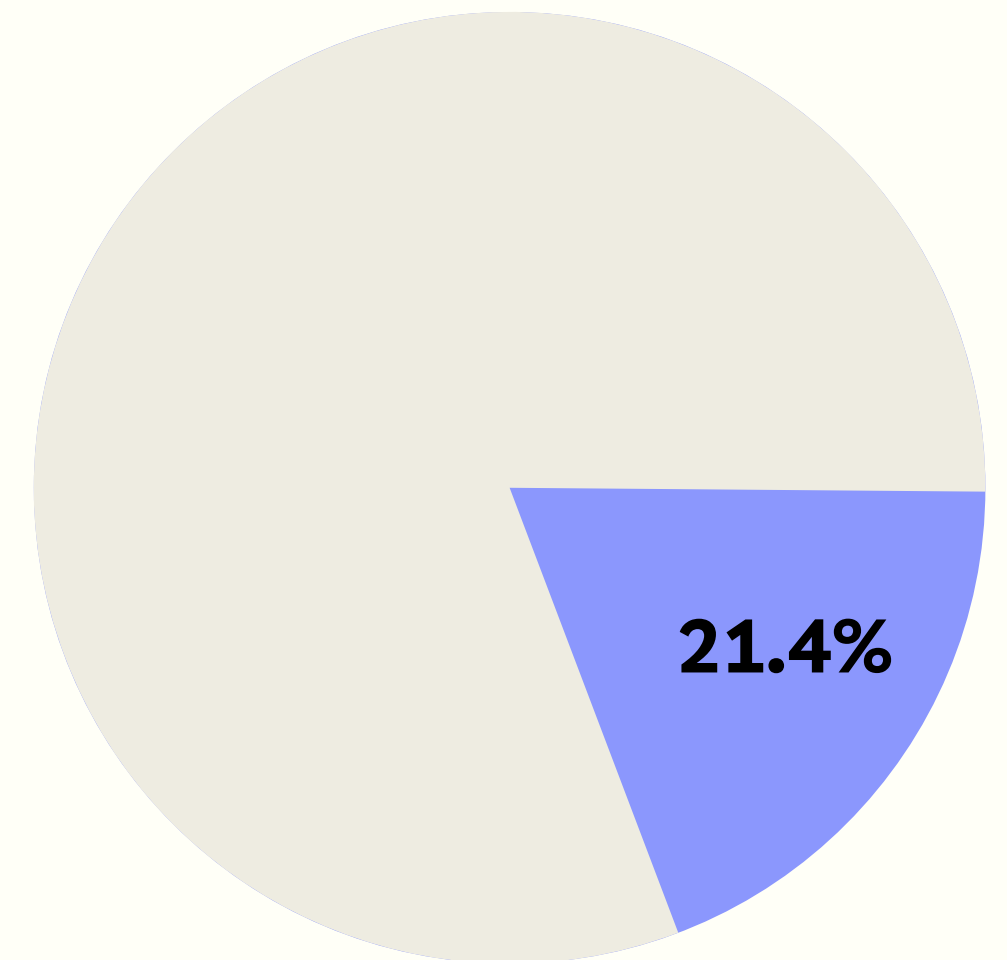
Legitimate Mangas

797/1002



Scanlations

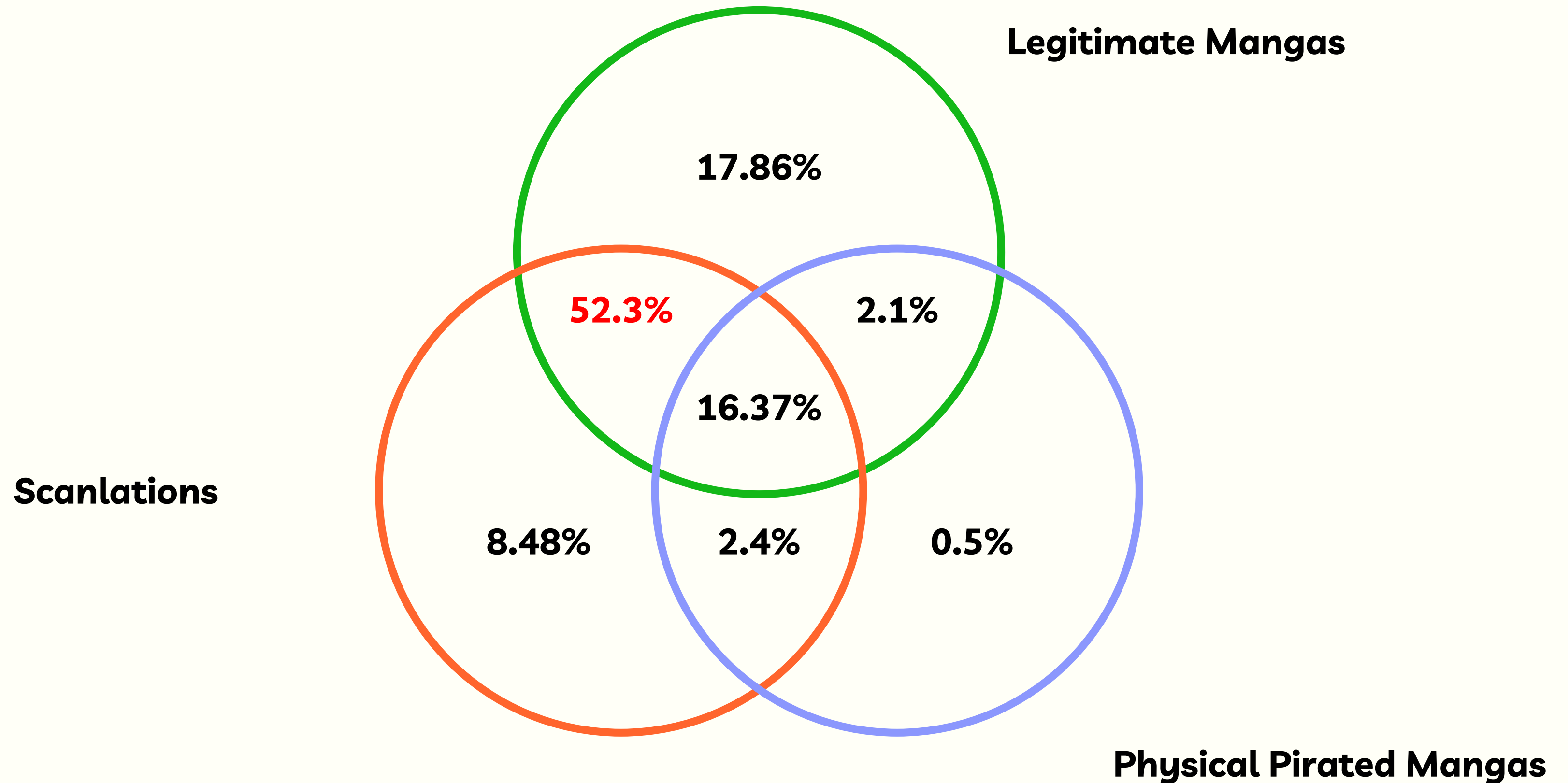
214/1002



Physical Pirated Mangas

## 04 Results

### Descriptive Statistics





# 04 Results

## Descriptive Statistics

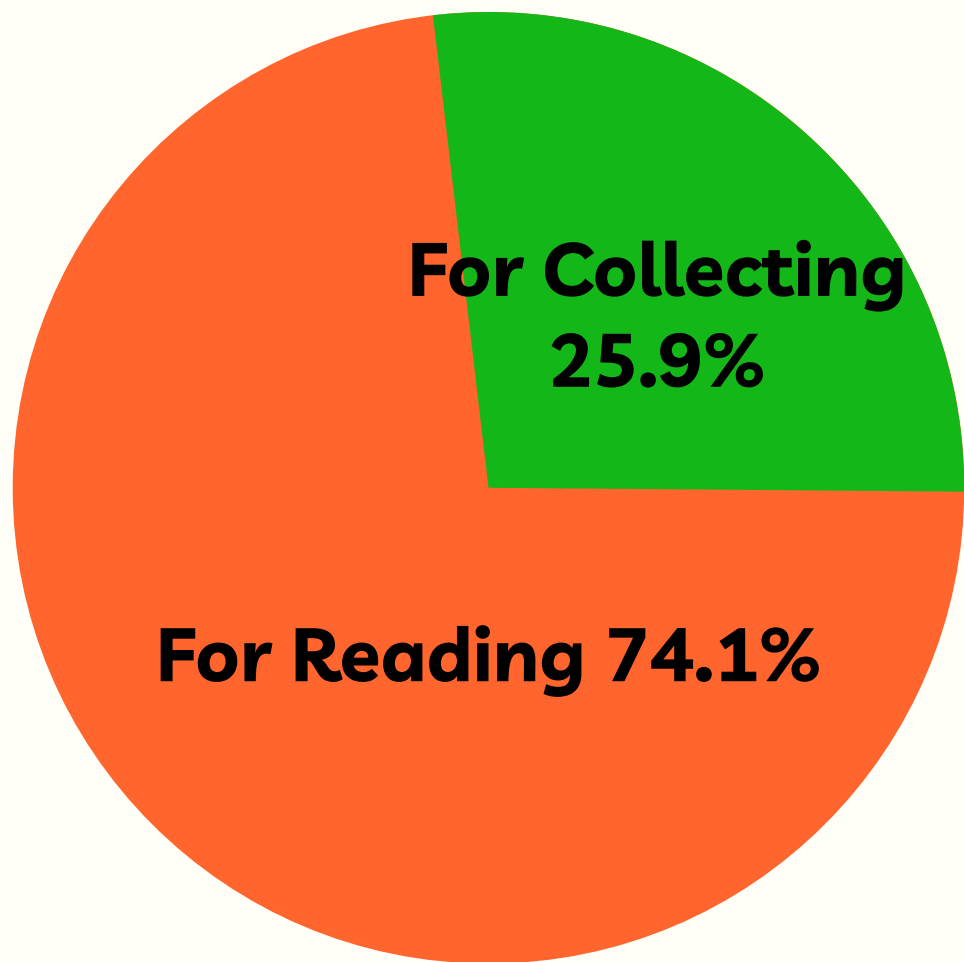


Chart A - The main reason consumers consume manga

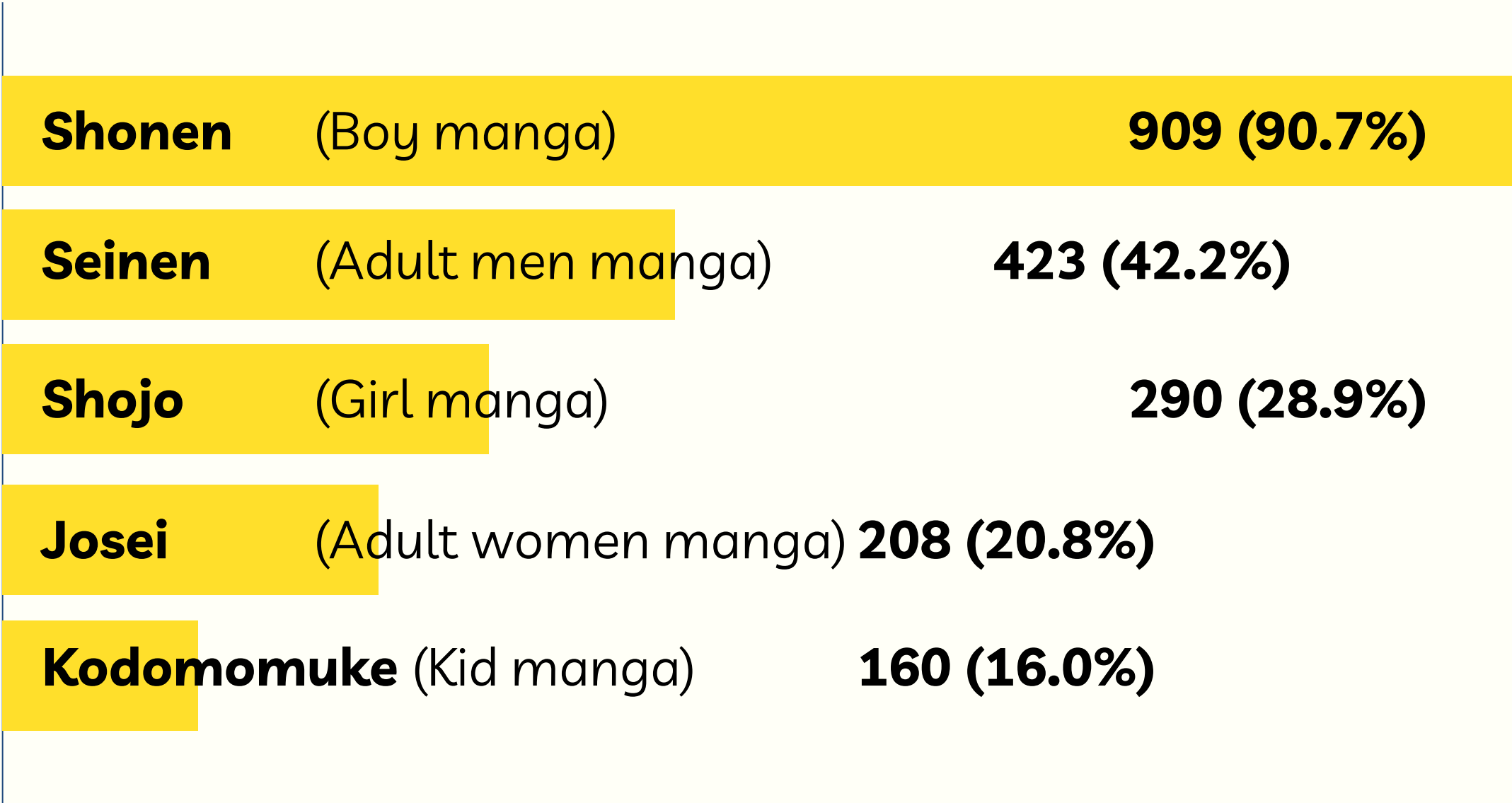


Chart B - Genre of manga

## 04 Results Legitimate Manga

### Descriptive Statistics

Total: 888 Samples



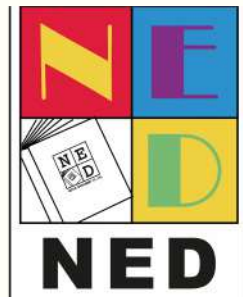
**Siam Inter Comics 89.9%**



**Luckpim 73.5%**



**Vibulkij 42.9%**



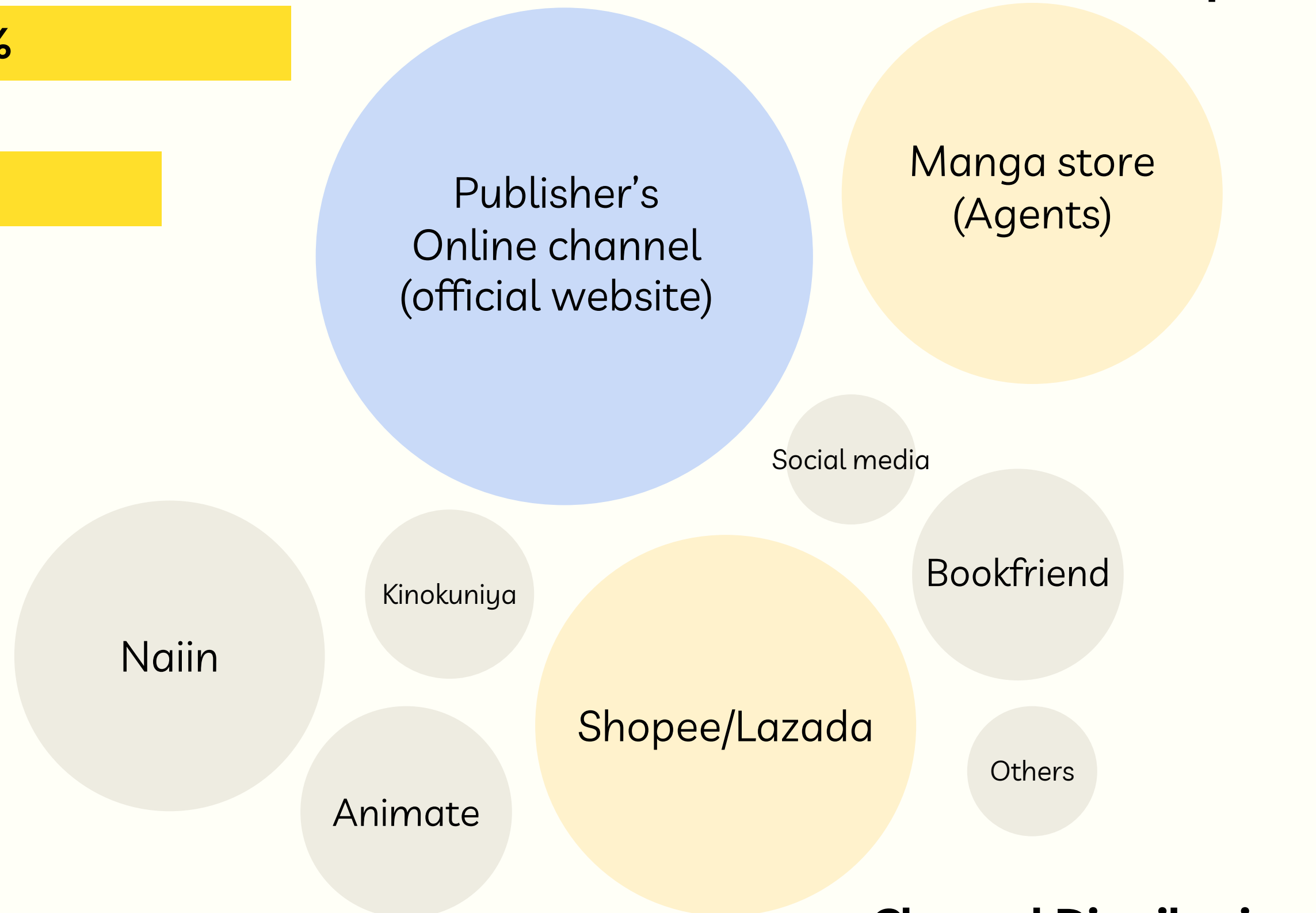
**NED 35.9%**



**Bongkoch 33.7%**



**Others 58.2%**



**Channel Distribution**

## 04 Results Legitimate Manga

### Descriptive Statistics

Total: 888 Samples



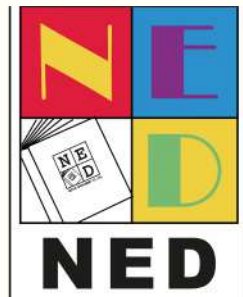
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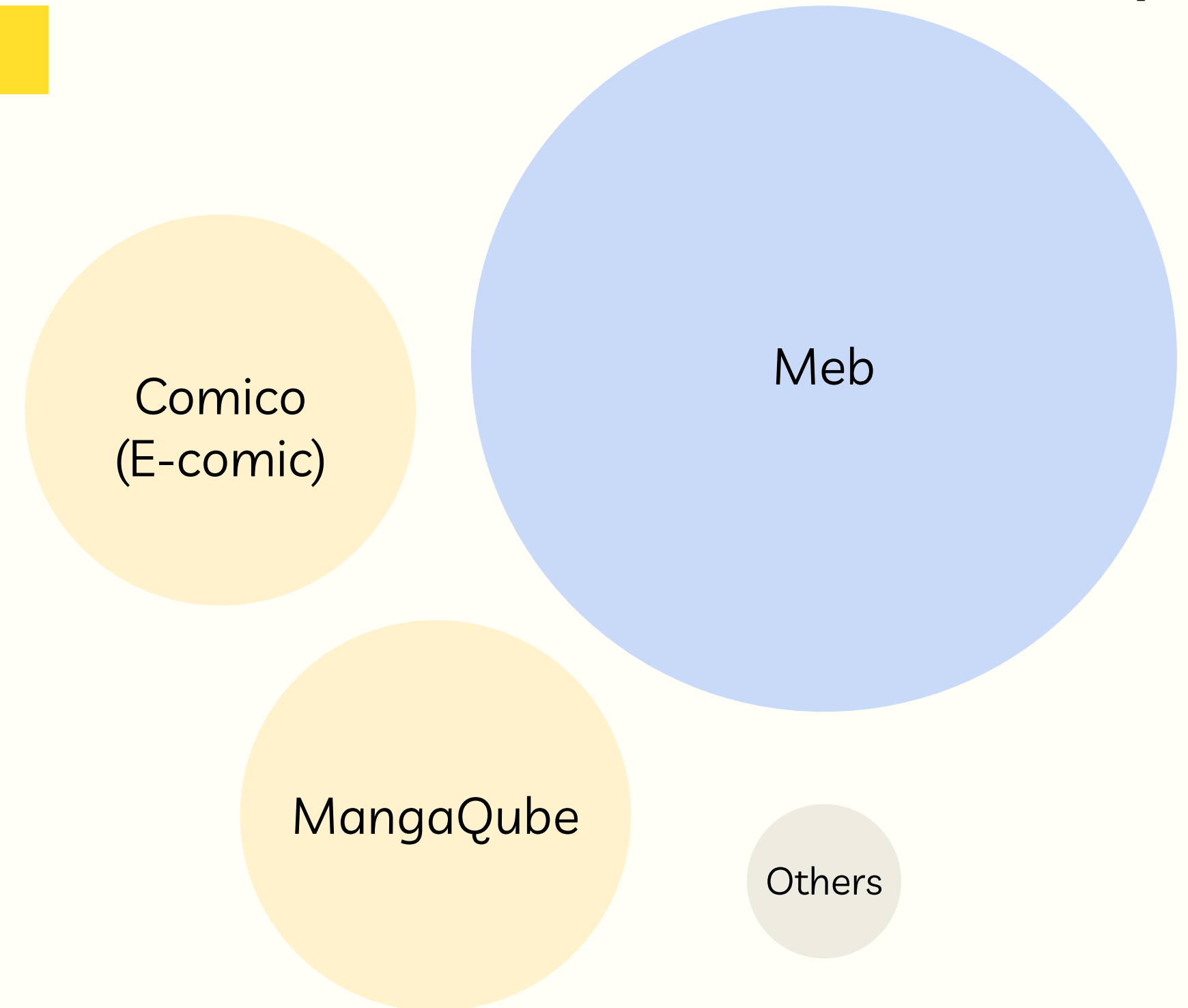
NED 35.9%



Bongkoch 33.7%



Others 58.2%



Channel Distribution



04 Results

Legitimate Manga

| Consumer Behavior                                                                    | n   | (%)   |
|--------------------------------------------------------------------------------------|-----|-------|
| 1. How many manga do you buy on average per month? (Both physical format and e-book) |     |       |
| Less than a volume a month                                                           | 86  | 9.7   |
| 1 – 5 volumes                                                                        | 361 | 40.7  |
| 6 – 10 volumes                                                                       | 211 | 23.8  |
| 11 – 15 volumes                                                                      | 105 | 11.8  |
| 16 – 20 volumes                                                                      | 44  | 5.0   |
| Over 20 volumes                                                                      | 81  | 9.1   |
| Total                                                                                | 888 | 100.0 |
| 2. Average monthly cost (Both physical format and e-book)                            |     |       |
| Less than 300 Baht                                                                   | 153 | 17.2  |
| 301 – 600 Baht                                                                       | 304 | 34.2  |
| 601 – 900 Baht                                                                       | 153 | 17.2  |
| 901 – 1,200 Baht                                                                     | 112 | 12.6  |
| 1,201 – 1,500 Baht                                                                   | 55  | 6.2   |
| Over 1,500 Baht                                                                      | 111 | 12.5  |
| Total                                                                                | 888 | 100.0 |

| Consumption Factors                                                   | $\bar{x}$ | S.D.  | Result    |
|-----------------------------------------------------------------------|-----------|-------|-----------|
| Product                                                               |           |       |           |
| 1. Publisher reputation                                               | 3.122     | 1.051 | Moderate  |
| 2. Translation quality, including artwork                             | 4.253     | 0.848 | Very High |
| 3. Material quality                                                   | 4.314     | 0.834 | Very High |
| Price                                                                 |           |       |           |
| 4. The appropriateness of the price compared with translation quality | 4.034     | 0.876 | High      |
| 5. The appropriateness of the price compared with material quality    | 4.232     | 0.828 | Very High |
| 6. The discount from the cover price                                  | 3.872     | 1.122 | High      |
| Place                                                                 |           |       |           |
| 7. Available at the store (offline channel)                           | 3.957     | 1.034 | High      |
| 8. Convenient to shop and pay on online channel                       | 4.372     | 0.875 | Very High |
| 9. Number of published manga (Inventory)                              | 3.998     | 1.179 | High      |
| Promotion                                                             |           |       |           |
| 10. Special promotion from the publisher, such as free gifts          | 3.740     | 1.111 | High      |
| 11. Public relations (PR)                                             | 3.849     | 0.957 | High      |
| 12. Customer relationship                                             | 4.122     | 1.019 | High      |

04 Results

Scanlation

Reach Site (Online Website) 92.7%

Facebook Group/Page 55.5%

Twitter 8.9%

Others 0.5%

Where?

Descriptive Statistics

Total: 797 Samples

No Thai translation rights in Thailand 79.8%

Read before deciding to buy a legal one 63.4%

Free 50.3%

Convenient to access 43.9%

Can read week by week 33.9%

Variety and ease 27.6%

Others 1.6%

ex: legal was out of stock, Legitimate publisher does not continue to publish next volume,

Why?

04 Results

Scanlation

| Consumer Behavior                            | n   | (%)   |
|----------------------------------------------|-----|-------|
| 1. Average reading <u>frequency</u> per week |     |       |
| Less than 1 day per week                     | 308 | 38.7  |
| 1 – 2 days per week                          | 238 | 29.9  |
| 3 – 4 days per week                          | 87  | 10.9  |
| 5 – 6 days per week                          | 31  | 3.9   |
| Everyday                                     | 133 | 16.7  |
| Total                                        | 797 | 100.0 |

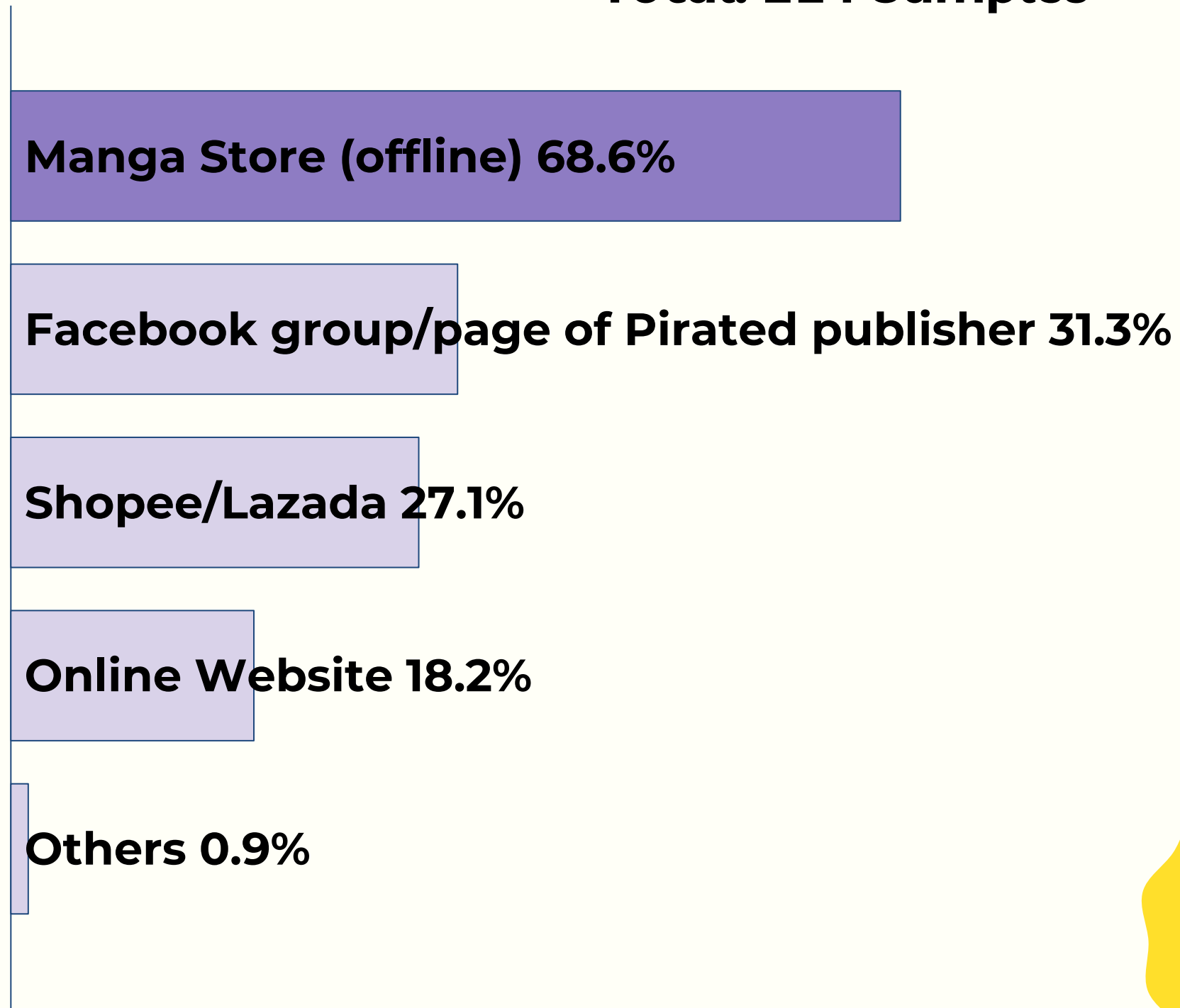
| Consumption Factors                                                                   | $\bar{x}$ | S.D.  | Result    |
|---------------------------------------------------------------------------------------|-----------|-------|-----------|
| Product                                                                               |           |       |           |
| 1. Translator reputation                                                              | 2.598     | 1.070 | Low       |
| 2. Translation quality, including artwork                                             | 3.675     | 1.149 | High      |
| 3. Translate and publish quickly                                                      | 3.839     | 1.116 | High      |
| Price                                                                                 |           |       |           |
| 4. If a translator charges a reading fee on a manga that is difficult to read in Thai | 3.913     | 1.171 | High      |
| 5. If a translator charges a reading fee on a general manga                           | 4.184     | 1.050 | High      |
| Place                                                                                 |           |       |           |
| 6. Reach site reputation                                                              | 3.082     | 1.123 | Moderate  |
| 7. The variety of manga on the reach site                                             | 3.649     | 1.130 | High      |
| 8. Convenient to read                                                                 | 4.299     | 0.879 | Very High |
| Promotion                                                                             |           |       |           |
| 9. Public relations (PR)                                                              | 3.270     | 1.124 | Moderate  |
| 10. Reader relationship                                                               | 3.415     | 1.167 | High      |
| 11. Interesting promoting                                                             | 3.556     | 1.170 | High      |



## 04 Results **Pirate**

### Descriptive Statistics

**Total: 214 Samples**



**Where?**

- No Thai translation rights in Thailand  
/ The legal was out of stock ★★★
- Misunderstand that it's legitimate manga ★★
- Worth collecting (including its quality) ★
- That manga is interesting to buy ★
- Cheaper than a legal



**Why?**

04 Results

Physical Pirated Manga

| Consumer Behavior                                                   | n   | (%)   |
|---------------------------------------------------------------------|-----|-------|
| 1. How many physical pirated manga do you buy on average per month? |     |       |
| Less than a volume a month                                          | 164 | 76.6  |
| 1 – 5 volumes                                                       | 39  | 18.2  |
| 6 – 10 volumes                                                      | 6   | 2.8   |
| 11 – 15 volumes                                                     | 2   | 0.9   |
| 16 – 20 volumes                                                     | 0   | 0.0   |
| Over 20 volumes                                                     | 3   | 1.4   |
| Total                                                               | 214 | 100.0 |
| 2. Average monthly cost                                             |     |       |
| Less than 300 Baht                                                  | 180 | 84.1  |
| 301 – 600 Baht                                                      | 21  | 9.8   |
| 601 – 900 Baht                                                      | 7   | 3.3   |
| 901 – 1,200 Baht                                                    | 3   | 1.4   |
| 1,201 – 1,500 Baht                                                  | 0   | 0     |
| Over 1,500 Baht                                                     | 3   | 1.4   |
| Total                                                               | 214 | 100.0 |

| Consumption Factors                                                   | $\bar{x}$ | S.D.  | Result   |
|-----------------------------------------------------------------------|-----------|-------|----------|
| Product                                                               |           |       |          |
| 1. Pirated publisher reputation                                       | 2.701     | 1.204 | Moderate |
| 2. Translation quality, including artwork                             | 3.439     | 1.257 | High     |
| 3. Material quality                                                   | 3.533     | 1.224 | High     |
| Price                                                                 |           |       |          |
| 4. The appropriateness of the price compared with translation quality | 3.617     | 1.106 | High     |
| 5. The appropriateness of the price compared with material quality    | 3.659     | 1.134 | High     |
| 6. The discount from the cover price                                  | 3.280     | 1.273 | Moderate |
| Place                                                                 |           |       |          |
| 7. Available at the store (offline channel)                           | 3.505     | 1.281 | High     |
| 8. Convenient to shop and pay (Online channel)                        | 3.650     | 1.212 | High     |
| 9. Number of published manga (Inventory)                              | 2.967     | 1.231 | Moderate |
| Promotion                                                             |           |       |          |
| 10. Special promotion from the pirated publisher, such as free gifts  | 2.780     | 1.238 | Moderate |
| 11. Public relations (PR)                                             | 2.869     | 1.226 | Moderate |
| 12. Customer relationship                                             | 2.944     | 1.243 | Moderate |

## **Binary Logistic Regression Model**

**analyze variables influencing the consumption decision on piracy, both scalations and physical pirated book**



## 04 Results

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### Logistic Regression Analysis

#### Independent variables

- LEGAL
- REA
- CAT 1
- CAT 2
- CAT 3
- CAT 4
- CAT 5
- Gen
- Age
- Inc
- Occ

#### Dependent Variable

- Not Consume ( $Y_1 = 0$ )
- Consume ( $Y_2 = 1$ )

the logistic response function will be as follows :

$$P (\text{Consume } Y = 1) = \frac{e^{\beta_0 + \beta_1 X_1 + \dots + \beta_{27} X_{27}}}{1 + e^{\beta_0 + \beta_1 X_1 + \dots + \beta_{27} X_{27}}}$$

$$P (\text{Not consume } Y = 0) = 1 - \frac{e^{\beta_0 + \beta_1 X_1 + \dots + \beta_{27} X_{27}}}{1 + e^{\beta_0 + \beta_1 X_1 + \dots + \beta_{27} X_{27}}}$$

Where  $0 \leq E (Y) \leq 1 = P (\text{event}) = P (\text{consume } Y = 1)$

Binary logistic model of the consumption decision on **Piracy**:

$$\log \left( \frac{P_{piracy}}{1 - P_{piracy}} \right) = Z$$

$$\begin{aligned} Z = & b_0 + b_1LEGAL + b_2Rea + b_3Cat1 + b_4Cat2 + b_5Cat3 + b_6Cat4 + b_7Cat5 + b_8Gen1 + b_9Gen2 \\ & + b_{10}Age1 + b_{11}Age2 + b_{12}Age3 + b_{13}Age4 + b_{14}Age5 + b_{15}Inc1 + b_{16}Inc2 + b_{17}Inc3 + b_{18}Inc4 + b_{19}Inc5 + b_{20}Inc6 \\ & + b_{21}Inc7 + b_{22}Occ1 + b_{23}Occ2 + b_{24}Occ3 + b_{25}Occ4 + b_{26}Occ5 + b_{27}Occ6 + \varepsilon \end{aligned}$$

04 Results

Scanlations

Logistic Regression Analysis

Table 1 Omnibus Tests of Model Coefficients of The Scanlation

|        |       | Chi-square | df | Sig.   |
|--------|-------|------------|----|--------|
| Step 1 | Step  | 105.309    | 27 | <0.001 |
|        | Block | 105.309    | 27 | <0.001 |
|        | Model | 105.309    | 27 | <0.001 |

Source: IBM SPSS Statistic Ver 27.0

There is the hypothesis as follow:

H0: The consumption of scanlations doesn't depend on any independent variable

H1: The consumption of scanlations depends on at least one independent variable

Table 2 Classification Table <sup>a</sup>

| Observed |                    |     | Predicted  |     |                    |
|----------|--------------------|-----|------------|-----|--------------------|
|          |                    |     | Scanlation |     | Percentage Correct |
|          |                    |     | No         | Yes |                    |
| Step 1   | Scanlation         | No  | 5          | 200 | 2.4                |
|          |                    | Yes | 4          | 793 | 99.5               |
|          | Overall Percentage |     |            |     | 79.6               |

a: The cut value is .500

Source: IBM SPSS Statistic Ver 27.0

At 95% confidence interval

Accept H1



# 04 Results Scanlations

## Logistic Regression Analysis

Variables in the Equation

|                     |          | B      | S.E.      | Wald   | df | Sig.  | Exp(B)     | 95% C.I. for EXP(B)<br>Lower | Upper  |
|---------------------|----------|--------|-----------|--------|----|-------|------------|------------------------------|--------|
| Step 1 <sup>a</sup> | Legal    | -1.729 | .477      | 13.171 | 1  | <.001 | .177       | .070                         | .451   |
|                     | REASON   | -.374  | .183      | 4.147  | 1  | .042  | .688       | .480                         | .986   |
|                     | TYPE_0   | -.133  | .316      | .177   | 1  | .674  | .875       | .471                         | 1.627  |
|                     | TYPE_1   | .607   | .228      | 7.095  | 1  | .008  | 1.835      | 1.174                        | 2.869  |
|                     | TYPE_2   | .620   | .195      | 10.134 | 1  | .001  | 1.859      | 1.269                        | 2.723  |
|                     | TYPE_3   | -.150  | .249      | .366   | 1  | .545  | .860       | .528                         | 1.401  |
|                     | TYPE_4   | .153   | .277      | .305   | 1  | .581  | 1.165      | .677                         | 2.005  |
|                     | GEN      |        |           | 3.224  | 2  | .199  |            |                              |        |
|                     | GEN(1)   | -.088  | .185      | .226   | 1  | .635  | .916       | .638                         | 1.315  |
|                     | GEN(2)   | -.598  | .333      | 3.217  | 1  | .073  | .550       | .286                         | 1.057  |
|                     | AGE      |        |           | 17.729 | 5  | .003  |            |                              |        |
|                     | AGE(1)   | .327   | .454      | .520   | 1  | .471  | 1.387      | .570                         | 3.376  |
|                     | AGE(2)   | 1.077  | .470      | 5.245  | 1  | .022  | 2.935      | 1.168                        | 7.378  |
|                     | AGE(3)   | .860   | .629      | 1.873  | 1  | .171  | 2.364      | .690                         | 8.104  |
|                     | AGE(4)   | 1.466  | .877      | 2.793  | 1  | .095  | 4.332      | .776                         | 24.172 |
|                     | AGE(5)   | -.361  | 1.405     | .066   | 1  | .797  | .697       | .044                         | 10.950 |
|                     | INC      |        |           | 1.161  | 7  | .992  |            |                              |        |
|                     | INC(1)   | .102   | .352      | .083   | 1  | .773  | 1.107      | .555                         | 2.207  |
|                     | INC(2)   | -.349  | .512      | .464   | 1  | .496  | .705       | .258                         | 1.926  |
|                     | INC(3)   | -.357  | .860      | .172   | 1  | .678  | .700       | .130                         | 3.774  |
|                     | INC(4)   | 18.066 | 18081.321 | .000   | 1  | .999  | 70128399.8 | .000                         | .      |
|                     | INC(5)   | 18.876 | 40192.969 | .000   | 1  | 1.000 | 157628947  | .000                         | .      |
|                     | INC(6)   | 15.809 | 22947.786 | .000   | 1  | .999  | 7338155.16 | .000                         | .      |
|                     | INC(7)   | -.775  | 1.274     | .370   | 1  | .543  | .461       | .038                         | 5.593  |
|                     | OCC      |        |           | 4.165  | 6  | .654  |            |                              |        |
|                     | OCC(1)   | .050   | .482      | .011   | 1  | .917  | 1.051      | .409                         | 2.703  |
|                     | OCC(2)   | 19.031 | 6780.087  | .000   | 1  | .998  | 184147692  | .000                         | .      |
|                     | OCC(3)   | .347   | .532      | .425   | 1  | .515  | 1.414      | .499                         | 4.013  |
|                     | OCC(4)   | .827   | 1.084     | .582   | 1  | .445  | 2.286      | .273                         | 19.134 |
|                     | OCC(5)   | -1.612 | .995      | 2.621  | 1  | .105  | .200       | .028                         | 1.404  |
|                     | OCC(6)   | 18.190 | 18590.442 | .000   | 1  | .999  | 79429856.6 | .000                         | .      |
|                     | Constant | 2.214  | .714      | 9.614  | 1  | .002  | 9.154      |                              |        |

a. Variable(s) entered on step 1: Legal, REASON, TYPE\_0, TYPE\_1, TYPE\_2, TYPE\_3, TYPE\_4, GEN, AGE, INC, OCC.

**Significant at 99% confidence interval**

Where

Legal = Purchasing decision on legitimate mangas

TYPE1 = Consumption on “Shojo” genre

TYPE2 = Consumption on “Seinen” genre

# 04 Results Scanlations

## Logistic Regression Analysis

**Significant at 95% confidence interval**

Where

**Legal** = Purchasing decision on legitimate mangas

**REASON** = The main reason they consume manga

**TYPE1** = Consumption on “Shojo” genre

**TYPE2** = Consumption on “Seinen” genre

**Age\_2** = 19 - 23 years old

Variables in the Equation

|                     |          | B      | S.E.      | Wald   | df | Sig.  | Exp(B)     | 95% C.I. for EXP(B) |        |
|---------------------|----------|--------|-----------|--------|----|-------|------------|---------------------|--------|
|                     |          |        |           |        |    |       |            | Lower               | Upper  |
| Step 1 <sup>a</sup> | Legal    | -1.729 | .477      | 13.171 | 1  | <.001 | .177       | .070                | .451   |
|                     | REASON   | -.374  | .183      | 4.147  | 1  | .042  | .688       | .480                | .986   |
|                     | TYPE_0   | -.133  | .316      | .177   | 1  | .674  | .875       | .471                | 1.627  |
|                     | TYPE_1   | .607   | .228      | 7.095  | 1  | .008  | 1.835      | 1.174               | 2.869  |
|                     | TYPE_2   | .620   | .195      | 10.134 | 1  | .001  | 1.859      | 1.269               | 2.723  |
|                     | TYPE_3   | -.150  | .249      | .366   | 1  | .545  | .860       | .528                | 1.401  |
|                     | TYPE_4   | .153   | .277      | .305   | 1  | .581  | 1.165      | .677                | 2.005  |
|                     | GEN      |        |           | 3.224  | 2  | .199  |            |                     |        |
|                     | GEN(1)   | -.088  | .185      | .226   | 1  | .635  | .916       | .638                | 1.315  |
|                     | GEN(2)   | -.598  | .333      | 3.217  | 1  | .073  | .550       | .286                | 1.057  |
|                     | AGE      |        |           | 17.729 | 5  | .003  |            |                     |        |
|                     | AGE(1)   | .327   | .454      | .520   | 1  | .471  | 1.387      | .570                | 3.376  |
|                     | AGE(2)   | 1.077  | .470      | 5.245  | 1  | .022  | 2.935      | 1.168               | 7.378  |
|                     | AGE(3)   | .860   | .629      | 1.873  | 1  | .171  | 2.364      | .690                | 8.104  |
|                     | AGE(4)   | 1.466  | .877      | 2.793  | 1  | .095  | 4.332      | .776                | 24.172 |
|                     | AGE(5)   | -.361  | 1.405     | .066   | 1  | .797  | .697       | .044                | 10.950 |
|                     | INC      |        |           | 1.161  | 7  | .992  |            |                     |        |
|                     | INC(1)   | .102   | .352      | .083   | 1  | .773  | 1.107      | .555                | 2.207  |
|                     | INC(2)   | -.349  | .512      | .464   | 1  | .496  | .705       | .258                | 1.926  |
|                     | INC(3)   | -.357  | .860      | .172   | 1  | .678  | .700       | .130                | 3.774  |
|                     | INC(4)   | 18.066 | 18081.321 | .000   | 1  | .999  | 70128399.8 | .000                | .      |
|                     | INC(5)   | 18.876 | 40192.969 | .000   | 1  | 1.000 | 157628947  | .000                | .      |
|                     | INC(6)   | 15.809 | 22947.786 | .000   | 1  | .999  | 7338155.16 | .000                | .      |
|                     | INC(7)   | -.775  | 1.274     | .370   | 1  | .543  | .461       | .038                | 5.593  |
|                     | OCC      |        |           | 4.165  | 6  | .654  |            |                     |        |
|                     | OCC(1)   | .050   | .482      | .011   | 1  | .917  | 1.051      | .409                | 2.703  |
|                     | OCC(2)   | 19.031 | 6780.087  | .000   | 1  | .998  | 184147692  | .000                | .      |
|                     | OCC(3)   | .347   | .532      | .425   | 1  | .515  | 1.414      | .499                | 4.013  |
|                     | OCC(4)   | .827   | 1.084     | .582   | 1  | .445  | 2.286      | .273                | 19.134 |
|                     | OCC(5)   | -1.612 | .995      | 2.621  | 1  | .105  | .200       | .028                | 1.404  |
|                     | OCC(6)   | 18.190 | 18590.442 | .000   | 1  | .999  | 79429856.6 | .000                | .      |
|                     | Constant | 2.214  | .714      | 9.614  | 1  | .002  | 9.154      |                     |        |

a. Variable(s) entered on step 1: Legal, REASON, TYPE\_0, TYPE\_1, TYPE\_2, TYPE\_3, TYPE\_4, GEN, AGE, INC, OCC.

04 Results

Pirates

Logistic Regression Analysis

Table 1 Omnibus Tests of Model Coefficients of The Physical Pirated Manga

|        |       | Chi-square | df | Sig.   |
|--------|-------|------------|----|--------|
| Step 1 | Step  | 122.757    | 27 | <0.001 |
|        | Block | 122.757    | 27 | <0.001 |
|        | Model | 122.757    | 27 | <0.001 |

Source: IBM SPSS Statistic Ver 27.0

There is the hypothesis as follow:

H0: The consumption of Pirates doesn't depend on any independent variable

H1: The consumption of Pirates depends on at least one independent variable

Table 2 Classification Table <sup>a</sup>

| Observed |                    |     | Predicted |     |                    |
|----------|--------------------|-----|-----------|-----|--------------------|
|          |                    |     | Pirate    |     | Percentage Correct |
|          |                    |     | No        | Yes |                    |
| Step 1   | Pirate             | No  | 767       | 21  | 97.3               |
|          |                    | Yes | 177       | 37  | 17.3               |
|          | Overall Percentage |     |           |     | 80.2               |

a: The cut value is .500

Source: IBM SPSS Statistic Ver 27.0

At 95% confidence interval

Accept H1



# 04 Results Pirates

## Logistic Regression Analysis

Significant at 99% confidence interval

Where

TYPE3 = Consumption on “Josei” genre

Gen\_1 = Female

Age\_4 = 31 - 45 years old

| Variables in the Equation |          |         |           |        |    |       |           |                     |         |
|---------------------------|----------|---------|-----------|--------|----|-------|-----------|---------------------|---------|
|                           |          | B       | S.E.      | Wald   | df | Sig.  | Exp(B)    | 95% C.I. for EXP(B) |         |
|                           |          |         |           |        |    |       |           | Lower               | Upper   |
| Step 1 <sup>a</sup>       | Legal    | -.258   | .262      | .973   | 1  | .324  | .772      | .462                | 1.290   |
|                           | REASON   | .219    | .187      | 1.379  | 1  | .240  | 1.245     | .864                | 1.795   |
|                           | TYPE_0   | .373    | .319      | 1.364  | 1  | .243  | 1.452     | .776                | 2.716   |
|                           | TYPE_1   | -.178   | .211      | .711   | 1  | .399  | .837      | .553                | 1.266   |
|                           | TYPE_2   | .126    | .193      | .431   | 1  | .511  | 1.135     | .778                | 1.655   |
|                           | TYPE_3   | .576    | .224      | 6.615  | 1  | .010  | 1.778     | 1.147               | 2.757   |
|                           | TYPE_4   | .111    | .233      | .228   | 1  | .633  | 1.118     | .708                | 1.764   |
|                           | GEN      |         |           | 32.885 | 2  | <.001 |           |                     |         |
|                           | GEN(1)   | 1.120   | .199      | 31.607 | 1  | <.001 | 3.066     | 2.075               | 4.532   |
|                           | GEN(2)   | .326    | .397      | .672   | 1  | .412  | 1.385     | .636                | 3.017   |
|                           | AGE      |         |           | 26.233 | 5  | <.001 |           |                     |         |
|                           | AGE(1)   | -.216   | .540      | .161   | 1  | .688  | .805      | .280                | 2.319   |
|                           | AGE(2)   | .038    | .543      | .005   | 1  | .944  | 1.039     | .358                | 3.009   |
|                           | AGE(3)   | .168    | .638      | .069   | 1  | .793  | 1.183     | .339                | 4.126   |
|                           | AGE(4)   | 2.100   | .734      | 8.183  | 1  | .004  | 8.166     | 1.937               | 34.423  |
|                           | AGE(5)   | 2.290   | 1.414     | 2.624  | 1  | .105  | 9.879     | .618                | 157.848 |
|                           | INC      |         |           | 4.216  | 7  | .755  |           |                     |         |
|                           | INC(1)   | -.383   | .303      | 1.591  | 1  | .207  | .682      | .376                | 1.236   |
|                           | INC(2)   | -.277   | .439      | .399   | 1  | .527  | .758      | .321                | 1.791   |
|                           | INC(3)   | -.010   | .699      | .000   | 1  | .988  | .990      | .252                | 3.893   |
|                           | INC(4)   | .897    | 1.269     | .500   | 1  | .480  | 2.452     | .204                | 29.478  |
|                           | INC(5)   | 20.485  | 40192.969 | .000   | 1  | 1.000 | 787628650 | .000                | .       |
|                           | INC(6)   | -22.272 | 28367.901 | .000   | 1  | .999  | .000      | .000                | .       |
|                           | INC(7)   | 1.366   | 1.245     | 1.202  | 1  | .273  | 3.918     | .341                | 45.000  |
|                           | OCC      |         |           | 9.967  | 6  | .126  |           |                     |         |
|                           | OCC(1)   | .504    | .397      | 1.608  | 1  | .205  | 1.655     | .760                | 3.608   |
|                           | OCC(2)   | -.413   | .606      | .466   | 1  | .495  | .662      | .202                | 2.168   |
|                           | OCC(3)   | .883    | .414      | 4.540  | 1  | .033  | 2.417     | 1.073               | 5.445   |
|                           | OCC(4)   | 1.144   | .698      | 2.686  | 1  | .101  | 3.138     | .799                | 12.321  |
|                           | OCC(5)   | .623    | .912      | .468   | 1  | .494  | 1.865     | .312                | 11.134  |
|                           | OCC(6)   | .065    | 1.311     | .002   | 1  | .960  | 1.068     | .082                | 13.929  |
|                           | Constant | -2.422  | .673      | 12.937 | 1  | <.001 | .089      |                     |         |

a. Variable(s) entered on step 1: Legal, REASON, TYPE\_0, TYPE\_1, TYPE\_2, TYPE\_3, TYPE\_4, GEN, AGE, INC, OCC.



# 04 Results Pirates

## Logistic Regression Analysis

**Significant at 95% confidence interval**

Where

TYPE3 = Consumption on “Josei” genre

Gen\_1 = Female

Age\_4 = 31 - 45 years old

Occ\_3 = Self-employed

| Variables in the Equation |          |         |           |        |    |       |           |                              |         |
|---------------------------|----------|---------|-----------|--------|----|-------|-----------|------------------------------|---------|
|                           |          | B       | S.E.      | Wald   | df | Sig.  | Exp(B)    | 95% C.I. for EXP(B)<br>Lower | Upper   |
| Step 1 <sup>a</sup>       | Legal    | -.258   | .262      | .973   | 1  | .324  | .772      | .462                         | 1.290   |
|                           | REASON   | .219    | .187      | 1.379  | 1  | .240  | 1.245     | .864                         | 1.795   |
|                           | TYPE_0   | .373    | .319      | 1.364  | 1  | .243  | 1.452     | .776                         | 2.716   |
|                           | TYPE_1   | -.178   | .211      | .711   | 1  | .399  | .837      | .553                         | 1.266   |
|                           | TYPE_2   | .126    | .193      | .431   | 1  | .511  | 1.135     | .778                         | 1.655   |
|                           | TYPE_3   | .576    | .224      | 6.615  | 1  | .010  | 1.778     | 1.147                        | 2.757   |
|                           | TYPE_4   | .111    | .233      | .228   | 1  | .633  | 1.118     | .708                         | 1.764   |
|                           | GEN      |         |           | 32.885 | 2  | <.001 |           |                              |         |
|                           | GEN(1)   | 1.120   | .199      | 31.607 | 1  | <.001 | 3.066     | 2.075                        | 4.532   |
|                           | GEN(2)   | .326    | .397      | .672   | 1  | .412  | 1.385     | .636                         | 3.017   |
|                           | AGE      |         |           | 26.233 | 5  | <.001 |           |                              |         |
|                           | AGE(1)   | -.216   | .540      | .161   | 1  | .688  | .805      | .280                         | 2.319   |
|                           | AGE(2)   | .038    | .543      | .005   | 1  | .944  | 1.039     | .358                         | 3.009   |
|                           | AGE(3)   | .168    | .638      | .069   | 1  | .793  | 1.183     | .339                         | 4.126   |
|                           | AGE(4)   | 2.100   | .734      | 8.183  | 1  | .004  | 8.166     | 1.937                        | 34.423  |
|                           | AGE(5)   | 2.290   | 1.414     | 2.624  | 1  | .105  | 9.879     | .618                         | 157.848 |
|                           | INC      |         |           | 4.216  | 7  | .755  |           |                              |         |
|                           | INC(1)   | -.383   | .303      | 1.591  | 1  | .207  | .682      | .376                         | 1.236   |
|                           | INC(2)   | -.277   | .439      | .399   | 1  | .527  | .758      | .321                         | 1.791   |
|                           | INC(3)   | -.010   | .699      | .000   | 1  | .988  | .990      | .252                         | 3.893   |
|                           | INC(4)   | .897    | 1.269     | .500   | 1  | .480  | 2.452     | .204                         | 29.478  |
|                           | INC(5)   | 20.485  | 40192.969 | .000   | 1  | 1.000 | 787628650 | .000                         | .       |
|                           | INC(6)   | -22.272 | 28367.901 | .000   | 1  | .999  | .000      | .000                         | .       |
|                           | INC(7)   | 1.366   | 1.245     | 1.202  | 1  | .273  | 3.918     | .341                         | 45.000  |
|                           | OCC      |         |           | 9.967  | 6  | .126  |           |                              |         |
|                           | OCC(1)   | .504    | .397      | 1.608  | 1  | .205  | 1.655     | .760                         | 3.608   |
|                           | OCC(2)   | -.413   | .606      | .466   | 1  | .495  | .662      | .202                         | 2.168   |
|                           | OCC(3)   | .883    | .414      | 4.540  | 1  | .033  | 2.417     | 1.073                        | 5.445   |
|                           | OCC(4)   | 1.144   | .698      | 2.686  | 1  | .101  | 3.138     | .799                         | 12.321  |
|                           | OCC(5)   | .623    | .912      | .468   | 1  | .494  | 1.865     | .312                         | 11.134  |
|                           | OCC(6)   | .065    | 1.311     | .002   | 1  | .960  | 1.068     | .082                         | 13.929  |
|                           | Constant | -2.422  | .673      | 12.937 | 1  | <.001 | .089      |                              |         |

a. Variable(s) entered on step 1: Legal, REASON, TYPE\_0, TYPE\_1, TYPE\_2, TYPE\_3, TYPE\_4, GEN, AGE, INC, OCC.

## 04 Results

### The Questionnaire Survey

**Part 1** General Consumption Behavior

**Part 2** Legitimate Mangas  
Scanlations  
Physical Pirated Mangas

**Part 3** Demographic

**Part 4** Additional suggestions for  
publishers in Thailand



### Complementary Part





## 04 Results

### Complementary Part

#### Part 4 Suggestions for publishers in Thailand



more inventory to  
meet with high  
consumer demand

Concern more  
about quality of  
the material ex:  
paper, ink

Reprint the manga  
that was out of stock

Concern more  
about translation  
quality including  
artwork

Lower the price

Better  
the promotion

Better online  
distribution channel

Listen to the  
feedback

Launch online  
reading platform

Better customer  
relationship

Please don't  
abandon on-  
going mangas  
and invariably  
distribute  
new volume

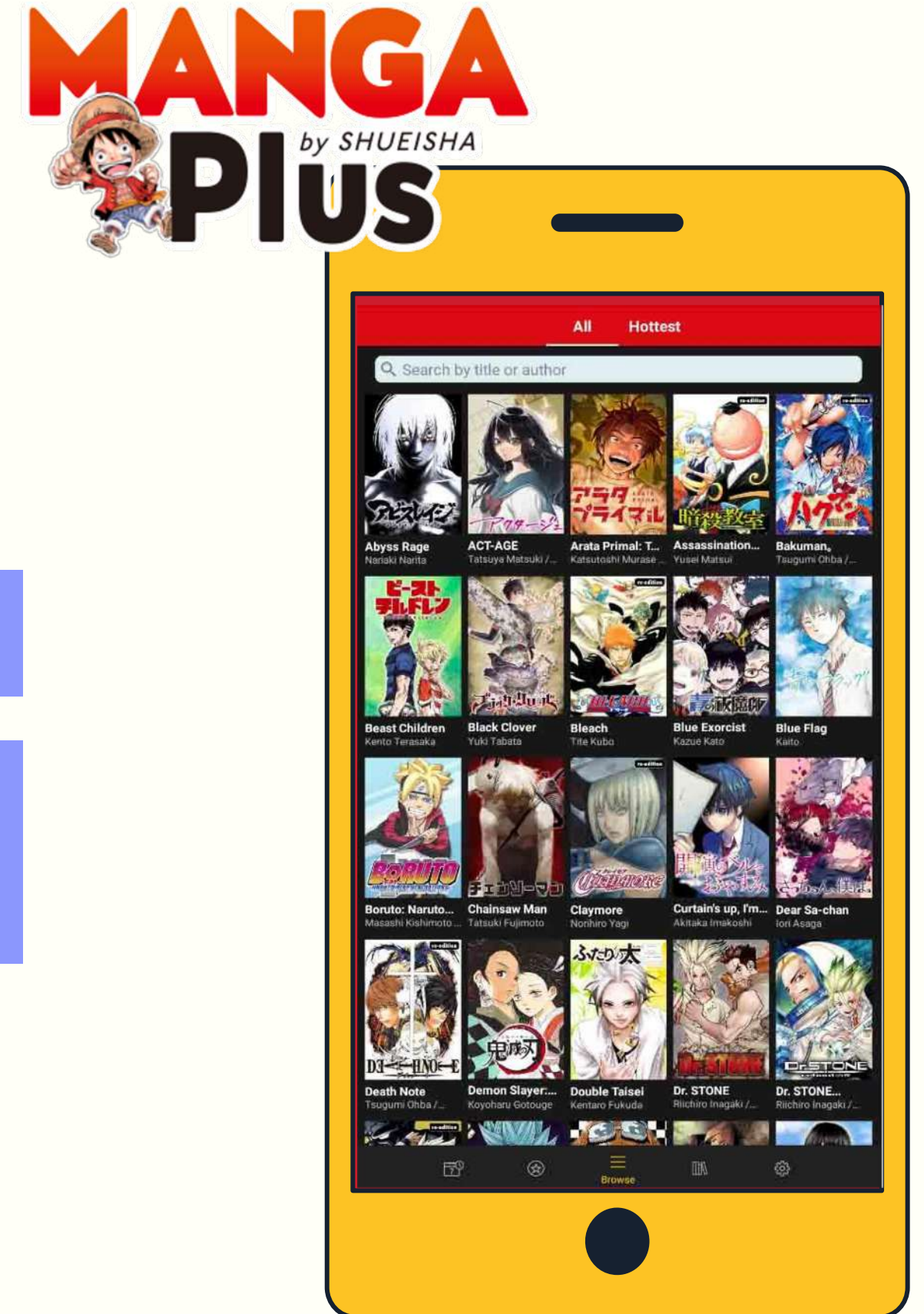
Lower the price of e-book  
(Cheaper than physical form)

# 05 Conclusion

## Main Research Questions



- Which factor influence consumers to consume manga piracy?
- Which recommendation strategies should legal publishers adapt to avoid getting disrupted in near future?





## **06 Further Improvement**

---

**Study in the publishers' part**

**Research more about copyright law**

**EE489 Seminar**

**Consumer behavior on Thai  
Translated Book Piracy: Case of  
The Japanese Comic Industry in  
Thailand**

**Pym Limpawutiwaranont  
6004641624**

# Appendix

|                        |      |      |       |          |      |       |
|------------------------|------|------|-------|----------|------|-------|
| 1. Gender              | n    |      | (%)   | 2. Age   | n    | (%)   |
| Male                   | 486  |      | 48.5  | Under 13 | 23   | 2.3   |
| Female                 | 456  |      | 45.5  | 14 – 18  | 434  | 43.3  |
| Non-binary             | 60   |      | 6     | 19 – 23  | 358  | 35.7  |
|                        |      |      |       | 24 – 30  | 129  | 12.9  |
|                        |      |      |       | 31 – 45  | 54   | 5.4   |
|                        |      |      |       | 46 – 60  | 4    | 0.4   |
|                        |      |      |       | Over 60  | 0    | 0.0   |
| Total                  | 1002 |      | 100.0 | Total    | 1002 | 100.0 |
| 3. Education           |      | n    |       | (%)      |      |       |
| Lower than primary     |      | 0    |       | 0.0      |      |       |
| Primary                |      | 7    |       | 0.7      |      |       |
| Secondary              |      | 468  |       | 46.7     |      |       |
| Diploma                |      | 96   |       | 9.6      |      |       |
| Bachelor’s degree      |      | 411  |       | 41.0     |      |       |
| Higher than Bachelor’s |      | 20   |       | 2.0      |      |       |
| Total                  |      | 1002 |       | 100.0    |      |       |

Table A2 Demographic of The Sample



# Appendix

| 4. Income Level                       | n    | (%)   |
|---------------------------------------|------|-------|
| Under 15,000                          | 803  | 80.1  |
| 15,001 – 30,000                       | 130  | 13.0  |
| 30,001 – 45,000                       | 44   | 4.4   |
| 45,001 – 60,000                       | 13   | 1.3   |
| 60,001 – 75,000                       | 4    | 0.4   |
| 75,001 – 90,000                       | 1    | 0.1   |
| 90,001 – 105,000                      | 2    | 0.2   |
| Upper 105,001                         | 5    | 0.5   |
| Total                                 | 1002 | 100.0 |
| 5. Occupation                         | n    | (%)   |
| Student                               | 790  | 78.8  |
| Private co. employee                  | 105  | 10.5  |
| Government employee/ State enterprise | 31   | 3.1   |
| Self-employed                         | 55   | 5.5   |
| Unemployed                            | 10   | 1.0   |
| Freelance                             | 7    | 0.7   |
| Other                                 | 4    | 0.4   |
| Total                                 | 1002 | 100.0 |

Table A2 Demographic of The Sample (Continue)

# Appendix

Table B Determination of Independent Variables

| Variable | Meaning                                                                                                                                                                                      | Reference                |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Rea      | Rea 1 = เพื่อการสะสม                                                                                                                                                                         | Rea 0 = เพื่อความบันเทิง |
| TYPE_0   | TYPE_0 = Shonen                                                                                                                                                                              |                          |
| TYPE_1   | TYPE_1 = Shojō                                                                                                                                                                               |                          |
| TYPE_2   | TYPE_2 = Seinen                                                                                                                                                                              |                          |
| TYPE_3   | TYPE 3 = Josei                                                                                                                                                                               |                          |
| TYPE_4   | TYPE_4 = Kodomomuke                                                                                                                                                                          |                          |
| Gen      | Gen 1 = Female<br>Gen 2 = Non-Binary                                                                                                                                                         | Gen 0 = Male             |
| Age      | Age 1 = 14 – 18<br>Age 2 = 19 – 23<br>Age 3 = 24 – 30<br>Age 4 = 31 – 45<br>Age 5 = 46 – 60                                                                                                  | Age 0 = Under 13         |
| Inc      | Inc 1 = 15,000 – 30,000<br>Inc 2 = 30,001 – 45,000<br>Inc 3 = 45,001 – 60,000<br>Inc 4 = 60,001 – 75,000<br>Inc 5 = 75,001 – 90,000<br>Inc 6 = 90,000 – 105,000<br>Inc 7 = 105,001 บาทขึ้นไป | Inc 0 = น้อยกว่า 15,000  |
| Occ      | Occ 1 = Private co.<br>employee<br>Occ 2 = Government<br>employee/ State enterprise<br>Occ 3 = Self-employed<br>Occ 4 = Unemployed<br>Occ 5 = Freelance<br>Occ 6 = Others                    | Occ 0 = Student          |