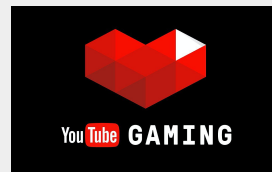


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## Key factors that influence audience decisions on watching live game streaming



Nutkanokporn Thanatepromote 6004640584

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# AGENDA

- Introduction
- Motivation
- Objective
- Research question
- Literature review
- Methodology
- Results
- Conclusion

# Introduction

## What is live game streaming platforms ?

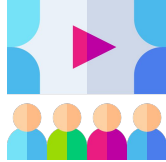
### Live game streaming platforms



Streamers



Features, subscription fee



Audiences

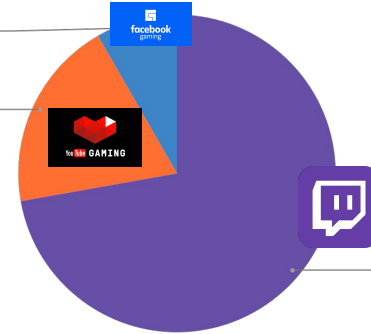
## Market situation



### Live hours watched

FB Gaming, others  
8.3%

Youtube lives  
19.5%



Twitch  
72.2%

Cite: streamelement

### The game streaming market is expected to register a CAGR of 9% during the forecast period 2021 - 2026

- The revenue generated from web-based was higher in 2019
- More mobile games gaining popularity in the streaming, app-based streaming is expected to gain more market share in the forecast period.
- Based on revenue model the market is segmented into subscription-supported game streaming and ad-supported game streaming. Subscription game streaming is expected to account for a major share of the market in 2019.

Cite: researchandmarket



2020 2025

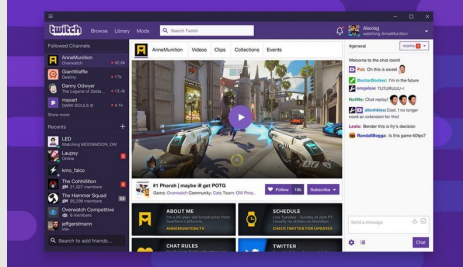
CAGR 9%

# Introduction

## Key players in Thailand



Youtube gaming (Google,2005)



Twitch(Amazon,2014)



Facebook gaming ( Facebook,2018)

# Introduction



## Twitch ( Amazon, 2014 )

[Twitch.tv](https://www.twitch.tv) is a video-game broadcasting and viewing platform where viewers can "donate" to their favorite players and one of the most widely used social live streaming services is the topic-specific streaming service Twitch which is mainly used for streaming video games ,special events and tournament of esport event.



## Facebook gaming ( Facebook,2018 )

[Facebook gaming](https://www.facebook.com/gaming) is the new interface of original facebook application that can provide especially gaming content only. In terms of feature of facebook gaming, there are filter that suit for individual preference by AI or algorithm and ability to search new content anytime, connecting with your favourite streamers directly and friend to share your comment about games.



## Youtube gaming (Google, 2005)

[YouTube Gaming](https://www.youtube.com/gaming) is an offshoot of YouTube that features both live and on-demand video game content. The new platform curates YouTube's existing gaming videos, allowing you to more easily find your favorite live video game streaming. As with standard YouTube, you can follow channels to stay on top of their content; unlike standard YouTube, you can also follow specific games to ensure you'll never miss the latest live streaming.

# Introduction

## Audience perspective

### Feature



● Viewing live game streaming		FREE	
● Chatting	Subscription fee	FREE	
● Rewarding		Additional purchase	
● Device accessibility	Smartphone , PC , Game Console and more		
● Contents	Esport tournament	Variety genre of games	
● Revenue	Advertising & Subscription fee		

\*Each platform took different percentage from subscription fee as revenue  
( 50% on Twitch , 30% on Youtube and Facebook gaming)

# Motivation

## Motivation

To **explore** and **understand** what is driver of users to decide to watch live game streaming and to study more the detail of features in those three live game streaming platforms.

### 4 Game Streaming Platform ยอดนิยมในประเทศไทย

Platform	YouTube	facebook	twitch	NiMoTV
เกมยอดนิยม				
ช่องแนะนำ				
จุดเด่น	Platform ไทยที่มีคนดูมากที่สุด มี content หลากหลาย	เข้าถึงง่ายทำลิ้งมาแบ่ง	มี streamer เยอะ ทั้งไทยและต่างประเทศ	มีทีมแข่ง E-Sports ไทยเยอะ
จุดด้อย	ระบบ Live ค่อนข้างมีช่วง Delay เยอะ	ระบบต่าง ๆ ยังไม่ค่อยดีนัก เวลาดูเกม ๆ ง่ายน้อย	โฆษณาเยอะมาก บางทีกดข้ามไม่ได้	เป็นเกมฟรีส่วนใหญ่ก่อนอาจจะไม่ถูกถึง Gamer สาย PC หรือ Console
ระบบส่งของตัวแบบ in app purchase				
Monthly Active User Worldwide	2 พันล้านคน	800 ล้านคน (ที่มีส่วนร่วมกับ Content เกมบน facebook)	140 ล้านคน	11.5 ล้าน
Support Platform				

**\*\*เกร็ดน่ารู้\*\***

- 71% ของประชากร Gen Z (ช่วงอายุ 16-24 ปี)ในประเทศไทยรับชมวีดีโอบนสื่อออนไลน์เฉลี่ย 3 ชั่วโมงต่อวัน
- ค่าเฉลี่ยการใช้อินเทอร์เน็ตต่อคนของชาวไทยอยู่ที่ 9 ชั่วโมง 11 นาที และเป็นการใช้บนสมาร์ตโฟนถึง 5 ชั่วโมง

<https://exicornthai.com/blog/thailand-leads-the-world-in-time-spent-online/>

# Objective

## Objective

1. To determine key factors that influence audience decision making process on watching live game streaming .
2. To study the audience behaviour on live game streaming .
3. To explore opportunity to develop feature or function on live game streaming platform based on user's preference



# Research question

## Research question

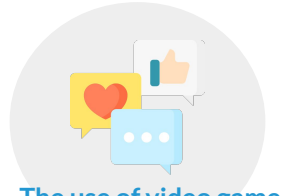
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1. What factor can contribute audience to spend time more on watching live game streaming and how ?
2. Does the subscription fee in some platform affect viewers ?
3. What is impact of users' preference in game live streaming ?
4. People who ever or never play video game has impact the frequency of watching or not?

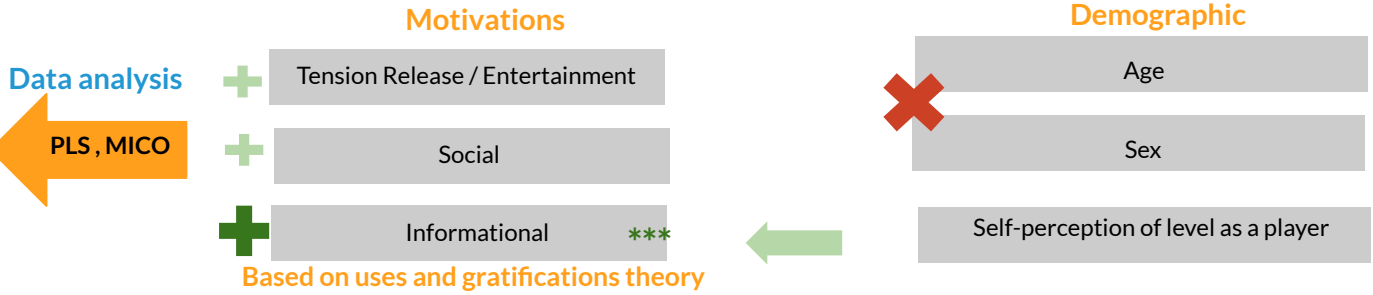


# Literature review

**01** Luis Javier.;Sandra M.; Fernando J., Motivations for the Use of Video Game Streaming Platforms: The Moderating Effect of Sex, Age and Self-Perception of Level as a Player



The use of video game streaming platforms



**02** Sjoblom, M., & Hamari, J., Why do people watch others play video games? An empirical study on the motivations of Twitch users, Computers in Human Behavior (2016)

motivations	usages	Hour watched	Streamers watched	Streamers followed	Subscriptions
Affective		+	+	+	-
Cognitive		+	+	-	-
Personal integrative		-	-	+	-
Social integrative		+	+	+	+
Tension release.	PLS-SEM as model testing	+	+	+	-

\*\*\* indicates statistical significance in the original study.



# Literature review

03

Scheibe, K.; Fietkiewicz, K.J.; Stock, W.G. **Information behavior on social live streaming services.**

Explain the information on social live streaming services based on YouNow users in terms of users , production and reception behaviour of YouNow users.By surveying and analyse as percentage to summary which element has the highest percentage.

## USERS

- To watch streams, to chat while watching, and to reward performers by using emoticons
- System is easily utilized

## Recipient (Audience)

- Watch streams of their friends and of people aged between 13 and 20 years old
- Multi-channel on other platform

# Literature review

04

Mengdi Wang.; Dong Li .; **What motivates audience comments on live streaming platforms?**

Observe audiences' interaction and engagement with live streaming from a sociological perspective to investigate the different effects of information factors on audiences' real-time interactions

the number of viewers \*\*\*

the gender of streamers

the number of likes

the number of gifts

the duration of the live stream.

Comment  
video game  
streaming

Interaction ritual chains theory

05

Gandol, E. (2016). **To watch or to play, it is in the game: e game culture on Twitch.tv among performers, plays and audiences.** Journal of Gaming & Virtual World, 8(1), 63-82

The results show the user behaviour on Twitch.tv as percentage by surveying including game habit and Twitch habit based on circuit and culture theory

06

C. Christopher Lee.;Pankaj Nagpal.;Sinéad G.,Hyoun Sook Lim.;**FACTORS AFFECTING ONLINE STREAMING SUBSCRIPTIONS**

- Available Options, Social trends as the strongest relationship variable
- Marginal correlation with the Media Options variable in considering online streaming.
- Demographics, gender played no clear role while age showed marginal impact in choosing online streaming over cable television.

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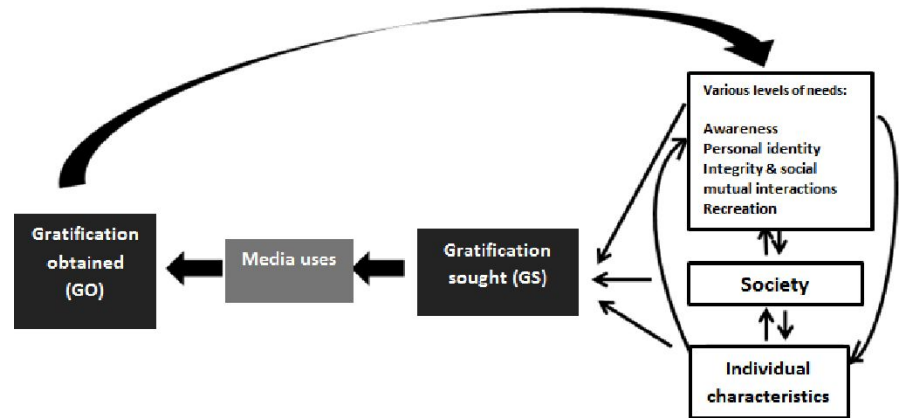
# Methodology

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# Methodology ( Theoretical Framework )

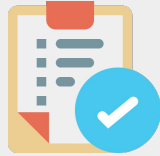
## Use and gratification Theory

1. **Information** : Motive of finding knowledge
2. **Personal identity** : Motive to define identity
3. **Entertainment** : Escape from problems
4. **Social and psychological origin** (Social trend):  
Motive to socialize with friends, family and  
relation in society.



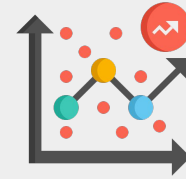
# Methodology

## Data collection ( Primary data)



Online questionnaires  
via Google form

## Data Analysis



Multiple Regression analysis

## Conceptual Framework

### Independent variable

#### Use and gratification theory

- Feature
- Additional purchase
- Characteristic of streamer
- Social trend
- Motivation

Audience's demographic and behaviour factor

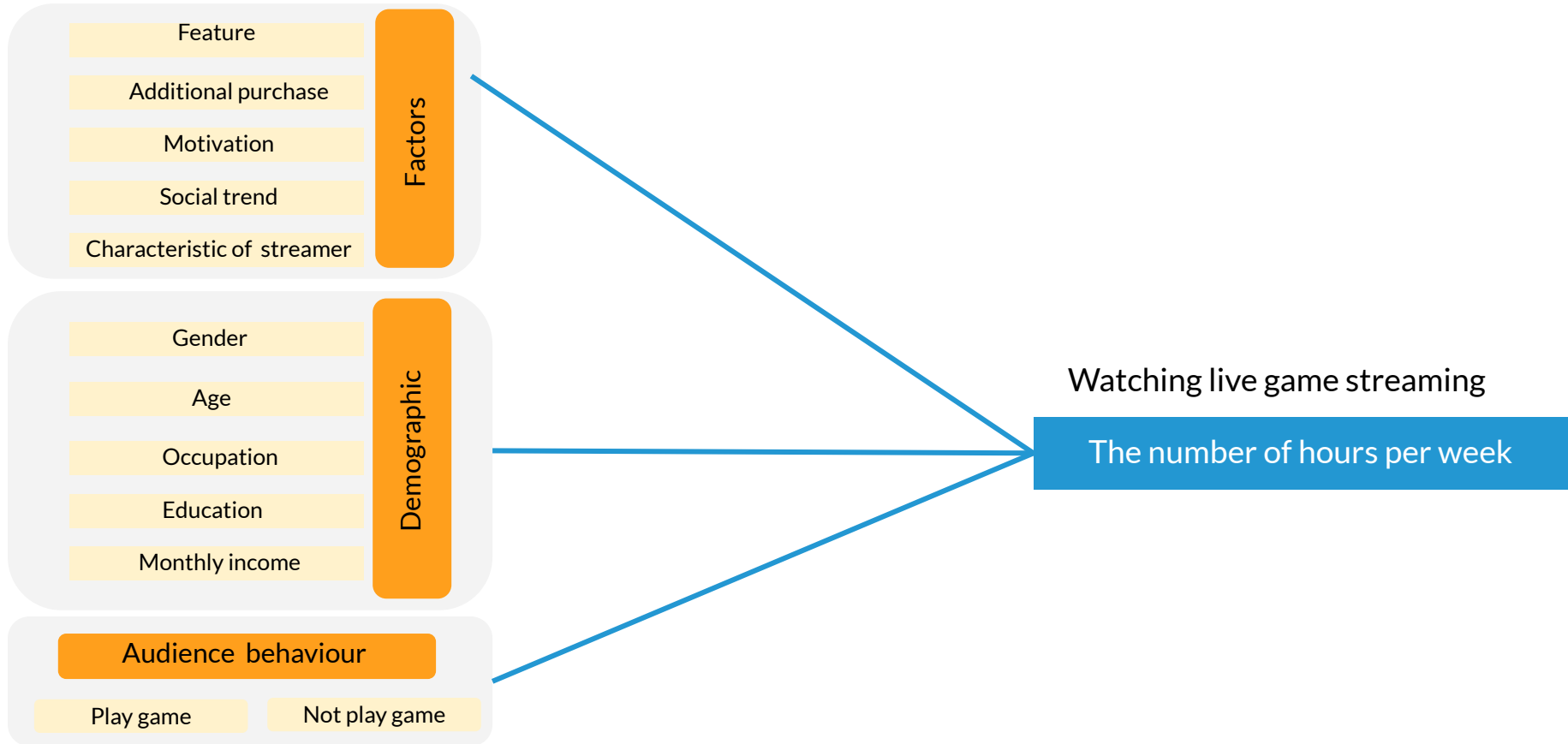


Regression analysis

### Dependent variable

Use of live game streaming platform

# Methodology ( Conceptual Framework )



# Methodology ( Conceptual Framework )

## Regression model

**The number of hours / week** =  $\beta_0 + \beta_1 \text{playgame} + \beta_2 \text{gender} + \beta_3 \text{age} + \beta_4 \text{occupation} + \beta_5 \text{edu} +$   
 $\beta_6 \text{income} + \beta_7 \text{streamercha\_age} + \beta_8 \text{streamercha\_gender} + \beta_9 \text{streamercha\_sty} + \beta_{10} \text{sc\_ff} + \beta_{11} \text{sc\_celeb}$   
 $+ \beta_{12} \text{sc\_scnw} + \beta_{13} \text{ft\_content} + \beta_{14} \text{ft\_game} + \beta_{15} \text{rewa} + \beta_{16} \text{ft\_easy} + \beta_{17} \text{ft\_chat} +$   
 $\beta_{18} \text{ft\_device} + \beta_{19} \text{ft\_event} + \beta_{20} \text{add\_subprice} + \beta_{21} \text{addp\_rewprice} + \beta_{22} \text{addp\_method} + \beta_{23} \text{moti\_info}$   
 $+ \beta_{24} \text{ft\_moti\_ent} + \varepsilon_i$

# Methodology

## Conducting questionnaires

1

Screening Question

One choice questions

2

Audience behaviour

Multiple choice questions , open -end questions

3

Factors that affecting audience's selecting live game streaming platform

Important rating questions

Rating scale	1	2	3	4	5
Meaning	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

4

Demographic information

One choice questions

# Methodology (Questionnaires)

1

## Screening Question

Have you ever play video game ?



Have you ever watch live game streaming ?

2

## Audience behaviour

- How many hours do you normally watch live game streaming ?  
(hrs/session , session / week, hrs/week )
- What devices do you use to watch live game streaming ?
- What types of games do you watch live game streaming
- Which platform do you use to watch live game streaming ?
- How did you get to use live game streaming platform ?

# Methodology (Questionnaires)

3

Factors that affecting audience's selecting live game streaming platform

Variables	Survey questions
1. Streamer characteristics	Age of streamers
	Gender of streamers
	Style of playing of streamers
2. Social trend	Friend
	Influencers / Celebrity
	Social network

Variables	Survey questions
3. Feature	Type of content
	Types of game
	Rewarding / Donation
	Easy to use
	Chatting / interaction with streamer and audience
	Accessing in many devices such as Tablet , Smartphone , PC , Laptop
	Special game streaming or special event ( E-sport event)

# Methodology (Questionnaires)

3

Factors that affecting audience's selecting live game streaming platform

Variables	Survey questions
4.Additional purchase	Price of subscription
	Price of rewarding
	Variety methods of purchasing
5.Motivation	Information
	Entertainment

4

Demographic information

- Gender
- Age
- Education
- Occupation
- Monthly income

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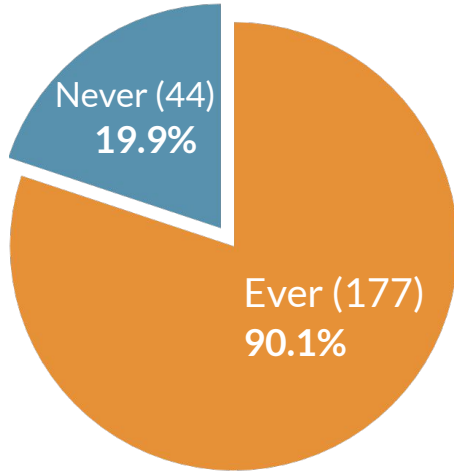
# Findings

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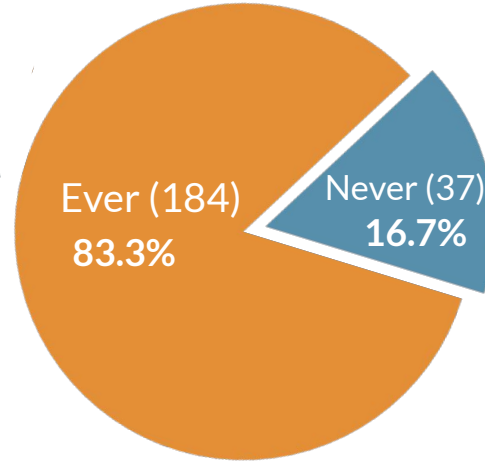
# Findings

Total respondents = 221

Have you ever play video games ?



Have you ever watch live game streaming ?



People who ever watch live game streaming = 184

# Findings ( Demographic data)

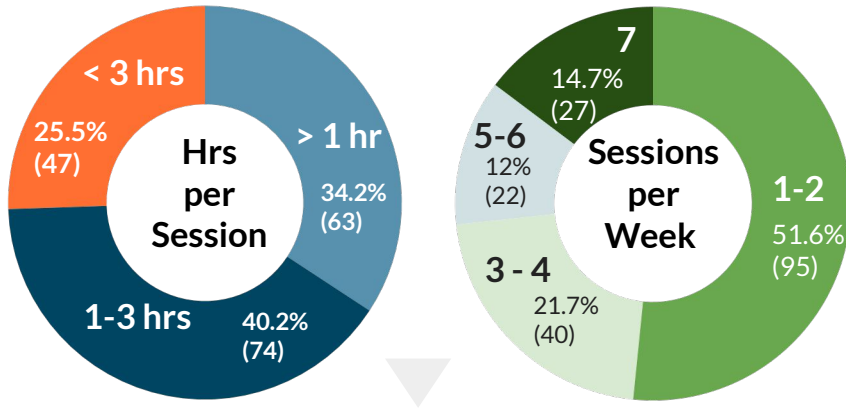
Data	Amount	(%)
<b>1. Gender</b>		
Female (1)	120	65.2%
Male (0)	64	34.8%
<b>2. Age</b>		
Teen (0)	121	65.8%
Under age of 18	43	23.4%
18 - 22 years old	78	42.4%
Adult (1)	63	34.3%
23 - 27 years old	45	24.5%
28 - 32 years old	7	3.8%
Over 33 years old	11	6%
<b>3. Occupation</b>		
Student	134	72.8%
Business owner	7	3.8%
Office worker	22	12%
Government / State Enterprise	9	4.9%
Freelancer	12	6.5%

Data	Amount	(%)
<b>4. Education</b>		
Below than high school (0)	52	28.2%
Below High school (0)	3	1.6%
High school	49	26.6%
Above Bachelor's degree (1)	132	71.8%
Bachelor's Degree	116	63%
Over Bachelor's Degree	16	8.7%
<b>5.Monthly income</b>		
Less than 30,000 Baht (0)	164	89.1%
Less than 15,000 Baht	118	64.1%
15,001 - 30,000 Baht	46	25%
More than 30,001 Baht (1)	20	10.9%
30,001 - 45,000 Baht	8	4.3%
45,001 - 60,000 Baht	3	1.6%
More than 60,000 Baht	9	4.9%

Demographic Data

# Findings ( Audience's behavioural data)

How long do you spend on watching live game streaming?

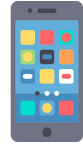


The number of hours per week ( Independent variable)

hrsperwk	Mean	Min	Max	SD
	9.122	1.5	28	8.893

Device

Data	Amount	%
Smartphone	161	87.5%
PC	91	49.5%
Tablets	71	38.6%
Smart TV	32	17.4%
Playstation,Xbox	6	3.3%
Others	7	3.8%



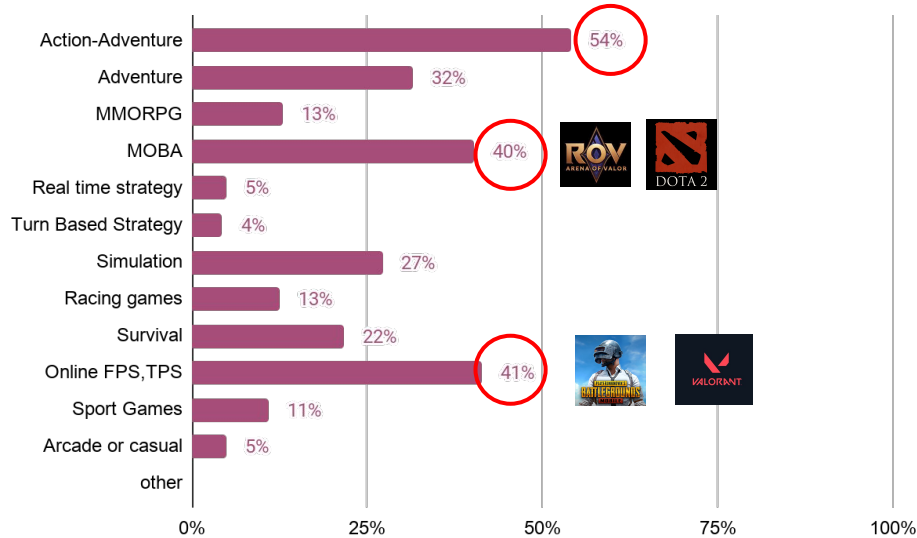
Platform

Data	Amount	%
Youtube gaming	130	70.7%
Facebook gaming	28	15.2%
Twitch	26	14.1%

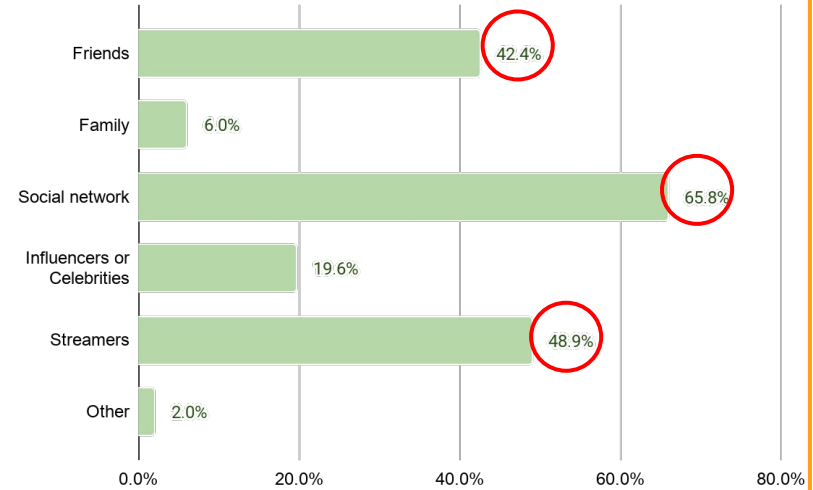


# Findings ( Audience's behavioural data)

## Kinds of game



## How to know the platform



# Findings ( Factors data)

Factors	Mean	SD	Average rating
1. Streamer characteristic			
streamercha_age	2.571	1.252	Neutral
streamercha_gender	2.380	1.231	Disagree
<b>streamercha_style</b>	<b>4.288</b>	<b>1.039</b>	<b>Agree</b>
2. Social trend			
Friend and family	2.728	1.286	Neutral
Influencer / Celebrities	2.886	1.282	Neutral
<b>Social network</b>	<b>2.897</b>	<b>1.274</b>	<b>Neutral</b>

Factors	Mean	SD	Average rating
3. Features			
feature_content	4.125	0.987	Agree
<b>feature_game</b>	<b>4.255</b>	<b>0.967</b>	<b>Agree</b>
feature_reward	2.592	1.216	Neutral
feature_easy	3.924	1.157	Agree
feature_chat	3.380	1.321	Neutral
feature_devices	4.076	1.048	Agree
feature_event	3.005	1.320	Neutral

# Regression Results

Source	SS	df	MS	Number of obs =	184
Model	4742.30238	27	175.640829	F(27, 156) =	2.82
Residual	9730.44626	156	62.3746555	Prob > F =	0.0000
				R-squared =	0.3277
				Adj R-squared =	0.2113
Total	14472.7486	183	79.0860581	Root MSE =	7.8978

hrperweek	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
playgame	1.353546	2.044016	0.66	0.509	-2.683974 5.391066
gender	2.212218	1.418121	1.56	0.121	-.588978 5.013414
age	-2.489641	1.902467	-1.31	0.193	-6.24756 1.268279
student	-4.822633	3.568533	-1.35	0.179	-11.87151 2.226246
business	0	(omitted)			
office	-3.353742	3.801976	-0.88	0.379	-10.86374 4.156254
gov	4.312896	4.494484	0.96	0.339	-4.565001 13.19079
freelance	.237445	4.168615	0.06	0.955	-7.996768 8.471658
edu	.1183962	1.480668	0.08	0.936	-2.806349 3.043141
income	2.971384	2.271728	1.31	0.193	-1.515932 7.458699
streamer_age	-1.540542	.5865775	-2.63	0.009	-2.699201 -.3818825
streamer_gender	.698988	.6100689	1.15	0.254	-.5060735 1.90405
streamer_sty	-.7937894	.8620379	-0.92	0.359	-2.496562 .9089833
sc_ff	-.1029509	.6278628	-0.16	0.870	-1.34316 1.137259
sc_celeb	.356389	.672877	0.53	0.597	-.9727365 1.685515
sc_scnw	-.2296589	.6512639	-0.35	0.725	-1.516092 1.056775
ft_content	-1.55672	.9188886	-1.69	0.092	-3.371789 .258349
ft_game	-.0599049	1.020896	-0.06	0.953	-2.076469 1.956659
ft_reward	-.2474179	.747161	-0.33	0.741	-1.723276 1.22844
ft_easy	-.8642201	.7925717	-1.09	0.277	-2.429777 .701337
ft_chat	1.442964	.646833	2.23	0.027	.1652831 2.720645
ft_device	1.615822	.9824514	1.64	0.102	-.3248023 3.556445
ft_event	.321984	.6581561	0.49	0.625	-.9780635 1.622031
addp_subprice	-.5870257	.742593	-0.79	0.430	-2.05386 .879809
addp_rewprice	-.3460595	.9051935	-0.38	0.703	-2.134077 1.441958
addp_method	.1463369	.7701274	0.19	0.850	-1.374886 1.66756
moti_info	-.7783601	.7064645	-1.10	0.272	-2.173831 .6171103
moti_ent	2.828991	.9302882	3.04	0.003	.9914039 4.666577
_cons	7.683965	5.45575	1.41	0.161	-3.09271 18.46064

Behavioral

Demographic

Factors



- R square 37.94 %
- With 95% confidence interval

## Statistically significant factors

From the regression model,  
**Demographic**


- No significant impact  
**Factor ( based on literature review )**
- Age of streamers
- Chatting feature
- Entertainment motivation

# Regression Results ( each factors) - 1

Factors	Coefficient	P-value	Result
<b>Streamer characteristic</b>			
 streamer_age	-1.540	0.009	Statistically significant
streamer_gender	0.699	0.254	Not statistically significant
streamer_sty	-0.793	0.359	Not statistically significant
<b>Motivation</b>			
moti_info	-0.778	0.272	Not statistically significant
 moti_ent	2.828	0.003	Statistically significant

- In streamer characteristic part, age of streamer statistically significant with 95% confidence interval by negative coefficient -1.540 which be negative impact to hour watched
- On contrary, Only Entertainment motivation has positively coefficient 2.568 and statistically significant with the hour watched

# Results ( each factors) - 2

Factors	Coefficient	P-value	Result
Feature			
ft_content	-1.557	0.092	Not statistically significant
ft_game	-0.060	0.953	Not statistically significant
ft_reward	-0.248	0.741	Not statistically significant
ft_easy	-0.864	0.277	Not statistically significant
 ft_chat	1.445	0.027	Statistically significant
ft_device	1.616	0.102	Not Statistically significant
ft_event	0.322	0.625	Not statistically significant

- Chatting feature has statistically significant impact on the number of hours per week by positively coefficient 1.445 that mean this feature can encourage people to watch more by 1.44 hours per week

# Implication



Demographic play no role in decision making process of users to watch game live streaming while



In user's behavior people who ever play game have not significant effect to the hours watched live game streaming



Age of streamers is significant factor that has negative impact on hours usage of live game streaming audiences  
(~ 3 hrs/week)

People tend to watch more ( 2 hrs/week) when streamers are younger.  
People tend to watch less when streamers are older. (3)



Chatting feature and Entertainment motivation are the key factors that can contribute audience to watch live game streaming more 2.4 ,2.5 hrs per week respectively. (1,2)

# Conclusion

## 1. The key factors that influence time spending of people on watching live game streaming

Demographic and behavior factors: no significant impact with the hour watched

Keys Factors : Characteristics of streamer ( age of streamer ) , Feature ( Chatting) and Entertainment motivation

## 2. Impact of subscription fee

The additional purchasing factors include subscription price , rewarding price and methods of purchasing have no significant impact to users in terms of the hours watched

## 3. Impact of user preference on watching live game streaming.

- People who prefer to watch younger streamers tend to spend more time to watch live game streaming.
- More interaction which is chatting on the live game streaming platform, the number of hours watched will increase more.
- People who prefer to watch live game streaming as a ways to relieve stress or entertainment will watch more ( hours watched)

# Suggestion for the further study and Limitation

## Suggestion for the further study

- Collect larger sample size
- Add more variable to make results more precise
- Observe more about latest feature and function in live game streaming platform due to expanding of technologies

## Limitations

Time  
constraint

Limited  
sample size

**Thank You**

---

# Appendix

# Appendix (Questionnaires)

1

## Screening Question

คุณเคยเล่นวิดีโอเกมส์หรือไม่ \*

- เคย
- ไม่เคย

คุณเคยรับชมการ Live game streaming หรือไม่ \*

- เคย
- ไม่เคย

# Appendix (Questionnaires)

## 2

### Audience behaviour

ส่วนที่ 2 แบบทดสอบเกี่ยวกับพฤติกรรมการรับชม Live game streaming platform

คำชี้แจง : กรุณาเลือกคำตอบตามคำจริง

1. คุณใช้เวลาในการรับชมการสตรีมเกมส์กี่ ชม ต่อครั้ง ? \*

- น้อยกว่า 1 ชม
- 1 - 3 ชม
- มากกว่า 3 ชม

2. คุณใช้เวลาในการรับชมสตรีมเกมส์กี่ครั้งต่อสัปดาห์ ? \*

- 1-2 ครั้ง
- 3-4 ครั้ง
- 5-6 ครั้ง
- ทุกวัน

3. คุณใช้อุปกรณ์อะไรในการรับชมการสตรีมเกมส์ ? ( เลือกได้มากกว่า 1 คำตอบ ) \*

- Smartphone
- PC
- Tablets
- Smart TV
- Playstation, Xbox
- อื่นๆ

# Appendix (Questionnaires)

## 2

### Audience behaviour

4. คุณรับชมการสตรีมเกมสัปดาห์ไหน ? ( เลือกได้มากกว่า 1 คำตอบ ) \*

- Action-Adventure เช่น Assassin's Creed
- Adventure เช่น Ghost of Tsushima , Watch Dogs
- MMORPG เช่น Ragnarok
- MOBA เช่น ROV, LOL , DOTA
- Real Time Strategy เช่น warcraft
- Turn Based Strategy เช่น PANZER CORPS
- Simulation เช่น The Sims
- Racing Games ( เกมสัขัรบรถ )
- Survival เช่น Minecraft
- Online FPS ,TPS เช่น PUB, Valorant
- Sport Games เช่น FIFA, NBA2K
- Arcade or casual เช่น จับผิดภาพ เรียงเพชร
- Other

5. คุณรับชมการสตรีมเกมสัผ่านช่องทางไหน ? ( มากที่สุด ) \*

- Twitch
- Youtube gaming
- Facebook gameing
- Other: \_\_\_\_\_

จากข้อ 5 , คุณรู้จักช่องทางนั้นจากทางไหน? ( เลือกได้มากกว่า 1 คำตอบ ) \*

- เพื่อน
- ครอบครัว
- Social network
- influencers หรือ Celebrities
- Streamers
- Other: \_\_\_\_\_

# Appendix (Questionnaires)

## 3

### Factors that affecting audience's selecting live game streaming platform

ส่วนที่ 3 ปัจจัยที่มีอิทธิพลต่อการเลือกชม Live game streaming platform

คำชี้แจง : กรุณาเลือกคำตอบตามค่าจริง

ปัจจัยที่มีอิทธิพลต่อการเลือกชม Live game streaming platform

เรียงลำดับจาก 1-5 โดย : เห็นด้วยมาก= 5, เห็นด้วย = 4, ปานกลาง = 3, ไม่เห็นด้วย = 2, ไม่เห็นด้วยมาก = 1

คุณคิดว่าปัจจัยนี้ส่งผลกระทบต่อตัดสินใจในการเลือกชม live game streaming platform ( steamer's characteristic) \*

	1	2	3	4	5
อายุของสตรีมเมอร์	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
เพศของสตรีมเมอร์ส่งผลกระทบต่อตัดสินใจในการเลือกดู live game streaming platform	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
รูปแบบ(สไตล์)การเล่นของสตรีมเมอร์ เช่น ทักษะการเล่น	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

คุณคิดว่าปัจจัยนี้ส่งผลกระทบต่อตัดสินใจในการเลือกชม live game streaming platform ( Feature) \*

	1	2	3	4	5
ประเภทของเนื้อหา เช่น เล่นเกมอย่างเดียว หรือ เล่นเกมและชวนคุย	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ประเภทของเกมสล็อตสตรีม	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
การให้รางวัลหรือบริจาคแก่สตรีมเมอร์ (rewarding /donation)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
รูปแบบของ Platform ง่ายต่อการใช้งาน	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
การแชทถึงสตรีมเมอร์ หรือ ผู้ชมด้วยกัน	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
การเข้าถึงของ platform ได้หลายอุปกรณ์ เช่น Tablets , PC ,โทรศัพท์	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
กิจกรรมพิเศษ เช่น Esport event หรือ วิดีโอพิเศษ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

# Appendix (Questionnaires)

## 3

### Factors that affecting audience's selecting live game streaming platform

คุณคิดว่าปัจจัยนี้ส่งผลต่อการตัดสินใจในการเลือกชม live game streaming platform (Additional purchase) \*

	1	2	3	4	5
ราคาของการสมัครสมาชิก หรือ Subscription (การติดตาม)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ราคาของรางวัลที่ให้สตรีมเมอร์ เช่น Star , แพคเกจรางวัล	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ความหลากหลายของช่องทางชำระ เช่น Paypal , True money wallet , Qr code	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

คุณคิดว่าปัจจัยนี้ส่งผลต่อการตัดสินใจในการเลือกชม live game streaming platform (Motivation) \*

	1	2	3	4	5
แรงจูงใจจากการอยากหาความรู้ ศึกษาวิธีการเล่น และอื่นๆ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
แรงจูงใจจากความสนุกสนาน หรือ ปลดปล่อยความตึงเครียด	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

# Appendix (Questionnaires)

## 4

### Demographic information

#### ส่วนที่ 4 ข้อมูลส่วนบุคคล

คำชี้แจง : กรุณาเลือกคำตอบตามความจริง

#### เพศ \*

- ชาย
- หญิง
- ไม่ต้องการระบุ
- Other: \_\_\_\_\_

#### อายุ \*

- ต่ำกว่า 18
- 18 - 22 ปี
- 23 - 27 ปี
- 28 - 32 ปี
- มากกว่า 33 ปี

#### อาชีพ \*

- นักเรียน / นักศึกษา
- ธุรกิจส่วนตัว / เจ้าของกิจการ
- พนักงานบริษัทเอกชน
- ข้าราชการ / พนักงานรัฐวิสาหกิจ
- ประกอบอาชีพอิสระ

#### ระดับการศึกษา ในปัจจุบัน \*

- ต่ำกว่ามัธยม
- มัธยมศึกษา
- ปริญญาตรี
- สูงกว่าปริญญาตรี

#### รายได้ต่อเดือน \*

- ต่ำกว่า 15,000
- 15,001 - 30,000 บาท
- 30,001 - 45,000 บาท
- 45,001 - 60,000 บาท
- มากกว่า 60,000 บาท

# Appendix (STATA)- summarize overall

```
. summarize hrperweek
```

Variable	Obs	Mean	Std. Dev.	Min	Max
hrperweek	184	9.122283	8.893034	1.5	28

```
. summarize playgame gender age occupation edu income
```

Variable	Obs	Mean	Std. Dev.	Min	Max
playgame	184	.8913043	.3121062	0	1
gender	184	.6847826	.4998218	0	2
age	184	1.266304	1.050504	0	4
occupation	184	.6847826	1.240741	0	4
edu	184	1.788043	.6128572	0	3
income	184	.5815217	1.010267	0	4

```
. summarize avg_streamercha avg_socialtrend avg_feature avg_addpurchase avg_motivate
```

Variable	Obs	Mean	Std. Dev.	Min	Max
avg_streamercha	184	3.07971	.837595	1	5
avg_socialtrend	184	2.836957	1.063833	1	5
avg_feature	184	3.622671	.8020498	1	5
avg_addpurchase	184	2.871377	1.128535	1	5
avg_motivate	184	4.008152	.9430151	1	5

# Appendix (STATA)- summarize each factor

```
. summarize streamer_age streamer_gender streamer_sty sc_ff sc_celeb sc_scnw f  
> t_content ft_game ft_reward ft_easy ft_chat ft_device ft_event addp_subprice  
> addp_rewprice addp_method moti_info moti_ent
```

Variable	Obs	Mean	Std. Dev.	Min	Max
streamer_age	184	2.570652	1.252498	1	5
streamer_gender	184	2.380435	1.231113	1	5
streamer_sty	184	4.288043	1.039477	1	5
sc_ff	184	2.728261	1.285508	1	5
sc_celeb	184	2.88587	1.281655	1	5
sc_scnw	184	2.896739	1.274032	1	5
ft_content	184	4.125	.9865904	1	5
ft_game	184	4.255435	.9666419	1	5
ft_reward	184	2.592391	1.21563	1	5
ft_easy	184	3.923913	1.15691	1	5
ft_chat	184	3.380435	1.321056	1	5
ft_device	184	4.076087	1.047857	1	5
ft_event	184	3.005435	1.32028	1	5
addp_subprice	184	3.048913	1.277292	1	5
addp_rewprice	184	2.63587	1.24708	1	5
addp_method	184	2.929348	1.334866	1	5
moti_info	184	3.777174	1.135286	1	5
moti_ent	184	4.23913	1.049273	1	5

# Variables ( dependent )

Factors	Variable	Definition
Dependent variable		
Time spending ( hour / week)	hrperweek	Average time spending of watching live game streaming ( hours per week)
Independent variable ( Behavioral information )		
Ever play video game or not ?	playgame	Have you ever play video games ? (1 = ever played game , 0 = never played video game)

# Variables ( independent -demographic )

Factors	Variable	Definition
Independent variable ( demographic )		
Gender		
Female gender	gender_f	female=1, if not =0
Male gender	gender_m	male=1, if not = 0
Other gender	gender_o	other=1, if not = 0
Age		
Age less than 18 years old	age_less18	people who age less 18 years old = 1, if not = 0
Age between 18 and 22 years old	age18_22	people who age between 18 and 22 = 1, if not = 0
Age between 23 and 27 years old	age23_27	people who age between 23 and 27 = 1, if not = 0
Age between 28 and 33 years old	age28_33	people who age between 28 and 33 = 1, if not = 0
Age more than 33 years old	age_more33	people who age more than 33 = 1, if not = 0

# Variables ( independent -demographic )

Factors	Variable	Definition
<b>Occupation</b>		
Student	student	student = 1, if not =0
Business owners / Entrepreneur	business	Business owner or Entrepreneur =1, if not =0
Office worker	office	office worker=1, if not = 0
Government worker	gov	government worker=1, if not = 0
Freelance	freelance	freelance =1, if not = 0
<b>Education</b>		
Lower than high school	edu_lowhigh	Lower than high school = 1, if not = 0
Highschool	edu_high	high school = 1, if not = 0
Bachelor degree	edu_bach	bachelor degree = 1, if not = 0
Above Bachelor degree	edu_abvbach	Above bachelor degree = 1, if not = 0

# Variables ( independent -demographic )

Factors	Variable	Definition
Level of monthly income		
Below 15,000 baht	inc_less15000	Less than 15,000 baht = 1, if not =0
Between 15,001 - 30,000 baht	inc15013000	Between 15,001 and 30,000 baht = 1, if not =0
Between 30,001- 45,000 baht	inc30014500	Between 30,001 and 45,000 baht = 1, if not = 0
Between 45,001- 60,000 baht	inc45016000	Between 45,001 and 60,000 baht = 1, if not = 0
More than 60,000 baht	inc_more6000	More than 60,000 baht =1 , if not = 0

# Variables ( independent - Factors )

Factors	Variable	Definition
Factors that affecting audience's watching live game streaming platform ( uses and gratification theory )		
<b>1. Streamer characteristic</b>		
1.1 Age of streamers	streamer_age	Age of streamers can influence decision of watching Live game streaming ( 1= Strongly Disagree 2.=Disagree 3 =Neutral 4 = Agree 5 = Strongly Agree )
1.2 Gender of streamers	streamer_gender	Gender of streamers can influence decision of watching Live game streaming ( 1= Strongly Disagree 2.=Disagree 3 =Neutral 4 = Agree 5 = Strongly Agree )
1.3 Style playing game of streamers	streamer_sty	Style playing game of streamers can influence decision of watching Live game streaming ( 1= Strongly Disagree 2.=Disagree 3 =Neutral 4 = Agree 5 = Strongly Agree )
<b>2. Social trend</b>		
2.1 Friends or Family	sc_frd	Friend or Family can influence decision of watching Live game streaming ( 1= Strongly Disagree 2.=Disagree 3 =Neutral 4 = Agree 5 = Strongly Agree )
2.2 Celebrities or influencers	sc_celeb	Celebrities or influencers can influence decision of watching Live game streaming ( 1= Strongly Disagree 2.=Disagree 3 =Neutral 4 = Agree 5 = Strongly Agree )
2.3 Social network	sc_scnw	Social network can influence decision of watching Live game streaming ( 1= Strongly Disagree 2.=Disagree 3 =Neutral 4 = Agree 5 = Strongly Agree )

# Variables ( independent - Factors )

Factors	Variable	Definition
Factors that affecting audience's watching live game streaming platform ( uses and gratification theory )		
<b>3. Feature</b>		
3.1 Types of content	ft_content	Types of content can influence decision of watching Live game streaming ( 1= Strongly Disagree 2.=Disagree 3 =Neutral 4 = Agree 5 = Strongly Agree )
3.2 Types of game	ft_game	Types of game can influence decision of watching Live game streaming ( 1= Strongly Disagree 2.=Disagree 3 =Neutral 4 = Agree 5 = Strongly Agree )
3.3 Rewarding feature	ft_reward	Rewarding feature can influence decision of watching Live game streaming ( 1= Strongly Disagree 2.=Disagree 3 =Neutral 4 = Agree 5 = Strongly Agree )
3.4 Easy to use	ft_easy	Easy to use of each feature can influence decision of watching Live game streaming ( 1= Strongly Disagree 2.=Disagree 3 =Neutral 4 = Agree 5 = Strongly Agree )
3.5 Chatting feature	ft_chat	Chatting feature can influence decision of watching Live game streaming ( 1= Strongly Disagree 2.=Disagree 3 =Neutral 4 = Agree 5 = Strongly Agree )
3.6 Accessible of variety devices	ft_device	Variety of accessible devices can influence decision of watching Live game streaming ( 1= Strongly Disagree 2.=Disagree 3 =Neutral 4 = Agree 5 = Strongly Agree )
3.7 Special events or content	ft_event	Special events or contents can influence decision of watching Live game streaming ( 1= Strongly Disagree 2.=Disagree 3 =Neutral 4 = Agree 5 = Strongly Agree )

# Variables ( independent - Factors )

Factors	Variable	Definition
Factors that affecting audience's watching live game streaming platform ( uses and gratification theory )		
<b>4. Additional purchase</b>		
4.1 Price of subscription	addp_subprice	Price of subscription can influence decision of watching Live game streaming ( 1= Strongly Disagree 2.=Disagree 3 =Neutral 4 = Agree 5 = Strongly Agree )
4.2 Price of rewarding	addp_rewprice	Price of rewarding can influence decision of watching Live game streaming ( 1= Strongly Disagree 2.=Disagree 3 =Neutral 4 = Agree 5 = Strongly Agree )
4.3 Variety methods of purchasing	addp_method	Variety methods of purchasing can influence decision of watching Live game streaming ( 1= Strongly Disagree 2.=Disagree 3 =Neutral 4 = Agree 5 = Strongly Agree )
<b>5. Motivation</b>		
5.1 Information seeking	moti_info	Information seeking motivation can influence decision of watching Live game streaming ( 1= Strongly Disagree 2.=Disagree 3 =Neutral 4 = Agree 5 = Strongly Agree )
5.2 Tension release / Entertainment	moti_ent	Tension release / Entertainment motivation can influence decision of watching Live game streaming ( 1= Strongly Disagree 2.=Disagree 3 =Neutral 4 = Agree 5 = Strongly Agree )