



DATA ANALYSIS CINEMA

EcoByte

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▶ READ ME FIRST

1. **Context:** May, 2019

2. **Objectives:** - Analyze business performance
- Propose business solutions

Label	Information
Customer information	
Customerid	<ul style="list-style-type: none">• A person who conducted the transaction
Gen Z	<ul style="list-style-type: none">• They were born between 1997 - 2013 (6-22 years old).<ul style="list-style-type: none">◦ Children: Below 16 years old.◦ Adolescents: From 16 to 18 years old.◦ Young adults: Above 18 years old.
Gen Y	<ul style="list-style-type: none">• They were born between 1980 - 1996.<ul style="list-style-type: none">◦ Adults: From 23 to 39 years old.
Gen X	<ul style="list-style-type: none">• They were born between 1970 - 1979.<ul style="list-style-type: none">◦ Old Adults: Above 40 years old.
Job	
Teenager	<ul style="list-style-type: none">• A person aged between 13 and 19 years.
Student	<ul style="list-style-type: none">• A person who is studying at a school or college.
Specialist	<ul style="list-style-type: none">• A role in which the person with that title is an expert in a specific area.
White Collar	<ul style="list-style-type: none">• A person who performs professional service, desk, managerial, or administrative work.
Blue Collar	<ul style="list-style-type: none">• a working-class person who performs manual labor or skilled trades.

Label	Information
Movie-going preference	
2 people	<ul style="list-style-type: none">• 2 people went to the cinema in 1 order
More than 2 people	<ul style="list-style-type: none">• More than 2 people went to the cinema in 1 order
Order preference	
Online	<ul style="list-style-type: none">• Order on app or website
Offline	<ul style="list-style-type: none">• Order at the counter
Offline Order Preferene	
Order less than 1 hour	<ul style="list-style-type: none">• Order under 1 hour compared to showtime
Order more than 1 hour	<ul style="list-style-type: none">• Order over 1 hour compared to showtime
Late order	<ul style="list-style-type: none">• Order during showtime

Executive Summary

Insights

- The revenue of a cinema usually depends on the **appeal** of the films and their **popularity** with the audience.
- Audience interests are focused on foreign films, especially from **Hollywood** and **action/adventure/science fiction** movies should be increased screening showtime from **7:00 PM to 9:00 PM**.
- **Selling popcorn** at the cinema had not been focused on and **less effective**.
- Lost potential chance to maximize revenue due to **low recognition in Gen Y** - our potential customer in May 2019.
- Nearly **90%** of customers did **not return** after their initial interaction.
- **83,7%** of customers tended to book movie tickets close to the screening time and paid at the cinema counter. It can reduce the customers' enthusiasm for watching movies and influence **their experience** at the cinema.

Solution

Short-term solutions

- Collaborate with film production to increase movie recognition.
- Intensify marketing strategy for family, friend-oriented films.
- Intensify marketing for family and coming-of-age genres film and schedule suitably.

Long-term solutions

- Schedule strategic film to align with customer preferences.
- Promote upselling popcorn sales to optimize the revenue.
- Increase engagement of millennials through multi-media marketing.
- Issue a gift card exclusively for the cinema's members.

OUTLINE

- 1 Executive summary
- 2 Overview
- 3 Company analysis & Recommendation
 - ▶ Sales performance
 - ▶ Marketing
 - ▶ Customer service
- 4 Short-term business solutions for June

Overview

Vietnam's demographics were favorable for its cinema market.

In Vietnam 2018,


 Population
96M
(2018)

 **15th** World's largest population

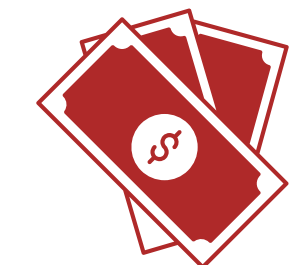
 **30%**
15 - 34 year-old Group

▶ Vietnam had many opportunities for entertainment aimed at young people.

In the Vietnam cinema market 2018,

 **3,200**
billion VND

 **42M**
views

Average ticket price
 **76,000**
VND

Source: [Vietnam Government Portal](#), [Mirae Asset](#) (2018).

Cinema Overview

Similarly, the cinema was **on the same trend in May, 2019**:

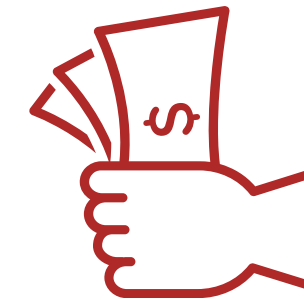


Total revenue

1.7
billion VND

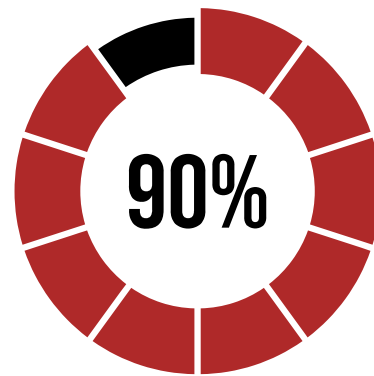


More than
4,500
customers

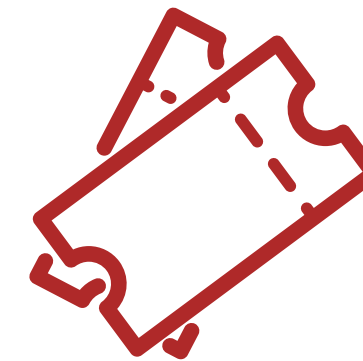


Average order value

117,000



Gen Z & Gen Y
(aged under 38
years old)



Average ticket price

48,000
VND



Unique selling point of the cinema was **low-priced tickets** and **young customers** were key factors.

Source: May, 2019 ([Dashboard](#))

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- 2 Company overview
- 3 Company performance analysis**
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 - ▶ Marketing
 - ▶ Customer service
- 4 Short-term business solutions in June

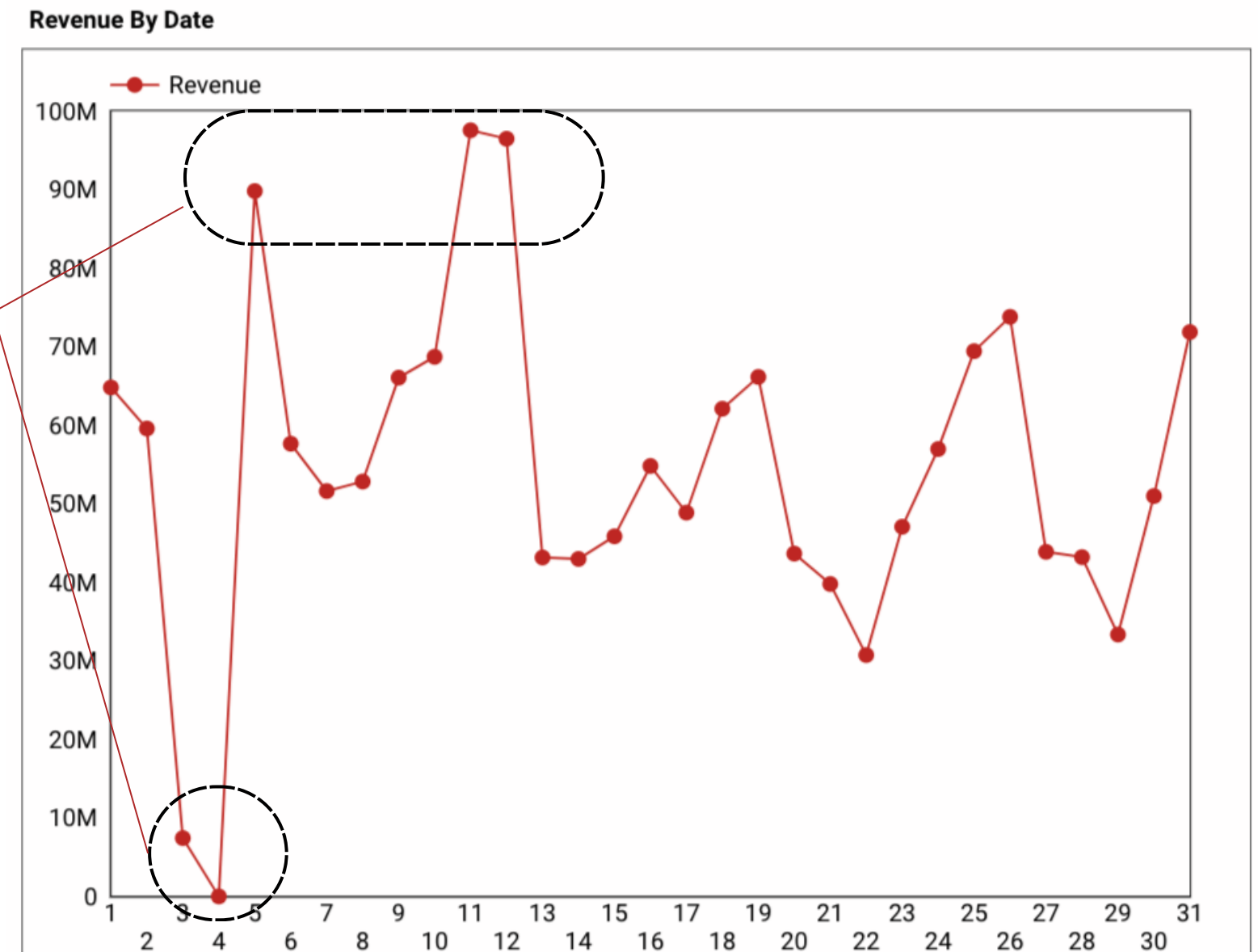
Data Analysis - Sales performance

Revenue fluctuated throughout the month, skyrocketing with Hollywood films in first two weeks.

- **Day 3** only recorded minor revenue in the morning, and **Day 4** had no earnings due to cinema closures in honor of former state president Le Duc Anh.
- Since revenue typically **increased** on weekends, **Day 5** saw a **rebound**. Box office takings **peaked** on the **11th** and **12th** of the month thanks to the influence of the highly successful films Avengers: Endgame (April 29th) and The Curse of Llalorona (April 19th).

▶ The revenue of a cinema usually depends on the **appeal** of the **films** and their **popularity** with the audience.

Film scheduling should be strategically determined and adjusted to align with customer preferences.



Source: May, 2019 ([Dashboard](#))

Source: [VTV \(2019\)](#), [Vietnamplus \(2019\)](#).

▶ Data Analysis - Sales performance

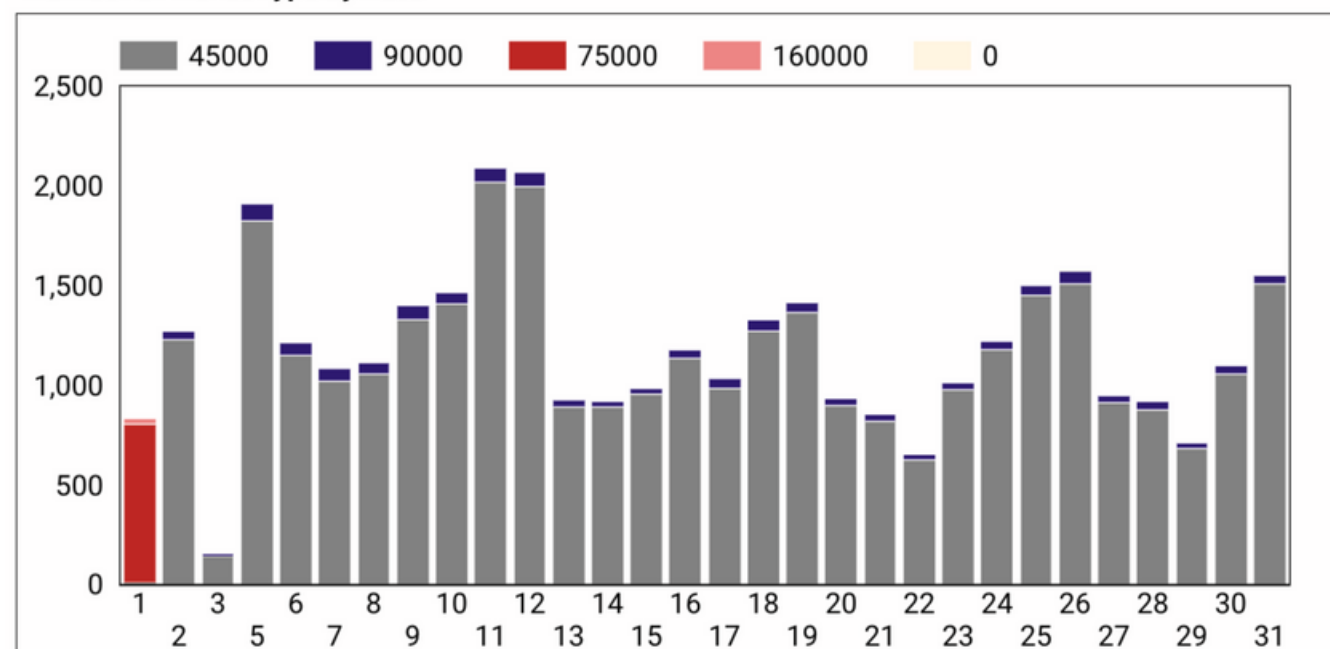
The cinema did not succeed in improve performance by increasing the ticket price

Although the cinema **increased the ticket price**,

Because May 1st - International Labour day (when all the workers and students usually have the break) they cinema:

- Increase single ticket type from 45,000 VNĐ to 75,000 VNĐ and couple one from 90,000 VNĐ to 160,000 VNĐ
- Last this campaign only on 1st May

Number of Ticket Type by Date

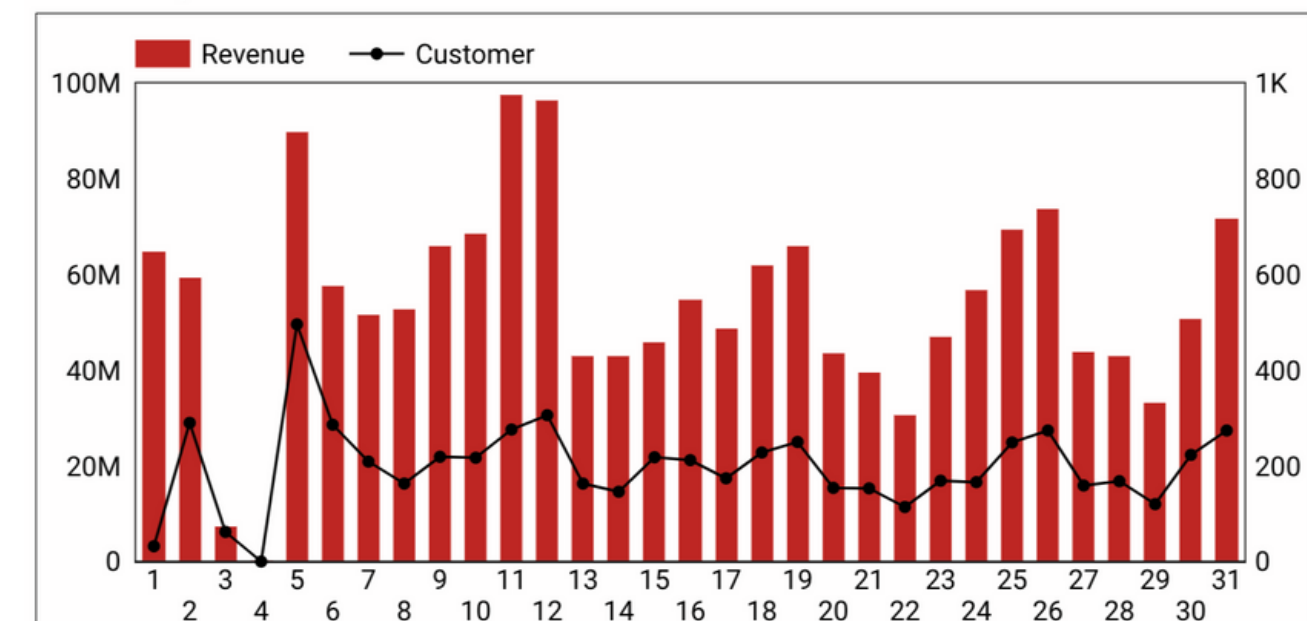


...the revenue **did not perform effectively**

However,

- The number of customers and revenue were not significant.
- There were only 8 million higher than daily average revenue (58M VNĐDD)

Revenue By Date



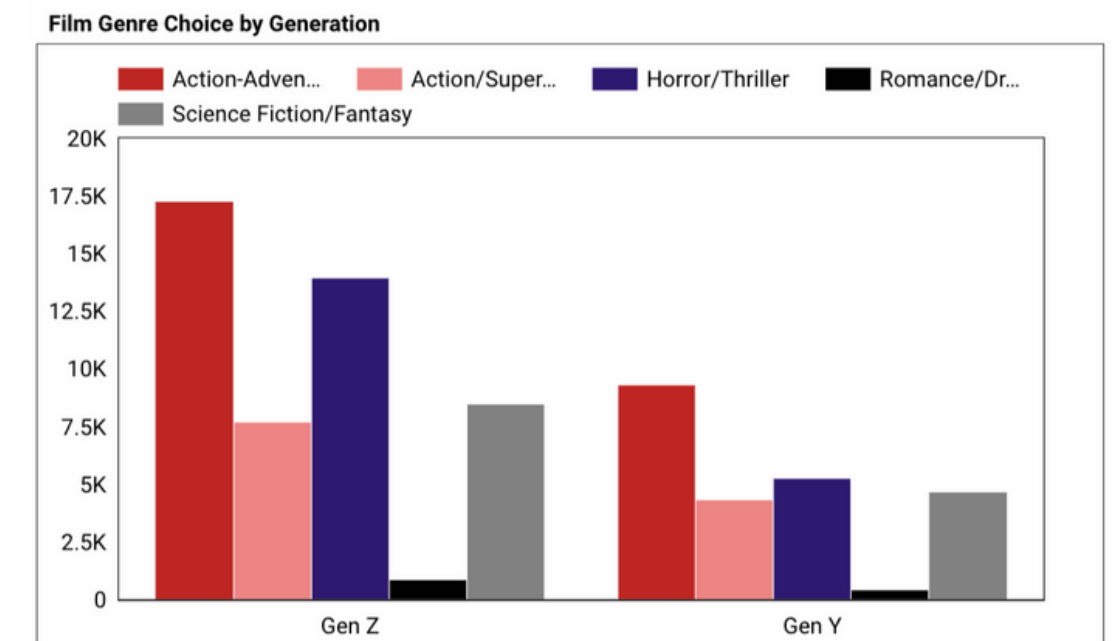
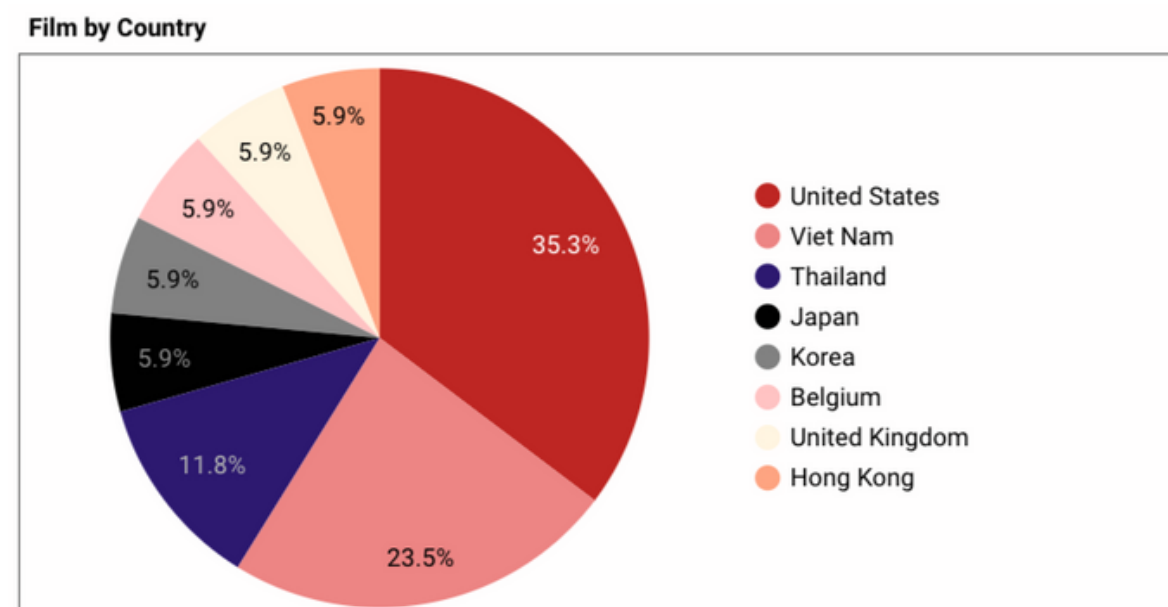
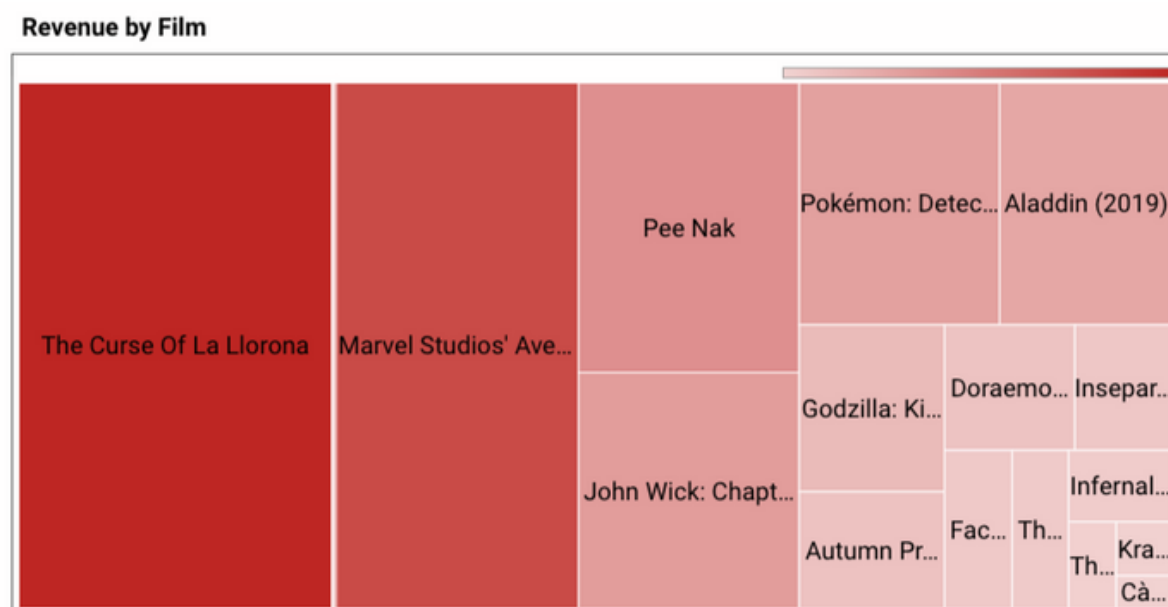
The cinema would lose its position in competitive advantage of low-priced strategy if it increased the price

► Data Analysis - Sales performance

The youth's preferences may be reflected in the film revenue and the genres of films being screened.

- Avengers: Endgame and The Curse of La Llorona contributed nearly **50%** of the total box office revenue in May 2019.
- The majority of high-grossing films came from the **U.S. market**.
- The young generation (Gen Z and Gen Y) had a strong preference for **action/superheroes/adventure, horror/thriller** compared to other genres.

► **Audience interests** are focused on foreign films, especially from **Hollywood** and **action/superheroes/adventure, horror/thriller** movies should be prioritized.



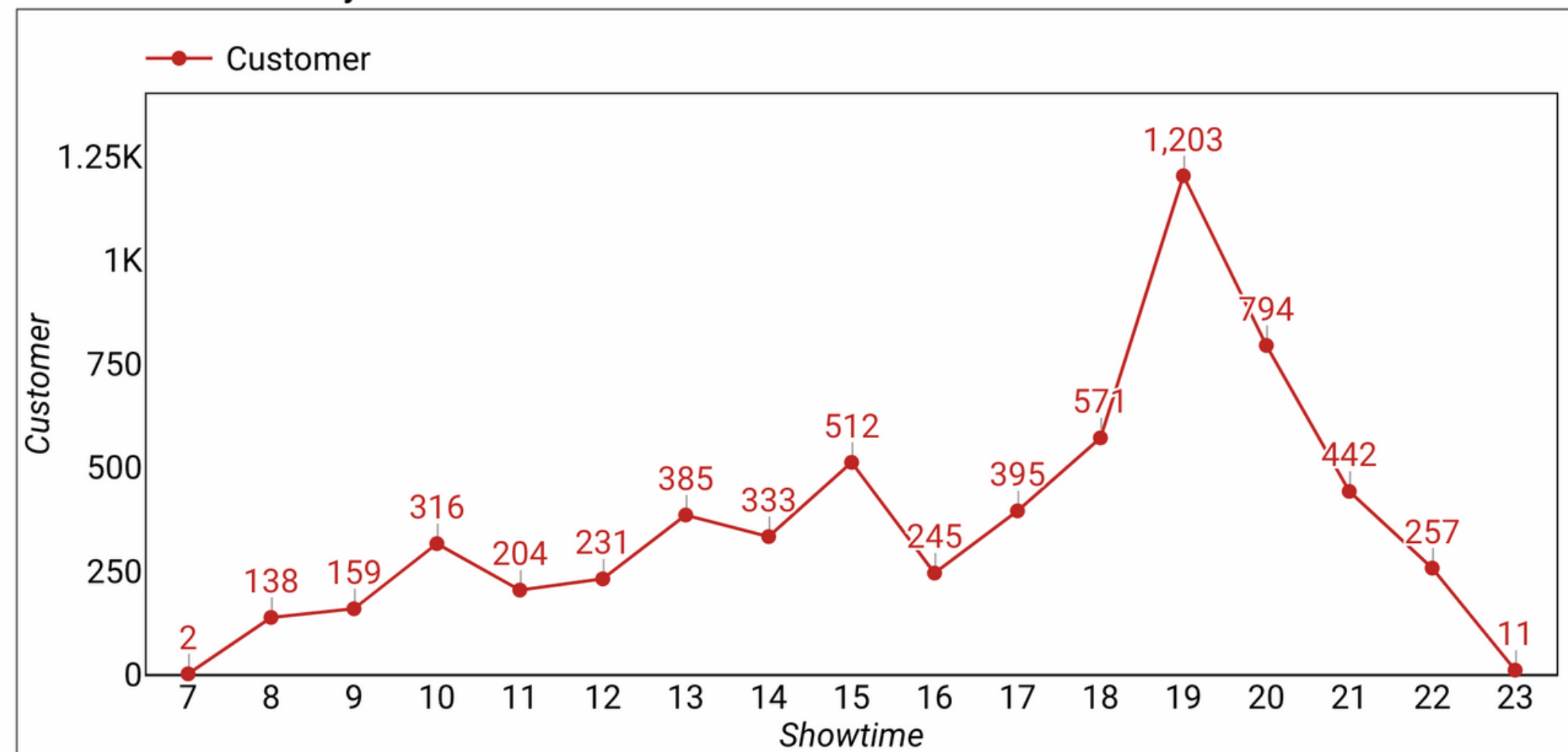
Source: May, 2019 ([Dashboard](#))

► Data Analysis - Sales performance

Customer-preferred films should be increased screening showtime at 3:00 PM and during the 7:00 PM to 9:00 PM

- The time when the highest number of customers was recorded was in the evening, within the time range from 7:00 pm to 9:00 pm.
- Additionally, 3:00 PM was also the time frame that attracted a significant number of customers (512 customers).

Number of Customer by Showtime

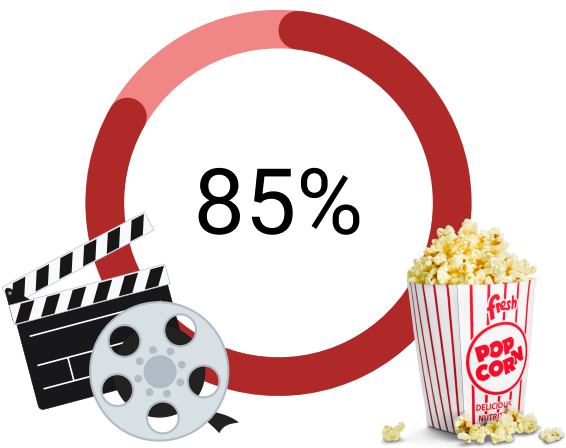


Source: May, 2019 (Dashboard)

▶ Data Analysis - Sales performance

The percentage of orders with popcorn was not significant, with only 36 orders out of a total of 14,598 (accounting for 0.25%).

- According to a study from Stanford GSB and the University of California, **85%** of the cinema's profit comes from the snack bar, with **popcorn** being the largest contributor.



▶ However, the data showed that **selling popcorn** at the cinema had **not been focused** on and had been **less effective**.

- A loss of consumption in popcorn may lead to suboptimal performance in box cinema revenue.

“Movie theaters make most of their profit from concessions, not ticket sales. This is because they keep all the profits from concessions, while they have to share ticket sales with movie distributors.”

Popcorn	Number of order	%Total
NO	14.562	99,75%
YES	36	0,25%

▶ **Promote upselling popcorn sales to optimize the revenue.**

Source: Stanford Business (2009).

► Data Analysis - Marketing

Lost potential chance to maximize revenue due to low recognition in GEN Y - our potential customer in May, 2019

- Although Gen Y and Gen X make up smaller proportion and hadn't shown significant interest in this service yet, due to alternative entertainment choices
- However, these age groups also comprised majorly family-oriented individuals with financial independence - a potential market opportunity

According to Nielsen report,

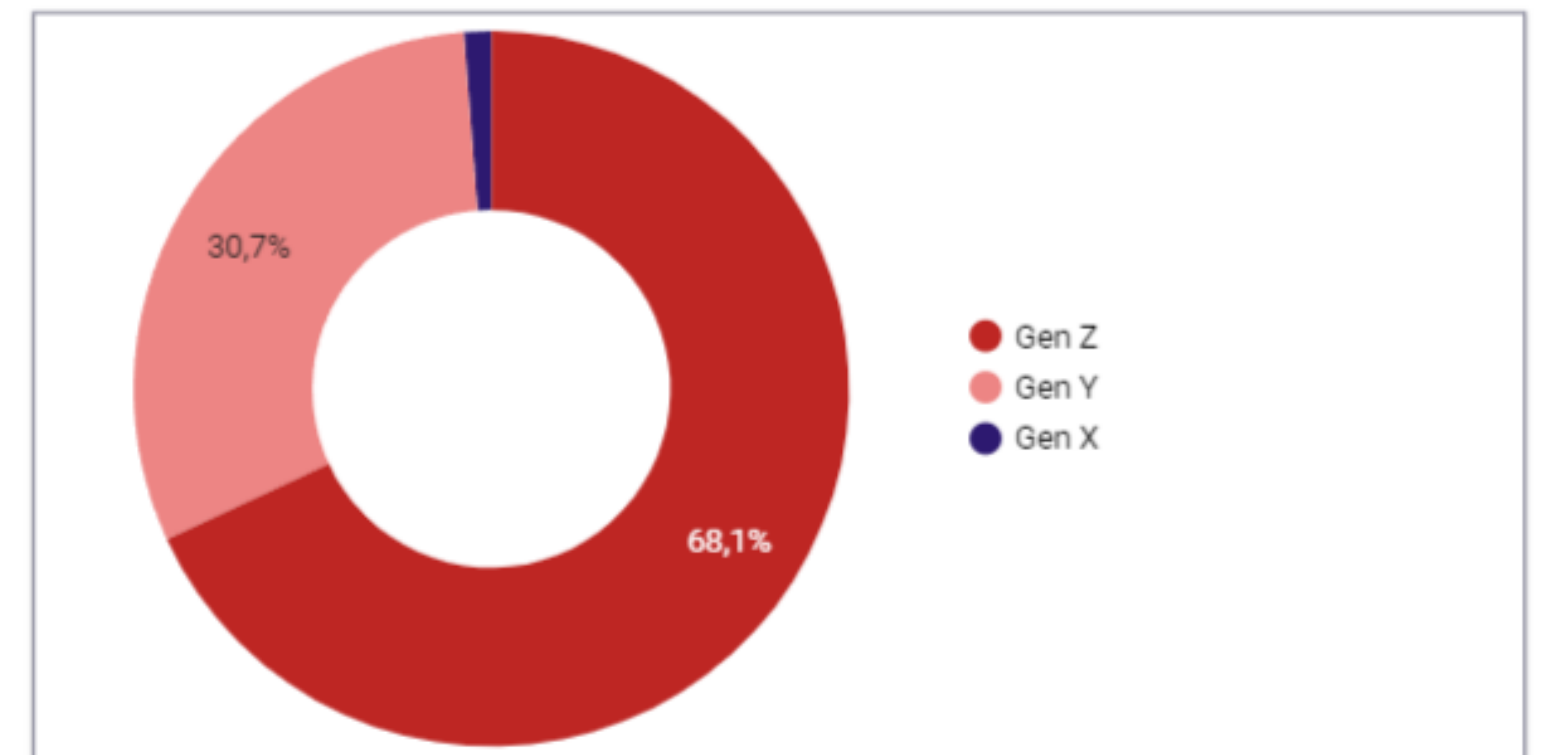
73% Millennials Use Their Phones to Shop Online.

98% Millennials Use Their Phones Everyday.

Increase engagement of Millennials through multi-media marketing.

Source: [Smart Insight \(2016\)](#)

Number of Customer by Generation



Source: May, 2019 ([Dashboard](#))

▶ Data Analysis - Marketing

Customer engagement strategies might be lacking in longer-term effectiveness.

Assuming they came to the movie theater for the first time in May 2019,

- Nearly **90%** of customers did not decide to use the service after their initial interaction
- Following the first return, more customers were churning, leading to a 1-5% decrease in the trend.

▶ There are many reasons why customers left, but the main cause could not be determined.

Conduct follow-up email survey/collect feedbacks or direct phonecall after the initial purchase to integrate customer’s needs

Retention rate in percentage

Cohort week	0	1	2	3	4
Week 18	100%	11%	13%	13%	8%
Week 19	100%	14%	15%	12%	
Week 20	100%	13%	11%		
Week 21	100%	11%			
Week 22	100%				

Only **8%** retained customer
in the last week

Source: May, 2019 (Dashboard)

► Data Analysis - Customer service

People bought movie tickets on the same day they planned to watch and paid for them at the cinema, which led to a long time in transaction.

- **83,7%** customers tended to book movie tickets close to the screening time or after the screening time and paid at the cinema counter.
- Therefore, they have to stand and queue to buy tickets when the demand was high in peak hours (7:00 - 9:00 pm).

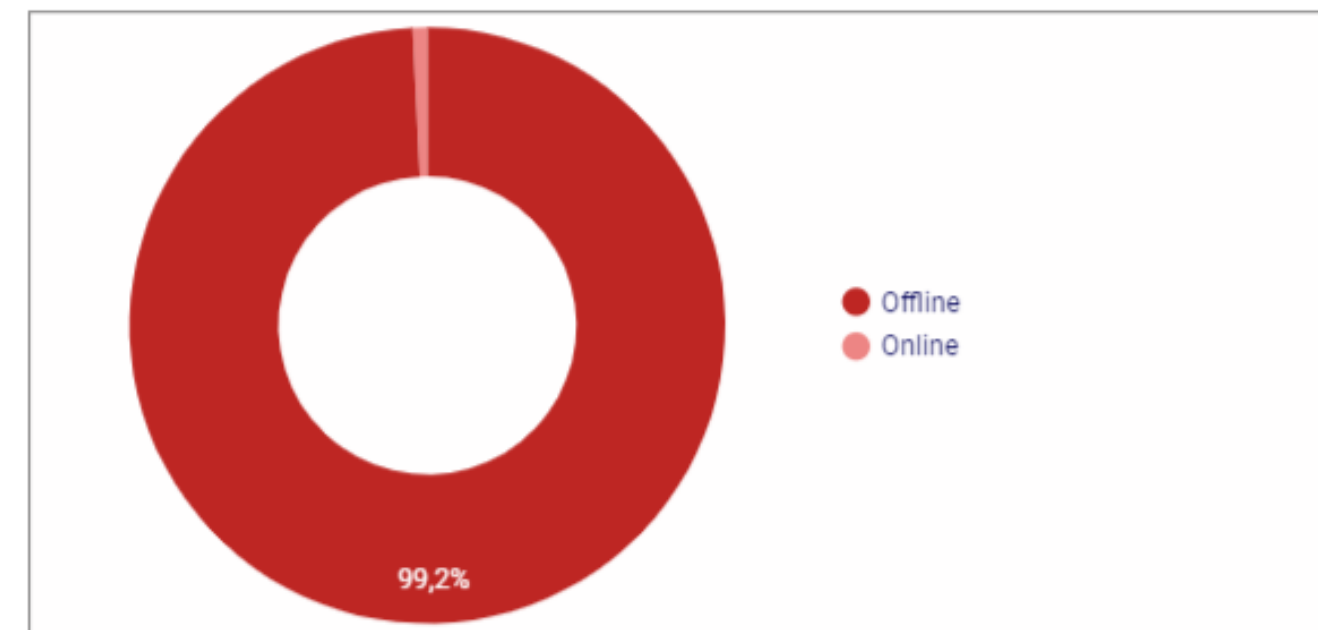
► The waiting time may **reduce** the **customers' enthusiasm** for watching movies and influence their experience at the cinema.

- The trend of online payment has become increasingly popular in recent years, however, most Gen Z - our main customers of the cinema, do not have the eligibility to open a bank account due to their age in 2019.

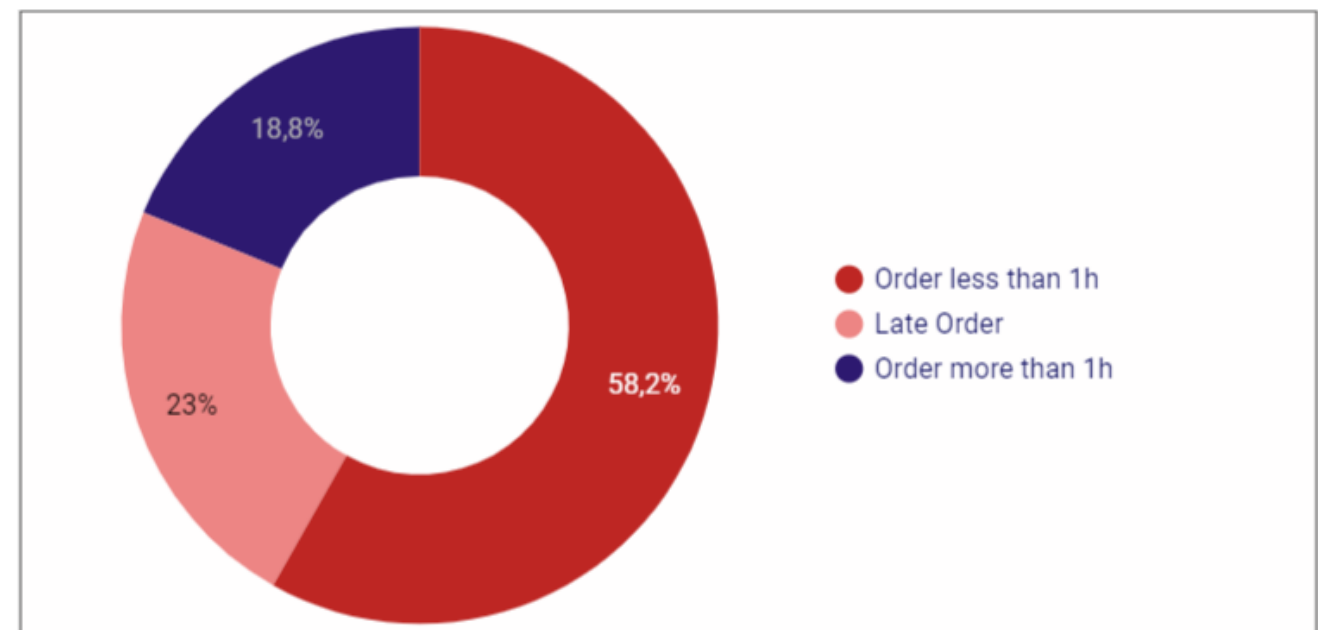
Issuing a gift card exclusively for the cinema's members, allowing customers to deposit money at the counter and use it for future payments at the cinema to save time on transactions.

Source: Columbia (2005).

Order Preference



Offline Order Preference



Source: May, 2019 (Dashboard)

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- 4 **Short-term business solutions in June**

Short - term business solutions in June - Revenue

June is the month with holidays for families and friends - a potential chance to maximize our revenue.

01/06: International Children’s Day
18/06: Father’s Day
28/06: Family Day



A growing desire for families and friends to connect and bond over shared activities including watching movies at the cinema.

Recommendation

Intensify marketing for movies or films suitable for families or teenagers, with a focus on family and coming of age genres.



Film Suggestion		
Film ▾	Listed In	Duration(min)
X-Men: Dark Phoenix	Action-Adventure, Family, Science Fiction	115
Toy Story 4	Action-Adventure, Animation, Comedy	101
Togo	Action-Adventure, Animals & Nature, Family	117
The Wonderful World of Disney Presents The Little Mermaid Live!	Concert Film, Family, Fantasy	84
The Lion King	Action-Adventure, Coming of Age, Drama	125
The Kid Who Would Be King	Action-Adventure, Coming of Age, Family	121
Star Wars: The Rise of Skywalker (Episode IX)	Action-Adventure, Family, Science Fiction	142
Star Wars: Galaxy's Edge-Adventure Awaits	Documentary, Family	81
Noelle	Comedy, Family, Fantasy	105
Marvel Studios' Captain Marvel	Action-Adventure, Science Fiction, Superhero	126

Source: May, 2019 ([Dashboard](#))

▶ Short - term business solutions in June - Revenue

Summer breaks is an ideal time to schedule films for teenagers and undergraduates.

- Young Adults (18-22 years old) and Adolescents (13-18 years old) contributed to the revenue the most.

▶ Most of them are teenagers or undergraduates.

- Since June is a summer holiday for all students in Vietnam, Gen Z has more flexibility in film schedules compared to "family" customers who are typically available only during evenings and weekends due to work commitments.

Revenue by Age Range

Gen ▾	Age Range	Revenue
Gen Z	Adolescent	127,225,000
Gen Z	Children	28,995,000
Gen Z	Young Adults	629,880,000
Gen Y	Adults	360,255,000
Gen X	Old Adults	14,295,000
		1 - 5 / 5 < >

Source: May, 2019 (Dashboard)

Recommendation

Schedule coming of age, action/adventure films in the morning or spread throughout the day.

Increase the showtimes for family films and allocate them during off-peak hours

Short - term business solutions in June - Revenue

Collaborate with film production brands to produce and sell the special merchandise for the film.

Since **GEN Z** is the main target audience with **HIGH SENSITIVITY TO PROMOTION**.

“When films become popular, there is a higher demand for film merchandise. Therefore, it makes sense to promote films to fans in this way. Moreover, cinemas can generate additional revenue by selling merchandise.”

▶ Sell merchandise and goods to increase film brand awareness and maximize revenue.



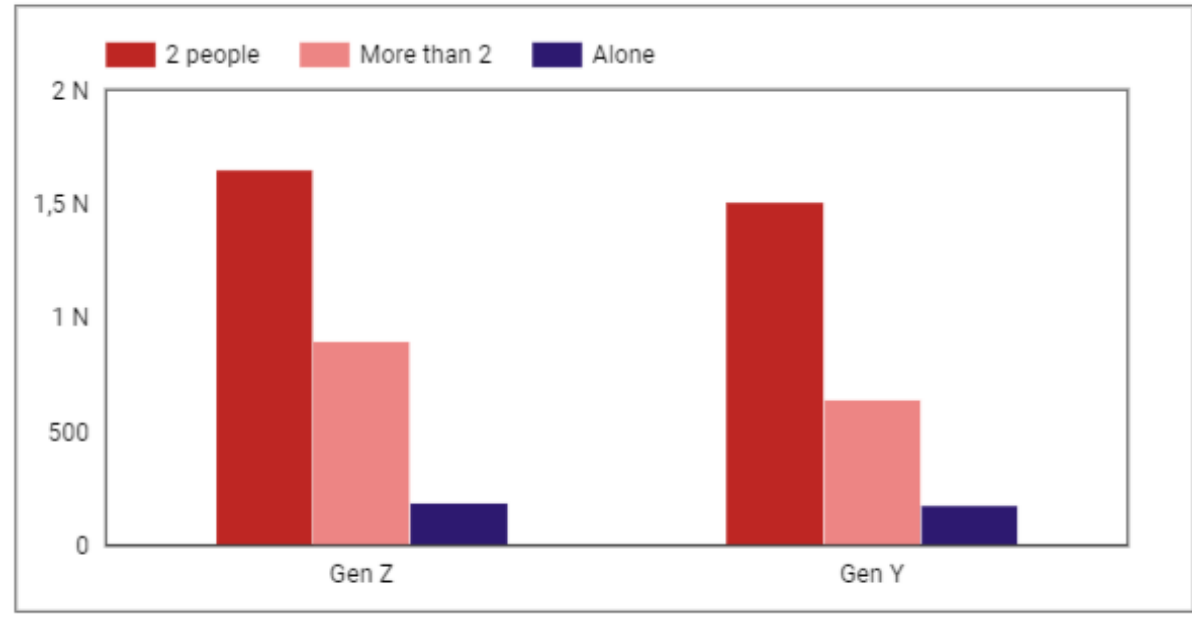
Prepare a large amount of extra popcorn for holidays and weekends in June.

- Most Gen X and Gen Y go with two or more than two people when coming to the cinema. That means they prefer watching movies with their family or friends.
- Additionally, Researchers Hartmann and Gil found that people who go to the movies in groups of friends or family also tend to buy more popcorn and soft drinks.

“Family- or adolescent-oriented movies attract a more concession-buying crowd. That raises the quality of the experience for a good movies.”

Source: [CNBC \(2015\)](#), [Liveforfilm \(2019\)](#), [Stanford Business \(2019\)](#)

Going Preference by Generation



Source: May, 2019 ([Dashboard](#))

Short - term business solutions in June - Marketing

Upgrade membership tier for loyal customer

100% Customers in the data marked as “membership” (no program)

To leverage the level of loyal customer, we could offer them “Frequent customer program below:

Score	Member (Anyone)	Silver (>1M VNĐ)	Gold (>5M VNĐ)
At box-office	3%	5%	10%
At concession stall	5%	7%	12%

- Each spending level will correspond to each class and each class will have different incentives.
- Accumulate points for each viewing to change the gifts.

Promote family campaign for Gen Z & Gen Y

June is month for coming of age and family.



- 01/06: International Children day
- 18/06: Father’s Day
- 28/06: Family Day

Challenge invite family members

Customers who can invite a family member (father/mother/grandparents...) to go with, will get a discount voucher for the next return. By that way, we can approach both Gen Z and Gen Y.

Use the waiting hall efficiency

Creating a public space for sharing and giving love to family members, by that way, we can keep the memorable moment for customers and their family.



Short-term business solutions in June - Customer Service

Gift cards for membership can be used to redeem movie tickets, F&B at the cinema, applied on both concession counters and online to reduce long time transaction and increase paying online

- Customers can top up Gift cards or extend the expiry date at the counter or online any time with cards with a minimum spend of 100.000 VND to 1.000.000 VND.
- Through the convenience of gift cards, moviegoers no longer need to worry about the amount of cash on hand. Instead, they can seamlessly pay within the system by entering the card's PIN and pay online through the cinema's website or mobile app.
- This can solve the long queue problem at the physical counter. Thus, we can improve customer satisfaction, increase working efficiency, and engage customers for loyal programs.

Place a camera booth to take pictures right at the cinema in June to keep the family moment and build customer engagement.

- Most people prefer watching movies at the cinema with their friends or their family. Besides, June is the month for family and friends holidays. Therefore, we can launch a program to engage customers together and build a connection with our customers.
- If customers upload photos into their social networks along with hashtags, they will get a voucher/small gift from the cinema.
- In that way, it can increase the theater's brand awareness and help the theater reach potential customers.



THANK YOU

**DATA GOT TALENT
ECOBYTE**