

GROUP MEKDY

CUSTOMER SENTIMENT ANALYSIS ON MCDONALD IN SELANGOR

TEXT ANALYTICS - CISB5123

GROUP MEMBERS



**Ahmad Amirul
Aizad bin Rosmadi**
(IS01082507)



**Muhammad Nabil
bin Muhamad**
(IS01082117)



**Siti Nur Lyana
binti Mohd Nazri**
(IS01082645)



**Muhammad Afiq Fikri
bin Ahmad Sabri**
(IS01082516)



**Mohammad Naufal
Eiman bin Shahromi**
(IS01082514)

PROBLEM

- **Customer Sentiment Is Dissatisfied With McDonald's in Selangor**

The project aims to analyze and classify public sentiment towards McDonald's outlets in Selangor. This study addresses to identify gaps in customer satisfaction, understanding brand perception, pinpointing operational or service issues, and evaluating customer responses to menu items and marketing campaigns.



PROJECT SCOPE



1

To assess and understand customer opinions on service quality provided, food taste, and the satisfaction levels based on customer reviews

2

Determine the lowest-rated branches in Selangor by looking at ratings ($\star < 2.5$)

3

Collect and analyze customer reviews and feedback from **Google Reviews** for the lowest rated branches

DATA PROCESS

● Data Exploration

Find the worst branches in Selangor by extracting a list of McDonald's in Selangor from Google and using a third-party tool, Instant Scraper, to pull the data.

* Script _Part 1.ipynb

● Data Consolidation & Cleaning

Merge all the data sets obtained for each branch into one excel, McDonalds_Review_Details.xlsx. After that, clean up the data set by dropping some unnecessary columns and filling in null values.

* Script _Part 1-2.ipynb

● Data Collection

From the created list, select the worst branches and extract Google Reviews for each branch using a third-party tool, Instant Scraper.

● Data Text Pre-Processing

Transform and prepare raw textual data into a format that is suitable for NLP or ML tasks.

* Script_Text Processing.ipynb

McD Selangor List.xlsx

		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1		hfpxzc hre qBF1Pd		MW4etd	UY7F9	AJB7ye	AJB7ye 2	W4Efsd	doJOZc	W4Efsd 3	W4Efsd 4	W4Efsd 5	W4Efsd 6	W4Efsd 7	W4Efsd 8	UsdIK	Icr4fd href Cw1rxz	
2																		
3																		
4	https://www.McDonald's Caltex Bandar Puteri Klang	3.8	(2,155)	.	RM 1-20	Fast Food	Iconic fast Open	.	Lot 13382	Iconic fast Open	.	Closes 1	.	03-5162 3	http://www			
5	https://www.McDonald's Kuala Selangor DT	4.0	(3,362)	.	RM 1-20	Fast Food	Iconic fast Open	.	Lot 640, T	Iconic fast Open	.	Closes 1	.	03-3281 1	https://www			
6	https://www.McDonald's Amerton DT	3.4	(369)	.	RM 1-20	Restauran	Iconic fast Open	.	Lot 85631	Iconic fast Open	.	Closes 12	.	03-6039 8	https://www			
7	https://www.McDonald's Bandar Utama DT	3.9	(2,828)	.	RM 1-20	Fast Food	Iconic fast Open	.	5 Lebuh B	Iconic fast Open 24 h	.	Lebuh B	.	03-7731 2	https://www			
8	https://www.McDonald's PKNS PJ DT	2.7	(417)	.	RM 1-20	Restauran	Iconic fast Open	.	Lot 201, N	Iconic fast Open	.	Closes 12	.	03-7931 4	https://www			
9	https://www.McDonald's Petronas Pekan Baru Subang DT	3.4	(393)	.	RM 1-20	Fast Food	Iconic fast Open	.	Exit, Jln S	Iconic fast Open	.	Closes 1	.	https://www				
10	https://www.McDonald's Bandar Bukit Puchong DT	3.2	(549)	.	RM 1-20	Fast Food	Iconic fast Open	.	2, Jalan BF	Iconic fast Open 24 h	.	2, Jalan BF	.	03-8051 4	https://www			
11	https://www.McDonald's Rawang DT	3.8	(3,763)	.	RM 1-20	Fast Food	Iconic fast Open	.	Lot PT 678	Iconic fast Open	.	Closes 2	.	03-6090 1	https://www			
12	https://www.McDonald's Kota Kemuning	3.8	(4,041)	.	RM 1-20	Fast Food	Iconic fast Open	.	No. 1, Jala	Iconic fast Open 24 h	.	Iconic fast Open	.	03-5131 6	https://www			
13	https://www.McDonald's Bandar Baru Bangi DT	4.1	(5,939)	.	RM 1-20	Fast Food	Iconic fast Open	.	PTD 68518	Iconic fast Open	.	Closes 2	.	03-8913 9	https://www			
14	https://www.McDonald's Puchong Gateway DT	3.9	(3,257)	.	RM 1-20	Fast Food	Iconic fast Open	.	Lot No. 48	Iconic fast Open	.	Closes 2	.	03-8958 6	https://www			
15	https://www.McDonald's Caltex Denai Alam DT	3.9	(3,042)	.	RM 1-20	Fast Food	Iconic fast Open	.	Lot, Sectic	Iconic fast Open	.	Closes 2	.	03-7734 7	https://www			
16	https://www.McDonald's Desa Aman Puri DT	3.7	(1,546)	.	RM 1-20	Restauran	Iconic fast Open	.	Stesyen M	Iconic fast Open	.	Closes 12	.	03-6275 9	https://www			
17	https://www.McDonald's Bandar Puteri Puchong DT	3.8	(3,947)	.	RM 1-20	Fast Food	Iconic fast Open	.	No. G-6. 1	Iconic fast Open 24 h	.	Iconic fast Open	.	03-8051 3	https://www			
18	https://www.McDonald's Petronas Bangi Layby	4.0	(722)	.	RM 1-20	Fast Food	Iconic fast Open	.	Lot PT 2 B	Iconic fast Open	.	Closes 2	.	03-8925 0	https://www			
19	https://www.McDonald's Subang Bestari DT	3.6	(943)	.	RM 1-20	Fast Food	Iconic fast Open	.	Persiaran	Iconic fast Open	.	Closes 12	.	03-7831 1	http://www			
20	https://www.McDonald's Shell Bandar Botanik DT	2.6	(250)	.	RM 20-40	Restauran	Iconic fast Open	.	Lot PT 118	Iconic fast Open	.	Closes 2	.	03-3318 9	https://www			
21	https://www.McDonald's Bandar Seri Putra	4.0	(2,728)	.	RM 1-20	Fast Food	Iconic fast Open	.	Sebahagia	Iconic fast Open	.	Closes 2	.	03-8912 0	https://www			
22	https://www.McDonald's SS 2 SF	3.7	(3,275)	.	RM 1-20	Fast Food	Iconic fast Open	.	56, Jalan S	Iconic fast Open 24 h	.	Open 24 h	.	03-7873 1	https://www			
23	https://www.McDonald's Drive Thru subang jaya	4.0	(4,260)	.	RM 1-20	Fast Food	Iconic fast Open	.	1, Jalan SS	Iconic fast Open 24 h	.	Iconic fast Open	.	03-5611 0	http://www			
24	https://www.McDonald's	3.1	(600)	.	RM 1-20	Fast Food	Iconic fast Open	.	2, Jalan Pa	Iconic fast Open 24 h	.	Iconic fast Open	.	03-2241 1	http://mc			
25	https://www.McDonald's Main Place	3.8	(939)	.	RM 1-20	Fast Food	Iconic fast Open	.	GF-36, Grc	Iconic fast Open	.	Closes 12	.	03-8021 5	https://www			
26	https://www.McDonald's Petron North Kiara DT	3.1	(475)	.	RM 1-20	Fast Food	Iconic fast Open	.	Lot 452, Ja	Iconic fast Open	.	Closes 12	.	010-972 5	http://mc			
27	https://www.McDonald's Petronas Taman Melati DT	4.0	(2,112)	.	RM 1-20	Fast Food	Iconic fast Open	.	Lot 3644 H	Iconic fast Open	.	Closes 2	.	03-4161 3	https://www			

Data Exploration

Cleaned_McDonald_Selangor_List

A	B	C	D	E	F
Branch Link	Branch	Ratings	Number of Reviews		
https://www.McDonald's BHP Jalan Genting Kelang DT *Store 476		1.7	214		
https://www.McDonald's Shell Saujana Utama DT		2.1	94		
https://www.McDonald's Puchong Perdana SF		2.1	109		
https://www.McDonald's Desa Petaling SF		2.1	104		
https://www.McDonald's Shell Taman Desa DT		2.2	163		
https://www.McDonald's AEON BiG Bukit Rimau DT		2.3	84		
https://www.McDonald's The Mines		2.4	142		
https://www.McDonald's Petronas Kota Damansara DT		2.5	14		
https://www.McDonald's Shell Bandar Botanik DT		2.6	250		
https://www.McDonald's PKNS PJ DT		2.7	417		

Data Gathering, Consolidation & Cleaning

McDonald AEON BiG Bukit Rimau DT.xlsx

	A	B	C	D	E	F	G	H	I	J
1	NBa7we sd4r55	RfnDt	rsqaWe	wil7pd	RfDO5c	RfDO5c 2	RfDO5c 3	RfDO5c 4	RfDO5c 5	
2	https://lh:Sylvia Hew	7 reviews	2 months	Good serv	Service	Delivery	Meal type	Lunch	5	
3	https://lh:Wai Nee C	1 review	2 months	Had an ex						
4	https://lh:Phey	4 reviews	6 months	Manager	Service	Dine in	Meal type	Other	Price per	
5	https://lh:Meimei Y	Local Guic	7 months	Very slow	3	1	4			
6	https://lh:Ho Li Yien	10 reviews	4 months	Thank you	5	5	5			
7	https://lh:Derick Liw	5 reviews	7 months	I visited di	Service	Dine in	Meal type	Other	1	
8	https://lh:Jun C	Local Guic	4 months	Extremely	Service	Dine in	Meal type	Breakfast	Price per	
9	https://lh:jien yong	5 reviews	2 months	very less	Service	Take out	Meal type	Lunch	Price per	
10	https://lh:Anil Nair	Local Guic	7 months	This is my	Service	Take out	Meal type	Other	Price per	
11	https://lh:Mohamm:	8 reviews	2 months	had great	Service	Dine in	Price per	RM 1-20	5	
12	https://lh:Naqiuddir	10 review	2 months	For a FAST	Meal type	Lunch	Price per	RM 1-20	3	
13	https://lh:Jasmine G	Local Guic	4 months	Booked M	5	5	5			
14	https://lh:W.L	Local Guic	7 months	Food	Service	Delivery	Meal type	Breakfast	Price per	

McDonald Puchong Perdana SF.xlsx

	A	B	C	D	E	F	G	H	I	J
1	NBa7we sd4r55	RfnDt	rsqaWe	wil7pd	RfDO5c	RfDO5c 2	RfDO5c 3	RfDO5c 4	RfDO5c 5	
2	https://lh:Mizu.L	Local Guic	a week ago	I waited a	Service	Delivery	Meal type	Dinner	Price per	
3	https://lh:Variz	6 reviews	5 days ago	I've been i	Service	Take out	Meal type	Dinner	4	
4	https://lh:Rachel Dic	8 reviews	6 months	ayam gore						
5	https://lh:Kisha Rina	3 reviews	8 months	Been wait	Service	Take out	Meal type	Other	1	
6	https://lh:Tan Chee	7 reviews	5 months	Wait more	3	1	1			
7	https://lh:Darjee HG	Local Guic	a year ago	Unusual o	Service	Take out	Meal type	Dinner	Price per	
8	https://lh:Kookiesy	10 reviews	2 months	Ordered to	1	1	1			
9	https://lh:J C	2 reviews	2 years ago	Subpar se	1	1	2			
10	https://lh:Cheng Lim	Local Guic	4 months	This outle	Service	Delivery	Meal type	Dinner	Price per	
11	https://lh:kah mun r	1 review	11 month	The servic	1	1	1			
12	https://lh:gin er	Local Guic	a year ago	Filet o fish	Service	Delivery	Meal type	Lunch	Price per	
13	https://lh:Ezham Asl	Local Guic	2 years ago	Not a regu	Service	Dine in	Meal type	Dinner	Price per	



McDonald Desa Petaling SF.xlsx

McDonald Shell Saujana Utama DT.xlsx

McDonald Shell Taman Desa DT.xlsx

McDonald The Mines.xlsx

McDonald's Petronas Kota Damansara DT.xlsx

21 Columns x X Rows

McDonald BHP Jalan Genting Kelang DT Store 476.xlsx

	A	B	C	D	E	F	G	H	I	J
1	NBa7we sd4r55	RfnDt	rsqaWe	wil7pd	RfDO5c	RfDO5c 2	RfDO5c 3	RfDO5c 4	RfDO5c 5	
2	https://lh:SL O	Local Guic	a month ago	I used to	Service	Takeaway	Meal type	Breakfast	Price per	
3	https://lh:Jane Yee	1 review	5 months	I've order	Service	Delivery	Meal type	Dinner	1	
4	https://lh:Simon Wo	3 reviews	8 months	Mcd again	Service	Takeaway	Meal type	Dinner	Price per	
5	https://lh:Kent Kam	Local Guic	a year ago	Service is	Service	Dine in	Meal type	Dinner	Price per	
6	https://lh:vivian ting	Local Guic	4 months	I will opt f	Service	Takeaway	Meal type	Other	Price per	
7	https://lh:Litian	Local Guic	2 weeks ago	We drive t	1	1	2			
8	https://lh:Ee Rick	Local Guic	3 months	Long queu	Service	Takeaway	Meal type	Dinner	Price per	
9	https://lh:湾湾	10 reviews	a month ago	The worst	Service	Dine in	Meal type	Other	Price per	
10	https://lh:Rajpal Sar	Local Guic	a month ago	I order me	Service	Take out	Meal type	Lunch	Price per	
11	https://lh:Vishal Bac	Local Guic	a month ago	The worst	Service	Dine in	Meal type	Dinner	1	
12	https://lh:Ali Zainal	2 reviews	3 weeks ago	Friendly st	Service	Dine in	Price per	RM 1-20	5	
13	https://lh:robert lee	Local Guic	6 months	If you war	2	1	2			

	Branch	Customer	Time	Reviews
2	McDonald Hamd	3 weeks ago	Worst McDonalds	I've visited in my life. Food is cold and hard especially nuggets and fries like they're days or hours old. I don't know if the staff have a sign of respect or just being plain racist. You'll w
3	McDonald Megan Oo	3 months ago	worst service ever, when requested for chicken part, they said will check for me but after that they brought out the wrong parts. Requested to check another round, they said ok, went in and came I	
4	McDonald VincentKo	5 months ago	[2022-2024]Always ALWAYS a pleasant location to enjoy the trains go by, and very cozy too. Usually would go upstairs and it's so peaceful in the mornings	
5	McDonald Pang Choc	4 months ago	I done the kiosk order and pay Cash. But employee just pretend didn't see me and let me wait at the counter. Just walk here and there pretend busy. I'm not sure they're racist or just Don't want to sei	
6	McDonald nur aein	3 months ago	Please train your mc cafe staff, order ice blended mocha but not follow sop, once add more ice the taste gonna be different. The taste very bad like drink latte.	
7	McDonald Huck Phin	4 months ago	No WiFi unlike the sign	
8	McDonald Reenthiyal	2 months ago	"The cashier Watie was very friendly and greeted me with a smile."	
9	McDonald Syazwan H	a month ago	They do not understand simple instructions and if delivery always something is missing.	
10	McDonald S Jackey	2 months ago	Hygienic issues, drinks with dirty objects	
11	McDonald 刘骏利	a month ago	Staffs are very nice here.	
12	McDonald Esa bin Ab	a day ago	Worst ever McDonald's in Malaysia. Ordered thru Shopee Food 10.40pm and have to wait until 1 hour & 50 minutes the food to be ready just for chicken nugget 9 pcs and Ayam Goreng Spicy 5 pcs.	
13	McDonald Dom 999	4 months ago	Service is really out... Drive thru if it's the worst night... Had to Q more than 30 minutes!!! Are you crazy?? Pekerje slow giler .. it's crazy slow!!!	
14	McDonald Wong Che	2 months ago	No Review	
15	McDonald siti nur hid	3 months ago	No Review	
16	McDonald yusrie jum	4 months ago	No Review	
17	McDonald Dodo Ki	(8 months ago)	Terrible attitude by the staff. I'm obviously saying spicy tomato chicken wrap. And he give me spicy beef burger. No ppl queuing at the counter still need 15 mins for the food. 9:30pm now and I'm da	
18	McDonald baby arrel	a month ago	Hope can improve. Staff many things don't know, said sundae cone ice cream is available ask me order on machine, but machine showing sold out.... Only 10.45am, just open but sold out... Waiting	
19	McDonald Iris Liew	2 months ago	The wrong order was sent, and the staff called to replace the order for us. We waited from 7.30pm until 9pm, but there was no replacement, and nobody bothered to update us. I called again, and	
20	McDonald Pao Fook	3 years ago	Everybody's favorite and it is everywhere. I have been patronizing it some 40 years ago. The big mac set then was slightly above RM6.00 but now its almost thrice the old price. Even George Fore	
21	McDonald RANJITH N	10 months ago	So my boyfriend and I went to this MCD which located at MINES SHOPPING MALL. We ordered pancake and hot milo. There is a cockroach inside the milo!!!! Luckily I opened the lid and I only no	
22	McDonald Hang Tan	a year ago	Order 10 times always got few times missing items, not the first time already! Sometimes missing burger, sometimes missing nugget! Even call the hotline also can't call in! How terrible service! Pls	
22	McDonald Dicer VT	7 months ago	I am writing to express my extreme dissatisfaction with the service I received regarding my recent order. I placed an order on app for delivery and was informed that it would be ready for self-pickup	

4 Columns x 921 Rows

Data Text Pre-Processing

Lowercase conversion

Removal of URLs

Removal of HTML tags

Removal of Expressions

Removal of Emoji

Replace internet slang words

Replace Contractions

Remove punctuations and special characters

Remove numbers

Correct spelling mistakes

Remove stopwords

Stemming

Lemmatization

* Results = Pre-Text Processing Dataset.xlsx

DATA DESCRIPTION

● Columns

Branch

The specific McDonald's outlet in Selangor where the review was posted

Customer

Username of the reviewer

Time

The time when the review was submitted

Reviews

The original, unprocessed text review given by the customer

Cleaned_Reviews

The version of the review text after applying pre-text processing

Sentiment

Reviews sentiment indicator. (Positive, Negative, Neutral)

● Description

DATA LIMITATIONS

Noise in
Reviews

Typos, Emojis,
Sarcasm &
Spelling errors

Incomplete /
Inconsistent
Entries

Language
Barriers

English, Malay
and Slang

Reviews missing values
/ contain empty

Mix opinions positive
& negative

Mix
Reviews



CONCLUSION

- **Group Project - Part 1**

Successfully extracting reviews and pre-processing the text to provide valuable insights into customer sentiment towards McDonald's stores in Selangor by analyzing online reviews.



See You Next

THANK YOU

GROUP MEKDY - GROUP PROJECT (PART 1)