



Microsoft Excel Mini Task

Created By : Yulindra Tita W.



LIST OF CONTENT

01 Data Description

02 Data Preparation

03 Pivot Table & Data Visualization

04 Dashboard



01 Data Description

The growth of supermarkets in most populated cities are increasing and market competitions are also high. The dataset is one of the historical sales of supermarket company which has recorded in 3 different branches for 3 months data. Predictive data analytics methods are easy to apply with this dataset. Some of the variables included in the dataset:

- Invoice id: Computer generated sales slip invoice identification number
- Branch: Branch of supercenter (3 branches are available identified by A, B and C).
- City: Location of supercenters
- Customer type: Type of customers, recorded by Members for customers using member card and Normal for without member card.
- Gender: Gender type of customer
- Product line: General item categorization groups - Electronic accessories, Fashion accessories, Food and beverages, Health and beauty, Home and lifestyle, Sports and travel
- Unit price: Price of each product in \$
- Quantity: Number of products purchased by customer
- Tax: 5% tax fee for customer buying
- Total: Total price including tax



- Date: Date of purchase (Record available from January 2019 to March 2019)
- Time: Purchase time (10am to 9pm)
- Payment: Payment used by customer for purchase (3 methods are available – Cash, Credit card and Ewallet)
- COGS: Cost of goods sold
- Gross margin percentage: Gross margin percentage
- Gross income: Gross income
- Rating: Customer stratification rating on their overall shopping experience (On a scale of 1 to 10)

Data source: <https://www.kaggle.com/datasets/aungpyaeap/supermarket-sales/data>



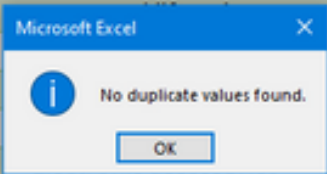
02 Data Preparation

- The first thing that I did was format raw data into table format using the shortcut command: CTRL + T. Then it will look like the picture below.

	A	B	C	D	E	F	G	H	I	J	K	
1	Invoice ID	Branch	City	Customer type	Gender	Product line	Unit price	Quantity	Tax 5%	Total	Date	Time
2	750-67-8428	A	Yangon	Member	Female	Health and beauty	74.69	7			01/05/2019	1:08
3	226-31-3081	C	Naypyitaw	Normal	Female	Electronic accessories	15.28	5			03/08/2019	10:29
4	631-41-3108	A	Yangon	Normal	Male	Home and lifestyle	46.33	7			03/03/2019	1:23
5	123-19-1176	A	Yangon	Member	Male	Health and beauty	58.22	8			01/27/2019	8:33
6	373-73-7910	A	Yangon	Normal	Male	Sports and travel	86.31	7			02/08/2019	10:37
7	699-14-3026	C	Naypyitaw	Normal	Male	Electronic accessories	85.39	7			03/25/2019	6:30
8	355-53-5943	A	Yangon	Member	Female	Electronic accessories	68.84	6			02/25/2019	2:36
9	315-22-5665	C	Naypyitaw	Normal	Female	Home and lifestyle	73.56	10			02/24/2019	11:38
10	665-32-9167	A	Yangon	Member	Female	Health and beauty	36.26	2			01/10/2019	5:15

- Check the duplicate data in the menu data, then remove the duplicate. From the picture below, we know that no duplicates were found.

	A	B	C	D	E	F	G	H	I	J	K	
1	Invoice ID	Branch	City	Customer type	Gender	Product line	Unit price	Quantity	Tax 5%	Total	Date	Time
2	750-67-8428	A	Yangon	Member	Female	Health and beauty	74.69	7			01/05/2019	1:08
3	226-31-3081	C	Naypyitaw	Normal	Female	Electronic accessories	15.28	5			03/08/2019	10:29
4	631-41-3108	A	Yangon	Normal	Male		46.33	7			03/03/2019	1:23
5	123-19-1176	A	Yangon	Member	Male		58.22	8			01/27/2019	8:33
6	373-73-7910	A	Yangon	Normal	Male		86.31	7			02/08/2019	10:37
7	699-14-3026	C	Naypyitaw	Normal	Male		85.39	7			03/25/2019	6:30
8	355-53-5943	A	Yangon	Member	Female		68.84	6			02/25/2019	2:36
9	315-22-5665	C	Naypyitaw	Normal	Female	Home and lifestyle	73.56	10			02/24/2019	11:38
10	665-32-9167	A	Yangon	Member	Female	Health and beauty	36.26	2			01/10/2019	5:15
11	692-92-5582	B	Mandalay	Member	Female	Food and beverages	54.84	3			02/20/2019	1:27
12	351-62-0822	B	Mandalay	Member	Female	Fashion accessories	14.48	4			02/06/2019	6:07





- Fill in the tax column with the calculation of the unit price times quantity times 0.05 times the tax on each product. Therefore, the formula is:
$$=[@[Unit\ price]]*[@Quantity]*0.05$$

	A	B	C	D	E	F	G	H	I	J	K	
1	Invoice ID	Branch	City	Customer type	Gender	Product line	Unit price	Quantity	Tax 5%	Total	Date	Time
2	750-67-8428	A	Yangon	Member	Female	Health and beauty	74.69	7	26.1415		01/05/2019	1:08
3	226-31-3081	C	Naypyitaw	Normal	Female	Electronic accessories	15.28	5	3.82		03/08/2019	10:29
4	631-41-3108	A	Yangon	Normal	Male	Home and lifestyle	46.33	7	16.2155		03/03/2019	1:23
5	123-19-1176	A	Yangon	Member	Male	Health and beauty	58.22	8	23.288		01/27/2019	8:33
6	373-73-7910	A	Yangon	Normal	Male	Sports and travel	86.31	7	30.2085		02/08/2019	10:37
7	699-14-3026	C	Naypyitaw	Normal	Male	Electronic accessories	85.39	7	29.8865		03/25/2019	6:30
8	355-53-5943	A	Yangon	Member	Female	Electronic accessories	68.84	6	20.652		02/25/2019	2:36
9	315-22-5665	C	Naypyitaw	Normal	Female	Home and lifestyle	73.56	10	36.78		02/24/2019	11:38
10	665-32-9167	A	Yangon	Member	Female	Health and beauty	36.26	2	3.626		01/10/2019	5:15

- Fill in the total column with the calculation of the unit price times quantity plus tax. Therefore, the formula is:
$$=([@[Unit\ price]]*[@Quantity])+[@[Tax\ 5\ %]]$$

	B	C	D	E	F	G	H	I	J	K	L	
1	Branch	City	Customer type	Gender	Product line	Unit price	Quantity	Tax 5%	Total	Date	Time	Paym
2	A	Yangon	Member	Female	Health and beauty	74.69	7	26.1415	548.9715	01/05/2019	1:08:00 PM	Ewalle
3	C	Naypyitaw	Normal	Female	Electronic accessories	15.28	5	3.82	80.2200	03/08/2019	10:29:00 AM	Cash
4	A	Yangon	Normal	Male	Home and lifestyle	46.33	7	16.2155	340.5255	03/03/2019	1:23:00 PM	Credit
5	A	Yangon	Member	Male	Health and beauty	58.22	8	23.288	489.0480	01/27/2019	8:33:00 PM	Ewalle
6	A	Yangon	Normal	Male	Sports and travel	86.31	7	30.2085	634.3785	02/08/2019	10:37:00 AM	Ewalle
7	C	Naypyitaw	Normal	Male	Electronic accessories	85.39	7	29.8865	627.6165	03/25/2019	6:30:00 PM	Ewalle
8	A	Yangon	Member	Female	Electronic accessories	68.84	6	20.652	433.6920	02/25/2019	2:36:00 PM	Ewalle
9	C	Naypyitaw	Normal	Female	Home and lifestyle	73.56	10	36.78	772.3800	02/24/2019	11:38:00 AM	Ewalle
10	A	Yangon	Member	Female	Health and beauty	36.26	2	3.626	76.1460	01/10/2019	5:15:00 PM	Credit



- Extrac day from the date column using the formula:
=TEXT([@Date],"dddd").

	I	J	K	L	M	N	O	P	Q	R	S
1	Tax 5%	Total	Date	Time	Payment	cogs	gross margin percentage	gross income	Rating	Day	Month
2	26.1415	548.9715	01/05/2019	1:08:00 PM	Ewallet	522.8	4.761.904.762	261.415	9.1	Saturday	
3	3.82	80.2200	03/08/2019	10:29:00 AM	Cash	76.4	4.761.904.762	3.82	9.6	Friday	
4	16.2155	340.5255	03/03/2019	1:23:00 PM	Credit card	324.3	4.761.904.762	162.155	7.4	Sunday	
5	23.288	489.0480	01/27/2019	8:33:00 PM	Ewallet	465.8	4.761.904.762	23.288	8.4	Sunday	
6	30.2085	634.3785	02/08/2019	10:37:00 AM	Ewallet	604.2	4.761.904.762	302.085	5.3	Friday	
7	29.8865	627.6165	03/25/2019	6:30:00 PM	Ewallet	597.7	4.761.904.762	298.865	4.1	Monday	
8	20.652	433.6920	02/25/2019	2:36:00 PM	Ewallet	413	4.761.904.762	20.652	5.8	Monday	
9	36.78	772.3800	02/24/2019	11:38:00 AM	Ewallet	735.6	4.761.904.762	36.78	8	Sunday	
10	3.626	76.1460	01/10/2019	5:15:00 PM	Credit card	72.52	4.761.904.762	3.626	7.2	Thursday	

- Extrac month from the date column using the formula:
=TEXT([@Date],"mmmm").

	I	J	K	L	M	N	O	P	Q	R	S
1	Tax 5%	Total	Date	Time	Payment	cogs	gross margin percentage	gross income	Rating	Day	Month
2	26.1415	548.9715	01/05/2019	1:08:00 PM	Ewallet	522.8	4.761.904.762	261.415	9.1	Saturday	January
3	3.82	80.2200	03/08/2019	10:29:00 AM	Cash	76.4	4.761.904.762	3.82	9.6	Friday	March
4	16.2155	340.5255	03/03/2019	1:23:00 PM	Credit card	324.3	4.761.904.762	162.155	7.4	Sunday	March
5	23.288	489.0480	01/27/2019	8:33:00 PM	Ewallet	465.8	4.761.904.762	23.288	8.4	Sunday	January
6	30.2085	634.3785	02/08/2019	10:37:00 AM	Ewallet	604.2	4.761.904.762	302.085	5.3	Friday	February
7	29.8865	627.6165	03/25/2019	6:30:00 PM	Ewallet	597.7	4.761.904.762	298.865	4.1	Monday	March
8	20.652	433.6920	02/25/2019	2:36:00 PM	Ewallet	413	4.761.904.762	20.652	5.8	Monday	February
9	36.78	772.3800	02/24/2019	11:38:00 AM	Ewallet	735.6	4.761.904.762	36.78	8	Sunday	February
10	3.626	76.1460	01/10/2019	5:15:00 PM	Credit card	72.52	4.761.904.762	3.626	7.2	Thursday	January



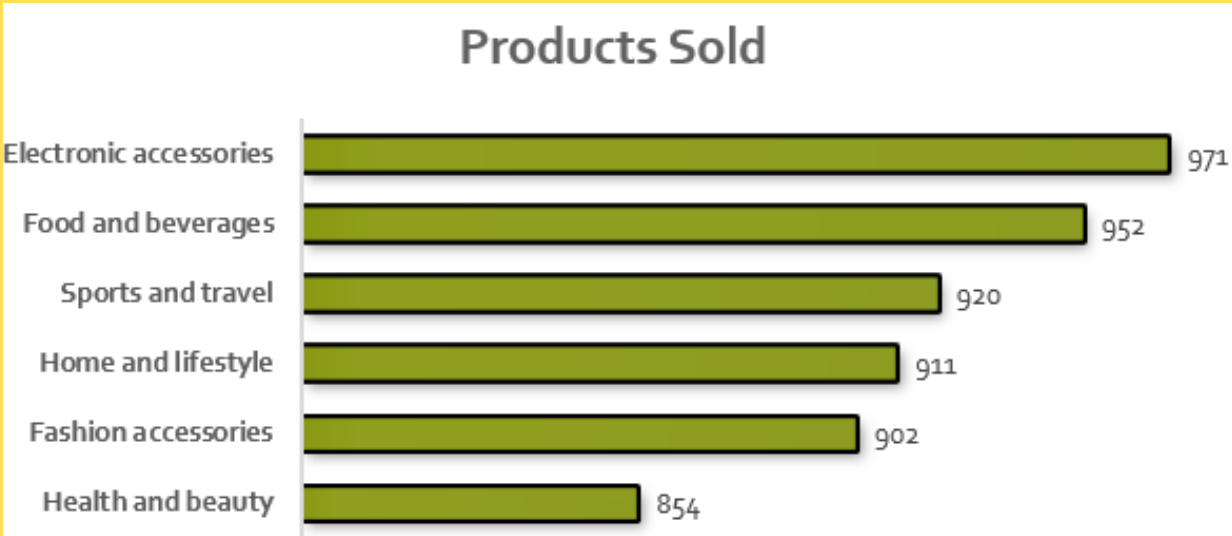
03 Pivot Table & Data Visualization

Pivot Table is an Excel feature that is commonly used to manage and display data in a practical way, so users can convert data sets into an easy-to-read table. Before the data can be visualized, the pivot table must be defined first. In this case study, we're going to show some data taken from the dataset, Pivot Table is an Excel feature that is commonly used to manage and display data in a practical way, so users can convert data sets into readable tables. Before data can be viewed, a pivot table must be defined first. In this case study, we will show some data taken from the dataset, namely: total sales, number of transactions, total product sold, gross profit, best-selling product, best product rating, cities with most sales, percentage comparison of payments, daily-month sales, and sales comparison by city.



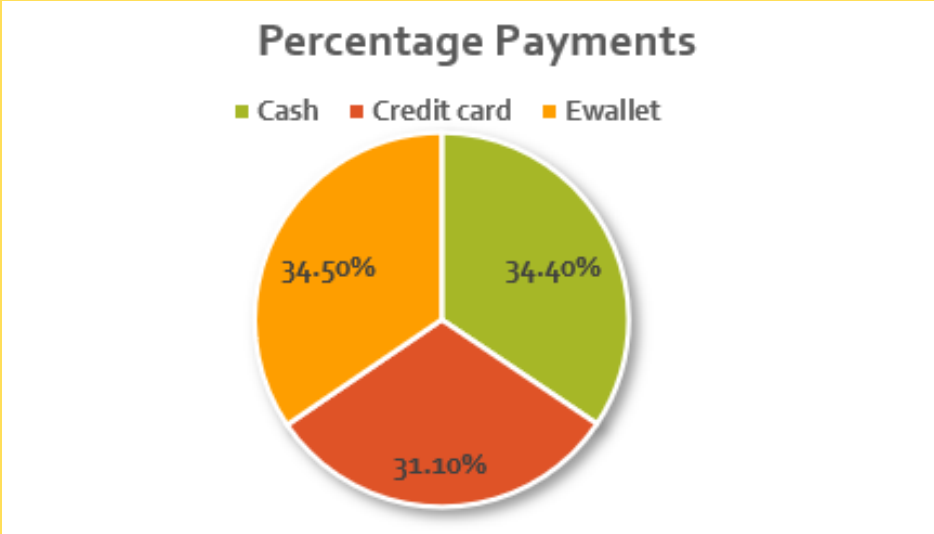
Product Sales	Sum of Quantity
Health and beauty	854
Fashion accessories	902
Home and lifestyle	911
Sports and travel	920
Food and beverages	952
Electronic accessories	971

Pivot table product sold by category



%Payment Type	Count of Invoice ID
Cash	34.40%
Credit card	31.10%
Ewallet	34.50%

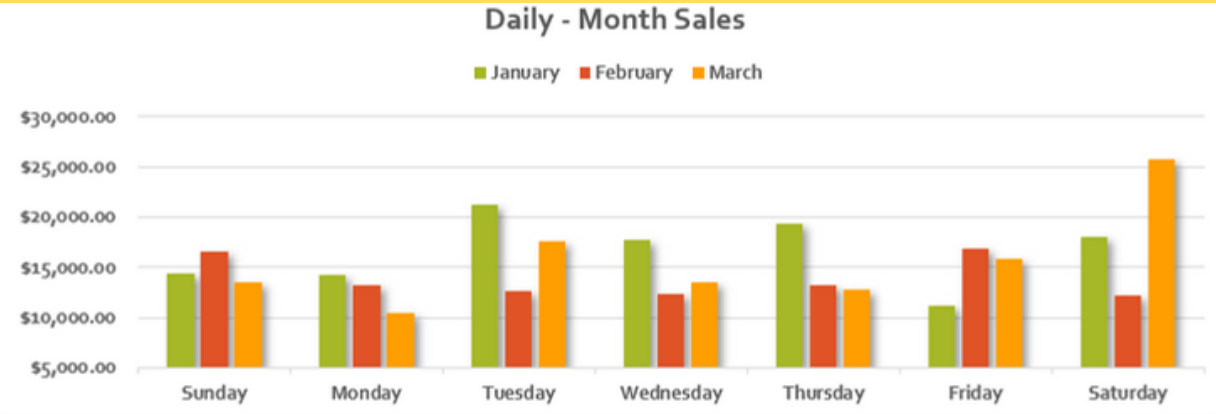
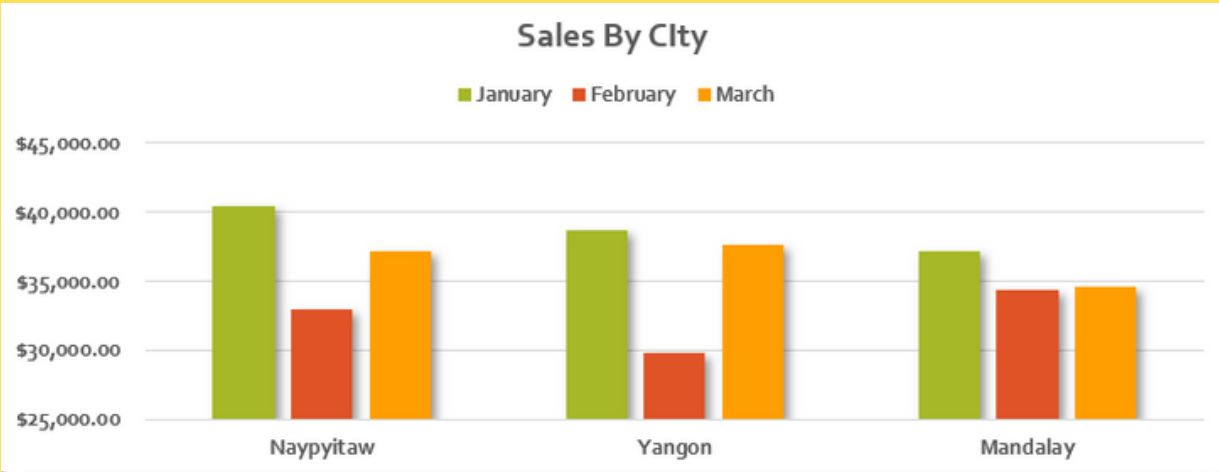
Pivot table comparison percentage payments





City Sales	January	February	March	Grand Total
Naypyitaw	\$ 40,434.68	\$ 32,934.98	\$ 37,199.04	\$ 110,568.71
Yangon	\$ 38,681.13	\$ 29,860.12	\$ 37,659.12	\$ 106,200.37
Mandalay	\$ 37,176.06	\$ 34,424.27	\$ 34,597.34	\$ 106,197.67

Pivot table comparison
sales by city

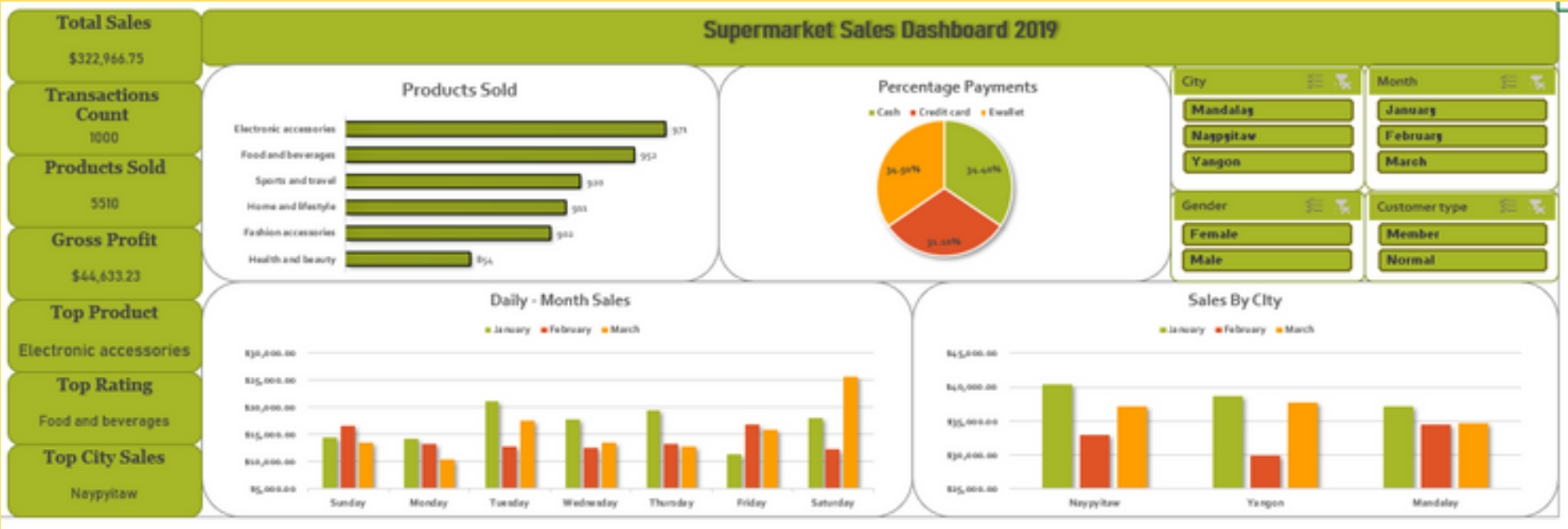


Pivot table daily - month
sales

Transaction By Day	January	February	March
Sunday	\$ 14,356.76	\$ 16,630.98	\$ 13,470.16
Monday	\$ 14,192.67	\$ 13,284.92	\$ 10,421.49
Tuesday	\$ 21,204.51	\$ 12,666.40	\$ 17,611.34
Wednesday	\$ 17,808.38	\$ 12,405.53	\$ 13,517.23
Thursday	\$ 19,416.38	\$ 13,173.06	\$ 12,759.81
Friday	\$ 11,219.49	\$ 16,802.29	\$ 15,904.56
Saturday	\$ 18,093.68	\$ 12,256.20	\$ 25,770.93
Grand Total	\$ 116,291.87	\$ 97,219.37	\$ 109,455.51



04 Dashboard



Let's connect!



Yulindra Tita



yulindratita@gmail.com

Please like and share it!
Thanks for the support!