

# **Vending Machine Capstone Project DAR**

by Dao Thanh Dat

Sales Overview

Total Price  
1.15bnđ

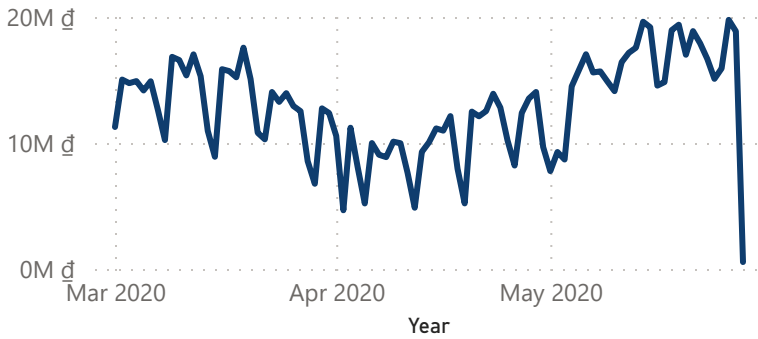
AVG Total Price  
9.92Kđ

Total Quantity  
115.68K

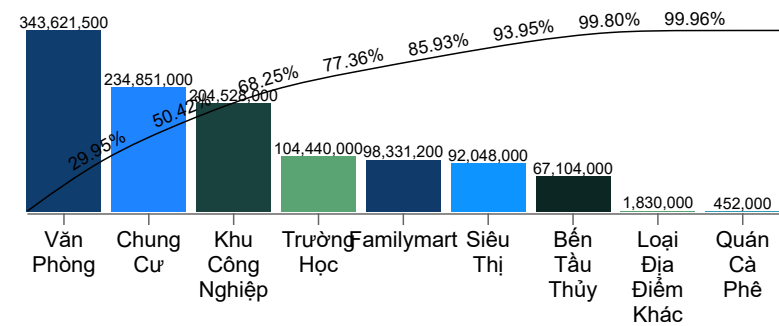
Refunded Amount  
10M đ

AVG Daily Sales  
12.89Mđ

Sales Performance Over Time

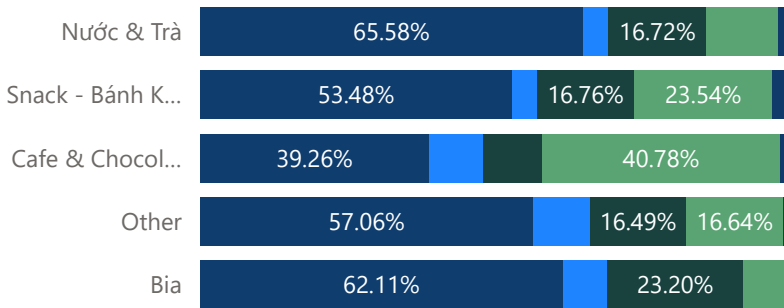


Sales by Location Type

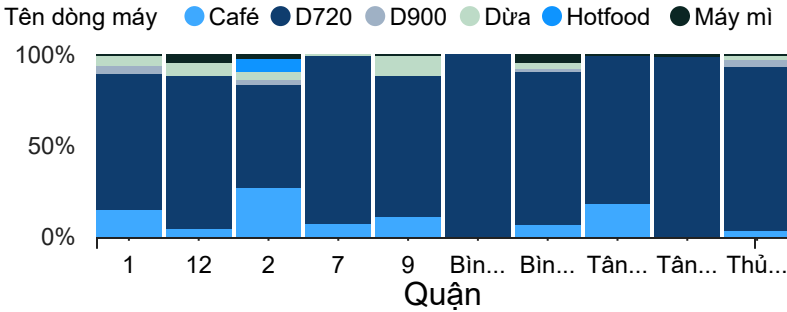


Sales by Product Category & Payment Type

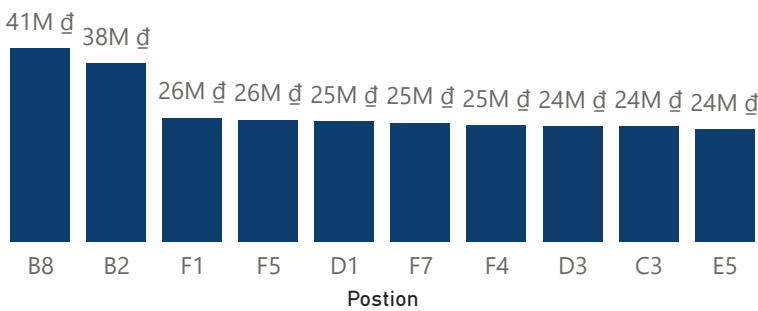
Payment Type v... Cash Grab Momo Skillshub Zalopay



Sales by Machine Type in Top 10 Districts



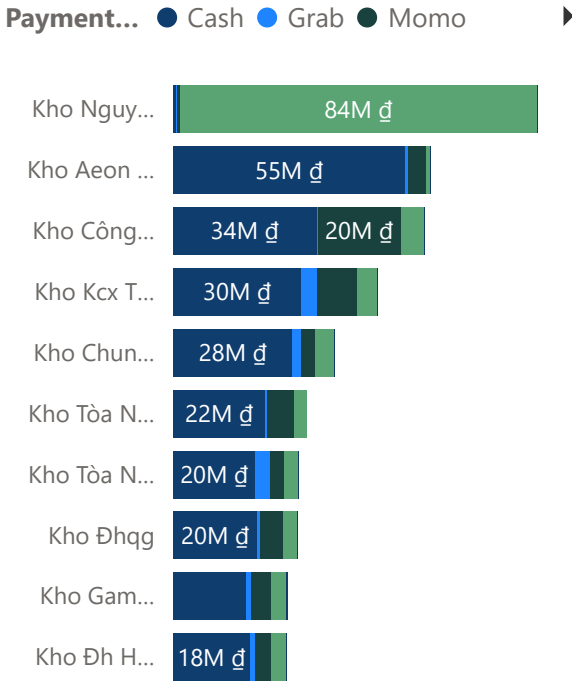
Sum of TotalPrice by Top 10 Postion



Busy Hours

DayName	0	1	2	3	4	5	6	7
Monday	1,608,000.00 đ	1,042,000.00 đ	774,000.00 đ	393,000.00 đ	401,000.00 đ	850,000.00 đ	1,915,000.00 đ	5,097,500.00 đ
Tuesday	2,229,000.00 đ	1,066,000.00 đ	1,107,000.00 đ	760,000.00 đ	771,000.00 đ	1,162,000.00 đ	1,876,000.00 đ	6,137,800.00 đ
Wednesday	2,071,000.00 đ	1,608,000.00 đ	1,138,000.00 đ	633,000.00 đ	621,000.00 đ	899,000.00 đ	2,107,000.00 đ	6,446,500.00 đ
Thursday	2,188,000.00 đ	1,136,000.00 đ	1,321,000.00 đ	834,000.00 đ	857,000.00 đ	1,031,000.00 đ	1,935,000.00 đ	5,217,500.00 đ
Friday	2,233,000.00 đ	1,076,000.00 đ	1,074,000.00 đ	905,000.00 đ	571,000.00 đ	1,029,000.00 đ	2,055,000.00 đ	5,461,700.00 đ
Saturday	1,785,000.00 đ	1,035,000.00 đ	1,217,000.00 đ	655,000.00 đ	500,000.00 đ	951,000.00 đ	1,247,000.00 đ	4,576,000.00 đ
Sunday	1,865,000.00 đ	1,075,000.00 đ	1,109,000.00 đ	580,000.00 đ	615,000.00 đ	994,000.00 đ	1,625,000.00 đ	3,614,000.00 đ

Sales by Top 10 Location with Payment Type



YearMonth  
All

Payment...  
All

Tỉnh  
All

Tên dòng...  
All

Tên danh...  
All

# Sales Analysis

Total Price  
1.15bnđ

AVG Total Price  
9.92Kđ

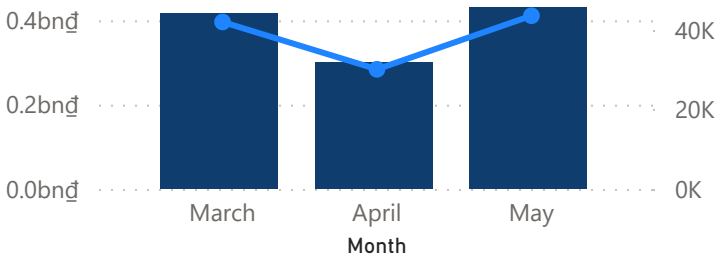
Total Quantity  
115.68K

Refunded Amount  
10M đ

AVG Daily Sales  
12.89Mđ

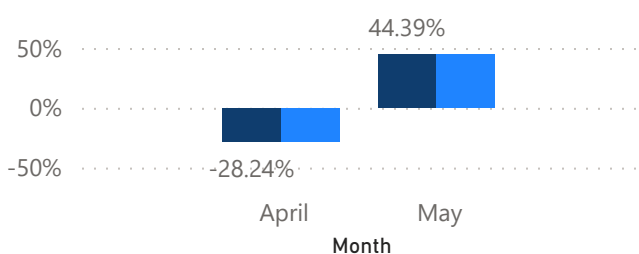
## Sales Performance Over Time

Sum of TotalPrice Count of TransactionId



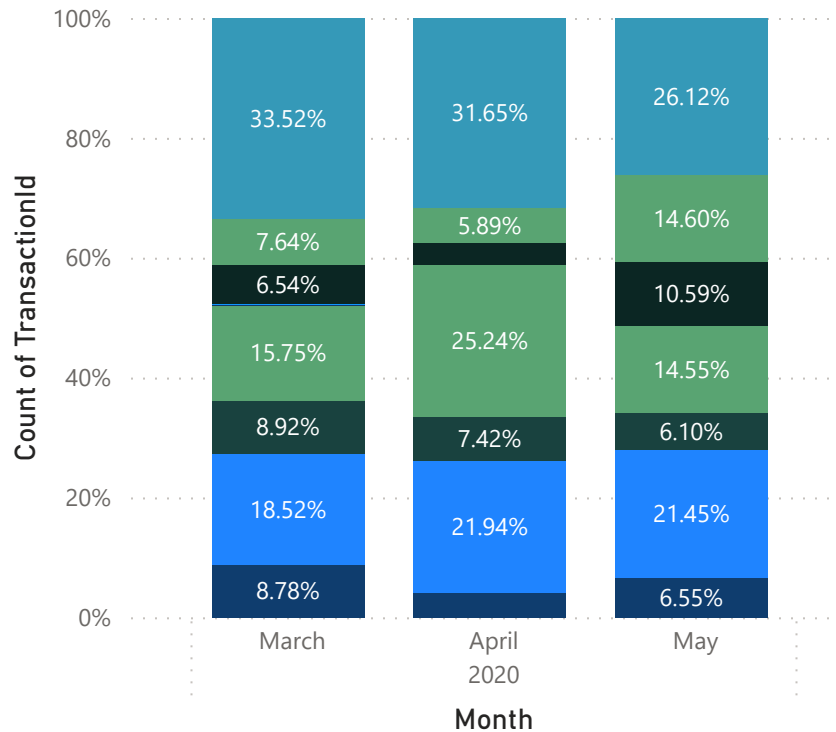
## Sales Metrics MoM Change

TotalPrice MoM% Count of TransactionId MoM%



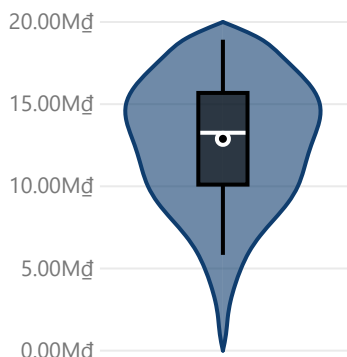
## Count of TransactionId By Location Type over Time

Loại địa điểm Bến Tàu... Chung Cư Familym... Khu Côn...



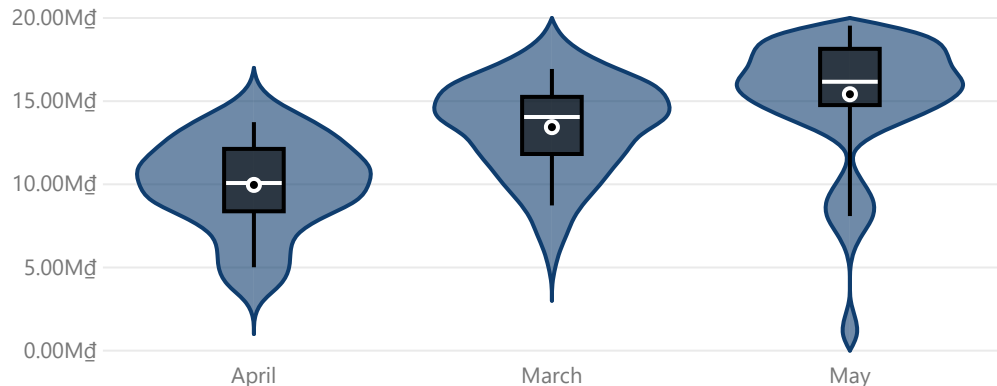
## Sales Amount (Day level)

Sum of TotalPrice



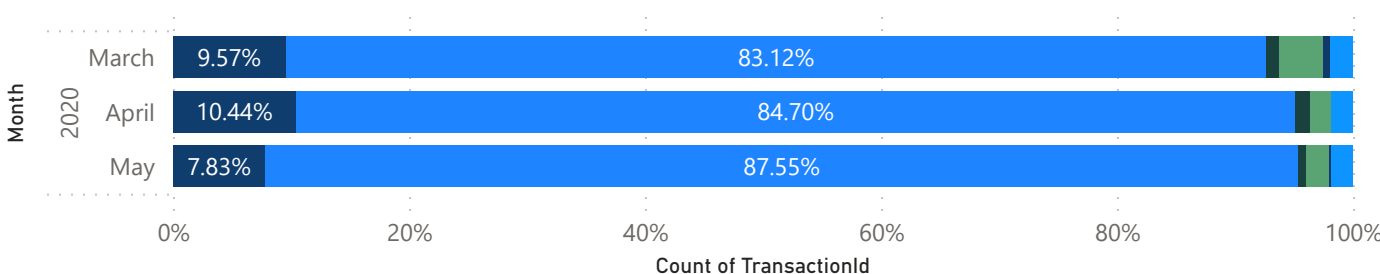
## Distribution of Total Price (Day level) Over Time

Sum of TotalPrice Median Value Mean Value

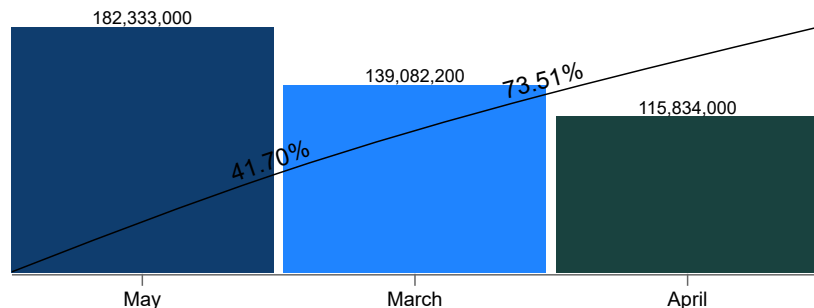


## Count of TransactionId By Machine Line over Time

Tên dòng máy Café D720 D900 Dừa Hotfood Máy mì



## Contribution of Sales Amount by Month



YearMonth  
All

Payment...  
All

Tỉnh  
All

Tên dòng...  
All

Tên danh...  
All

# Sales Analysis

Total Price  
1.15bnđ

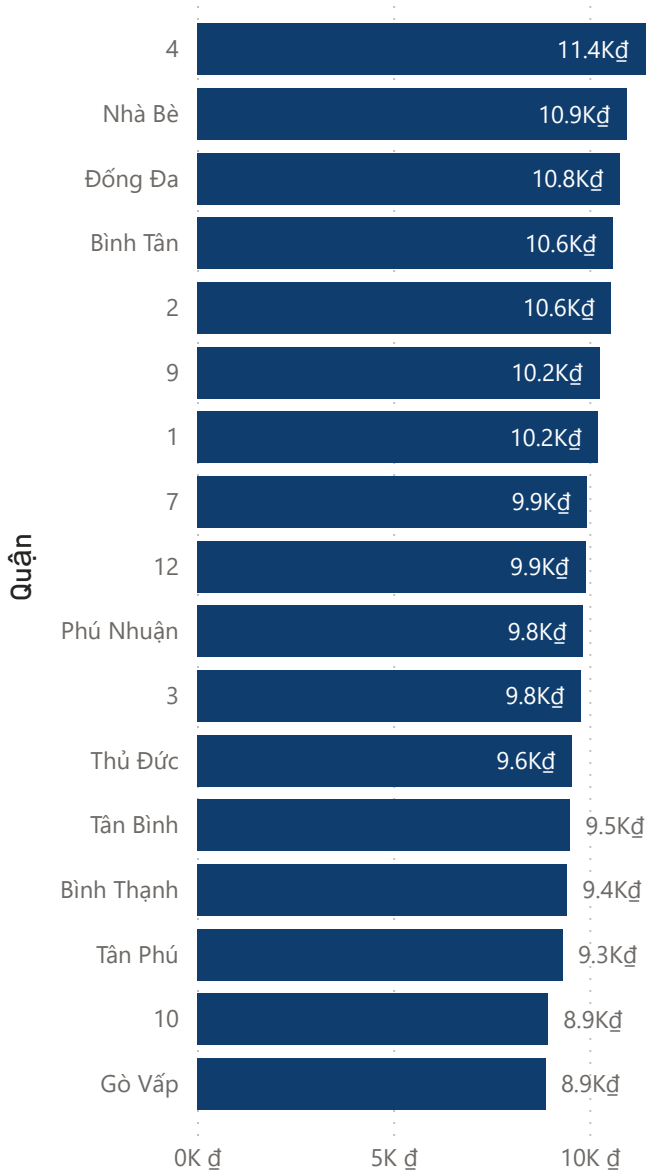
AVG Total Price  
9.92Kđ

Total Quantity  
115.68K

Refunded Amount  
10M đ

AVG Daily Sales  
12.89Mđ

## AVG Sales by District



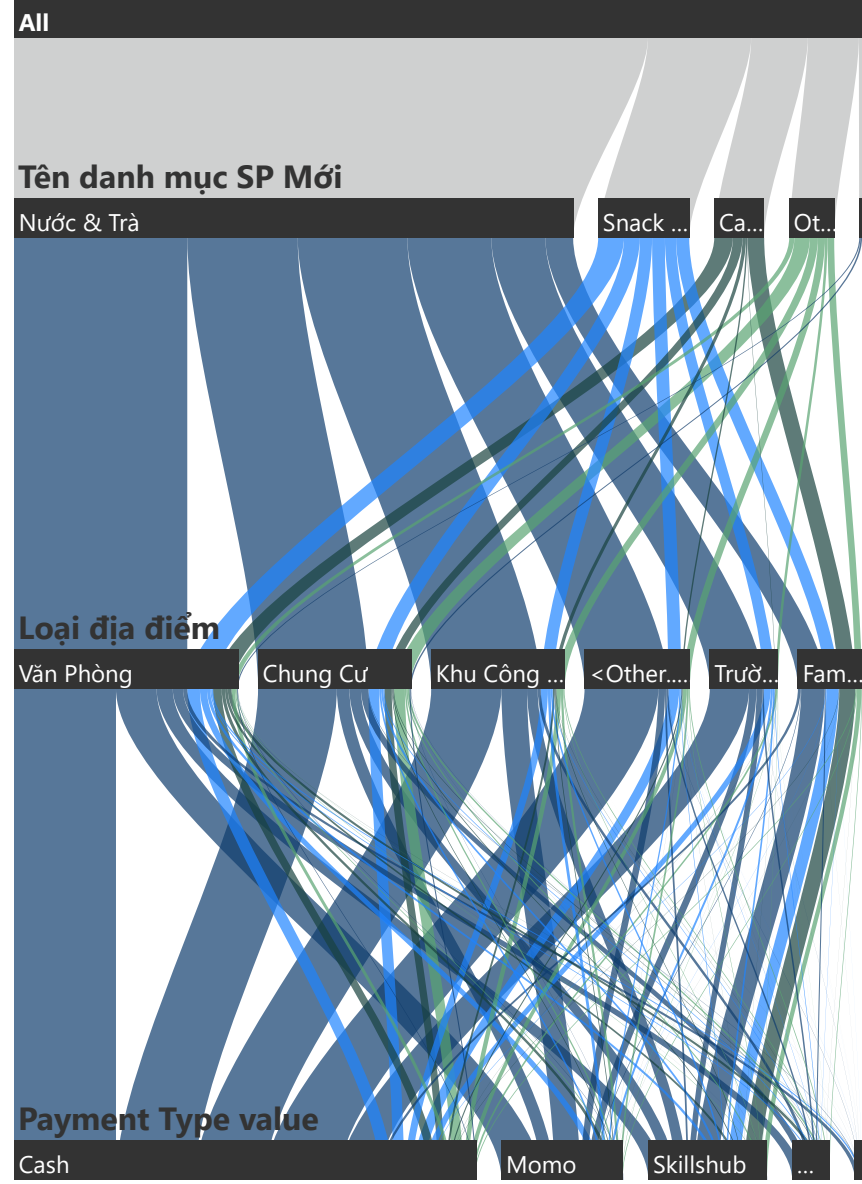
## Factors Affecting Sales Value

Key influencers Top segments

What influences TotalPrice to



## Total Price by Product Category, Location Type, & Payment Type



YearMonth

Payment...

Tỉnh

Tên dòng...

Tên danh...

# Sales Analysis

Total Price  
1.15bnđ

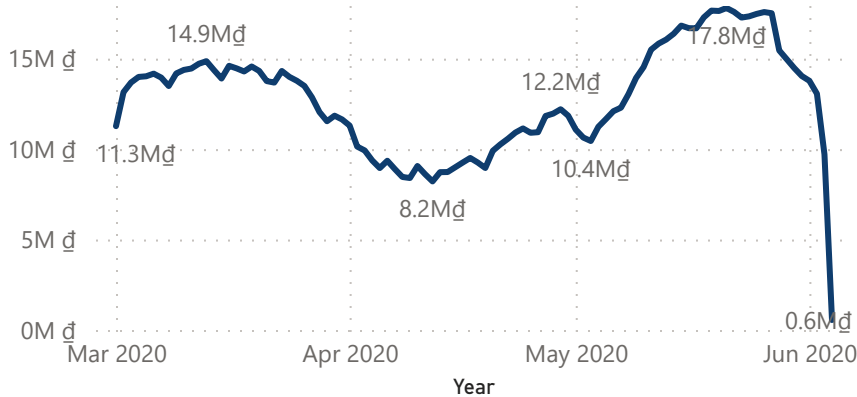
AVG Total Price  
9.92Kđ

Total Quantity  
115.68K

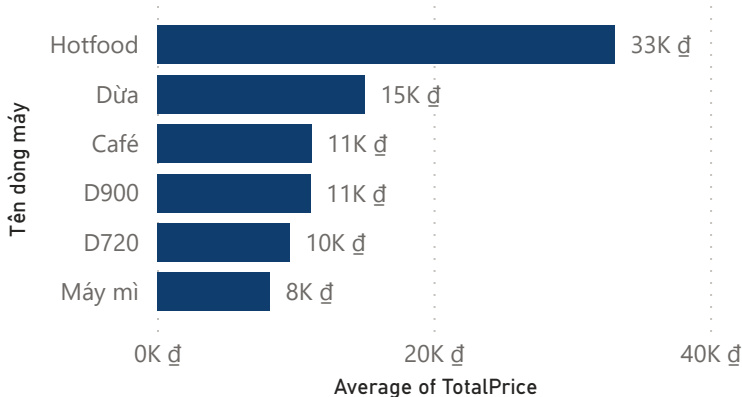
Refunded Amount  
10M đ

AVG Daily Sales  
12.89Mđ

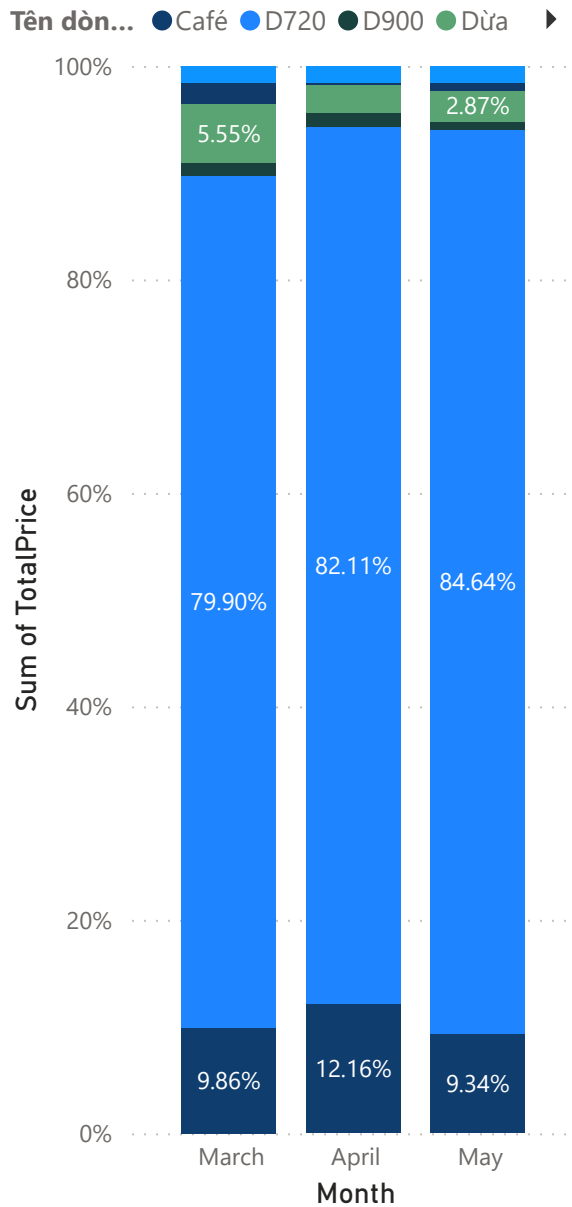
Weekly Rolling Sales Amount



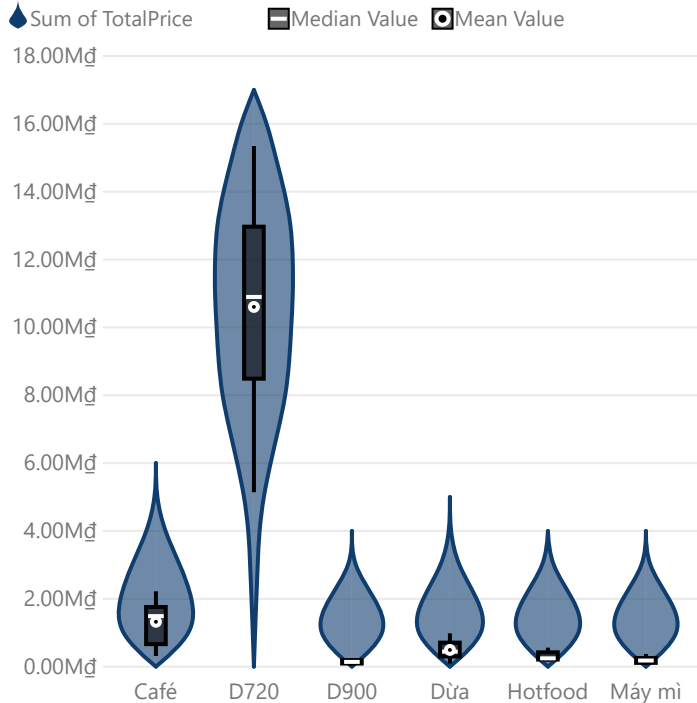
AVG Total Price By Machine Line



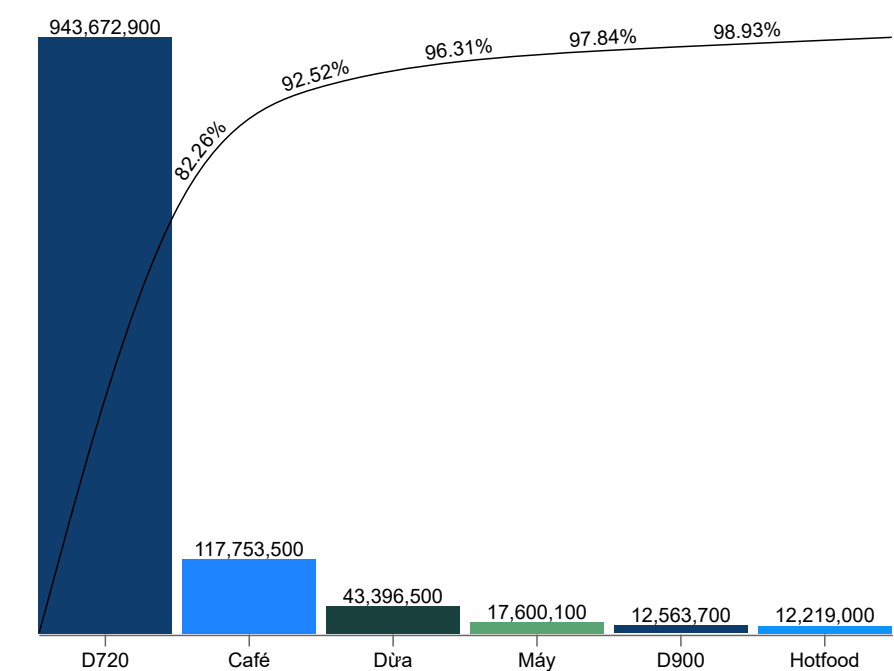
Sales Amount By Machine Line



Sales Amount Distribution (Day-level)



Sales Amount By Machine Line



# Sales Analysis

Total Price

1.15bnd

### AVG Total Price

9.92Kd

Total Quantity

115.68K

Refunded Amount

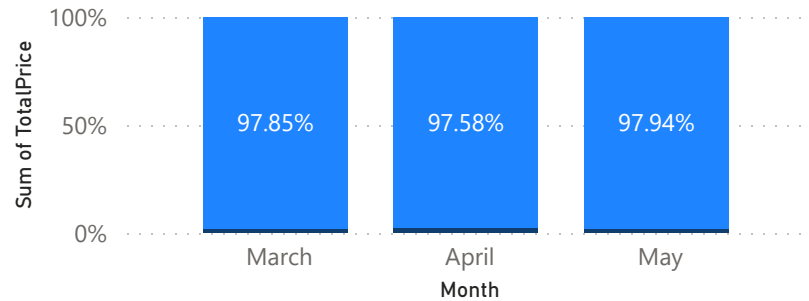
10M d

AVG Daily Sales

12.89Md

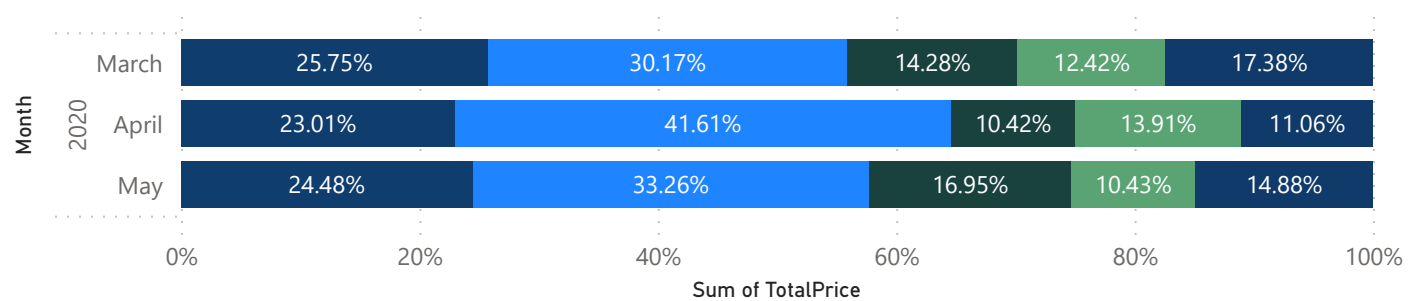
## Sales Value By Province Over Time

Tỉnh địa điểm c... ● Hà Nội ● Hồ Chí Minh



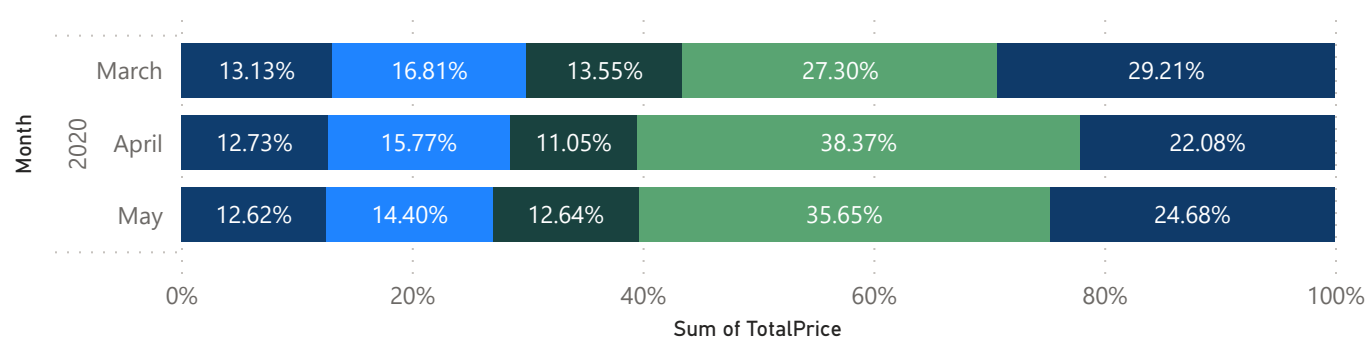
## Sales Value By Top 5 Districts

Quận ● 2 ● 7 ● Bình Thạnh ● Tân Bình ● Thủ Đức

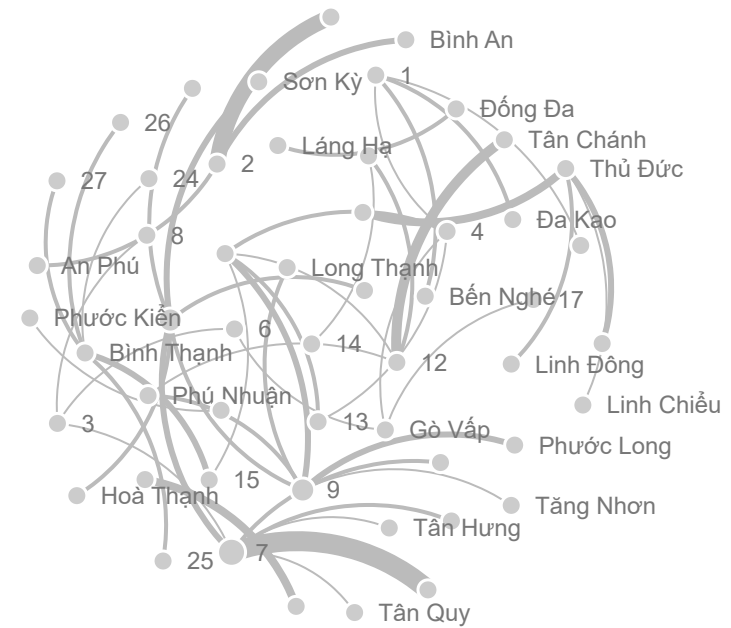


## Sales Value By Top 5 Wards

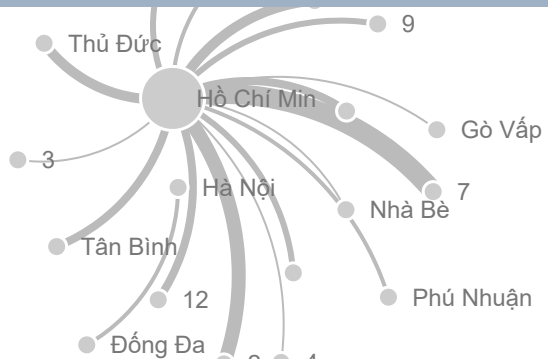
**Phường địa điểm cha** ●9 ●Tân Chánh Hiệp ●Tân Phú ●Tân Thuận Đông ●Thảo Điền



## Sales Value by Geography Hierarchy



## Sales Value by Geography Hierarchy

YearMonth 

All

Payment... 

All

Tỉnh All 

Tên dòng... 

All

Tên danh... 

All 

# Sales Analysis

Total Price  
1.15bnđ

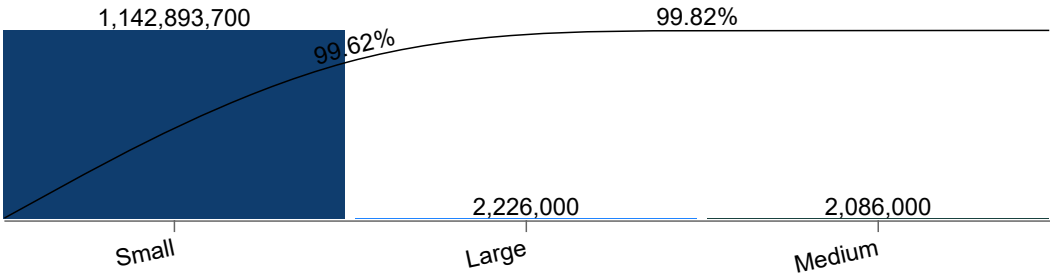
AVG Total Price  
9.92Kđ

Total Quantity  
115.68K

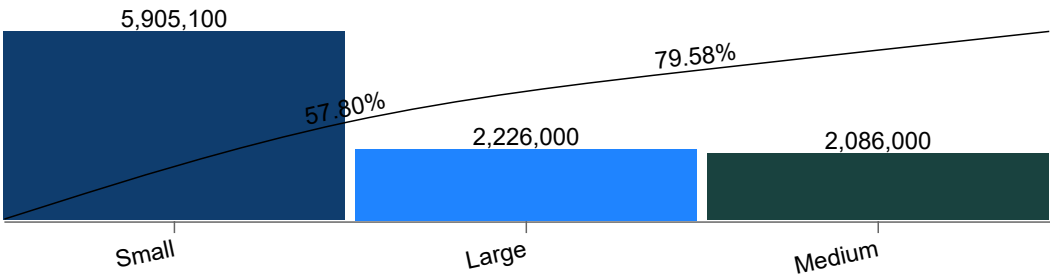
Refunded Amount  
10M đ

AVG Daily Sales  
12.89Mđ

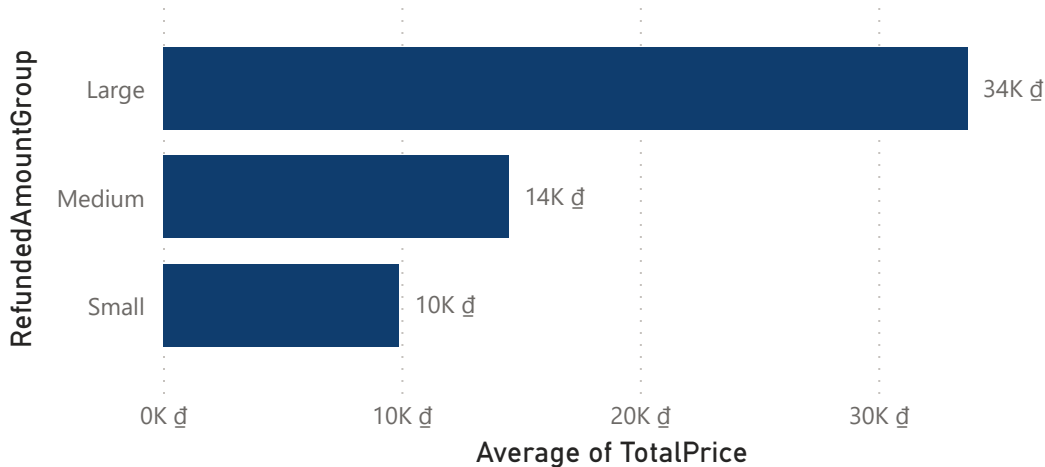
Pareto Chart for Sales Value of Refunded Amount Group



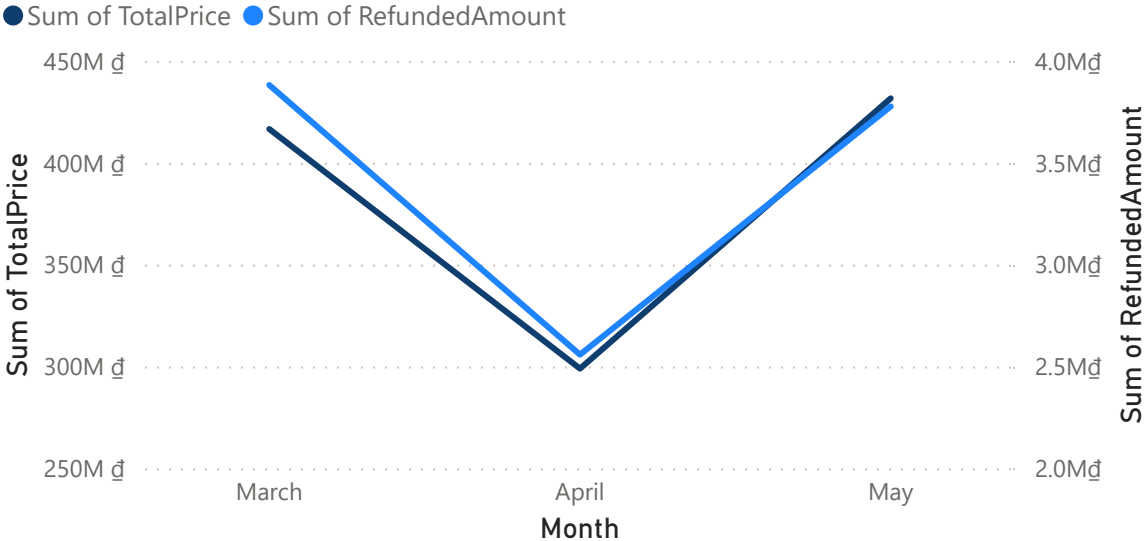
Pareto Chart for Refunded Amount Value of Refunded Amount Group



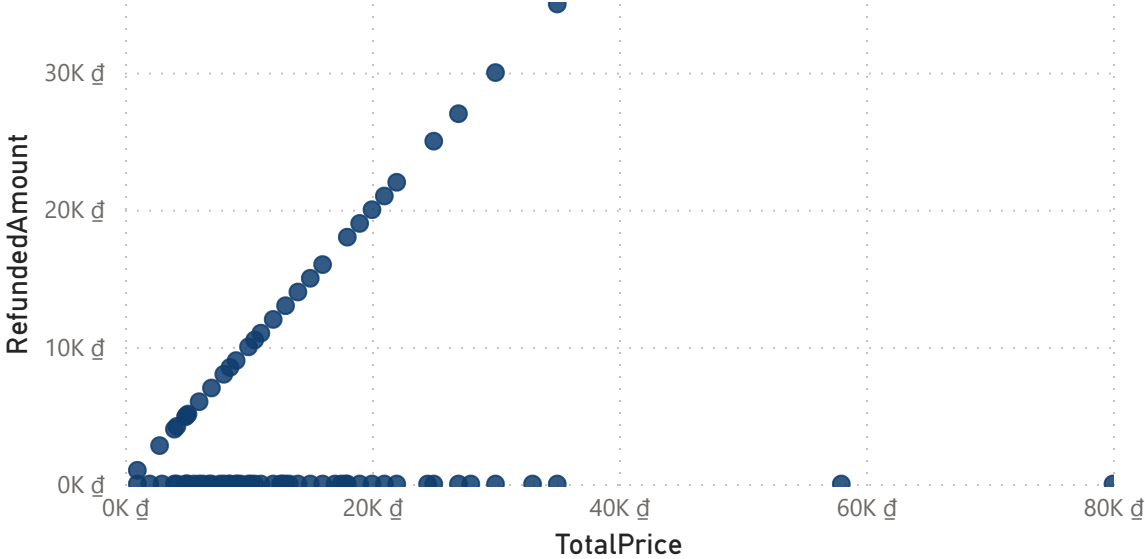
AVG Sales Value per Transaction By Refunded Amount Group



Count of TransactionId By Machine Line & Location Type



TotalPrice and RefundedAmount Correlation



YearMonth  
All

Payment...  
All

Tỉnh  
All

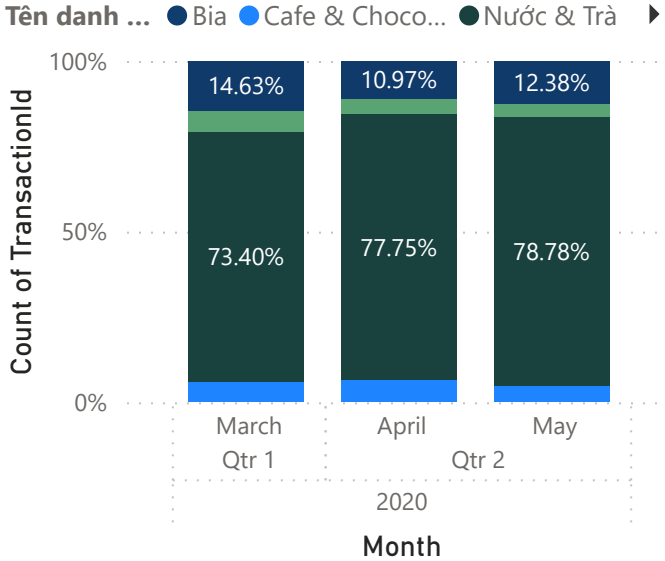
Tên dòng...  
All

Tên danh...  
All

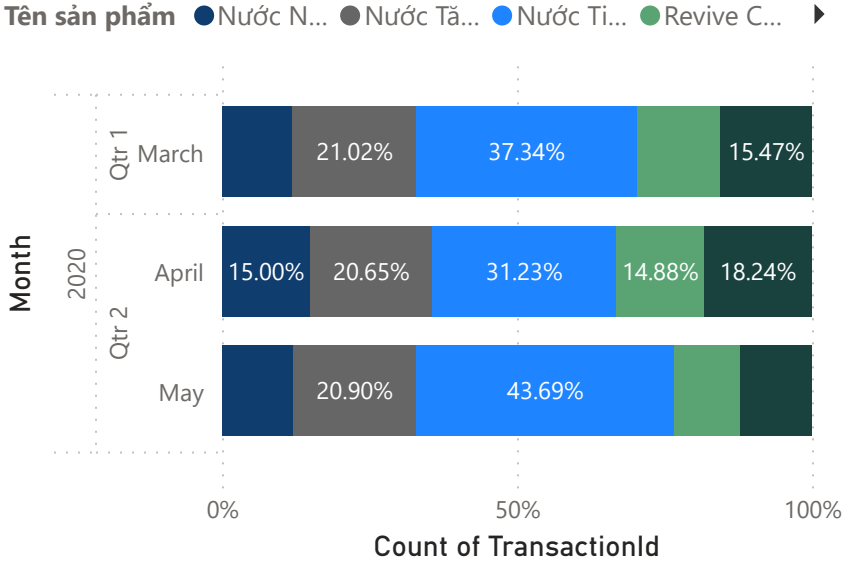
Product Analysis

Total Price	AVG Total Price	Total Quantity	Refunded Amount	AVG Daily Sales
1.15bnđ	9.92Kđ	115.68K	10M đ	12.89Mđ

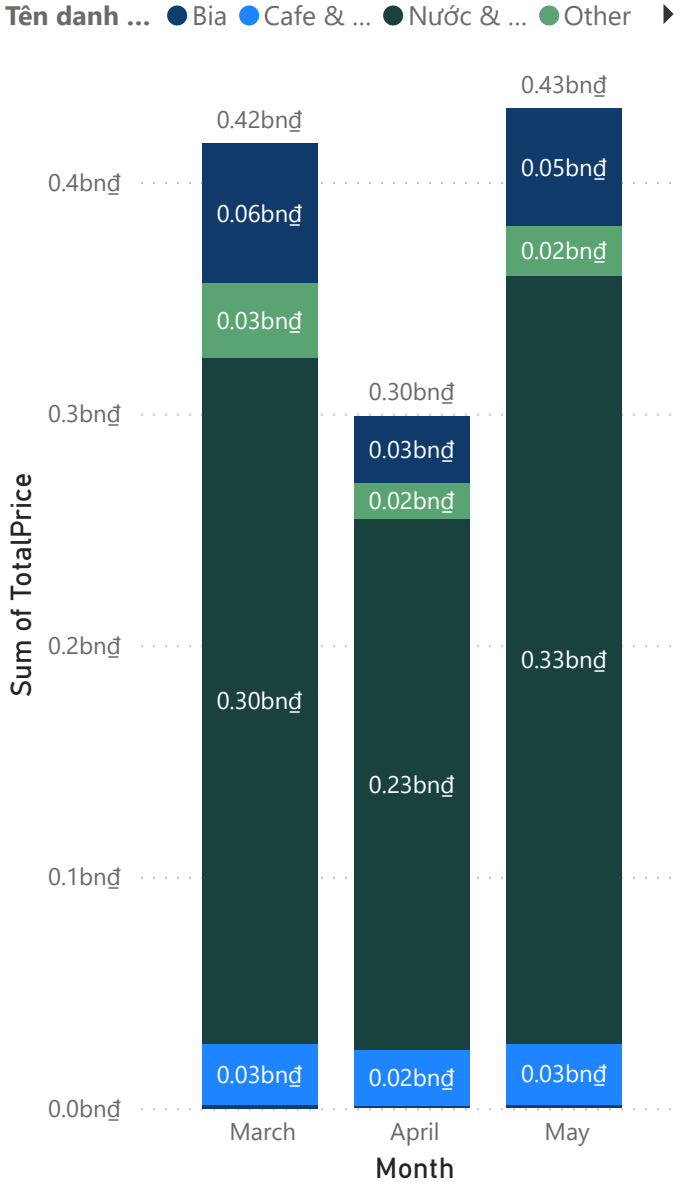
Contribution of Transactions By Product Category



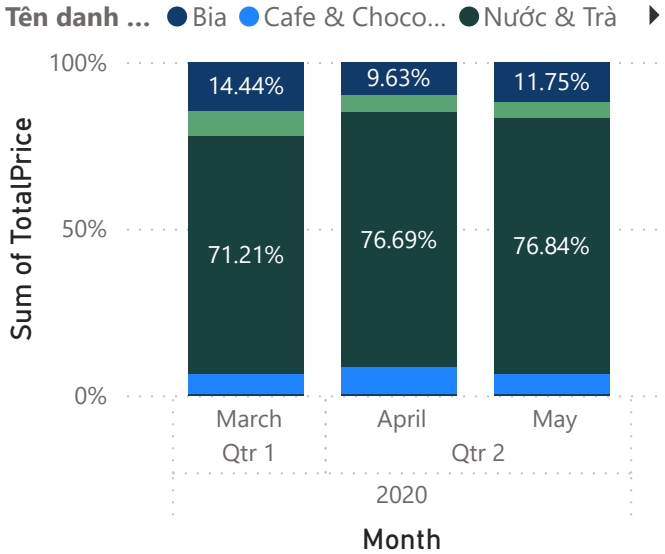
Contribution of Transactions By Top 5 Products Over Tlme



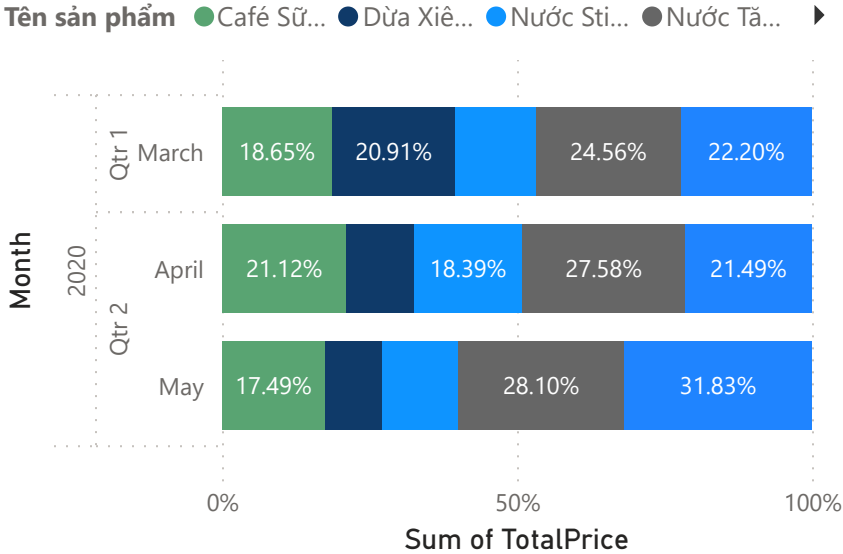
Contribution of Sales By Product Category over Time



Contribution of Sales By Product Category



Contribution of Sales By Top 5 Products Over Tlme



YearMonth

All

Payment...

All

Tỉnh

All

Tên dòng...

All

Tên danh...

All

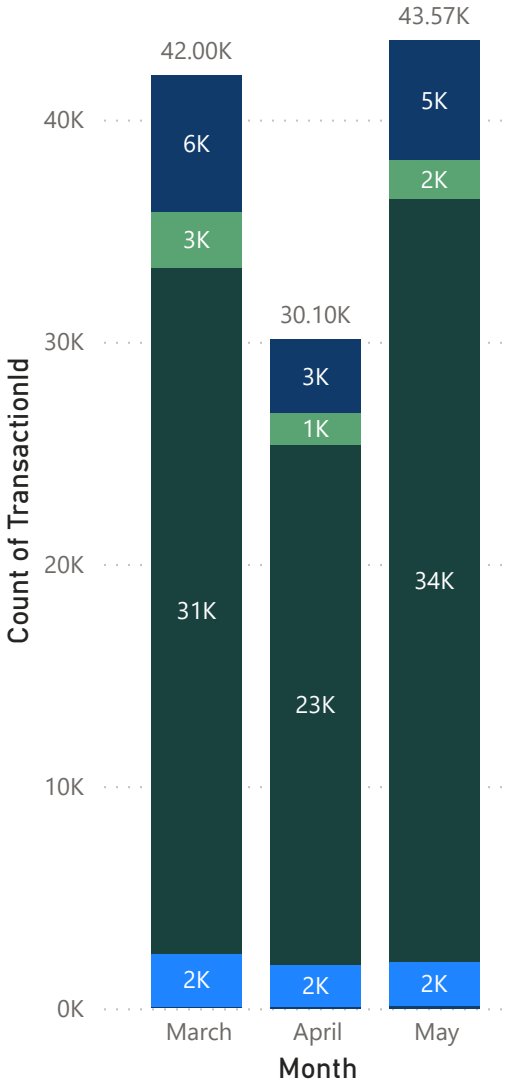


Product Analysis

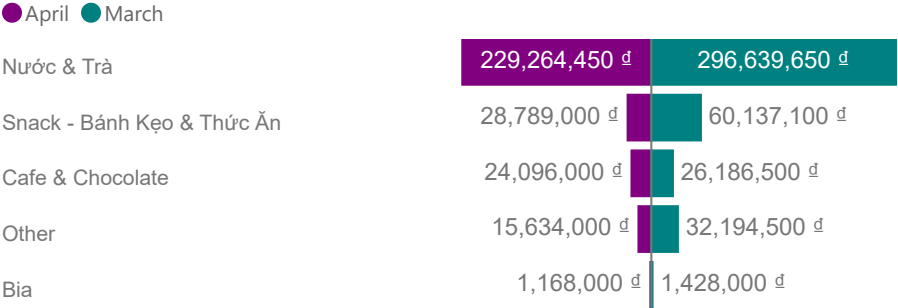
Total Price	AVG Total Price	Total Quantity	Refunded Amount	AVG Daily Sales
1.15bnđ	9.92Kđ	115.68K	10M đ	12.89Mđ

Contribution of Transactions By Product Category over Time

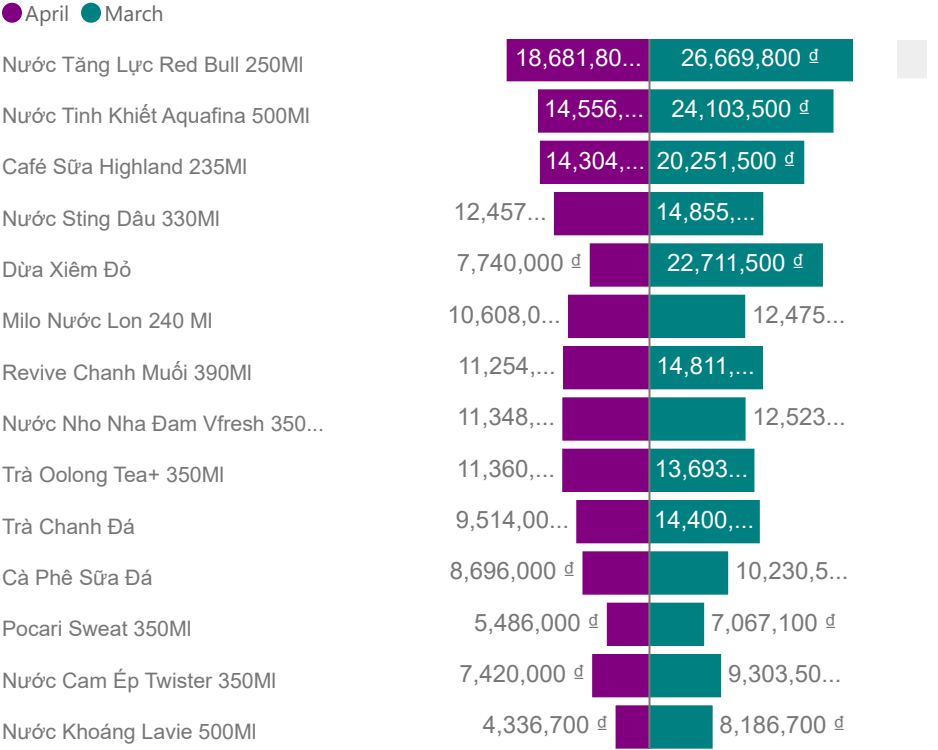
Tên da... Bia Cafe & Chocolate



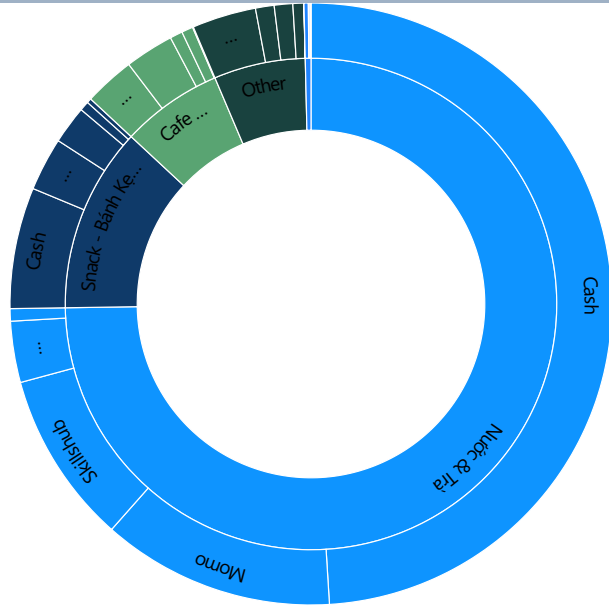
Sales By Product Category Month vs Month



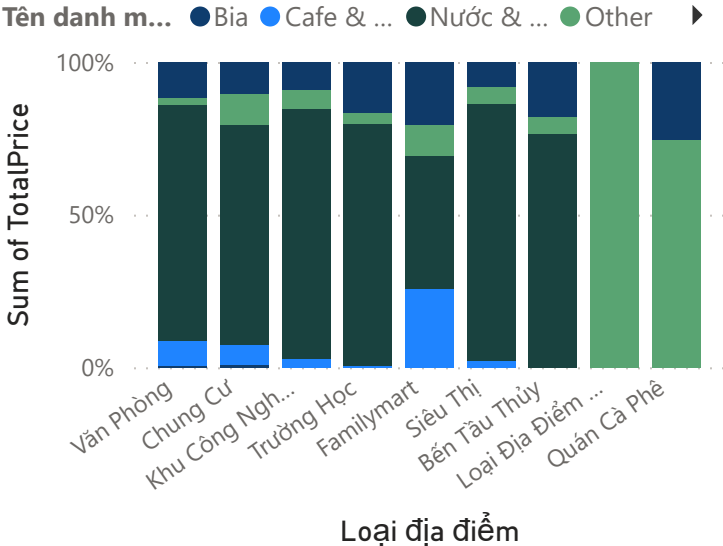
Sales By Product Month vs Month



Sales By Product & Payment Type



Sales By Product Category & Location Type



YearMonth ▼  
All ▼

Payment... ▼  
All ▼

Tỉnh ▼  
All ▼

Tên dòng... ▼  
All ▼

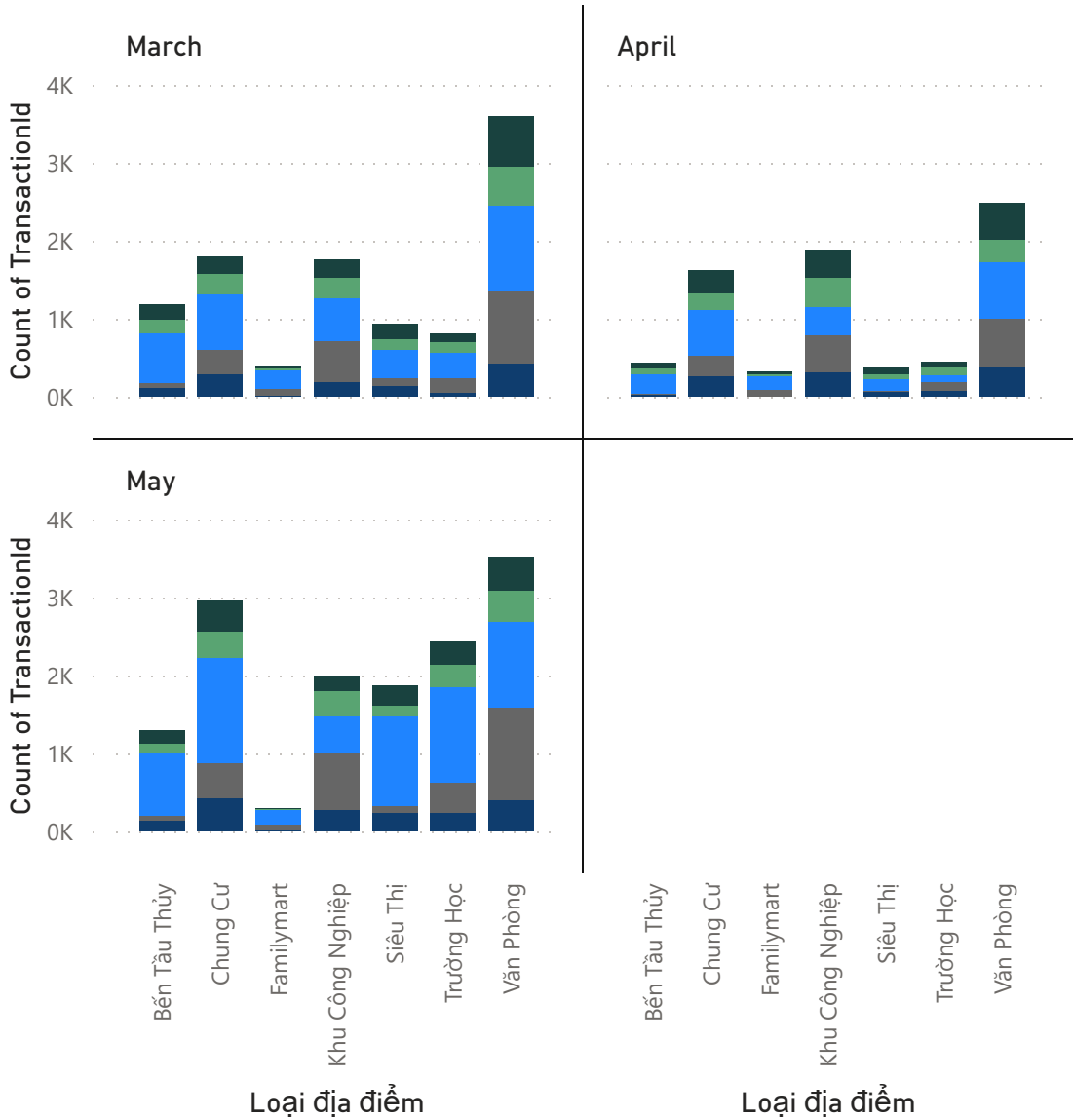
Tên danh... ▼  
All ▼

Product Analysis

Total Price	AVG Total Price	Total Quantity	Refunded Amount	AVG Daily Sales
1.15bnđ	9.92Kđ	115.68K	10M đ	12.89Mđ

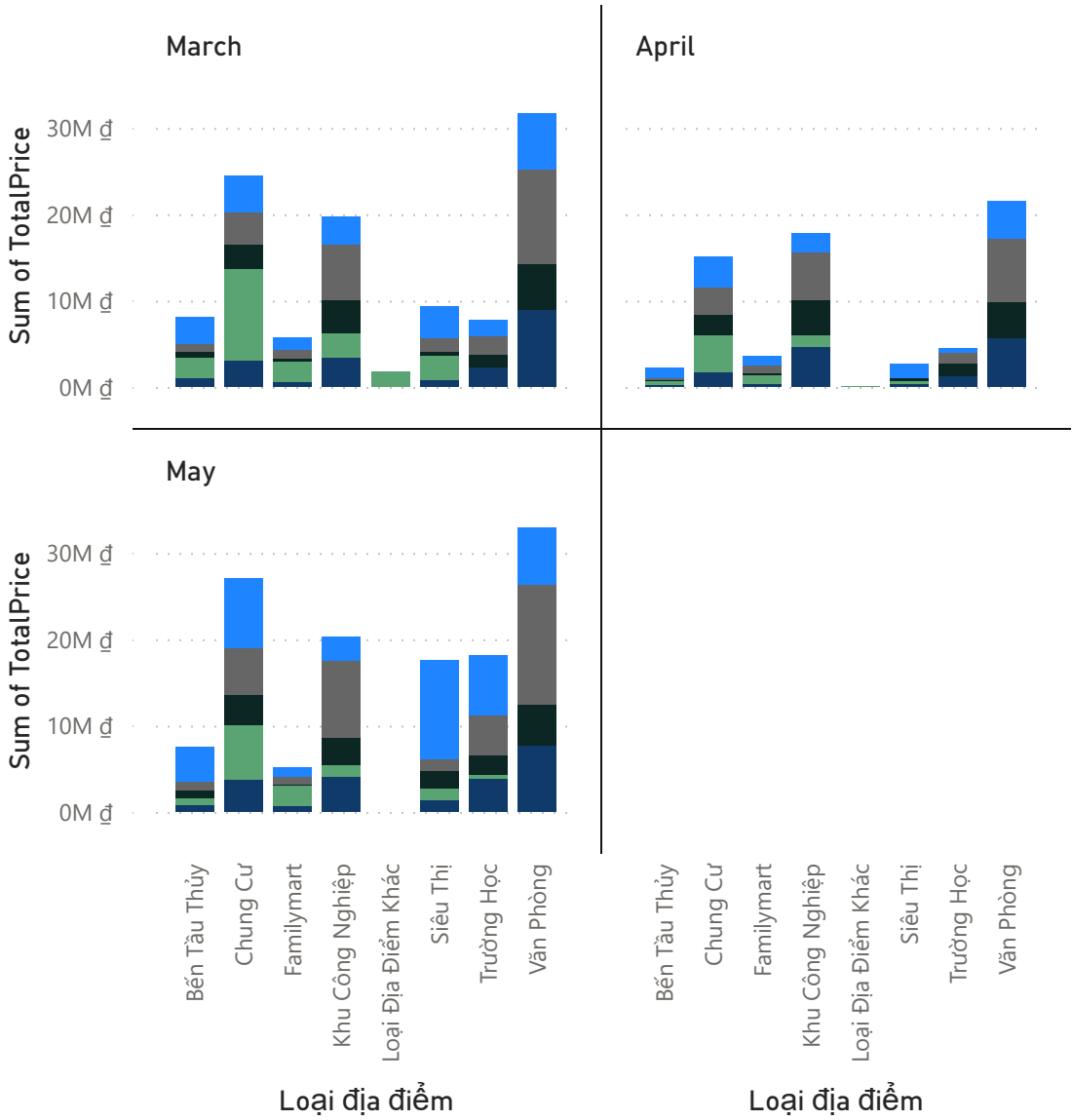
Contribution of Transactions By Top 5 Products Over Tlme

Tên sản phẩm ● Nước Nho ... ● Nước Tăn... ● Nước Tin... ● Revive Ch... ● Trà Oolon...



Contribution of Sales By Top 5 Products Over Tlme

Tên sản phẩm ● Café Sữa ... ● Dừa Xiêm Đỏ ● Nước Stin... ● Nước Tăn... ● Nước Tin...



YearMonth

All

Payment...

All

Tỉnh

All

Tên dòng...

All

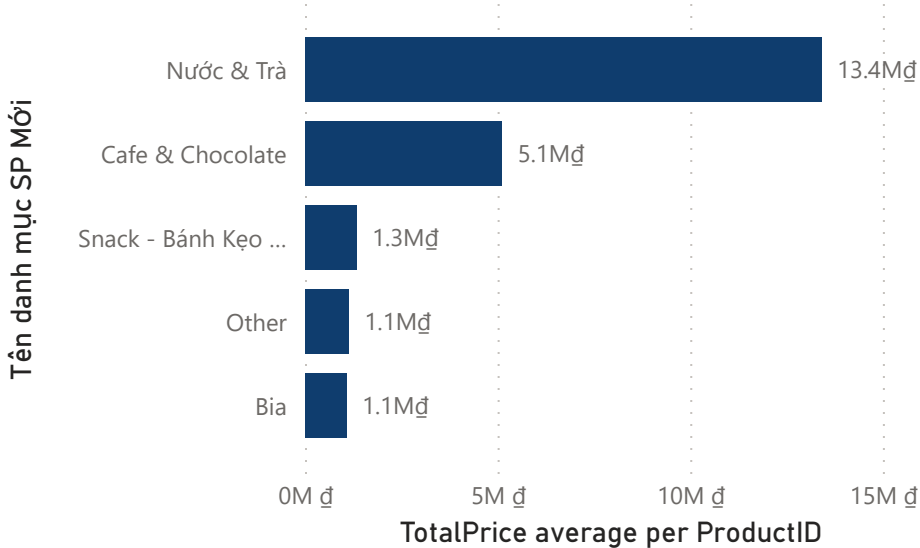
Tên danh...

All

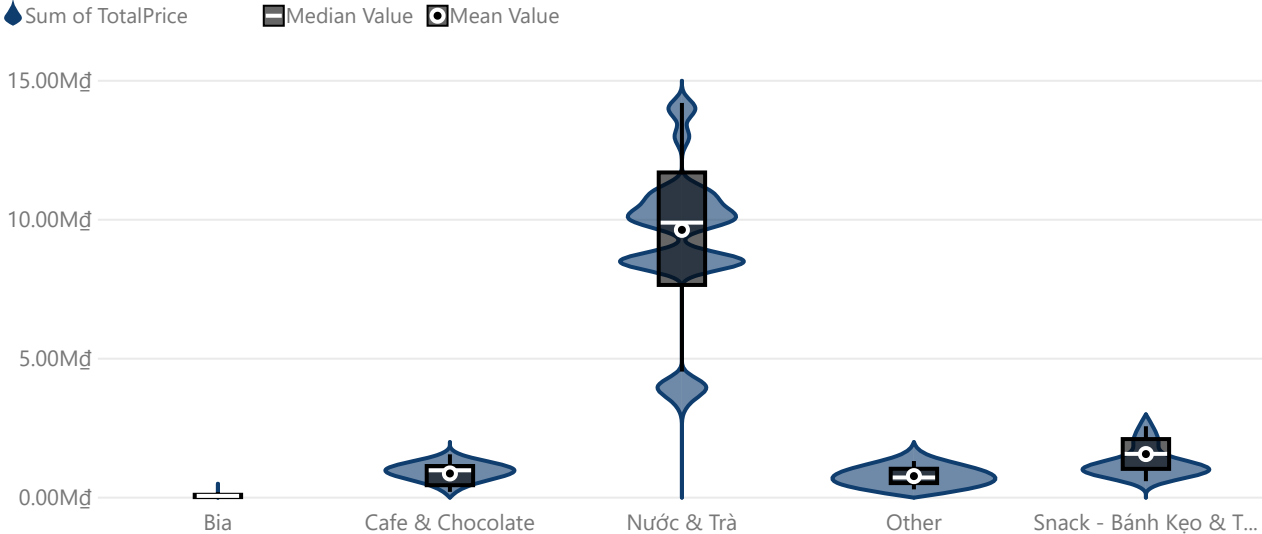
Product Analysis

Total Price	AVG Total Price	Total Quantity	Refunded Amount	AVG Daily Sales
1.15bnđ	9.92Kđ	115.68K	10M đ	12.89Mđ

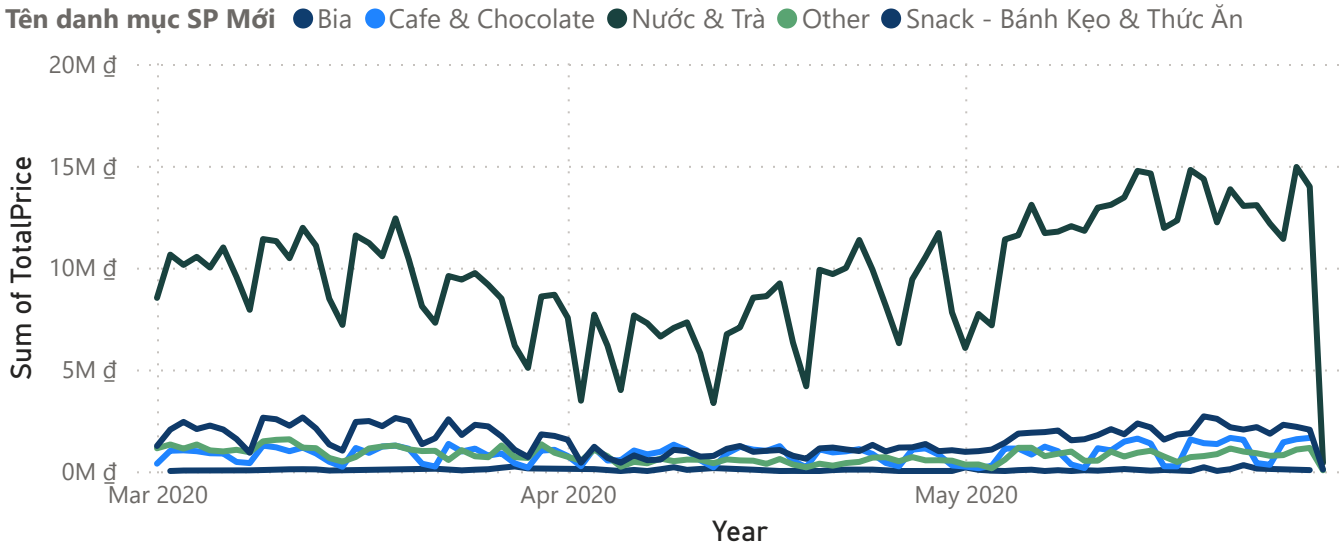
AVG Sales per Product within a Category



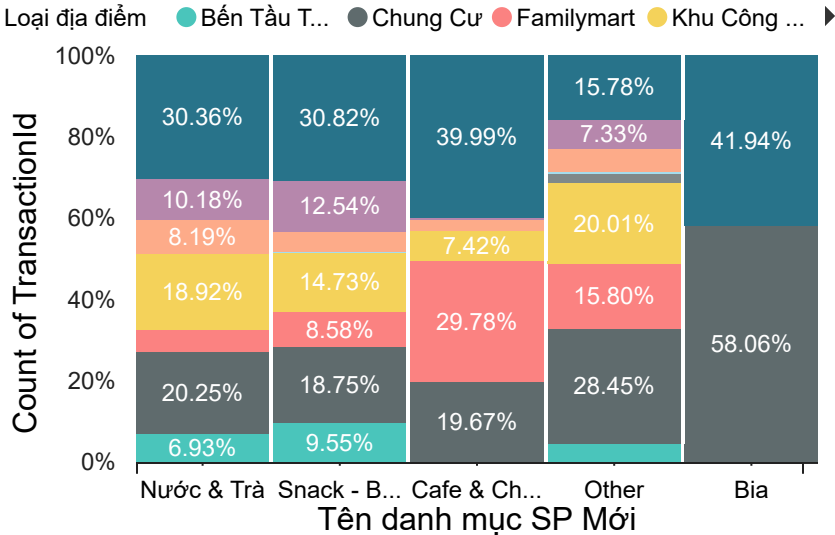
Sales Distribution (Day-level) of Product Category



Sum of TotalPrice by Year, Quarter, Month, Day and Tên danh mục SP Mới



Sales Contribution By Product Category & Location Type



YearMonth

All

Payment...

All

Tỉnh

All

Tên dòng...

All

Tên danh...

All

Geography Analysis

Total Price  
1.12bnđ

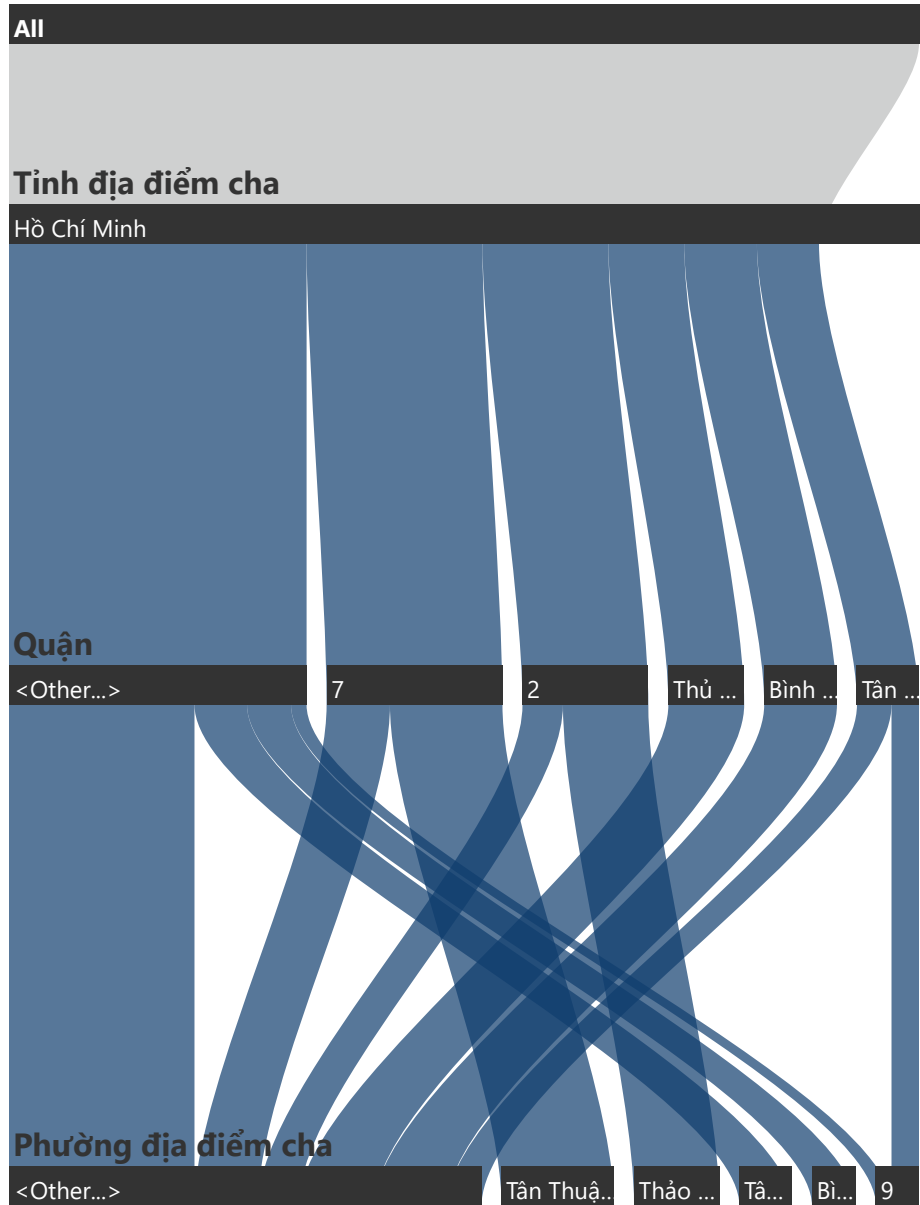
AVG Total Price  
9.90Kđ

Total Quantity  
113.35K

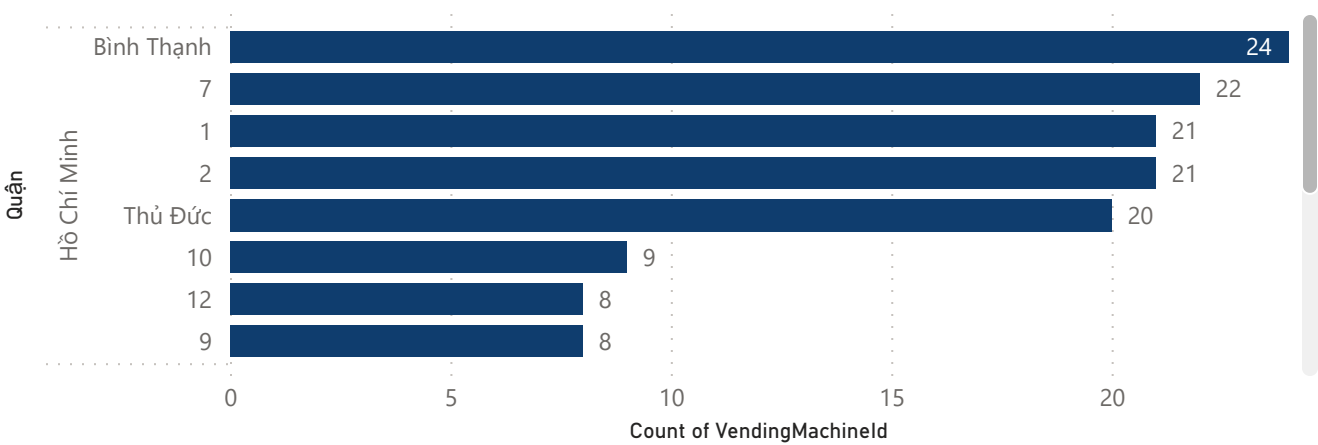
Refunded Amount  
10M đ

AVG Daily Sales  
12.61Mđ

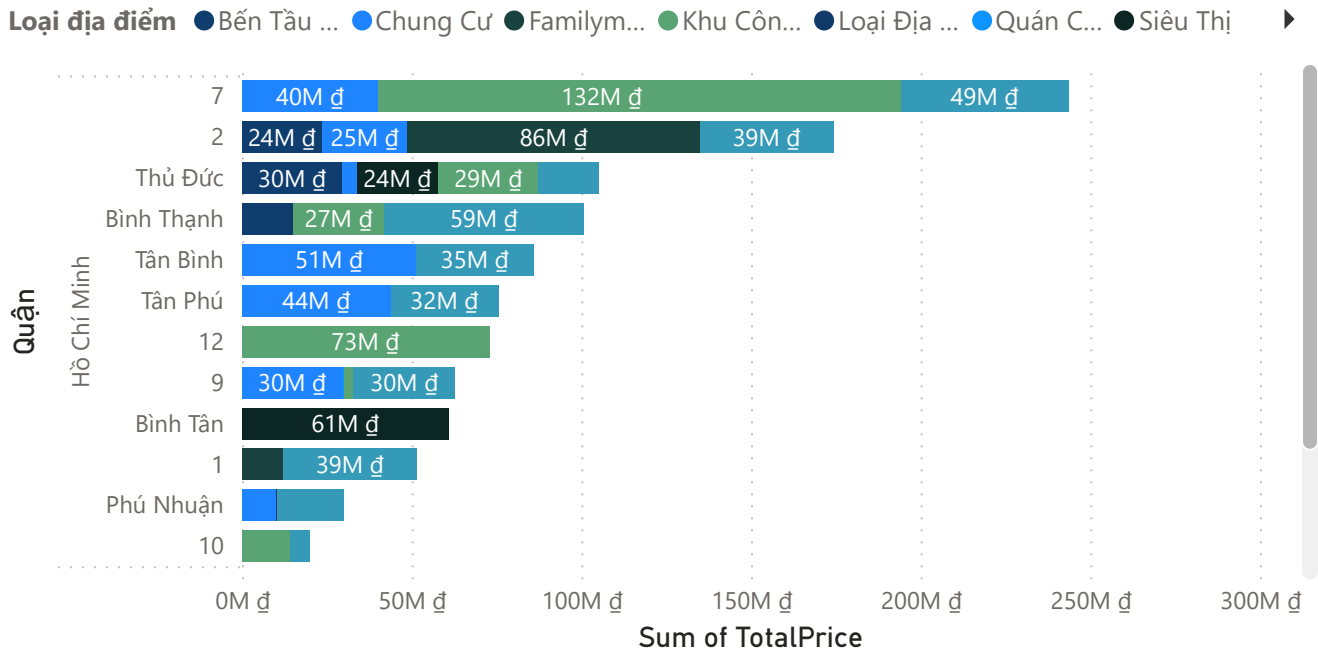
Sales Value By Geography Hierarchy



Vending Machine Count By Geography Hierarchy



Sales Contribution by Geography Hierarchy & Location Type



YearMonth  
All

Payment...  
All

Tỉnh  
All

Tên dòng...  
All

Tên danh...  
All

## Geography Analysis

Total Price

# 1.1 5bnd

### AVG Total Price

9.92Kd

Total Quantity

115.68K

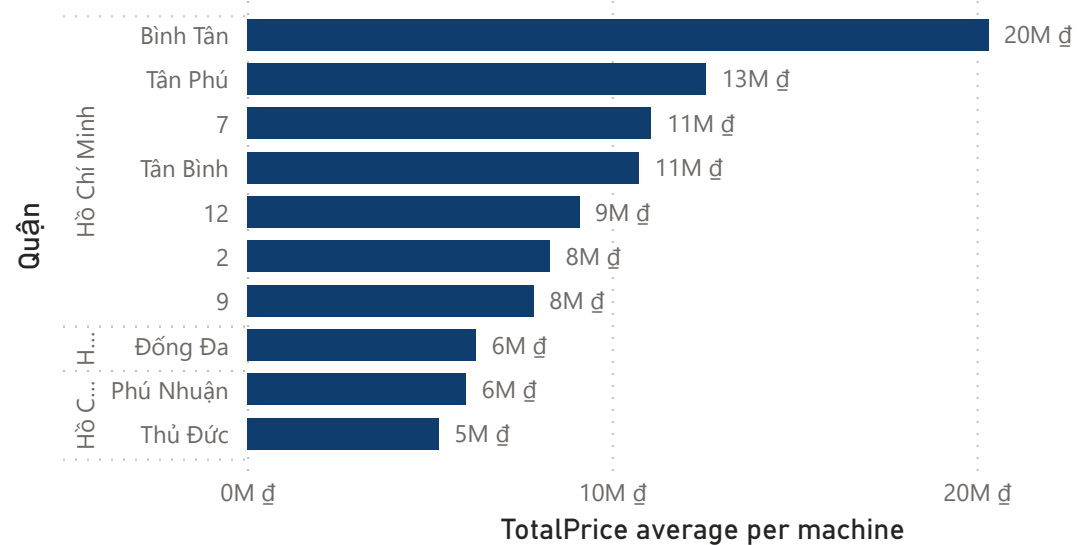
Refunded Amount

10M d

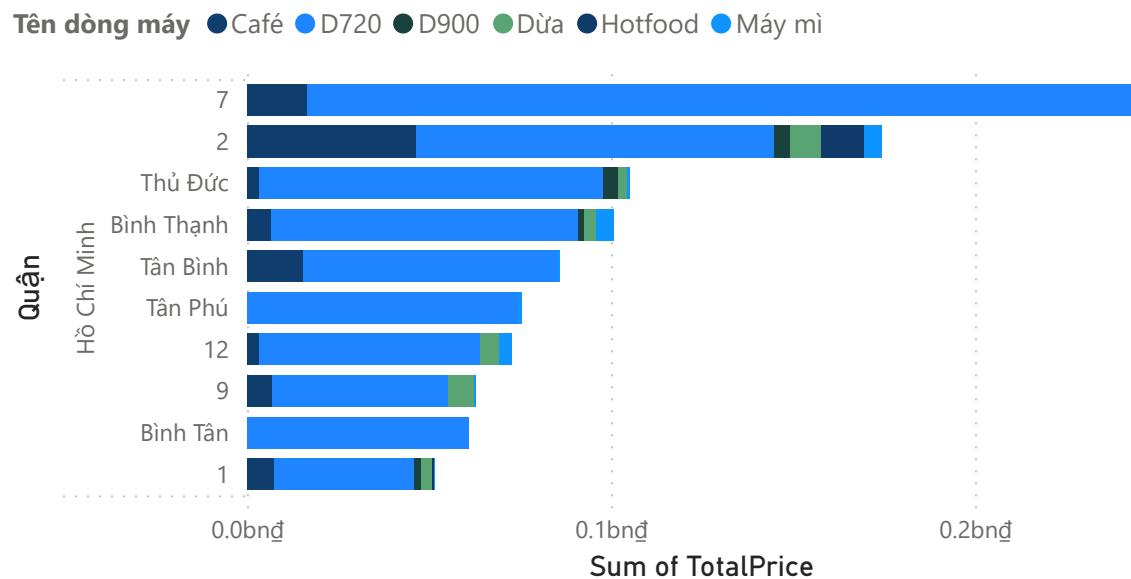
AVG Daily Sales

12.89Md

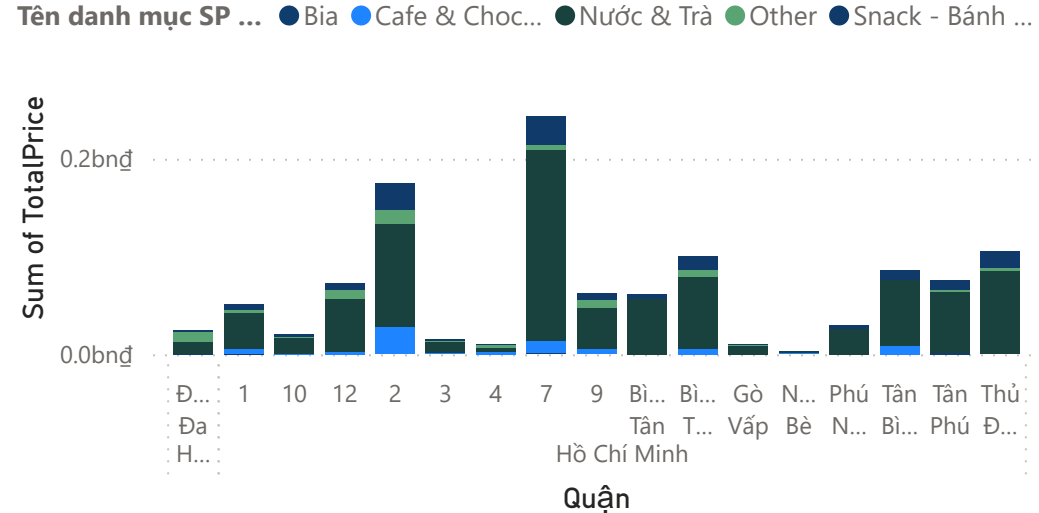
## AVG Sales Per Machine By Geography Hierarchy



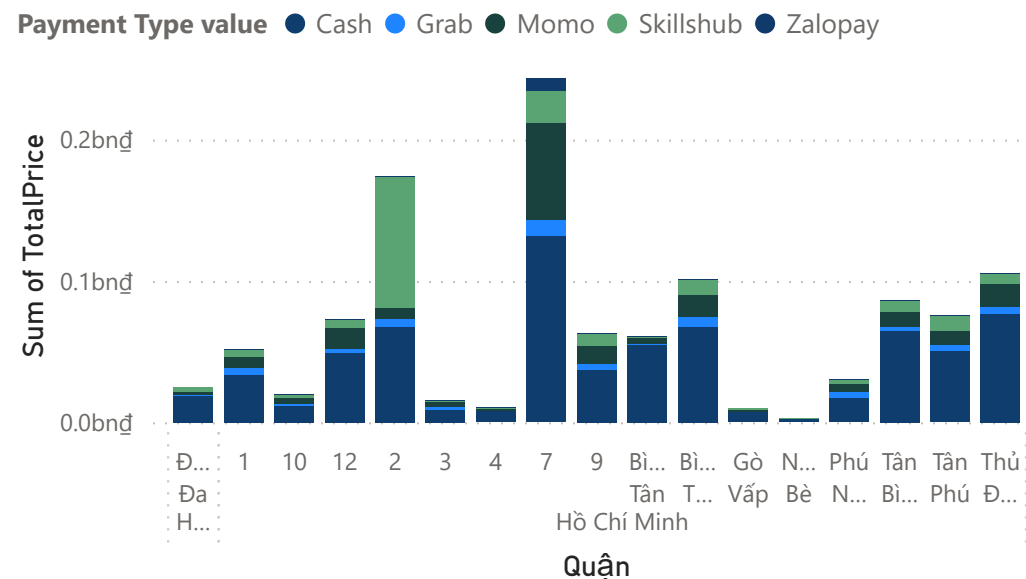
Sum of TotalPrice by Tỉnh địa điểm cha, Quận and Tên dòng máy




## Sales Contribution By Geography Hierarchy & Product Category



## Sales Contribution By Geography Hierarchy & Product Category

YearMonth 

All 


Payment... 

All 

Tỉnh 

All 

Tên dòng... 

All 

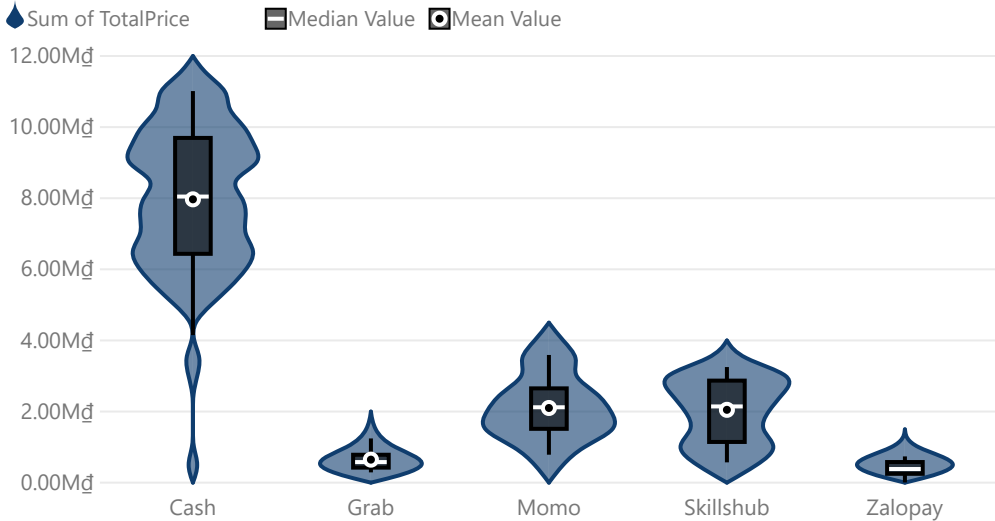
Tên danh... 

All 

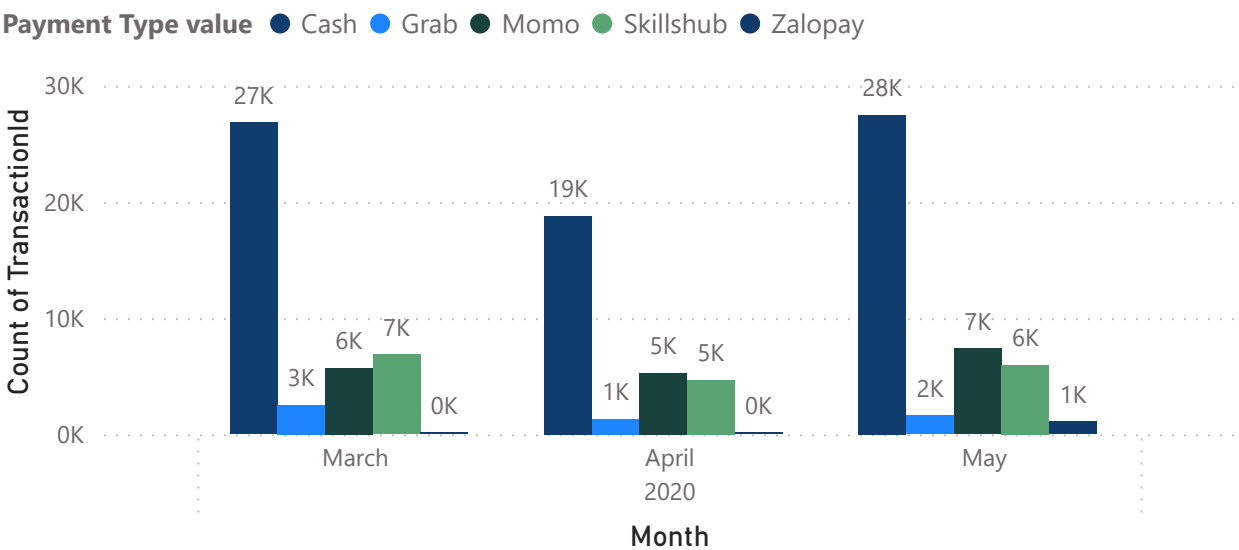
Payment Analysis

Total Price	AVG Total Price	Total Quantity	Refunded Amount	AVG Daily Sales
1.15bnđ	9.92Kđ	115.68K	10M đ	12.89Mđ

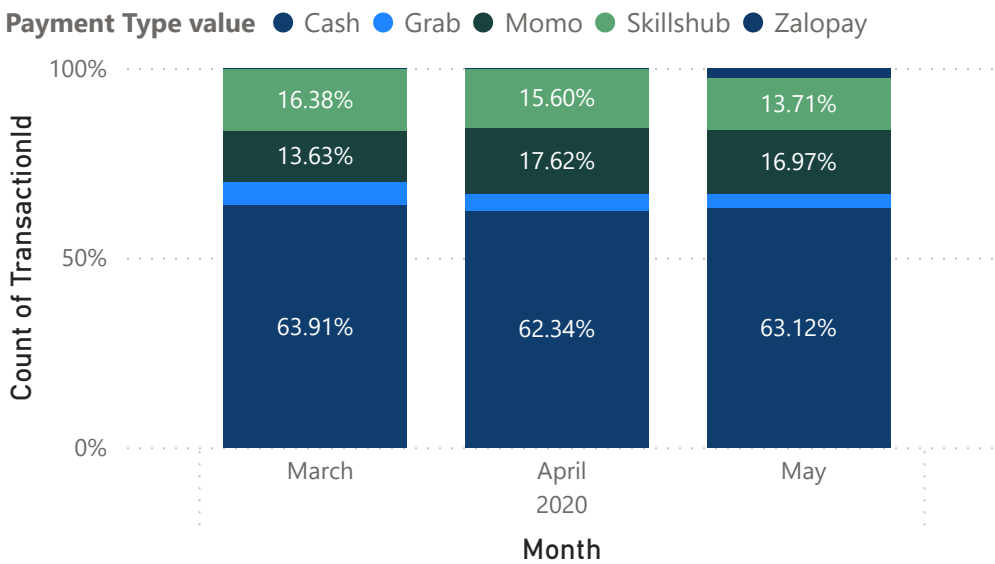
Day-level Sales Distribution by Payment Type



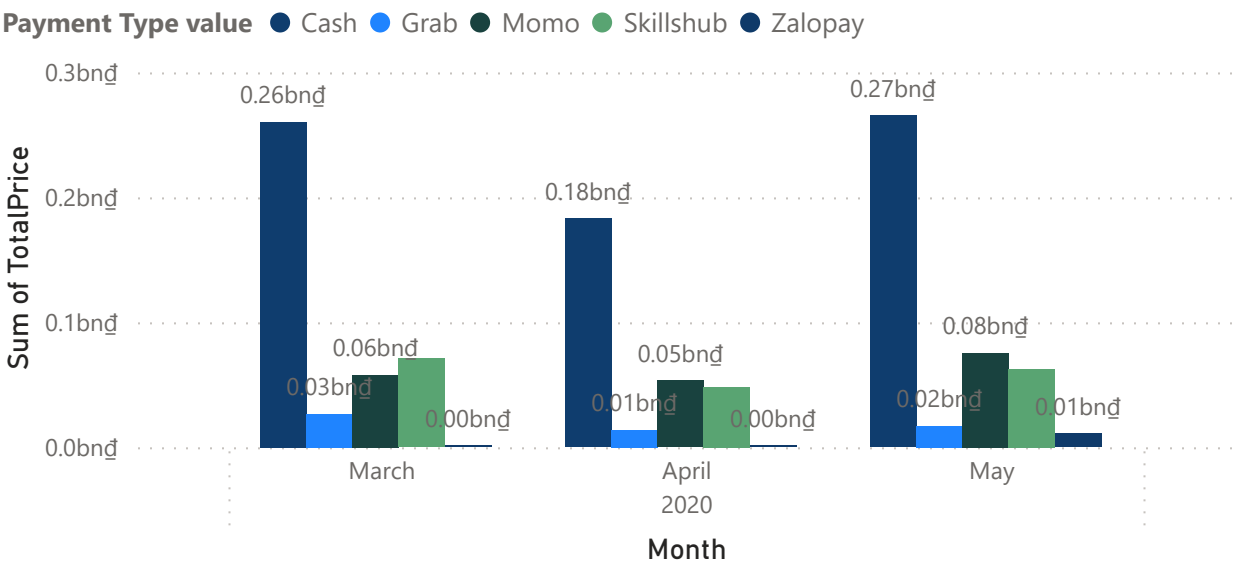
Count of TransactionId By Payment Type over Time



Count of TransactionId By Payment Type over Time



Sales Value By Payment Type over Time



YearMonth

All

Payment...

All

Tỉnh

All

Tên dòng...

All

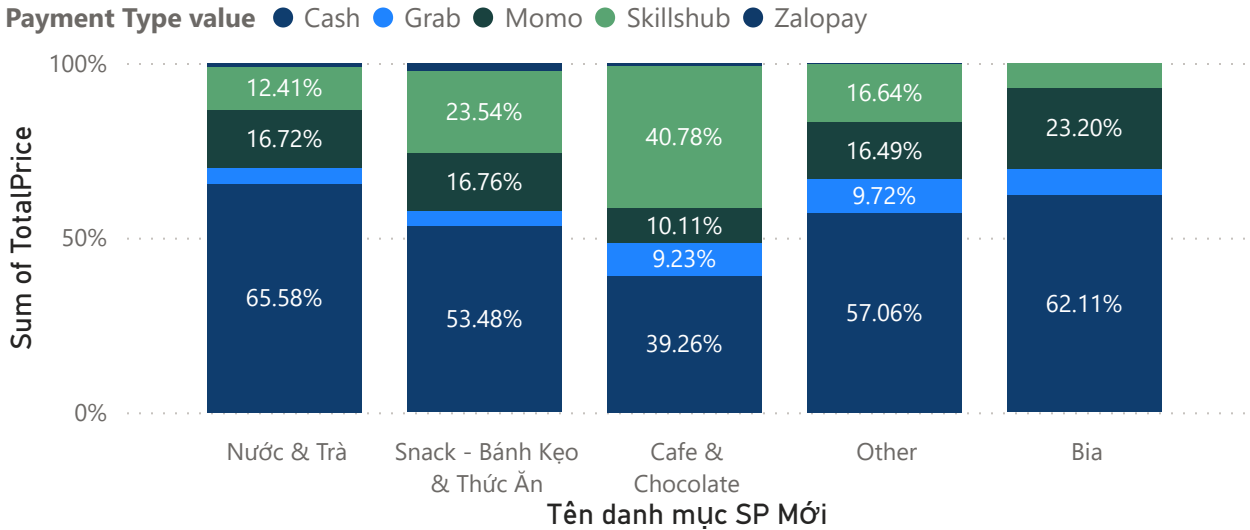
Tên danh...

All

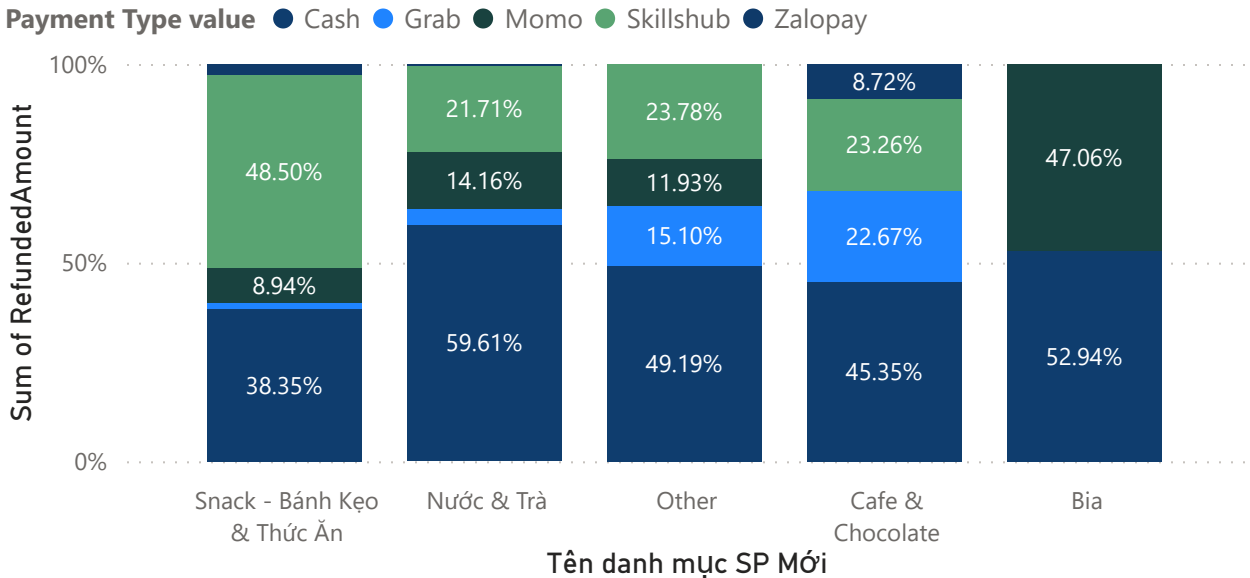
Payment Analysis

Total Price	AVG Total Price	Total Quantity	Refunded Amount	AVG Daily Sales
1.15bnđ	9.92Kđ	115.68K	10M đ	12.89Mđ

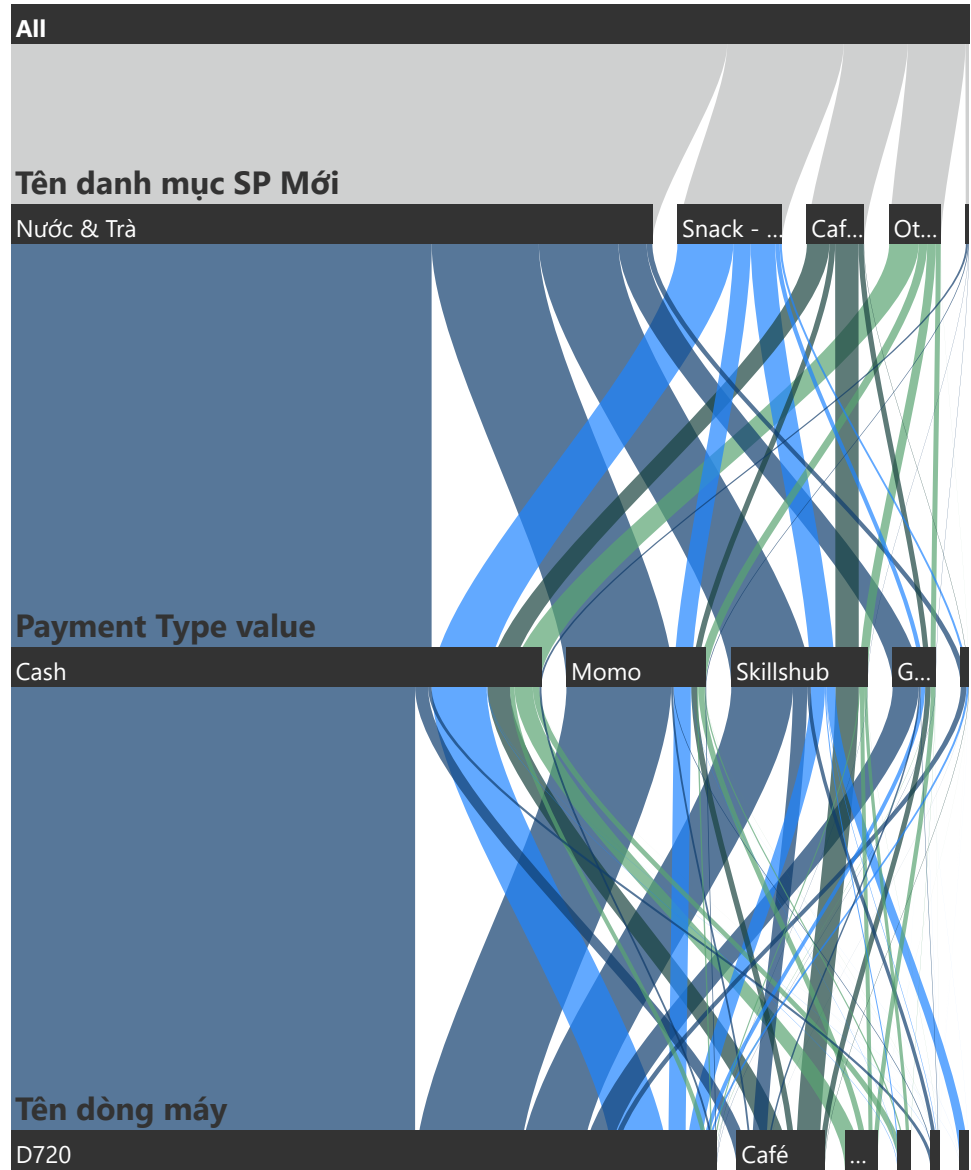
Sum Sales Value By Machine Line & Location Type



Refunded Amount By Machine Line & Location Type



Sum of TotalPrice by Tên danh mục SP Mới, Payment Type value and Tên dòng máy



YearMonth

All

Payment...

All

Tỉnh

All

Tên dòng...

All

Tên danh...

All

# Date Analysis

Total Price  
1.15bnđ

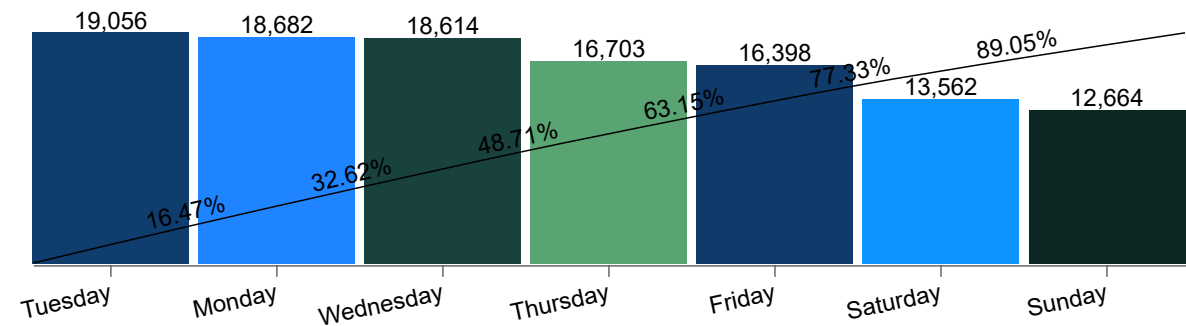
AVG Total Price  
9.92Kđ

Total Quantity  
115.68K

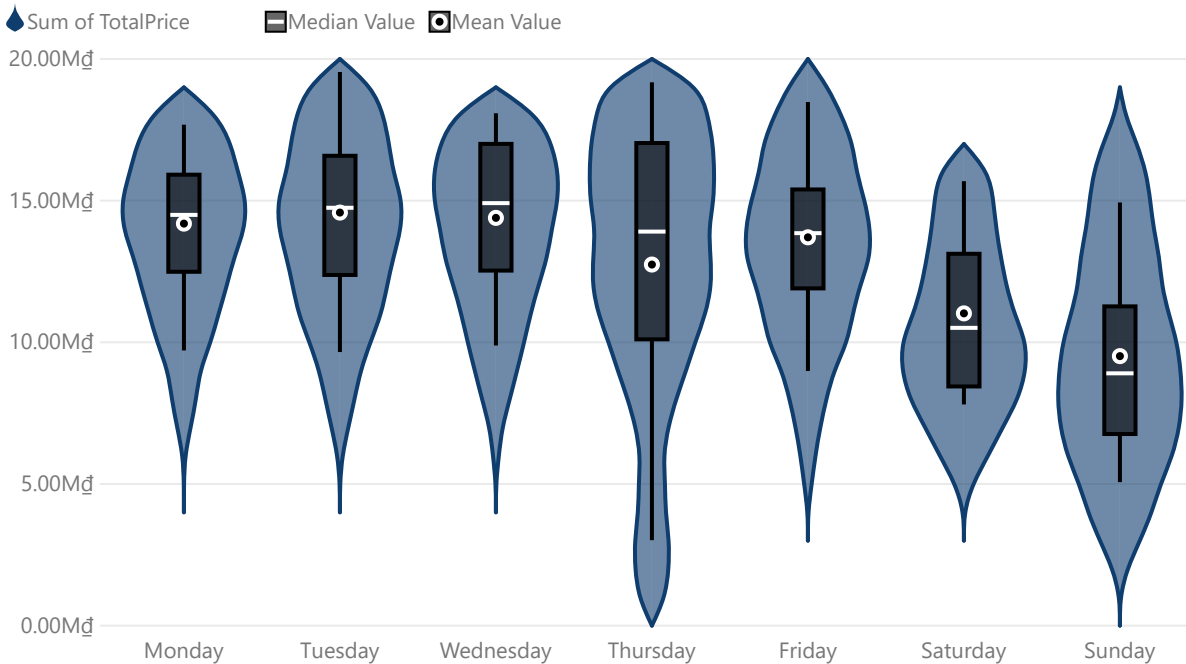
Refunded Amount  
10M đ

AVG Daily Sales  
12.89Mđ

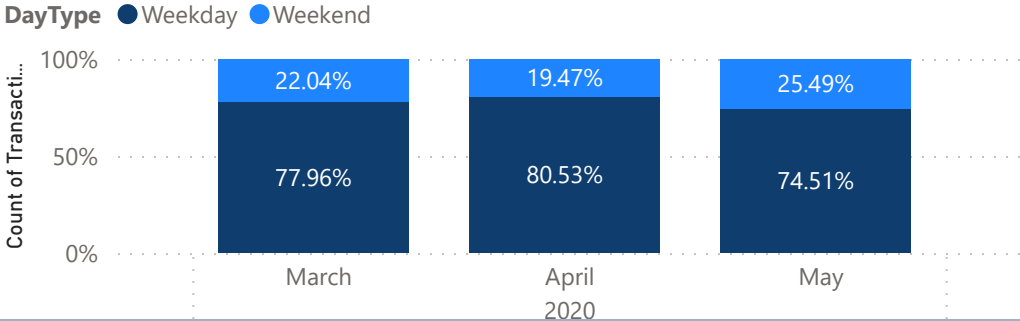
Contribution of Transactions By Day of Week



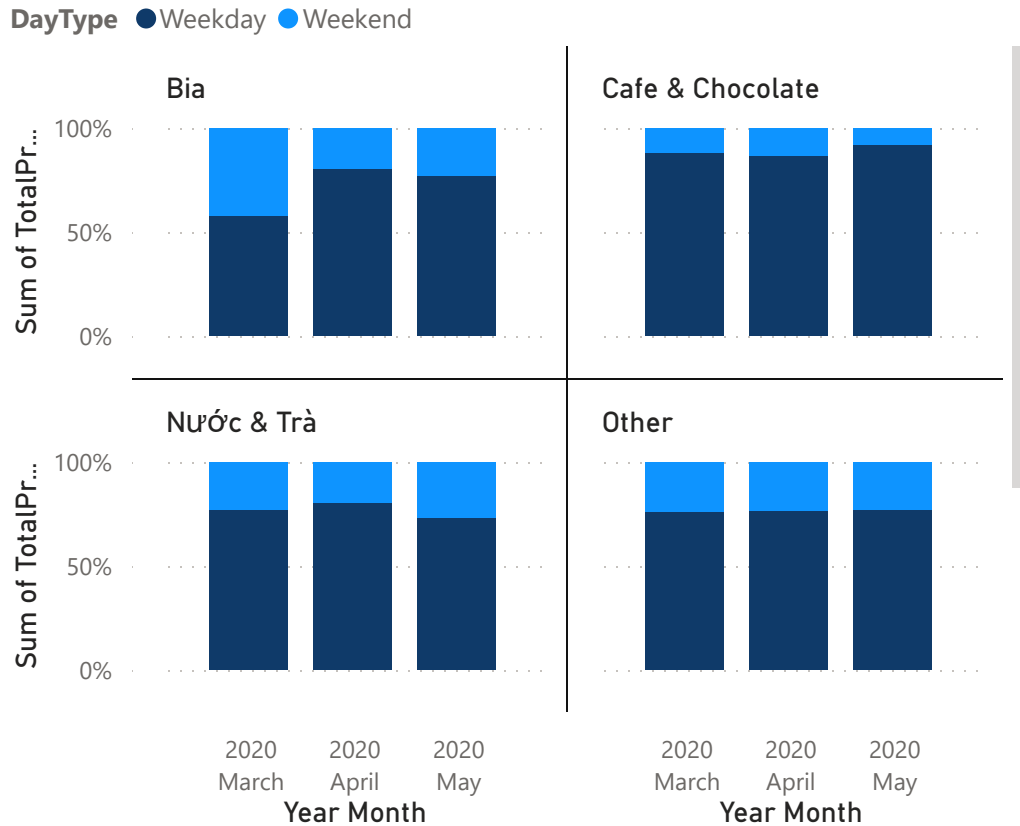
Sales Distribution (Day-level) by Day of Week



Count of TransactionId By Date over Time



Sales Value By Day Type



YearMonth

All

Payment...

All

Tỉnh

All

Tên dòng...

All

Tên danh...

All



# Date Analysis

Total Price

1.15bnđ

AVG Total Price

9.92Kđ

Total Quantity

115.68K

Refunded Amount

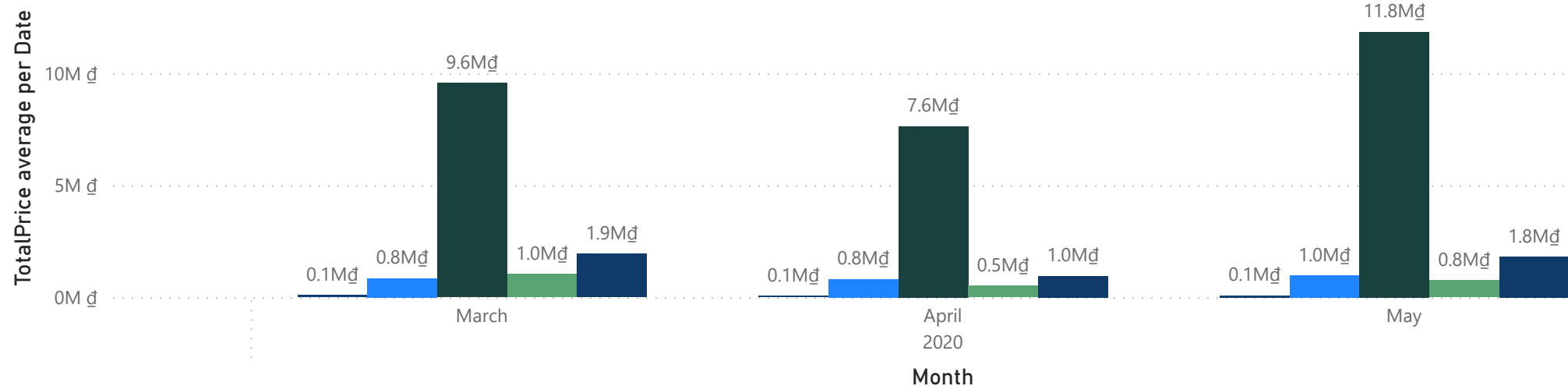
10M đ

AVG Daily Sales

12.89Mđ

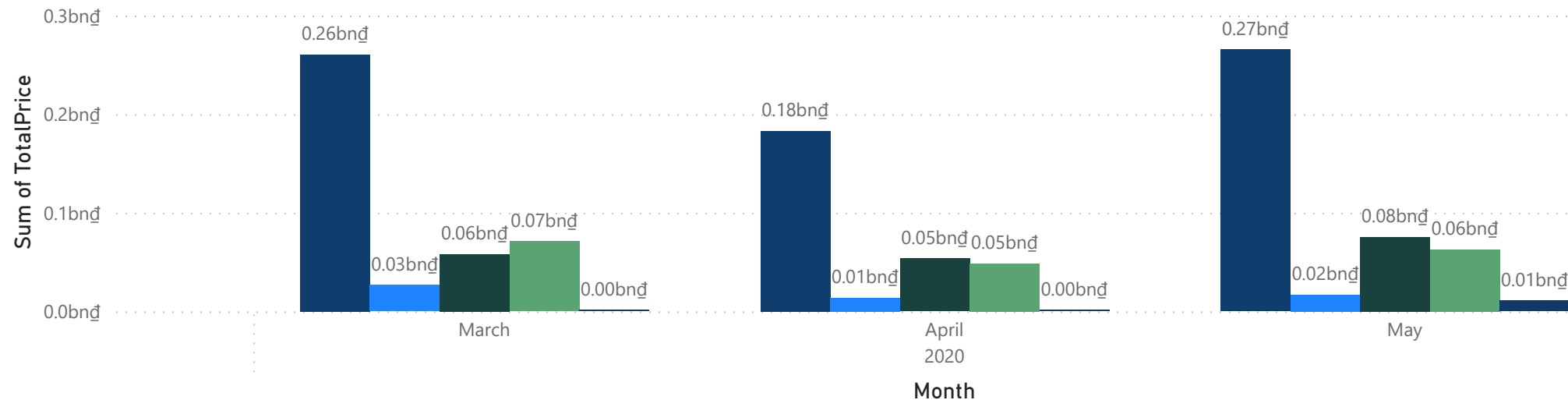
## AVG Sales Per Day by Product Category

Tên danh mục SP Mới ● Bia ● Cafe & Chocolate ● Nước & Trà ● Other ● Snack - Bánh Kẹo & Thức Ăn



## Sum of Sales by Payment Type

Payment Type value ● Cash ● Grab ● Momo ● Skillshub ● Zalopay



YearMonth

All

Payment...

All

Tỉnh

All

Tên dòng...

All

Tên danh...

All

Sales Report					Total Price	AVG Total Price	Total Quantity	Refunded Amount	AVG Daily Sales
					1.15bnđ	9.92Kđ	115.68K	10M đ	12.89Mđ
Sales Amount By Machine Line Over Time					Sales Amount By Location Type Over Time				
Tên dòng máy	March	April	May	Total	Loại địa điểm	March	April	May	Total
Café	41,086,500.00 đ	36,350,000.00 đ	40,317,000.00 đ	117,753,500.00	Bến Tàu Thủy	32,263,000.00 đ	10,828,000.00 đ	24,013,000.00 đ	67,104,0
D720	332,838,950.00 đ	245,469,450.00 đ	365,364,500.00 đ	943,672,900.00	Chung Cư	78,257,000.00 đ	65,816,000.00 đ	90,778,000.00 đ	234,851,0
D900	4,895,700.00 đ	4,093,000.00 đ	3,575,000.00 đ	12,563,700.00	Familymart	41,474,200.00 đ	24,761,000.00 đ	32,096,000.00 đ	98,331,2
Dừa	23,125,500.00 đ	7,866,000.00 đ	12,405,000.00 đ	43,396,500.00	Khu Công Nghiệp	65,327,000.00 đ	75,370,000.00 đ	63,831,000.00 đ	204,528,0
Hotfood	8,069,000.00 đ	630,000.00 đ	3,520,000.00 đ	12,219,000.00	Loại Địa Điểm Khác	1,725,000.00 đ	105,000.00 đ		1,830,0
Máy mì	6,570,100.00 đ	4,543,000.00 đ	6,487,000.00 đ	17,600,100.00	Quán Cà Phê	204,000.00 đ	118,000.00 đ	130,000.00 đ	452,0
Total	416,585,750.00 đ	298,951,450.00 đ	431,668,500.00 đ	1,147,205,700.00	Siêu Thị	30,539,000.00 đ	11,529,000.00 đ	49,980,000.00 đ	92,048,0
					Trường Học	29,894,000.00 đ	17,289,000.00 đ	57,257,000.00 đ	104,440,0
					Văn Phòng	136,902,550.00 đ	93,135,450.00 đ	113,583,500.00 đ	343,621,5
					Total	416,585,750.00 đ	298,951,450.00 đ	431,668,500.00 đ	1,147,205,7
Sales Amount By Geography Hierarchy Over Time					Sales Amount By Day Name Over Time				
Tỉnh địa điểm cha	March	April	May	Total	DayName	March	April	May	Total
[-] Hà Nội	8,955,000.00 đ	7,245,000.00 đ	8,902,000.00 đ	25,102,0	Monday	74,525,000.00 đ	44,163,050.00 đ	65,781,000.00 đ	184,469,050.00 đ
[+] Đống Đa	8,955,000.00 đ	7,245,000.00 đ	8,902,000.00 đ	25,102,0	Tuesday	72,676,450.00 đ	44,765,950.00 đ	72,092,500.00 đ	189,534,900.00 đ
[-] Hồ Chí Minh	407,630,750.00 đ	291,706,450.00 đ	422,766,500.00 đ	1,122,103,7	Wednesday	59,448,650.00 đ	57,179,300.00 đ	70,478,000.00 đ	187,105,950.00 đ
[+] 1	21,274,000.00 đ	16,706,000.00 đ	13,486,000.00 đ	51,466,0	Thursday	61,702,550.00 đ	49,331,250.00 đ	54,652,000.00 đ	165,685,800.00 đ
[+] 10	3,456,550.00 đ	1,790,450.00 đ	14,807,500.00 đ	20,054,5	Friday	57,793,600.00 đ	46,136,900.00 đ	60,545,000.00 đ	164,475,500.00 đ
[+] 12	27,574,000.00 đ	22,961,000.00 đ	22,298,000.00 đ	72,833,0	Saturday	42,977,500.00 đ	33,894,000.00 đ	55,391,000.00 đ	132,262,500.00 đ
[+] 2	68,870,200.00 đ	43,580,000.00 đ	61,916,000.00 đ	174,366,2	Sunday	47,462,000.00 đ	23,481,000.00 đ	52,729,000.00 đ	123,672,000.00 đ
[+] 3	7,028,000.00 đ	3,481,000.00 đ	4,928,000.00 đ	15,437,0	Total	416,585,750.00 đ	298,951,450.00 đ	431,668,500.00 đ	1,147,205,700.00 đ
[+] 4	5,001,000.00 đ	1,182,000.00 đ	3,991,000.00 đ	10,174,0					
[+] 7	80,687,000.00 đ	78,804,000.00 đ	84,147,000.00 đ	243,638,0					
[+] 9	21,039,000.00 đ	23,262,000.00 đ	18,529,000.00 đ	62,830,0					
[-] Bình Tân	15,700,000.00 đ	7,072,000.00 đ	28,082,000.00 đ	60,854,0					
Total	416,585,750.00 đ	298,951,450.00 đ	431,668,500.00 đ	1,147,205,7					

YearMonth

All

Payment...

All

Tỉnh

All

Tên dòng...

All

Tên danh...

All

Sales Report					Total Price	AVG Total Price	Total Quantity	Refunded Amount	AVG Daily Sales
					1.15bnđ	9.92Kđ	115.68K	10M đ	12.89Mđ
Sales Amount By Payment Type Over Time					Sales Amount By Product Category Time				
Payment Type value	March	April	May	Total	Tên danh mục SP Mới	March	April	May	Total
Cash	260,569,000.00 đ	183,042,150.00 đ	265,616,000.00 đ	709,227,150.00 đ	Bia	1,428,000.00 đ	1,168,000.00 đ	1,680,000.00 đ	4,276,000.00 đ
Grab	26,838,250.00 đ	13,930,550.00 đ	16,880,000.00 đ	57,648,800.00 đ	Cafe & Chocolate	26,186,500.00 đ	24,096,000.00 đ	26,344,000.00 đ	76,626,500.00 đ
Momo	58,085,200.00 đ	53,557,450.00 đ	75,303,000.00 đ	186,945,650.00 đ	Nước & Trà	296,639,650.00 đ	229,264,450.00 đ	331,695,500.00 đ	857,600,000.00 đ
Skillshub	70,997,300.00 đ	48,409,300.00 đ	62,917,000.00 đ	182,323,600.00 đ	Other	32,194,500.00 đ	15,634,000.00 đ	21,228,000.00 đ	69,056,500.00 đ
Zalopay	96,000.00 đ	12,000.00 đ	10,952,500.00 đ	11,060,500.00 đ	Snack - Bánh Kẹo & Thức Ăn	60,137,100.00 đ	28,789,000.00 đ	50,721,000.00 đ	139,647,100.00 đ
Total	416,585,750.00 đ	298,951,450.00 đ	431,668,500.00 đ	1,147,205,700.00 đ	Total	416,585,750.00 đ	298,951,450.00 đ	431,668,500.00 đ	1,147,205,700.00 đ
Sales Amount By Product Over Time					Sales Amount By Hour Name Over Time				
Tên sản phẩm	March	April	May	Total	Hour	March	April	May	Total
(Đá) Trà Đào	500,000.00 đ	2,740,000.00 đ	2,700,000.00 đ	5,940,000.00 đ	0	4,818,000.00 đ	4,673,000.00 đ	4,488,000.00 đ	13,979,000.00 đ
7 Up Chanh Bạc Hà 330ml	998,500.00 đ	238,500.00 đ	60,000.00 đ	1,297,000.00 đ	1	2,836,000.00 đ	2,688,000.00 đ	2,514,000.00 đ	8,038,000.00 đ
Americano Đá	1,372,000.00 đ	1,518,000.00 đ	1,034,000.00 đ	3,924,000.00 đ	2	2,132,000.00 đ	3,073,000.00 đ	2,535,000.00 đ	7,740,000.00 đ
Americano Nóng	440,000.00 đ	406,000.00 đ	321,000.00 đ	1,167,000.00 đ	3	1,760,000.00 đ	1,589,000.00 đ	1,411,000.00 đ	4,760,000.00 đ
Áo Mưa Tiện Lợi		15,000.00 đ	30,000.00 đ	45,000.00 đ	4	1,171,000.00 đ	1,706,000.00 đ	1,459,000.00 đ	4,336,000.00 đ
Bánh Flan Sài Gòn	130,800.00 đ			130,800.00 đ	5	2,235,000.00 đ	2,645,000.00 đ	2,036,000.00 đ	6,916,000.00 đ
Bánh Hometown Phô Mai 100G	1,660,000.00 đ	990,000.00 đ	2,330,000.00 đ	4,980,000.00 đ	6	3,593,000.00 đ	3,624,000.00 đ	5,543,000.00 đ	12,760,000.00 đ
Bánh Hometown Rong Biển 100G	30,000.00 đ	20,000.00 đ		50,000.00 đ	7	11,376,500.00 đ	10,709,500.00 đ	14,465,000.00 đ	36,551,000.00 đ
Total	416,585,750.00 đ	298,951,450.00 đ	431,668,500.00 đ	1,147,205,700.00 đ	8	22,456,950.00 đ	18,139,700.00 đ	23,971,000.00 đ	64,567,650.00 đ
	0 đ	0 đ	0 đ		9	27,480,650.00 đ	19,868,600.00 đ	30,722,200.00 đ	78,071,450.00 đ
					10	25,052,050.00 đ	18,464,500.00 đ	26,346,300.00 đ	69,862,850.00 đ
					11	23,563,950.00 đ	20,565,050.00 đ	26,024,000.00 đ	70,153,000.00 đ
					Total	416,585,750.00 đ	298,951,450.00 đ	431,668,500.00 đ	1,147,205,700.00 đ

YearMonth

All

Payment...

All

Tỉnh

All

Tên dòng...

All

Tên danh...

All