

Bakery Café EDA

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Outline

01 Background

02 Define Goals

03 Data Analysis & Insight

04 Suggestion & Conclusion

The background of the slide is a dark, textured surface, possibly a baking stone or a dark countertop, covered with a light dusting of white flour. Three golden-brown baguettes are arranged on the left side of the frame. One baguette is at the top, another is to the left, and a third is at the bottom. They have a slightly cracked, rustic appearance. The text '01. Background' is positioned on the right side of the slide, in a white, sans-serif font. Below the text is a horizontal line that is brown on the left and transitions to a lighter, almost white color on the right.

01. Background

Background

- Dataset taken from Bakery Café Shop located in **Edinburgh, Scotland**
- Available transaction data period : **October 30th 2016** until **April 9th 2017**



The background of the slide features four golden-brown baguettes arranged on a dark, textured surface. The surface is lightly dusted with white flour, creating a rustic and artistic aesthetic. The baguettes are positioned diagonally, with one at the top left, one on the left side, and two at the bottom.

02. Goals

Goals



- **Boost** food and beverages **sales** through **transaction data analysis**
- **Reduce losses** through **stock optimization**

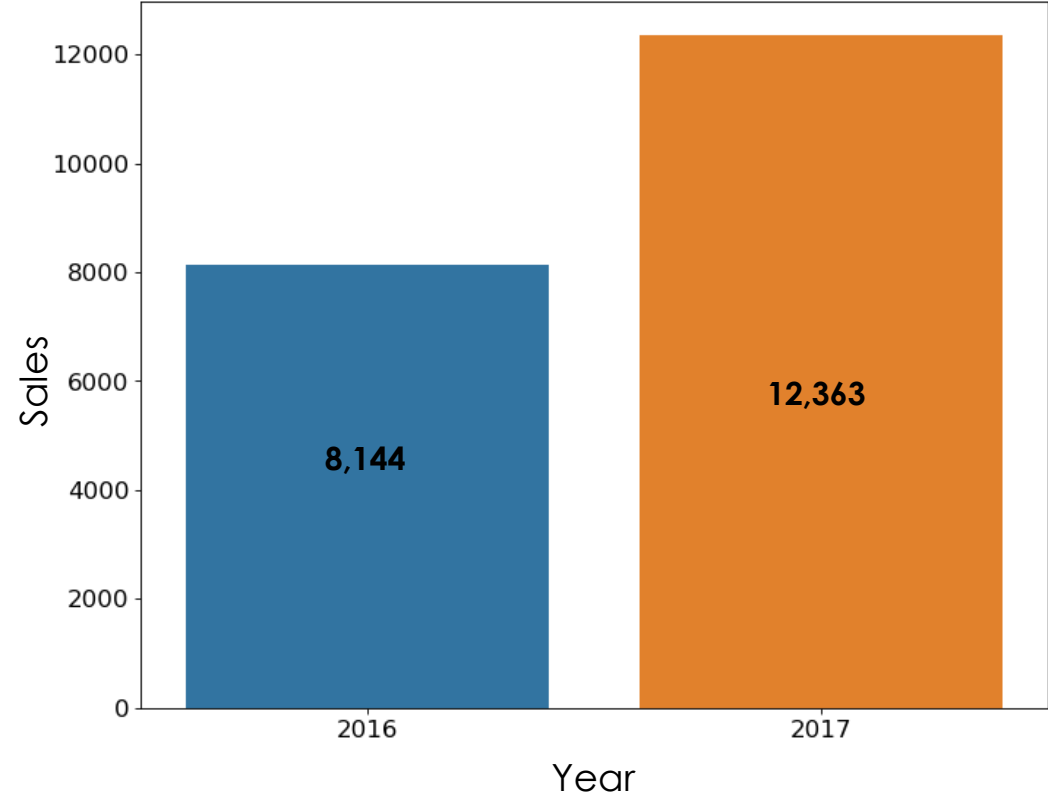


The background of the slide features four golden-brown baguettes arranged on a dark, textured surface. The surface is lightly dusted with white flour, creating a rustic and artisanal feel. The baguettes are positioned in the left half of the frame, with one at the top, one on the left, and two at the bottom.

03. Data Analysis & Insight

Data Analysis & Insight

Total Sales By Year



year	total_sales	bakery_sales	non_bakery_sales	beverages_sales	other_sales
2016	8144	4047	520	3314	263
2017	12363	6203	879	4949	332

49,98%
Market Share

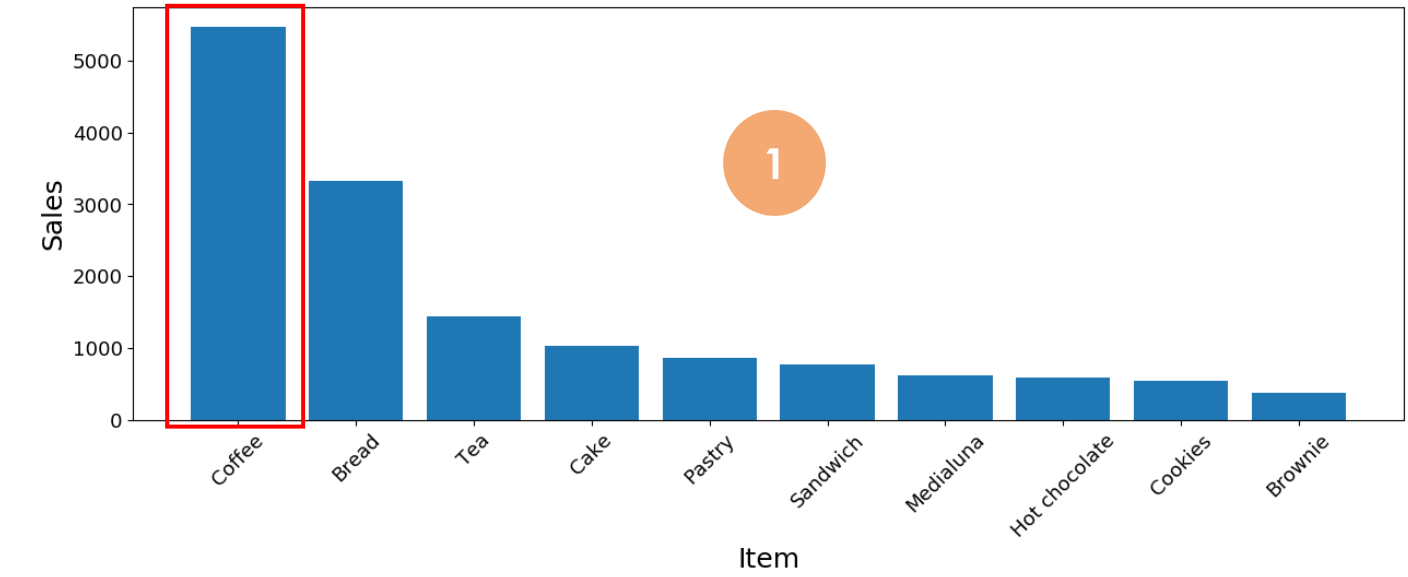
40,29%
Market Share

Note:

- **2016** transaction data was recorded from **30th October – 31st December (63 days)**
- **2017** transaction data was recorded from **1st January – 9th April (99 days)**

Data Analysis & Insight

Top 10 Sales on Edinburgh Bakery Shop (All Item)

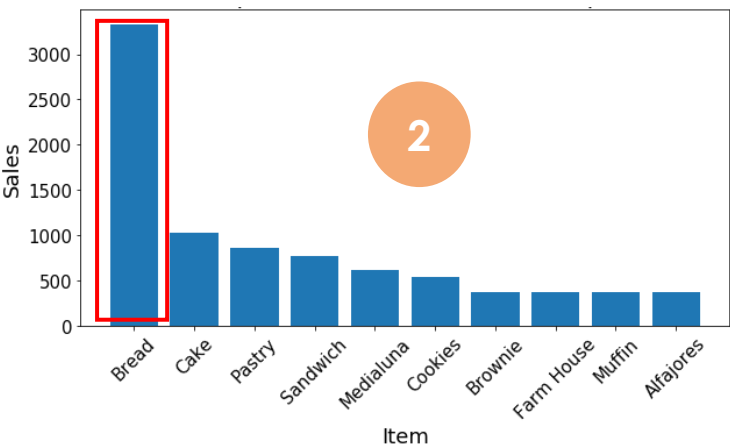


Insight:

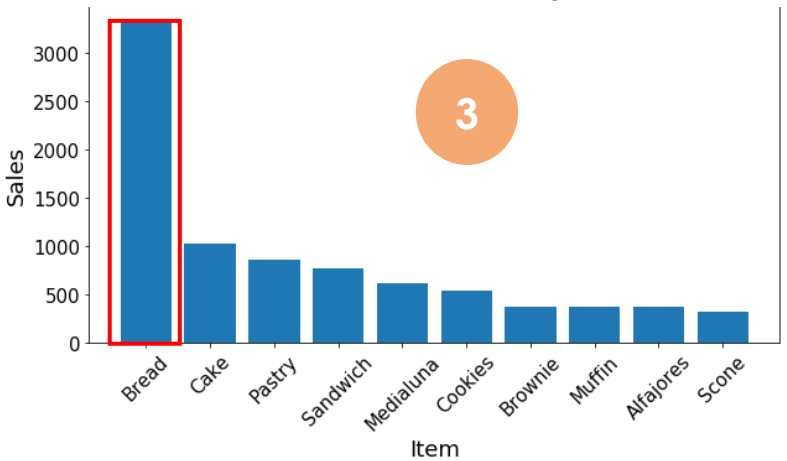
The most favorite item:

1. From all transaction is **Coffee (5471)**
2. From Food category is **Bread (3325)**
3. From Food Bakery category is **Bread (3325)**
4. From Beverages category is **Coffee (5471)**

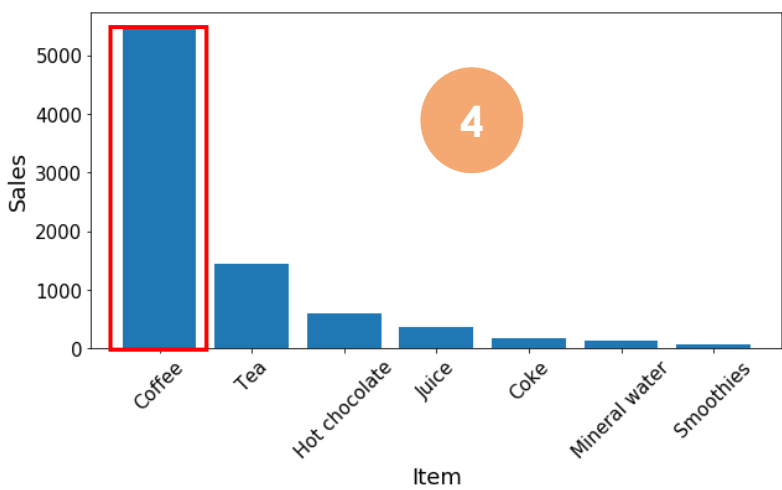
Top 10 Sales on Edinburgh Bakery Shop (By Food Category)



Top 10 Sales on Edinburgh Bakery Shop (By Food Bakery Category)



Sales on Edinburgh Bakery Shop (By Beverages Category)



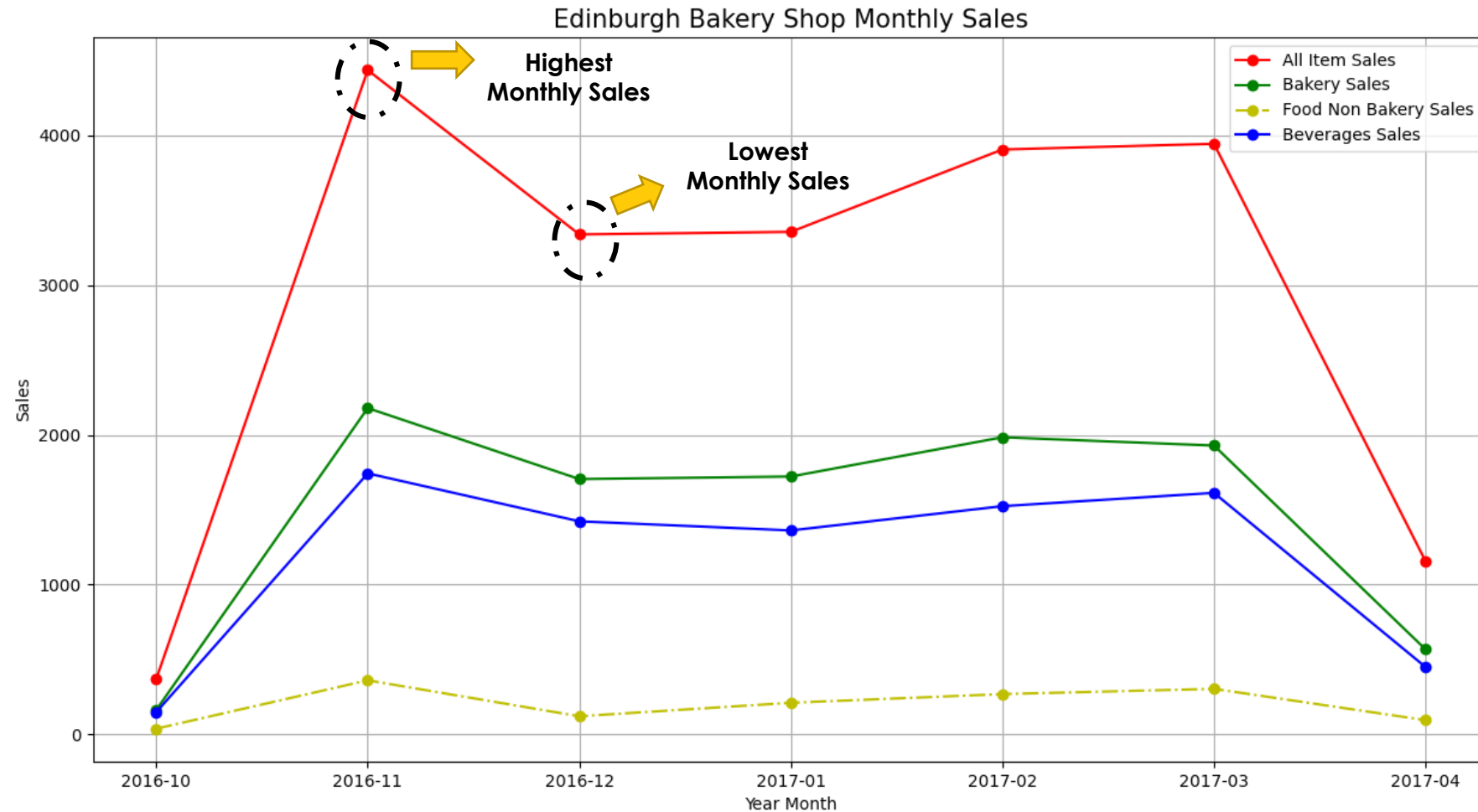
Data Analysis & Insight

Bakery Food Total Sales	
Item	Sales
Bread	3,325
Cake	1,025
Pastry	856
Sandwich	771
Medialuna	616
Cookies	540
Brownie	379
Muffin	370
Alfajores	369
Scone	327
Toast	318
Scandinavian	277
Truffles	193
Fudge	159
Baguette	152
Tiffin	146
Jammie Dodgers	125
The Nomad	58
Vegan mincepie	54
Focaccia	54
Bakewell	48
Tartine	47
Kids biscuit	12
Empanadas	7
Crepes	6
Panatone	5
Bread Pudding	4
Caramel bites	3
Raspberry shortbread sandwich	3
Raw bars	1

Non Bakery Food Total Sales	
Item	Sales
Farm House	374
Soup	342
Spanish Brunch	172
Chicken Stew	123
Hearty & Seasonal	107
Salad	99
Frittata	81
Keeping It Local	63
Vegan Feast	16
Tacos/Fajita	11
Pintxos	6
Brioche and salami	3
Bacon	1
Chicken sand	1

Beverages Total Sales	
Item	Sales
Coffee	5,471
Tea	1,435
Hot chocolate	590
Juice	369
Coke	185
Mineral water	136
Smoothies	77

Data Analysis & Insight



Notes:

- October 2016 and April 2017 sales are excluded due to incomplete date transaction within month period
- Every month, bakery and beverages dominated Edinburgh Bakery Shop Sales

Data Analysis & Insight

November 2016 (Top Month) Sales By Item Category

- **By Item Category**

Item Category	Sales
Food	2,540
Beverages	1,743
Others	153

- **Bakery Sales**

Item	Sales
Bread	712
Pastry	218
Medialuna	208
Brownie	154
Alfajores	141
Muffin	127
Cake	116
Scandinavian	105
Sandwich	103
Cookies	87
Fudge	55
Tartine	39
Truffles	29
Focaccia	28
Kids biscuit	12
Jammie Dodgers	11
Bakewell	10
Empanadas	7
Tiffin	7
Bread Pudding	4
Caramel bites	3
The Nomad	3

- **Non Bakery Sales**

Item	Sales
Farm House	113
Soup	98
Hearty & Seasonal	71
Keeping It Local	61
Frittata	17
Bacon	1

- **Beverages Sales**

Item	Sales
Coffee	1189
Tea	311
Hot chocolate	118
Juice	46
Mineral water	40
Coke	27
Smoothies	12

Data Analysis & Insight

December 2016 (Bottom Month) Sales By Item Category

- By Item Category

Item Category	Sales
Food	1,826
Beverages	1,423
Others	90

- Bakery Sales

Item	Sales
Bread	625
Medialuna	141
Cake	141
Sandwich	129
Pastry	129
Scone	69
Cookies	68
Toast	65
Fudge	60
Alfajores	45
Muffin	42
Brownie	37
Scandinavian	34
Vegan mincepie	33
Truffles	27
Jammie Dodgers	18
Focaccia	11
The Nomad	10
Bakewell	8
Crepes	6
Panatone	5
Tartine	2

- Non Bakery Sales

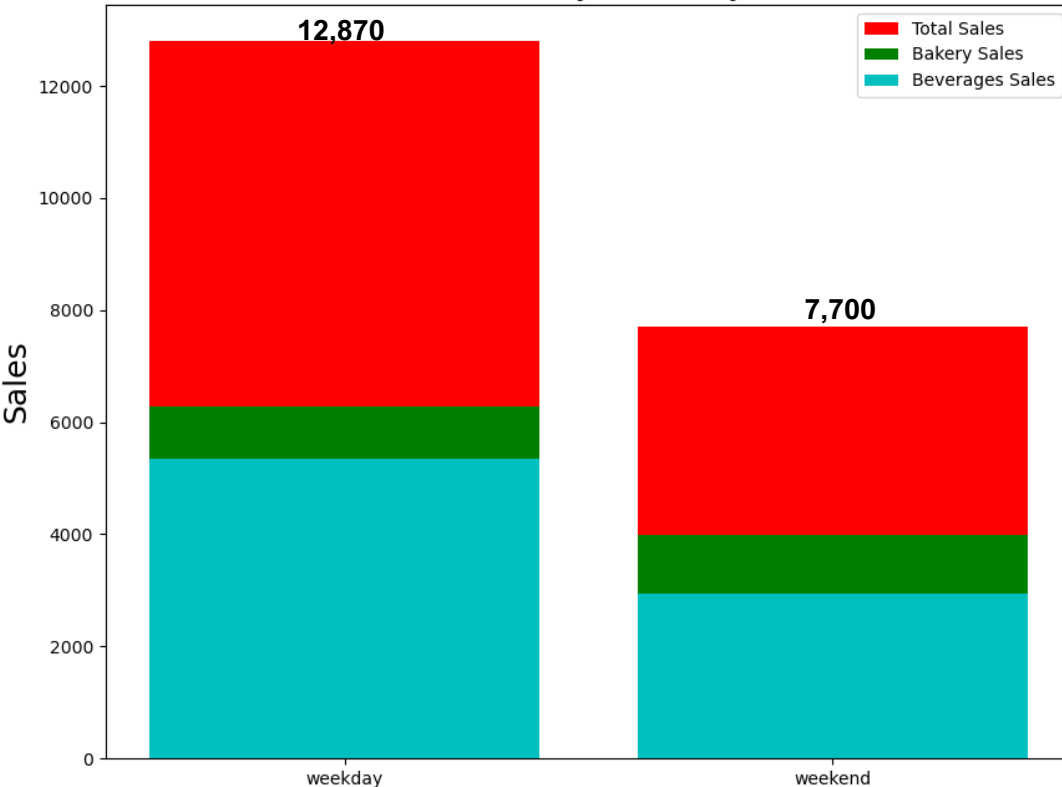
Item	Sales
Farm House	76
Frittata	26
Hearty & Seasonal	10
Pintxos	6
Keeping It Local	2
Brioche and salami	1

- Beverages Sales

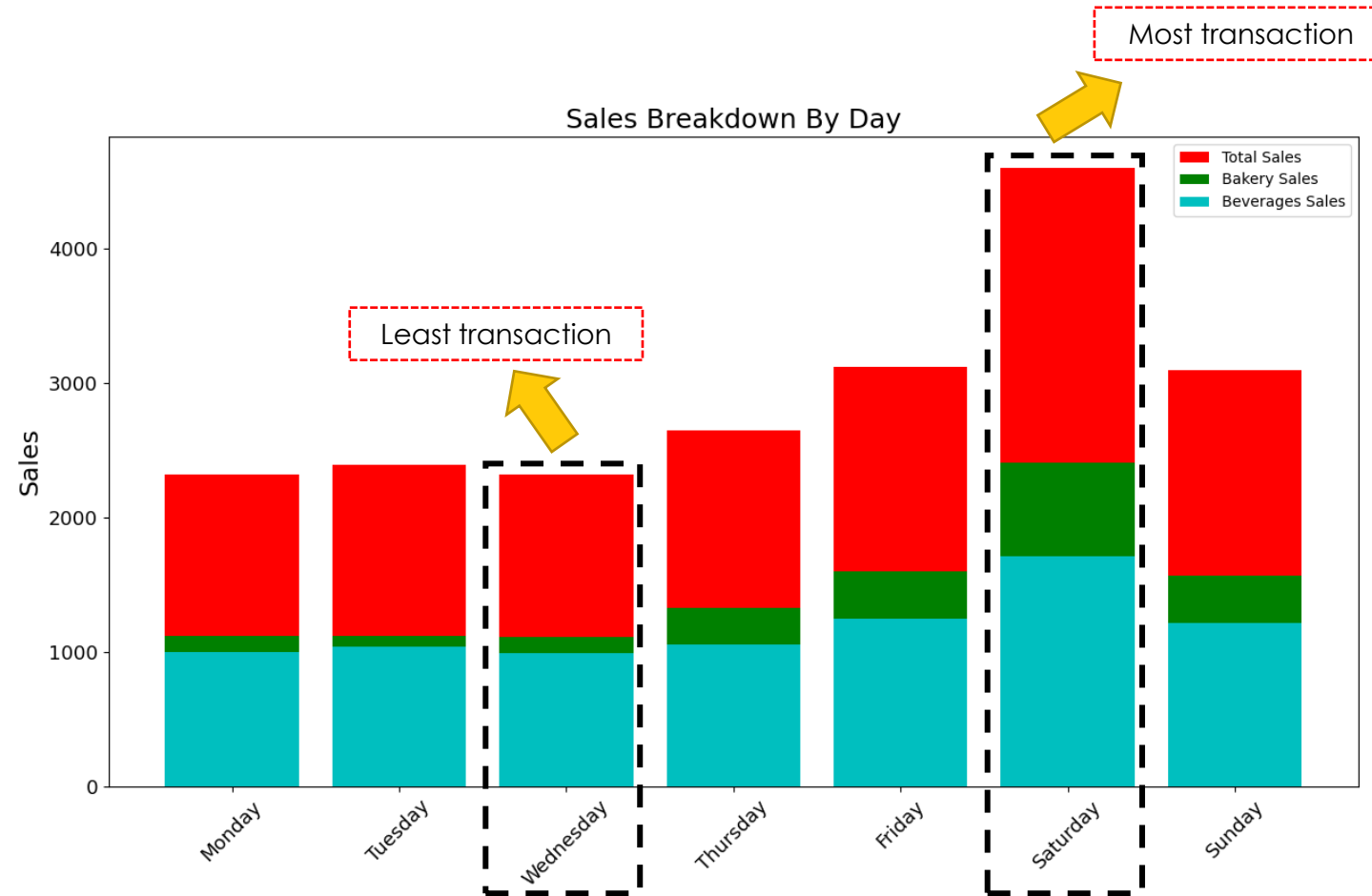
Item	Sales
Coffee	932
Tea	235
Hot chocolate	138
Juice	55
Coke	34
Mineral water	20
Smoothies	9

Data Analysis & Insight

Sales Breakdown By Weekday Weekend



Sales Breakdown By Day



- Average **sales/day** for **weekday** : 2561
- Average **sales/day** for **weekend** : 3850
- Bakery sales dominating each week and day period

More transaction happened on weekend period

Data Analysis & Insight

Saturday (Top Day) Sales By Item Category

- By Item Category

Item Category	Sales
Food	2,714
Beverages	1,713
Others	178

- Bakery Sales

Item	Sales
Bread	760
Cake	246
Pastry	166
Sandwich	161
Scone	146
Medialuna	143
Scandinavian	118
Brownie	111
Muffin	93
Cookies	79
Alfajores	67
Toast	53
Truffles	46
Tiffin	35
Fudge	34
Baguette	33
Jammie Dodgers	31
Focaccia	25
The Nomad	24
Vegan mincepie	11
Tartine	9
Bakewell	8
Kids biscuit	4
Caramel bites	3
Panatone	2
Raspberry shortbread sandwich	1

- Non Bakery Sales

Item	Sales
Farm House	76
Soup	50
Spanish Brunch	47
Frittata	39
Chicken Stew	22
Salad	22
Hearty & Seasonal	18
Vegan Feast	10
Tacos/Fajita	8
Keeping It Local	7
Pintxos	6

- Beverages Sales

Item	Sales
Coffee	1103
Tea	288
Hot chocolate	146
Juice	85
Coke	45
Mineral water	27
Smoothies	19

Data Analysis & Insight

Wednesday (Bottom Day) Sales By Item Category

- By Item Category

Item Category	Sales
Food	1,268
Beverages	989
Others	64

- Bakery Sales

Item	Sales
Bread	405
Cake	123
Pastry	103
Sandwich	92
Cookies	63
Medialuna	56
Alfajores	41
Toast	35
Brownie	30
Muffin	29
Baguette	23
Truffles	20
Scandinavian	19
Fudge	16
Tiffin	13
Scone	11
Jammie Dodgers	11
Tartine	6
Vegan mincepie	5
Focaccia	4
The Nomad	3
Bread Pudding	3
Bakewell	2
Crepes	1
Raw bars	1

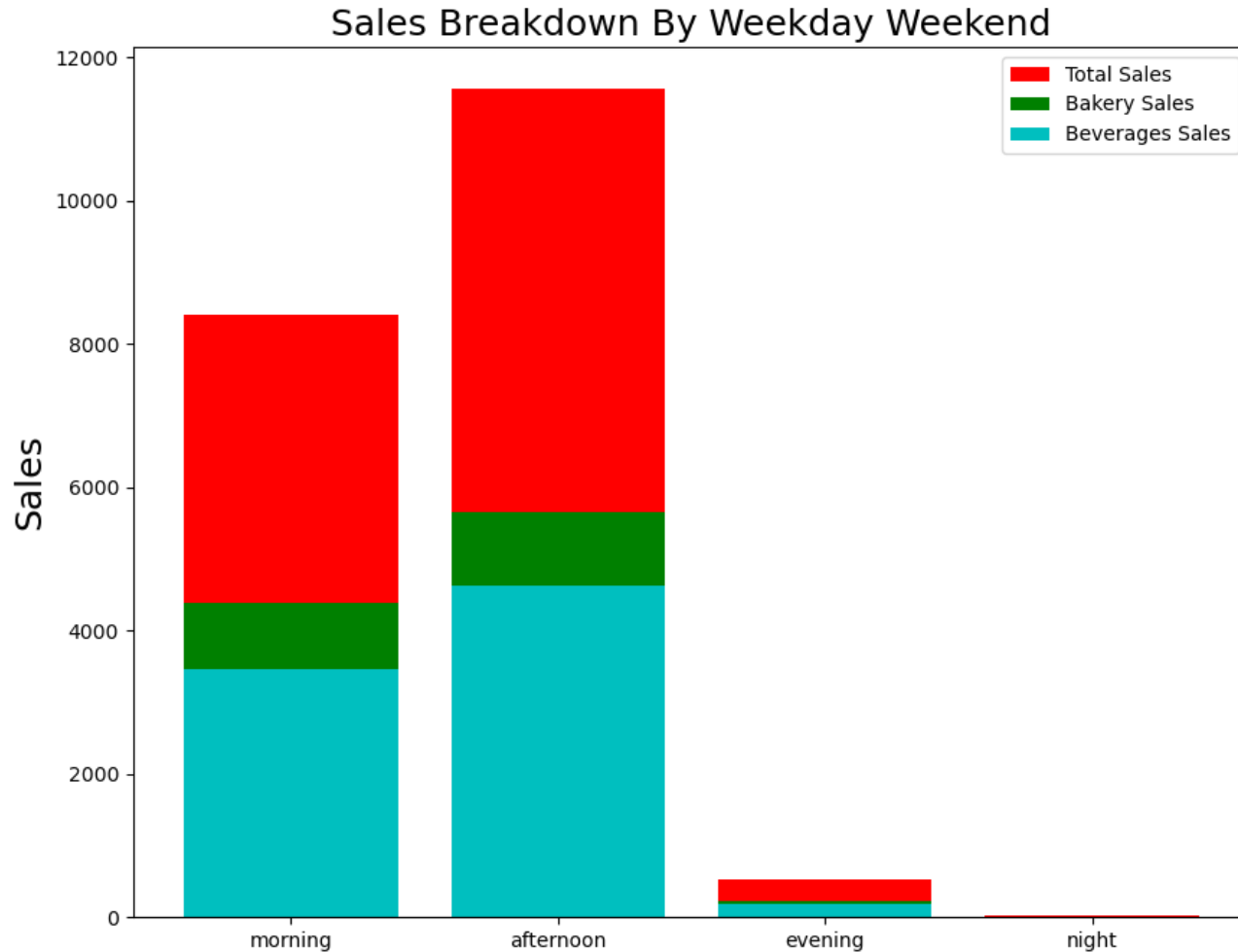
- Non Bakery Sales

Item	Sales
Soup	56
Farm House	40
Chicken Stew	14
Hearty & Seasonal	12
Salad	11
Spanish Brunch	10
Keeping It Local	9
Vegan Feast	1

- Beverages Sales

Item	Sales
Coffee	628
Tea	188
Hot chocolate	69
Juice	44
Coke	34
Mineral water	18
Smoothies	8

Data Analysis & Insight



- **Most transaction** occurred during **Morning** and **Afternoon** Period
- **Small amount of transaction** occurred on **Evening**
- Almost **no transaction** occurred on **Night**
- Bakery sales dominating each time period

The background of the slide features three golden-brown baguettes arranged on a dark, textured surface. The surface is lightly dusted with white flour, creating a contrast with the dark background and the warm tones of the bread. The baguettes are positioned diagonally, with one in the upper left, one in the lower left, and one in the lower center. The lighting highlights the texture of the bread's crust.

04. Sugestion & Conculsion

Suggestion & Conclusion

1. From all transaction breakdown (By Year, By Month, By Weekdays-Weekend, By Day, and By Period Time):
 - **Coffee** had the most transaction **at Edinburgh Bakery Shop**.
 - **The Nomad, Vegan mincepie, Focaccia, Bakewell, Tartine, Kids Biscuit, Empanadas, Crepes, Panatone, Bread Pudding, Caramel Bites, Raspberry shortbread sandwich, and Raw bars** had the least transaction item at **Edinburgh Bakery Shop**.
2. **Saturday** was **the most crowded** transaction and **Wednesday** was **the least crowded** transaction on **Edinburgh Bakery Shop**



Our suggestion :

1. To conduct **package discount promotion every Saturday and Wednesday** for one month period which combine **Coffee + least popular Bakery Item**
2. **Reduce** everyday **stock** (except on promotion day) for **least popular Bakery Item** to avoid losses
3. Created Membership Account and Card to assess Customer Loyalty Point (**Future Works**)

Impact

Assumption Using December 2016 Sales (Bottom Sales)

- Sales Without Promotion**

Item Category	Sales
Food	1,826
Beverages	1,423
Others	90

Total Sales : 3,348

- Sales With Promotion**

December 2016 (Saturday Only) Beverages Sales	
Item	Sales
Coffee	175
Tea	58
Hot chocolate	37
Juice	16
Coke	10
Mineral water	4
Smoothies	1

December 2016 (Wednesday Only) Beverages Sales	
Item	Sales
Coffee	128
Tea	29
Hot chocolate	18
Coke	8
Juice	8
Mineral water	2
Smoothies	1



Additional 303 Bakery Sales

Total Sales : 3,651

Increase Sales : 9,1% !

The image features three loaves of bread on a dark, textured background. Two loaves on the left are light-colored, possibly white or wheat, with a golden-brown crust. The third loaf on the right is darker, likely whole grain or rye, and is covered in small, dark seeds. The surface is dusted with white flour, creating a speckled effect. The text 'THANK YOU' is centered in a white, sans-serif font, with a horizontal line underneath it.

THANK YOU