Adidas France Retailer Impact

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"Data-driven Engineer, I like to work with data to retrieve critical insights and help improving the business-decisions. During my freetime I enjoy playing Badminton, Ping-pong and hanging out with Friends"

Etudes :

2021-2023: Ecole Centrale Lille

2020-2021: IAE Caen

2017-2020: Dipl. D'ingénieur Polytech Orléans

Target of the project

Identification of new retailers in France with potential business impact (+/-)

🎯 exploring new opportunities to grow the business in some locations with high opportunities in France

Four main tasks identified :

1. Showing the distribution of the current retailers vs new retailers
2. Showing the evolution of Sales throughout the period of 2018 and 2019
3. Impact of the current retailers by evaluating them within distance of 3 km from the new retailers
4. providing Insights on Football Footwear

Datasets Descriptions

1. France Customer master data
2. 2 datasets of Sales 2018 and 2019 of the existing retailers
3. New retailers dataset

Current retailers vs new retailers

Dynamique map displaying the current retailers vs the new retailers which Adidas is targeting to implement.
The new retailers (Red) and current retailers (blue)

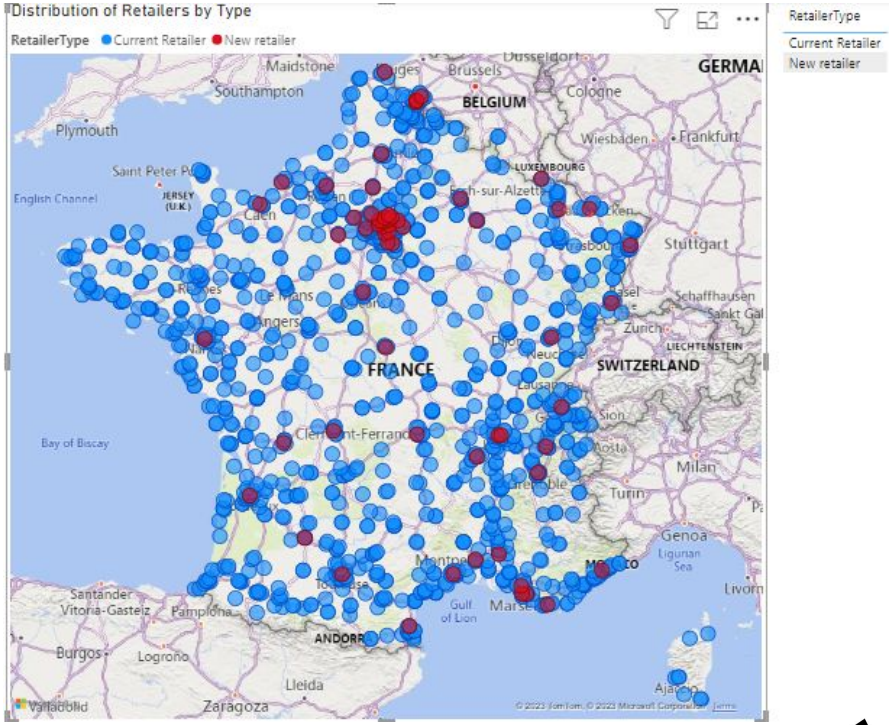

Figure 1 : Distribution of current vs new retailer

Sales Distribution

Figure 2 : Weekly distribution of sales during 2018 & 2019

Units Distribution

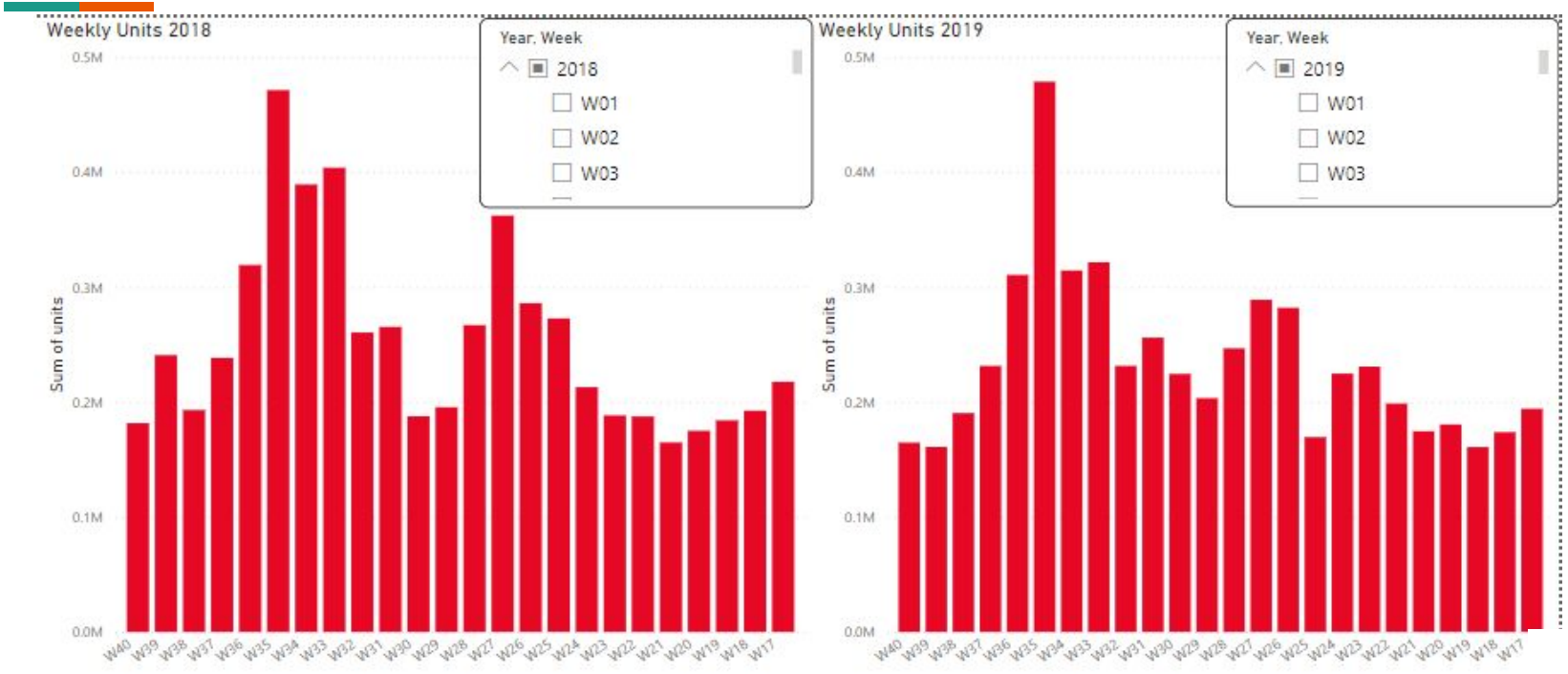

Figure 3 : Weekly distribution of units during 2018 & 2019

Sales Distribution (Ex: Basketball ACC HW ALL)

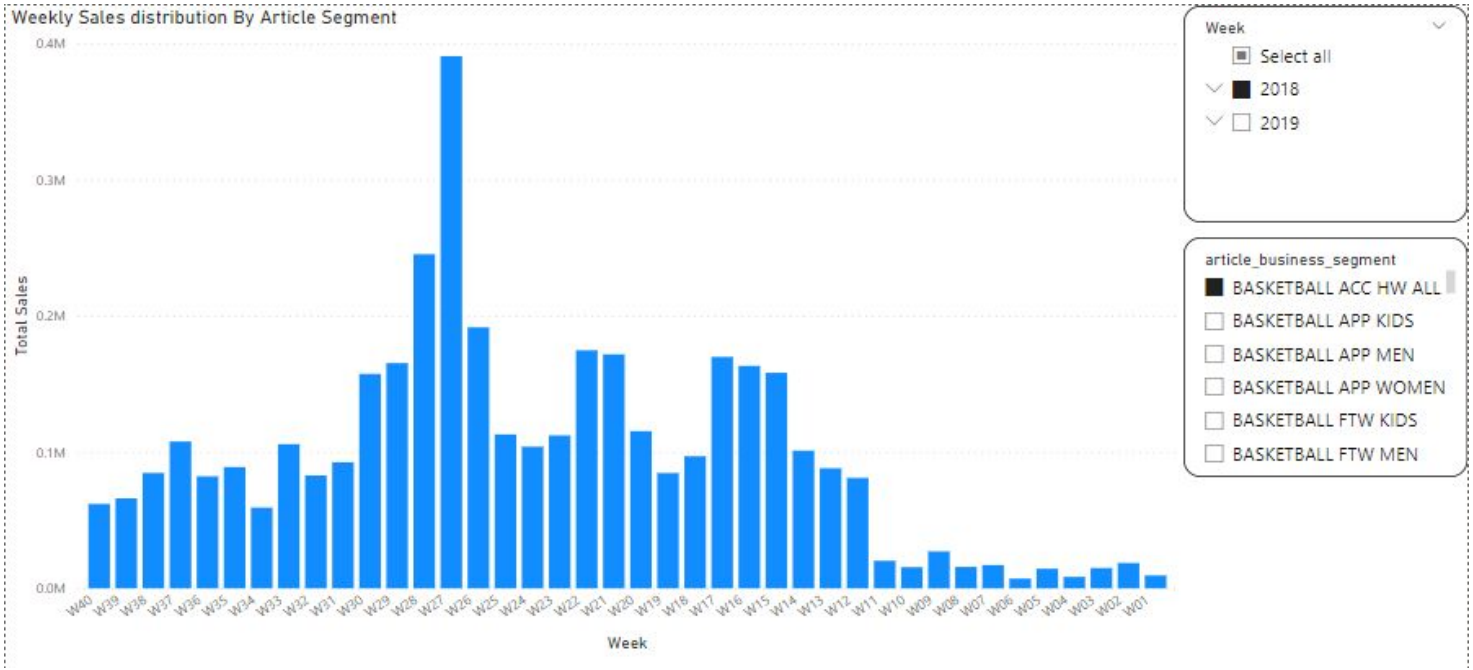

Figure 4 : Weekly distribution of Sales by segment during 2018 & 2019

Sales Distribution in France

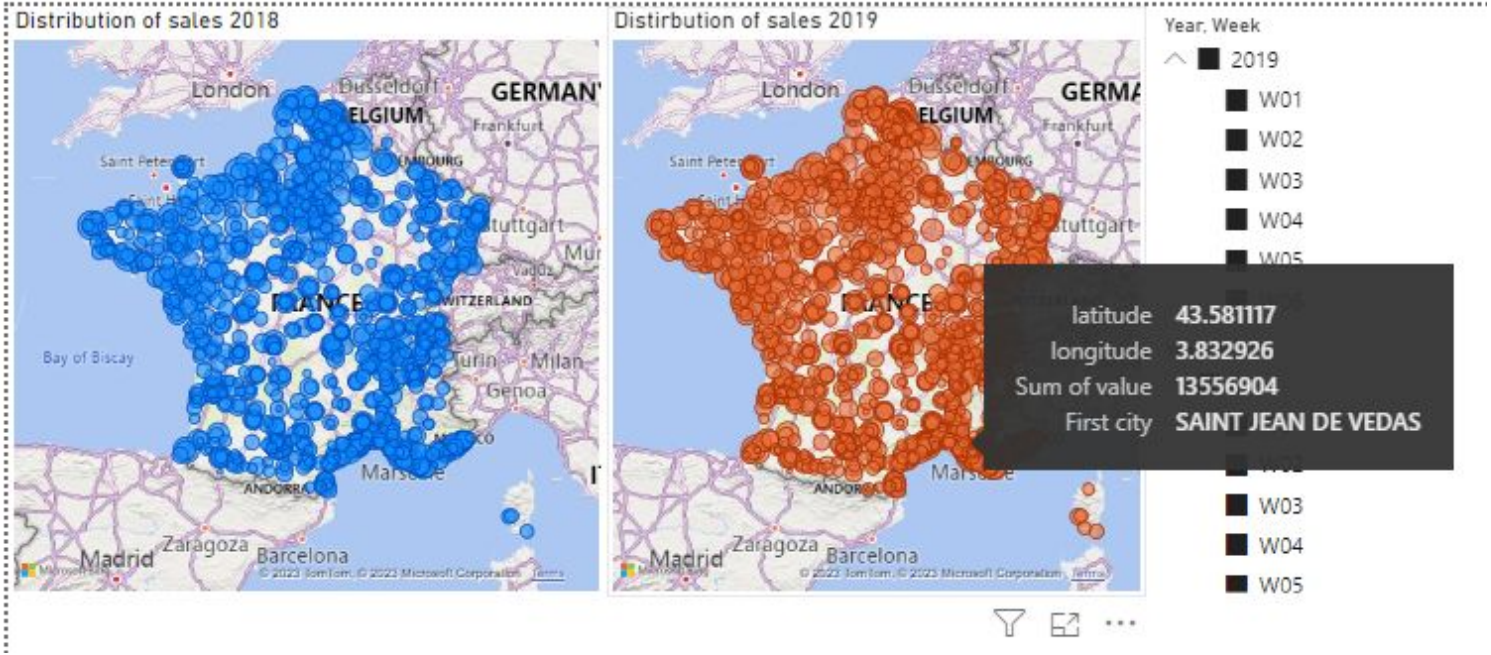

Figure 5 : Distribution of Sales in France during 2018 & 2019

KPIs of Sales trends in 2018 & 2019:

Year	Week	Total Sales	Cumulative Sales	Year-to-Date Sales	YoY Sales
2018	W01	437M	437M	437M	437M
2018	W02	670M	1107M	1107M	670M
2018	W03	516M	1623M	1623M	516M
2018	W04	466M	2088M	2088M	466M
2018	W05	458M	2546M	2546M	458M
2018	W06	390M	2936M	2936M	390M
2018	W07	365M	3300M	3300M	365M
2018	W08	326M	3626M	3626M	326M
2018	W09	383M	4009M	4009M	383M
2018	W10	358M	4367M	4367M	358M
2018	W11	382M	4749M	4749M	382M
2018	W12	416M	5165M	5165M	416M
2018	W13	390M	5555M	5555M	390M
2018	W14	395M	5950M	5950M	395M
2018	W15	469M	6419M	6419M	469M
2018	W16	473M	6892M	6892M	473M
2018	W17	537M	7429M	7429M	537M
2018	W18	513M	7941M	7941M	513M
2018	W19	471M	8412M	8412M	471M
2018	W20	434M	8846M	8846M	434M
2018	W21	427M	9274M	9274M	427M
2018	W22	479M	9753M	9753M	479M
2018	W23	475M	10228M	10228M	475M
2018	W24	508M	10736M	10736M	508M
2018	W25	657M	11393M	11393M	657M
2018	W26	696M	12089M	12089M	696M
2018	W27	790M	12879M	12879M	790M
2018	W28	612M	13491M	13491M	612M
2018	W29	470M	13961M	13961M	470M
2018	W30	476M	14437M	14437M	476M
2018	W31	662M	15099M	15099M	662M
2018	W32	661M	15759M	15759M	661M
2018	W33	1042M	16801M	16801M	1042M
2018	W34	1021M	17822M	17822M	1021M

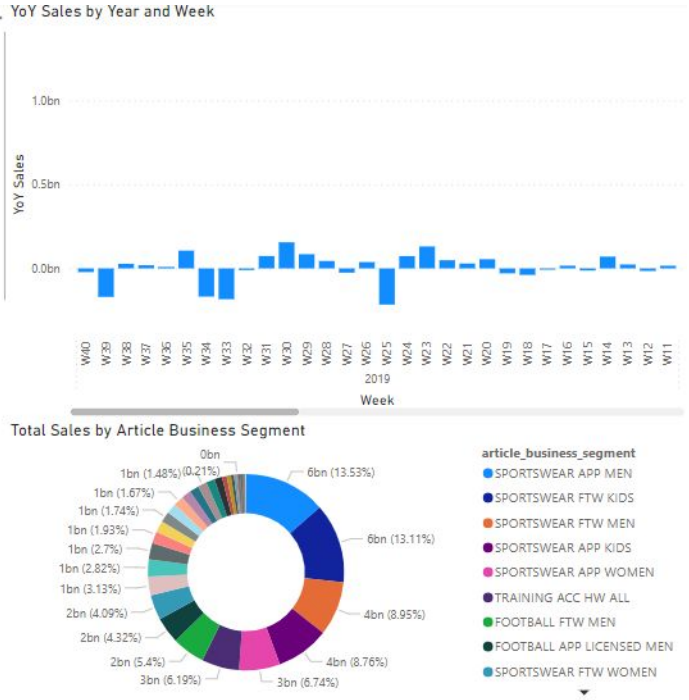

Figure 6 : YoY, Cumul, YTD of Sales in France during 2018 & 2019

Distribution of Opportunities in France:

- Very High Opportunity : D =0
- High Opportunity: D =1
- Medium Opportunity: 2= <D <=3
- Low Opportunity : D>=4

retailer	city	postal_code	Number of retailers Within 3km	Opportunity Level
Sport Azure	AGDE	34300		Very High
Red Sport	AMIENS	80000		Very High
Sport Azure	ANGLET	64600		Very High
F-King Sport	ANGOULEME	16006		Very High
Sport House	BAUME LES DAMES	25110		Very High
Red Sport	BERGERAC	24100		Very High
Red Sport	BEZIERS	34500		Very High
Red Sport	BOIS D ARCY	78390		Very High
Sport Azure	BORDEAUX	33000		Very High
Sport Azure	BOUC BEL AIR	13320		Very High
Red Sport	BOURG EN BRESSE	1000		Very High
Red Sport	BREST	29200		Very High
Sport Azure	BRETIGNY SUR ORGE	91220		Very High
F-King Sport	CAEN	14000		Very High
Red Sport	CARCASSONNE	11000		Very High
Sport Azure	CESTAS	33610		Very High
Red Sport	COULOMMIERS	77120		Very High
Sport House	EVRON	53600		Very High
F-King Sport	FARÉBERSVILER	57450		Very High
Sport Azure	FREJUS	83600		Very High
F-King Sport	GOUSSAINVILLE	95190		Very High
Red Sport	LAVAL	53000		Very High
F-King Sport	LILLE	59000		Very High
Sport Azure	LILLE	59000		Very High
Sport Azure	LYON	69002		Very High
Red Sport	MANDELIEU LA NAPOULE	6210		Very High
Sport Azure	MARCQ EN BAROEUL	59700		Very High
Sport Azure	MARSEILLE	13008		Very High
F-King Sport	METZ	57000		Very High

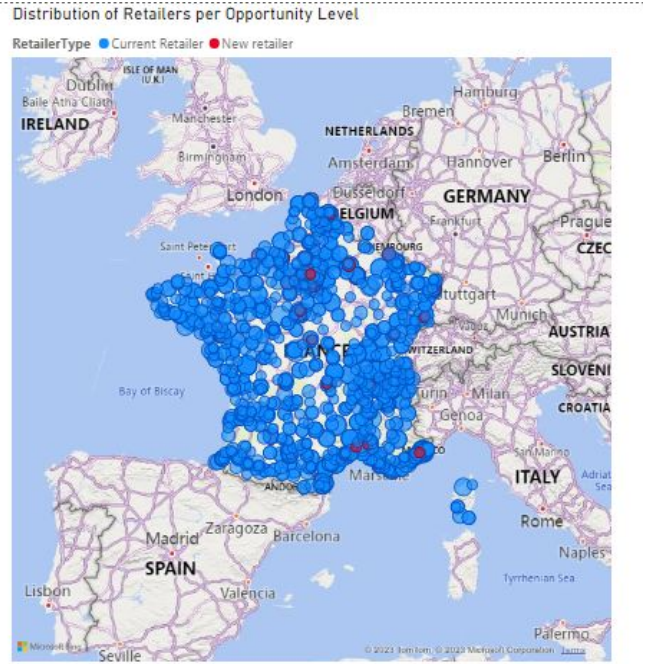

Figure 7: Distribution of opportunities in France

Methodology:

We use GeocodeAPI to retrieve the information of GPS and addresses using the XML :

```
https://maps.googleapis.com/maps/api/geocode/xml?place_id=ChIJeRpOeF67j4AR9ydy_PIzPuM&key=YOUR_API_KEY
```

Methodology:

To determine the distance between pair of data points we use Haversine formula in DAX :

The Haversine Distance formula is used to calculate the great-circle distance between two points on the Earth's surface.

$$\text{Haversine Distance} = 2r \cdot \sin^{-1}\left(\sqrt{\text{hav}(\Delta\text{lat}) + \cos(\text{lat}_1) \cdot \cos(\text{lat}_2) \cdot \text{hav}(\Delta\text{long})}\right)$$

Where:

- r is the Earth's radius (approximately 6,371 kilometers),
- $\text{hav}(\theta) = \sin^2\left(\frac{\theta}{2}\right)$,
- $\Delta\text{lat} = \frac{\text{lat}_2 - \text{lat}_1}{2}$,
- $\Delta\text{long} = \frac{\text{long}_2 - \text{long}_1}{2}$,
- lat_1 and lat_2 are the latitudes of the two points, and
- long_1 and long_2 are the longitudes of the two points.

Merci !