

# Project: Coffee Sales Analysis

## 1. Project Objective

The primary objective of this project is to analyze the coffee sales of a company to better understand sales trends, identify improvement opportunities, and provide strategic recommendations. This project focuses on optimizing sales management using advanced Excel tools and functions.

## 2. Data Used

The data includes:

- **Sales by Product:** Quantities of coffee sold by product type.
- **Unit Cost:** Selling price and cost per unit of each product.
- **Sales Dates:** Specific periods when sales occurred.

	A	B	C	D	E	F	G	H
1	ID du produit	Type de café	Type de torréfaction	Taille	Prix unitaire	Prix par 100g	Profit	
2	A-L-0.2	Ara	L	0,2	3,885	1,9425	0,3497	
3	A-L-0.5	Ara	L	0,5	7,77	1,554	0,6993	
4	A-L-1	Ara	L	1,0	12,95	1,295	1,1655	
5	A-L-2.5	Ara	L	2,5	29,785	1,1914	2,6807	
6	A-M-0.2	Ara	M	0,2	3,375	1,6875	0,3038	
7	A-M-0.5	Ara	M	0,5	6,75	1,35	0,6075	
8	A-M-1	Ara	M	1,0	11,25	1,125	1,0125	
9	A-M-2.5	Ara	M	2,5	25,875	1,035	2,3288	
10	A-D-0.2	Ara	D	0,2	2,985	1,4925	0,2687	
11	A-D-0.5	Ara	D	0,5	5,97	1,194	0,5373	
12	A-D-1	Ara	D	1,0	9,95	0,995	0,8955	
13	A-D-2.5	Ara	D	2,5	22,885	0,9154	2,0597	
14	R-L-0.2	Rob	L	0,2	3,585	1,7925	0,2151	
15	R-L-0.5	Rob	L	0,5	7,17	1,434	0,4302	
16	R-L-1	Rob	L	1,0	11,95	1,195	0,717	
17	R-L-2.5	Rob	L	2,5	27,485	1,0994	1,6491	

	A	B	C	D	E	F	G	H	I
1	ID client	Nom du client	Email	Numéro de téléphone	Adresse ligne 1	Ville	Pays	Code postal	Carte de fidélité
2	17670-51384-MA	Aloisia Allner	aallner0@lulu.com	+1 (862) 817-0124	57999 Pepper Wood Alley	Paterson	United States	7505	
3	73342-18763-UW	Piotr Bote	pbote1@yelp.com	+353 (913) 396-4653	2112 Ridgeway Hill	Crumlin	Ireland	D6W	No
4	21125-22134-PX	Jami Redholes	jredholes2@tmall.com	+1 (210) 986-6806	5214 Bartillon Park	San Antonio	United States	78205	Yes
5	71253-00052-RN	Dene Azema	dazema3@facebook.com	+1 (217) 418-0714	27 Maywood Place	Springfield	United States	62711	Yes
6	23806-46781-OU	Christoffer O' Shea		+353 (698) 362-9201	38980 Manitowish Junction	Cill Airne	Ireland	N41	No
7	86561-91660-RB	Beryle Cottier		+1 (570) 289-7473	2651 Stoughton Place	Scranton	United States	18505	No
8	65223-29612-CB	Shaylynn Lobe	slobe6@nifty.com	+1 (937) 954-4541	7005 Mariners Cove Place	Dayton	United States	45440	Yes
9	21134-81676-FR	Melvin Wharfe		+353 (507) 574-3034	7 Straubel Road	Kill	Ireland	P24	Yes
10	03396-68805-ZC	Guthrey Petracci	gpetracci8@livejournal.com	+1 (310) 868-1842	949 Paget Parkway	Los Angeles	United States	90045	No
11	61021-27840-ZN	Rodger Raven	rraven9@ed.gov	+1 (213) 263-0288	1 Reinke Avenue	Los Angeles	United States	90065	No
12	76239-90137-UQ	Ferrell Ferber	fferbera@businesswire.com	+1 (408) 383-5302	68 High Crossing Court	San Jose	United States	95160	No
13	49315-21985-BB	Duky Phizackerly	dphizackerlyb@utexas.edu	+1 (408) 533-6012	28643 Bluejay Crossing	San Jose	United States	95194	Yes
14	34136-36674-OM	Rosaleen Scholar	rscholarc@nyu.edu	+1 (804) 420-0420	80915 Montana Park	Richmond	United States	23285	No
15	39396-12890-PE	Terence Vanyutin	tvanyutind@wix.com		331 Bunting Hill	Migrate	United States	41905	No
16	95875-73336-RG	Patrice Trobe	ptrobee@wunderground.com	+1 (314) 240-7896	827 Declaration Plaza	Saint Louis	United States	63131	Yes
17	25473-43727-BY	Llywellyn Oscroft	loscroftf@ebay.co.uk		022 Roth Place	Philadelphia	United States	19172	No
18	99643-51048-IQ	Minni Alabaster	malabasterg@hexun.com	+1 (971) 483-6255	3 Charing Cross Trail	Portland	United States	97271	No
19	62173-15287-CU	Rhianon Broxup	rbroxuph@jimdo.com	+1 (713) 663-1338	83517 Thierer Court	Houston	United States	77240	No
20	57611-05522-ST	PaIl Redford	predfordi@ow.ly		7337 Hayes Junction	Caherconlish	Ireland	F45	Yes
21	76664-37050-DT	Aurea Corradino	acorradinoi@harvard.edu	+1 (646) 202-5965	698 Canarv Terrace	New York City	United States	10060	Yes

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	ID de commande	Date de commande	ID client	ID du produit	Quantité	Nom du client	Email	Pays	Type de café	Type de torréfaction	Taille	Prix unitaire	Ventes
2	QEV-37451-860	05/09/2019	17670-51384-MA	R-M-1	2								
3	QEV-37451-860	05/09/2019	17670-51384-MA	E-M-0.5	5								
4	FAA-43335-268	17/06/2021	21125-22134-PX	A-L-1	1								
5	KAC-83089-793	15/07/2021	23806-46781-OU	E-M-1	2								
6	KAC-83089-793	15/07/2021	23806-46781-OU	R-L-2.5	2								
7	CVP-18956-553	04/08/2021	86561-91660-RB	L-D-1	3								
8	IPP-31994-879	21/01/2022	65223-29612-CB	E-D-0.5	3								
9	SNZ-65340-705	20/05/2022	21134-81676-FR	L-L-0.2	1								
10	EZT-46571-659	02/01/2019	03396-68805-ZC	R-M-0.5	3								
11	NWQ-70061-912	05/09/2019	61021-27840-ZN	R-M-0.5	1								
12	BKK-47233-845	08/03/2021	76239-90137-UQ	A-D-1	4								
13	VQR-01002-970	28/10/2020	49315-21985-BB	E-L-2.5	5								
14	SZW-48378-399	02/07/2022	34136-36674-OM	R-M-1	5								
15	ITA-87418-783	22/05/2020	39396-12890-PE	R-D-2.5	2								
16	GNZ-46006-527	05/04/2022	95875-73336-RG	L-D-0.2	3								
17	FYQ-78248-319	07/06/2022	25473-43727-BY	R-M-2.5	5								
18	VAU-44387-624	20/03/2019	99643-51048-IQ	A-M-0.2	6								
19	RDW-33155-159	19/10/2019	62173-15287-CU	A-L-1	6								
20	TDZ-59011-211	13/06/2019	57611-05522-ST	R-D-2.5	4								
21	IDU-25793-399	04/12/2020	76664-37050-DT	A-M-0.2	5								

### 3. Features Used

#### a) XLOOKUP and INDEX MATCH

Used to search for specific information within large databases, such as linking sales to products or clients. These formulas allow for quick retrieval of important data, like product prices and quantities sold.

SUM    ✕    ✓    f_x    =XLOOKUP(C2;customers!\$A\$2:\$A\$1001;customers!\$B\$2:\$B\$1001;;)													
	A	B	C	D	E	F	G	H	I	J	K	L	M
1	ID de commande	Date de commande	ID client	ID du produit	Quantité	Nom du client	Email	Pays	Type de café	Type de torréfaction	Taille	Prix unitaire	Ventes
2	QEV-37451-860	05/09/2019	17670-51384-MA	R-M-1	2	=XLOOKUP(C2;customers!\$A\$2:\$A\$1001;customers!\$B\$2:\$B\$1001;;)							
3	QEV-37451-860	05/09/2019	17670-51384-MA	E-M-0.5	5	A XLOOKUP(lookup_value; lookup_array; return_array; [if_not_found]; [match_mode]; [search_mode])							
4	FAA-43335-268	17/06/2021	21125-22134-PX	A-L-1	1	Jami Redholes							
5	KAC-83089-793	15/07/2021	23806-46781-OU	E-M-1	2	Christoffer O' Shea							
6	KAC-83089-793	15/07/2021	23806-46781-OU	R-L-2.5	2	Christoffer O' Shea							
7	CVP-18956-553	04/08/2021	86561-91660-RB	L-D-1	3	Beryle Cottier							
8	IPP-31994-879	21/01/2022	65223-29612-CB	E-D-0.5	3	Shaylynn Lobe							
9	SNZ-65340-705	20/05/2022	21134-81676-FR	L-L-0.2	1	Melvin Wharfe							
10	EZT-46571-659	02/01/2019	03396-68805-ZC	R-M-0.5	3	Guthrey Petracci							
11	NWQ-70061-912	05/09/2019	61021-27840-ZN	R-M-0.5	1	Rodger Raven							
12	BKK-47233-845	08/03/2021	76239-90137-UQ	A-D-1	4	Ferrell Ferber							
13	VQR-01002-970	28/10/2020	49315-21985-BB	E-L-2.5	5	Duky Phizackerly							
14	SZW-48378-399	02/07/2022	34136-36674-OM	R-M-1	5	Rosaleen Scholar							
15	ITA-87418-783	22/05/2020	39396-12890-PE	R-D-2.5	2	Terence Vanyutin							
16	GNZ-46006-527	05/04/2022	95875-73336-RG	L-D-0.2	3	Patrice Trobe							
17	FYQ-78248-319	07/06/2022	25473-43727-BY	R-M-2.5	5	Llywellyn Oscroft							
18	VAU-44387-624	20/03/2019	99643-51048-IQ	A-M-0.2	6	Minni Alabaster							
19	RDW-33155-159	19/10/2019	62173-15287-CU	A-L-1	6	Rhianon Broxup							
20	TDZ-59011-211	13/06/2019	57611-05522-ST	R-D-2.5	4	Pall Redford							
21	IDU-25793-399	04/12/2020	76664-37050-DT	A-M-0.2	5	Aurea Corradino							
22	IDU-25793-399	04/12/2020	76664-37050-DT	E-D-0.2	4	Aurea Corradino							
23	NUO-20013-488	04/12/2020	03090-88267-BQ	A-D-0.2	6	Avrit Davidowsky							
24	UQU-65630-479	22/01/2021	37651-47492-NC	R-M-2.5	4	Annabel Antuk							
25	FEO-11834-332	11/02/2022	95399-57205-HI	A-D-0.2	4	Iorgo Kleinert							

=XLOOKUP(C2;customers!\$A\$2:\$A\$1001;customers!\$C\$2:\$C\$1001;;)									
	A	B	C	D	E	F	G	H	I
	ID de commande	Date de commande	ID client	ID du produit	Quantité	Nom du client	Email	Pays	Type de café
1	QEV-37451-860	05/09/2019	17670-51384-MA	R-M-1	2	Aloisia Allner	=XLOOKUP(C2;customers!\$A\$2:\$A\$1001;customers!\$C\$2:\$C\$1001;;)		
2	QEV-37451-860	05/09/2019	17670-51384-MA	E-M-0.5	5	Aloisia Allner	=XLOOKUP(lookup_value; lookup_array; return_array; [if_not_found]; [m		
3	FAA-43335-268	17/06/2021	21125-22134-PX	A-L-1	1	Jami Redholes	jredholes2@tmail.com		
5	KAC-83089-793	15/07/2021	23806-46781-OU	E-M-1	2	Christoffer O' Shea		0	
6	KAC-83089-793	15/07/2021	23806-46781-OU	R-L-2.5	2	Christoffer O' Shea		0	
7	CVP-18956-553	04/08/2021	86561-91660-RB	L-D-1	3	Beryle Cottier		0	
8	IPP-31994-879	21/01/2022	65223-29612-CB	E-D-0.5	3	Shaylynn Lobe	slobe6@nifty.com		
9	SNZ-65340-705	20/05/2022	21134-81676-FR	L-L-0.2	1	Melvin Wharfe		0	
10	EZT-46571-659	02/01/2019	03396-68805-ZC	R-M-0.5	3	Guthrey Petracci	gpetracci8@livejournal.com		
11	NWQ-70061-912	05/09/2019	61021-27840-ZN	R-M-0.5	1	Rodger Raven	rraven9@ed.gov		
12	BKK-47233-845	08/03/2021	76239-90137-UQ	A-D-1	4	Ferrell Ferber	fferbera@businesswire.com		
13	VQR-01002-970	28/10/2020	49315-21985-BB	E-L-2.5	5	Duky Phizackerly	dphizackerlyb@utexas.edu		
14	SZW-48378-399	02/07/2022	34136-36674-OM	R-M-1	5	Rosaleen Scholar	rscholarc@nyu.edu		
15	ITA-87418-783	22/05/2020	39396-12890-PE	R-D-2.5	2	Terence Vanyutin	tvanyutind@wix.com		
16	GNZ-46006-527	05/04/2022	95875-73336-RG	L-D-0.2	3	Patrice Trobe	ptrobee@wunderground.com		
17	FYQ-78248-319	07/06/2022	25473-43727-BY	R-M-2.5	5	Llywellyn Oscroft	loscroftf@ebay.co.uk		
18	VAU-44387-624	20/03/2019	99643-51048-IQ	A-M-0.2	6	Minni Alabaster	malabasterg@hexun.com		
19	RDW-33155-159	19/10/2019	62173-15287-CU	A-L-1	6	Rhianon Broxup	rbroxuph@jimdo.com		
20	TDZ-59011-211	13/06/2019	57611-05522-ST	R-D-2.5	4	Pall Redford	predfordi@ow.ly		
21	IDU-25793-399	04/12/2020	76664-37050-DT	A-M-0.2	5	Aurea Corradino	acorradinoj@harvard.edu		
22	IDU-25793-399	04/12/2020	76664-37050-DT	E-D-0.2	4	Aurea Corradino	acorradinoj@harvard.edu		
23	NUO-20013-488	04/12/2020	03090-88267-BQ	A-D-0.2	6	Avrit Davidowsky	adavidowskyl@netvibes.com		
24	UQU-65630-479	22/01/2021	37651-47492-NK	R-M-2.5	4	Annabel Antuk	aantukm@kickstarter.com		
25	FE0-11834-332	11/02/2022	95399-57205-HI	A-D-0.2	4	Iorgo Kleinert	ikleinertn@timesonline.co.uk		



SUM					=INDEX(products!A1:\$G\$49;MATCH(orders!\$D2:products!\$A\$1:\$A\$49;0);MATCH(orders!\$I\$1:products!\$A\$1:\$G\$1;0))							
	A	B	C	D	E	F	G	H	I	J	K	L
1	ID de commande	Date de commande	ID client	ID du produit	Quantité	Nom du client	Email	Pays	Type de café	Type de torréfaction	Taille	Prix unitaire
2	QEV-37451-860	05/09/2019	17670-51384-MA	R-M-1	2	Aloisia Allner	aallner0@lulu.com	United States	=INDEX(products!A1:\$G\$49;MATCH(orders!\$D2:products!\$A\$1:\$A\$49;0);MATCH(orders!\$I\$1:products!\$A\$1:\$G\$1;0))			
3	QEV-37451-860	05/09/2019	17670-51384-MA	E-M-0.5	5	Aloisia Allner	aallner0@lulu.com	United States	\$A\$49;0);MATCH(orders!\$I\$1:products!\$A\$1:\$G\$1;0))			
4	FAA-43335-268	17/06/2021	21125-22134-PX	A-L-1	1	Jami Redholes	jredholes2@tmall.com	United States	INDEX(array; row_num; [column_num])			
5	KAC-83089-793	15/07/2021	23806-46781-OU	E-M-1	2	Christoffer O' Shea		0 Ireland	INDEX(reference; row_num; [column_num]; [area_num])			
6	KAC-83089-793	15/07/2021	23806-46781-OU	R-L-2.5	2	Christoffer O' Shea		0 Ireland				
7	CVP-18956-553	04/08/2021	86561-91660-RB	L-D-1	3	Beryle Cottier		0 United States				
8	IPP-31994-879	21/01/2022	65223-29612-CB	E-D-0.5	3	Shaylynn Lobe	slobe6@nifty.com	United States				
9	SNZ-65340-705	20/05/2022	21134-81676-FR	L-L-0.2	1	Melvin Wharfe		0 Ireland				
10	EZT-46571-659	02/01/2019	03396-68805-ZC	R-M-0.5	3	Guthrey Petracci	gpetracci8@livejournal.com	United States				
11	NWQ-70061-912	05/09/2019	61021-27840-ZN	R-M-0.5	1	Rodger Raven	rraven9@ed.gov	United States				
12	BKK-47233-845	08/03/2021	76239-90137-UQ	A-D-1	4	Ferrell Ferber	fferbera@businesswire.com	United States				
13	VQR-01002-970	28/10/2020	49315-21985-BB	E-L-2.5	5	Duky Phizackerly	dphizackerlyb@utexas.edu	United States				
14	SZW-48378-399	02/07/2022	34136-36674-OM	R-M-1	5	Rosaleen Scholar	rscholarc@nyu.edu	United States				
15	ITA-87418-783	22/05/2020	39396-12890-PE	R-D-2.5	2	Terence Vanyutin	tvanyutind@wix.com	United States				
16	GNZ-46006-527	05/04/2022	95875-73336-RG	L-D-0.2	3	Patrice Trobe	ptrobe@wunderground.com	United States				
17	FYQ-78248-319	07/06/2022	25473-43727-BY	R-M-2.5	5	Llywellyn Oscroft	loscroft@ebay.co.uk	United States				
18	VAU-44387-624	20/03/2019	99643-51048-IQ	A-M-0.2	6	Minni Alabaster	malabasterg@hexun.com	United States				
19	RDW-33155-159	19/10/2019	62173-15287-CU	A-L-1	6	Rhianon Broxup	rbroxuph@jimdo.com	United States				
20	TDZ-59011-211	13/06/2019	57611-05522-ST	R-D-2.5	4	Pall Redford	predfordi@ow.ly	Ireland				
21	IDU-25793-399	04/12/2020	76664-37050-DT	A-M-0.2	5	Aurea Corradino	acorradinoj@harvard.edu	United States				
22	IDU-25793-399	04/12/2020	76664-37050-DT	E-D-0.2	4	Aurea Corradino	acorradinoj@harvard.edu	United States				
23	NUO-20013-488	04/12/2020	03090-88267-BQ	A-D-0.2	6	Avrit Davidowsky	adavidowskyl@netvibes.com	United States				
24	UQU-65630-479	22/01/2021	37651-47492-NC	R-M-2.5	4	Annabel Antuk	aantukm@kickstarter.com	United States				
25	FE0-11834-332	11/02/2022	95399-57205-HI	A-D-0.2	4	Iorgo Kleinert	ikleinertn@timesonline.co.uk	United States				

## b) Multiplication Formula for Sales

A simple formula was used to calculate the total revenue by multiplying the number of units sold by the unit selling price.

A	B	C	D	E	F	G	H	I	J	K	L	M
ID de commande	Date de command	ID client	ID du produit	Quantité	Nom du client	Email	Pays	Type de café	Type de torréfaction	Taille	Prix unitaire	Ventes
QEV-37451-860	05/09/2019	17670-51384-MA	R-M-1	2	Aloisia Allner	aallner0@lulu.com	United States	Rob	M	1	9,95	=L2*L3
QEV-37451-860	05/09/2019	17670-51384-MA	E-M-0.5	5	Aloisia Allner	aallner0@lulu.com	United States	Exc	M	0,5	8,25	
FAA-43335-268	17/06/2021	21125-22134-PX	A-L-1	1	Jami Redholes	jredholes2@tmall.com	United States	Ara	L	1	12,95	
KAC-83089-793	15/07/2021	23806-46781-OU	E-M-1	2	Christoffer O' Shea		0 Ireland	Exc	M	1	13,75	
KAC-83089-793	15/07/2021	23806-46781-OU	R-L-2.5	2	Christoffer O' Shea		0 Ireland	Rob	L	2,5	27,485	
CVP-18956-553	04/08/2021	86561-91660-RB	L-D-1	3	Beryle Cottier		0 United States	Lib	D	1	12,95	
IPP-31994-879	21/01/2022	65223-29612-CB	E-D-0.5	3	Shaylynn Lobe	slobe6@nifty.com	United States	Exc	D	0,5	7,29	
SNZ-65340-705	20/05/2022	21134-81676-FR	L-L-0.2	1	Melvin Wharfe		0 Ireland	Lib	L	0,2	4,755	
EZT-46571-659	02/01/2019	03396-68805-ZC	R-M-0.5	3	Guthrey Petracci	gpetracci8@livejournal.com	United States	Rob	M	0,5	5,97	
NWQ-70061-912	05/09/2019	61021-27840-ZN	R-M-0.5	1	Rodger Raven	rraven9@ed.gov	United States	Rob	M	0,5	5,97	
BKK-47233-845	08/03/2021	76239-90137-UQ	A-D-1	4	Ferrell Ferber	fferbera@businesswire.com	United States	Ara	D	1	9,95	
VQR-01002-970	28/10/2020	49315-21985-BB	E-L-2.5	5	Duky Phizackerly	dphizackerlyb@utexas.edu	United States	Exc	L	2,5	34,155	
SZW-48378-399	02/07/2022	34136-36674-OM	R-M-1	5	Rosaleen Scholar	rscholarc@nyu.edu	United States	Rob	M	1	9,95	
ITA-87418-783	22/05/2020	39396-12890-PE	R-D-2.5	2	Terence Vanyutin	tvanyutind@wix.com	United States	Rob	D	2,5	20,585	
GNZ-46006-527	05/04/2022	95875-73336-RG	L-D-0.2	3	Patrice Trobe	ptrobe@wunderground.com	United States	Lib	D	0,2	3,885	
FYQ-78248-319	07/06/2022	25473-43727-BY	R-M-2.5	5	Llywellyn Oscroft	loscroft@ebay.co.uk	United States	Rob	M	2,5	22,885	
VAU-44387-624	20/03/2019	99643-51048-IQ	A-M-0.2	6	Minni Alabaster	malabasterg@hexun.com	United States	Ara	M	0,2	3,375	
RDW-33155-159	19/10/2019	62173-15287-CU	A-L-1	6	Rhianon Broxup	rbroxuph@jimdo.com	United States	Ara	L	1	12,95	
TDZ-59011-211	13/06/2019	57611-05522-ST	R-D-2.5	4	Pall Redford	predfordi@ow.ly	Ireland	Rob	D	2,5	20,585	
IDU-25793-399	04/12/2020	76664-37050-DT	A-M-0.2	5	Aurea Corradino	acorradinoj@harvard.edu	United States	Ara	M	0,2	3,375	
IDU-25793-399	04/12/2020	76664-37050-DT	E-D-0.2	4	Aurea Corradino	acorradinoj@harvard.edu	United States	Exc	D	0,2	3,645	
NUO-20013-488	04/12/2020	03090-88267-BQ	A-D-0.2	6	Avrit Davidowsky	adavidowskyl@netvibes.com	United States	Ara	D	0,2	2,985	
UQU-65630-479	22/01/2021	37651-47492-NC	R-M-2.5	4	Annabel Antuk	aantukm@kickstarter.com	United States	Rob	M	2,5	22,885	
FE0-11834-332	11/02/2022	95399-57205-HI	A-D-0.2	4	Iorgo Kleinert	ikleinertn@timesonline.co.uk	United States	Ara	D	0,2	2,985	
TKY-71558-096	15/09/2021	24010-66714-HW	A-M-1	1	Chrisy Blofeld	cblofeldo@amazon.co.uk	United States	Ara	M	1	11,25	
OXY-65322-253	24/10/2020	07591-92789-UA	A-M-0.2	3	Culley Farris		0 United States	Exc	M	0,2	4,125	
EVP-43500-491	20/02/2019	49231-44455-IC	A-M-0.5	4	Seiene Shales	sshalesq@umich.edu	United States	Ara	M	0,5	6,75	

## c) Multiple IF Functions

IF functions were used to define different conditions, such as calculating discounts or checking if sales meet certain thresholds.

=IF(J2="M";"Medium";IF(J2="L";"Light";IF(J2="D";"Dark")))														
	C	D	E	F	G	H	I	J	K	L	M	N	O	
1	ID client	ID du produit	Quantité	Nom du client	Email	Pays	Type de café	Type de torréfaction	Taille	Prix unitaire	Ventes	Nom du type de café	Nom du type de torréfaction	
2	17670-51384-MA	R-M-1	2	Aloisia Allner	aallner0@lulu.com	United States	Rob	M	1	9,95	19,9	Robusta	=IF(J2="M";"Medium";IF(J2="L";	
3	17670-51384-MA	A-M-0.5	5	Aloisia Allner	aallner0@lulu.com	United States	Exc	M	0,5	8,25	41,25	Excelca	"Light";IF(J2="D";"Dark"))	
4	21125-22134-PX	A-L-1	1	Jami Redholes	jredholes2@gmail.com	United States	Ara	L	1	12,95	12,95	Arabica	IF(logical_test;[value_if_true];[value_if_false])	
5	23806-46781-OU	E-M-1	2	Christoffer O' Shea		0 Ireland	Exc	M	1	13,75	27,5	Excelca	Medium	
6	23806-46781-OU	R-L-2.5	2	Christoffer O' Shea		0 Ireland	Rob	L	2,5	27,485	54,97	Robusta	Light	
7	86561-91660-RB	L-D-1	3	Beryl Cottier		0 United States	Lib	D	1	12,95	38,85	Libiane	Dark	
8	65223-29612-CB	E-D-0.5	3	Shaylenn Lobe	slobe6@nifty.com	United States	Exc	D	0,5	7,29	21,87	Excelca	Dark	
9	21134-81676-FR	L-L-0.2	1	Melvin Wharfe		0 Ireland	Lib	L	0,2	4,755	4,755	Libiane	Light	
10	03396-68805-ZC	R-M-0.5	3	Guthrey Petracci	gpetracci@livejournal.com	United States	Rob	M	0,5	5,97	17,91	Robusta	Medium	
11	61021-27840-ZN	R-M-0.5	1	Rodger Raven	rraven9@ed.gov	United States	Rob	M	0,5	5,97	5,97	Robusta	Medium	
12	76239-90137-UQ	A-M-1	4	Ferrell Ferber	fferbera@businesswire.com	United States	Ara	D	1	9,95	39,8	Arabica	Dark	
13	49315-21985-BB	E-L-2.5	5	Duky Phizackerly	dphizackerlyb@utexas.edu	United States	Exc	L	2,5	34,155	170,78	Excelca	Light	
14	34136-36674-OM	R-M-1	5	Rosaleen Scholar	rscholarc@nyu.edu	United States	Rob	M	1	9,95	49,75	Robusta	Medium	
15	39396-12890-PE	R-D-2.5	2	Terence Vanyutin	tvanyutin@wix.com	United States	Rob	D	2,5	20,585	41,17	Robusta	Dark	
16	95875-73336-RG	L-D-0.2	3	Patrice Trobe	ptrobe@wunderground.com	United States	Lib	D	0,2	3,885	11,655	Libiane	Dark	
17	25473-43727-BY	R-M-2.5	5	Llywellyn Olsroft	loscroff@ebay.co.uk	United States	Rob	M	2,5	22,885	114,43	Robusta	Medium	
18	99643-51048-IQ	A-M-0.2	6	Minni Alabaster	malabasterg@hexun.com	United States	Ara	M	0,2	3,375	20,25	Arabica	Medium	
19	62173-15287-CU	A-L-1	6	Rhianon Broxup	rbroxup@jimdo.com	United States	Ara	L	1	12,95	77,7	Arabica	Light	
20	57611-05522-ST	R-D-2.5	4	Pall Redford	predfordi@ow.ly	Ireland	Rob	D	2,5	20,585	82,34	Robusta	Dark	
21	76664-37050-DT	A-M-0.2	5	Aurea Corradino	acorradinoj@harvard.edu	United States	Ara	M	0,2	3,375	16,875	Arabica	Medium	
22	76664-37050-DT	E-D-0.2	4	Aurea Corradino	acorradinoj@harvard.edu	United States	Exc	D	0,2	3,645	14,58	Excelca	Dark	
23	03090-88267-BQ	A-M-0.2	6	Avrit Davidowsky	adavidowsky@netvibes.com	United States	Ara	D	0,2	2,985	17,91	Arabica	Dark	
24	37651-47492-NC	R-M-2.5	4	Annabel Antuk	aantukm@kickstarter.com	United States	Rob	M	2,5	22,885	91,54	Robusta	Medium	
25	95399-57205-HI	A-M-0.2	4	Iorgo Kleiart	ikleinertn@timesonline.co.uk	United States	Ara	D	0,2	2,985	11,94	Arabica	Dark	
26	24010-66714-HW	E-M-1	1	Chrisy Blofeld	cblofeldo@amazon.co.uk	United States	Ara	M	1	11,25	11,25	Arabica	Medium	
27	07591-92789-UA	E-M-0.2	3	Culley Efford		0 United States	Exc	M	0,2	4,125	12,375	Excelca	Medium	
28	49231-44455-IC	A-M-0.5	4	Selene Shales	sshalesq@umich.edu	United States	Ara	M	0,5	6,75	27	Arabica	Medium	

## d) Date and Number Formatting

Specific formatting was applied to dates (days, months, years) to ensure a clearer reading of sales periods. Numbers (such as monetary amounts) were formatted to indicate currency values with separators and decimals.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	ID de commande	Date de commande	ID client	ID du produit	Quantité	Nom du client	Email	Pays	Type de café	Type de torréfaction	Taille	Prix unitaire	Ventes	Nom du type d
2	QEV-37451-860	05-sept-2019	17670-51384-MA	R-M-1	2	Aloisia Allner	aallner0@lulu.com	United States	Rob	M	1	9,95	19,9	Robusta
3	QEV-37451-860	05-sept-2019	17670-51384-MA	E-M-0.5	5	Aloisia Allner	aallner0@lulu.com	United States	Exc	M	0,5	8,25	41,25	Excelca
4	FAA-43335-268	17-juin-2021	21125-22134-PX	A-L-1	1	Jami Redholes	jredholes2@gmail.com	United States	Ara	L	1	12,95	12,95	Arabica
5	KAC-83089-793	15-juil-2021	23806-46781-OU	E-M-1	2	Christoffer O' Shea		0 Ireland	Exc	M	1	13,75	27,5	Excelca
6	KAC-83089-793	15-juil-2021	23806-46781-OU	R-L-2.5	2	Christoffer O' Shea		0 Ireland	Rob	L	2,5	27,485	54,97	Robusta
7	CVP-18956-553	04-août-2021	86561-91660-RB	L-D-1	3	Beryl Cottier		0 United States	Lib	D	1	12,95	38,85	Libiane
8	IPP-31994-879	21-janv-2022	65223-29612-CB	E-D-0.5	3	Shaylenn Lobe	slobe6@nifty.com	United States	Exc	D	0,5	7,29	21,87	Excelca
9	SNZ-65340-705	20-mai-2022	21134-81676-FR	L-L-0.2	1	Melvin Wharfe		0 Ireland	Lib	L	0,2	4,755	4,755	Libiane
10	EZT-46571-659	02-janv-2019	03396-68805-ZC	R-M-0.5	3	Guthrey Petracci	gpetracci@livejournal.com	United States	Rob	M	0,5	5,97	17,91	Robusta
11	NWQ-70061-912	05-sept-2019	61021-27840-ZN	R-M-0.5	1	Rodger Raven	rraven9@ed.gov	United States	Rob	M	0,5	5,97	5,97	Robusta
12	BKK-47233-845	08-mars-2021	76239-90137-UQ	A-M-1	4	Ferrell Ferber	fferbera@businesswire.com	United States	Ara	D	1	9,95	39,8	Arabica
13	VQR-01002-970	28-oct-2020	49315-21985-BB	E-L-2.5	5	Duky Phizackerly	dphizackerlyb@utexas.edu	United States	Exc	L	2,5	34,155	170,78	Excelca
14	SZW-48378-399	02-juil-2022	34136-36674-OM	R-M-1	5	Rosaleen Scholar	rscholarc@nyu.edu	United States	Rob	M	1	9,95	49,75	Robusta
15	ITA-87418-783	22-mai-2022	39396-12890-PE	R-D-2.5	2	Terence Vanyutin	tvanyutin@wix.com	United States	Rob	D	2,5	20,585	41,17	Robusta
16	GNZ-46006-527	05-avr-2022	95875-73336-RG	L-D-0.2	3	Patrice Trobe	ptrobe@wunderground.com	United States	Lib	D	0,2	3,885	11,655	Libiane
17	FYQ-78248-319	07-juin-2022	25473-43727-BY	R-M-2.5	5	Llywellyn Olsroft	loscroff@ebay.co.uk	United States	Rob	M	2,5	22,885	114,43	Robusta
18	VAU-44387-624	20-mars-2019	99643-51048-IQ	A-M-0.2	6	Minni Alabaster	malabasterg@hexun.com	United States	Ara	M	0,2	3,375	20,25	Arabica
19	RDW-33155-159	19-oct-2019	62173-15287-CU	A-L-1	6	Rhianon Broxup	rbroxup@jimdo.com	United States	Ara	L	1	12,95	77,7	Arabica
20	TDZ-59011-211	13-juin-2019	57611-05522-ST	R-D-2.5	4	Pall Redford	predfordi@ow.ly	Ireland	Rob	D	2,5	20,585	82,34	Robusta
21	IDU-25793-399	04-déc-2020	76664-37050-DT	A-M-0.2	5	Aurea Corradino	acorradinoj@harvard.edu	United States	Ara	M	0,2	3,375	16,875	Arabica
22	IDU-25793-399	04-déc-2020	76664-37050-DT	E-D-0.2	4	Aurea Corradino	acorradinoj@harvard.edu	United States	Exc	D	0,2	3,645	14,58	Excelca
23	NUO-20013-488	04-déc-2020	03090-88267-BQ	A-M-0.2	6	Avrit Davidowsky	adavidowsky@netvibes.com	United States	Ara	D	0,2	2,985	17,91	Arabica
24	UQU-55630-479	22-janv-2021	37651-47492-NC	R-M-2.5	4	Annabel Antuk	aantukm@kickstarter.com	United States	Rob	M	2,5	22,885	91,54	Robusta
25	FEO-11834-332	11-févr-2022	95399-57205-HI	A-M-0.2	4	Iorgo Kleiart	ikleinertn@timesonline.co.uk	United States	Ara	D	0,2	2,985	11,94	Arabica
26	TKY-71558-096	15-sept-2021	24010-66714-HW	E-M-1	1	Chrisy Blofeld	cblofeldo@amazon.co.uk	United States	Ara	M	1	11,25	11,25	Arabica
27	OXY-65322-253	24-oct-2020	07591-92789-UA	E-M-0.2	3	Culley Efford		0 United States	Exc	M	0,2	4,125	12,375	Excelca
28	EVP-43500-491	20-févr-2019	49231-44455-IC	A-M-0.5	4	Selene Shales	sshalesq@umich.edu	United States	Ara	M	0,5	6,75	27	Arabica

Format Cells

Number Alignment Font Border Fill Protection

Category: General Number Currency Accounting Date Time Percentage Fraction Scientific Text Special Custom

Type: dd-mm-yyyy

dd/mm/yyyy hh:mm mm:ss mm:ss,0 @ [h]:mm:ss -.\* ##0 CFA\_.\* ##0 CFA\_.\* CFA\_.\* -.\* ##0,00 CFA\_.\* ##0,00 CFA\_.\* ?? CFA\_.\* -.\* ##0,00\_.\* ##0,00\_.\* ??\_.\* 0,0 [S-fr-SN]dddd d mmmm yyyy dd-mm-yyyy

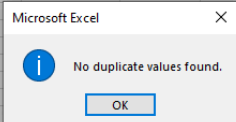
Type the number format code, using one of the existing codes as a starting point.

OK Cancel

## e) Checking for Duplicates

Duplicates in sales or product information were checked and removed to ensure data reliability.

	C	D	E	F	G	H	I	J	K	L	M	N	O
1	ID client	ID du produit	Quantité	Nom du client	Email	Pays	Type de café	Type de torréfaction	Taille	Prix unitaire	Ventes	Nom du type de café	Nom du type de torréfaction
2	17670-51384-MA	R-M-1	2	Aloisia Allner	aallner0@lulu.com	United States	Rob	M	1kg	\$ 9,95	\$ 19,90	Robusta	Medium
3	17670-51384-MA	E-M-0.5	5	Aloisia Allner	aallner0@lulu.com	United States	Exc	M	1kg	\$ 8,25	\$ 41,25	Excelca	Medium
4	21125-22134-PX	A-L-1	1	Jami Redholes	jredholes2@gmail.com	United States	Ara	L	1kg	\$ 12,95	\$ 12,95	Arabica	Light
5	23806-46781-OU	E-M-1	2	Christoffer O' Shea		0 Ireland	Exc	M	1kg	\$ 13,75	\$ 27,50	Excelca	Medium
6	23806-46781-OU	R-L-2.5	2	Christoffer O' Shea		0 Ireland	Rob	L	3kg	\$ 27,49	\$ 54,97	Robusta	Light
7	86561-91660-RB	L-D-1	3	Beryle Cottier		0 United States	Lib	D	1kg	\$ 12,95	\$ 38,85	Libiane	Dark
8	65223-29612-CB	E-D-0.5	3	Shaylynn Lobe	slobe6@nifty.com				1kg	\$ 7,29	\$ 21,87	Excelca	Dark
9	21134-81676-FR	L-L-0.2	1	Melvin Wharfe					0kg	\$ 4,76	\$ 4,76	Libiane	Light
10	03996-68805-ZC	R-M-0.5	3	Guthrey Petracci	gpetracci8@livejournal.com				1kg	\$ 5,97	\$ 17,91	Robusta	Medium
11	61021-27840-ZN	R-M-0.5	1	Rodger Raven	rraven9@ed.gov				1kg	\$ 5,97	\$ 5,97	Robusta	Medium
12	76239-90137-UQ	A-D-1	4	Ferrell Ferber	fferbera@businesswire.com				1kg	\$ 9,95	\$ 39,80	Arabica	Dark
13	49315-21985-BB	E-L-2.5	5	Duky Phizackerly	dphizackerlyb@utexas.edu				3kg	\$ 34,16	\$ 170,78	Excelca	Light
14	34136-36674-OM	R-M-1	5	Rosaleen Scholar	rscholarc@nyu.edu				1kg	\$ 9,95	\$ 49,75	Robusta	Medium
15	39396-12890-PE	R-D-2.5	2	Terence Vanyutin	tvanyutin@wix.com	United States	Rob	D	3kg	\$ 20,59	\$ 41,17	Robusta	Dark
16	95875-73336-RG	L-D-0.2	3	Patrice Trobe	ptrobe@wunderground.com	United States	Lib	D	0kg	\$ 3,89	\$ 11,66	Libiane	Dark
17	25473-43727-BY	R-M-2.5	5	Liywellyn Oscroft	loscroftf@ebay.co.uk	United States	Rob	M	3kg	\$ 22,89	\$ 114,43	Robusta	Medium
18	99643-51048-IQ	A-M-0.2	6	Minni Alabaster	malabasterg@hexun.com	United States	Ara	M	0kg	\$ 3,38	\$ 20,25	Arabica	Medium
19	62173-15287-CU	A-L-1	6	Rhianon Broxup	rbroxuph@jimdo.com	United States	Ara	L	1kg	\$ 12,95	\$ 77,70	Arabica	Light
20	57611-05522-ST	R-D-2.5	4	Pall Redford	predfordi@ow.ly	Ireland	Rob	D	3kg	\$ 20,59	\$ 82,34	Robusta	Dark
21	76664-37050-DT	A-M-0.2	5	Aurea Corradino	acorradinog@harvard.edu	United States	Ara	M	0kg	\$ 3,38	\$ 16,88	Arabica	Medium
22	76664-37050-DT	E-D-0.2	4	Aurea Corradino	acorradinog@harvard.edu	United States	Exc	D	0kg	\$ 3,65	\$ 14,58	Excelca	Dark
23	03090-88267-BQ	A-D-0.2	6	Avrit Davidowsky	adavidowskyi@netvibes.com	United States	Ara	D	0kg	\$ 2,99	\$ 17,91	Arabica	Dark
24	37651-47492-NC	R-M-2.5	4	Annabel Antuk	aantukm@kickstarter.com	United States	Rob	M	3kg	\$ 22,89	\$ 91,54	Robusta	Medium
25	95399-57205-HI	A-D-0.2	4	Iorgo Kleinert	ikleinertn@timesonline.co.uk	United States	Ara	D	0kg	\$ 2,99	\$ 11,94	Arabica	Dark
26	24010-66714-HW	A-M-1	1	Chrisy Blofeld	cblofeldo@amazon.co.uk	United States	Ara	M	1kg	\$ 11,25	\$ 11,25	Arabica	Medium
27	07591-92789-UA	E-M-0.2	3	Culley Farris		0 United States	Exc	M	0kg	\$ 4,13	\$ 12,38	Excelca	Medium
28	49231-44455-IC	A-M-0.5	4	Selene Shales	sshalesq@umich.edu	United States	Ara	M	1kg	\$ 6,75	\$ 27,00	Arabica	Medium



## f) Convert Range to Table

All data was converted into a table to facilitate filter management and data sorting, making the analysis process more fluid and interactive.

## 4. Analysis with Pivot Tables

Pivot tables were used to group and summarize data by product, month, and client. They were used to:

- Visualize total sales by coffee type.
- Compare sales performance over time.
- Identify top clients or market segments.

3	Sum of Ventes		Type de café			
4	Years	Date de commande	Ara	Exc	Lib	Rob
5	2019	janv	187	306	213	123
6		févr	252	129	434	172
7		mars	225	349	321	126
8		avr	307	681	534	159
9		mai	54	83	194	68
10		juin	163	678	171	372
11		juil	345	274	184	201
12		août	335	71	134	166
13		sept	179	166	439	493

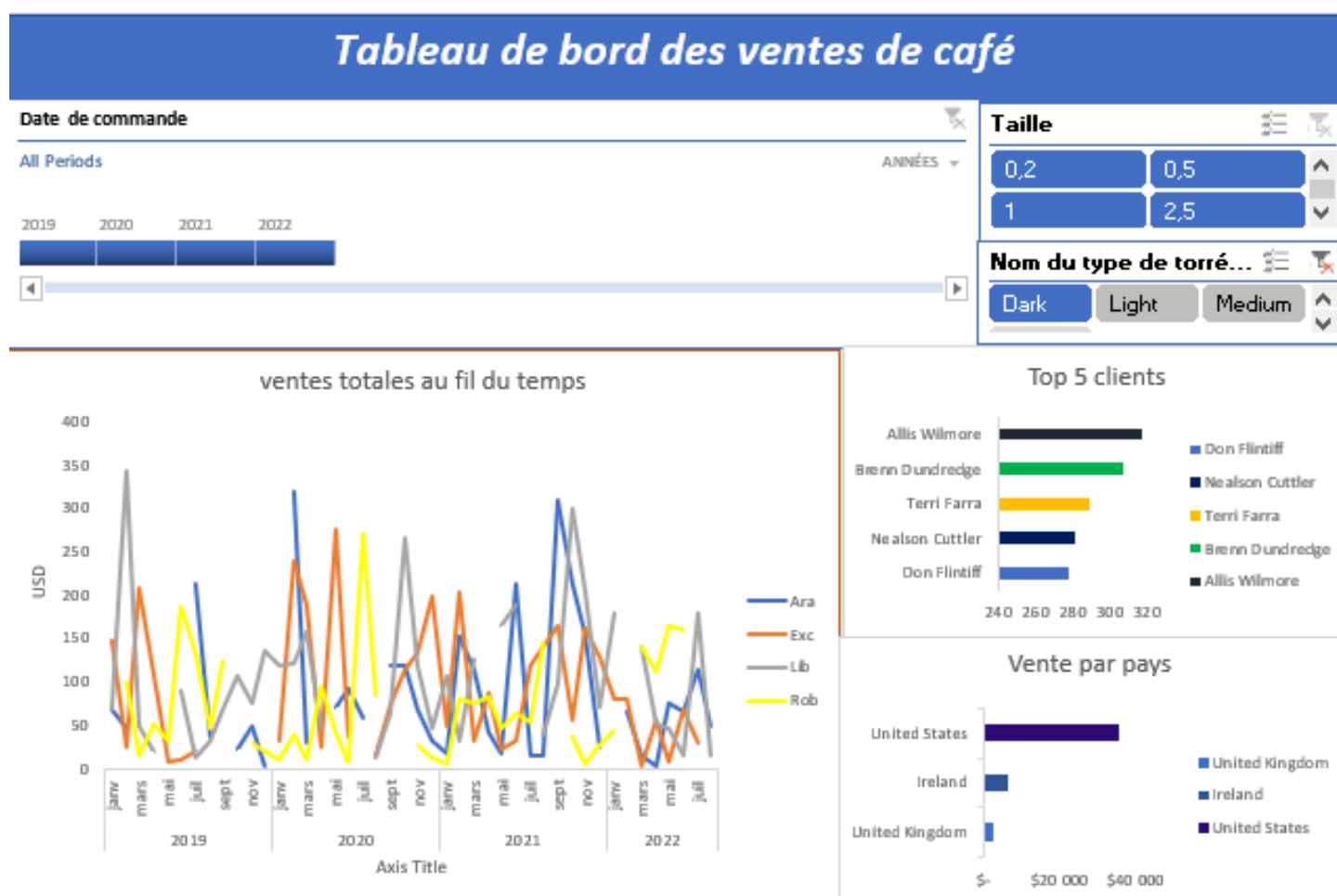
## Pivot Charts

Pivot charts were created to visualize results dynamically and help decision-makers understand trends more easily.

## 5. Dashboard

An interactive dashboard was developed to track key performance indicators (KPIs) in real-time, including:

- Sales by product.
- Sales by month or quarter.
- Best product categories.
- Sales trends over time.



## Tableau de bord des ventes de café

Date de commande

All Periods

2019 2020 2021 2022



ANNÉES

Taille

0,2

0,5

1

2,5

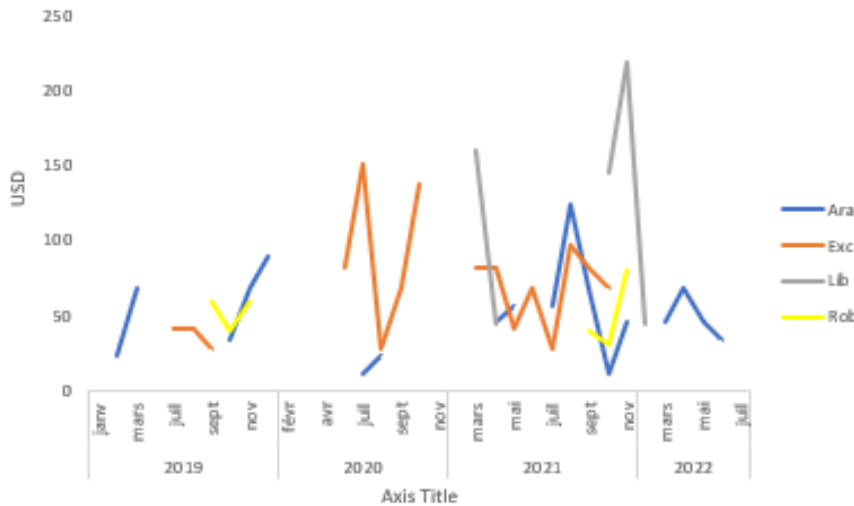
Nom du type de torré...

Dark

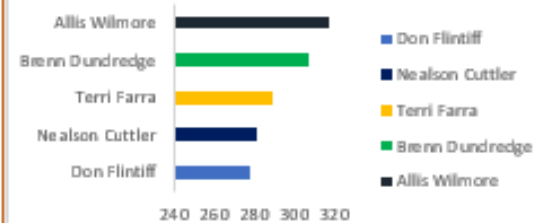
Light

Medium

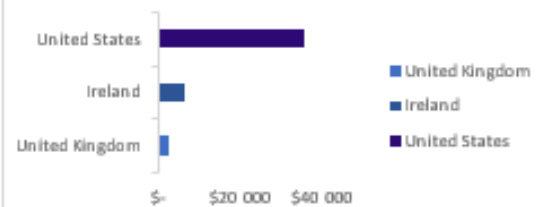
ventes totales au fil du temps



Top 5 clients



Vente par pays

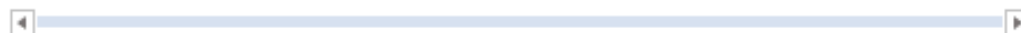


## Tableau de bord des ventes de café

Date de commande

All Periods

2019 2020 2021 2022



ANNÉES

Taille

0,2

0,5

1

2,5

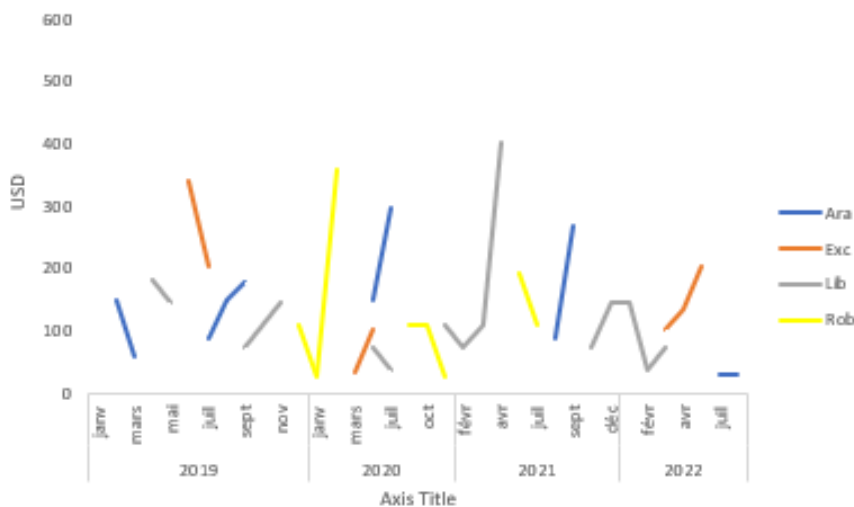
Nom du type de torré...

Dark

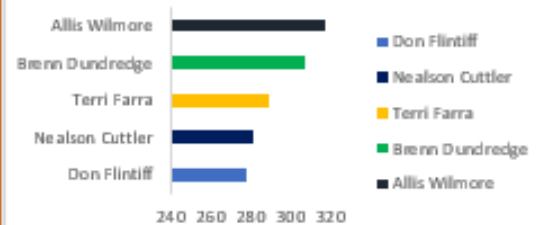
Light

Medium

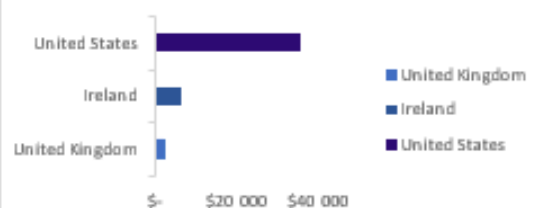
ventes totales au fil du temps



Top 5 clients



Vente par pays





This dashboard includes **timelines** and **slicers** for interactive filtering and more precise analysis.

## 6. Updating the Data Source

The data sources for the pivot table were regularly updated to ensure the dashboard always reflected the most recent information available.

## 7. Results and Recommendations

The analysis highlighted the best-performing products and the most profitable sales periods. This led to recommendations:

- Increase sales of the most popular products.
- Adjust sales strategies for less effective products.
- Target historically lower sales periods with promotions or special offers.

## 8. Challenges Encountered

Some difficulties were encountered with managing duplicates in the data, but these were resolved using duplicate checking and data cleaning features.

## 9. Conclusion

The project provided a more strategic approach to sales analysis using Excel. The interactive dashboard offers a clear and comprehensive view of company performance, facilitating informed decision-making.