

Welcome to the wonderful world of Excel!

DATA ANALYSIS IN EXCEL

Jen Bricker

Head of Instructor Success, DataCamp

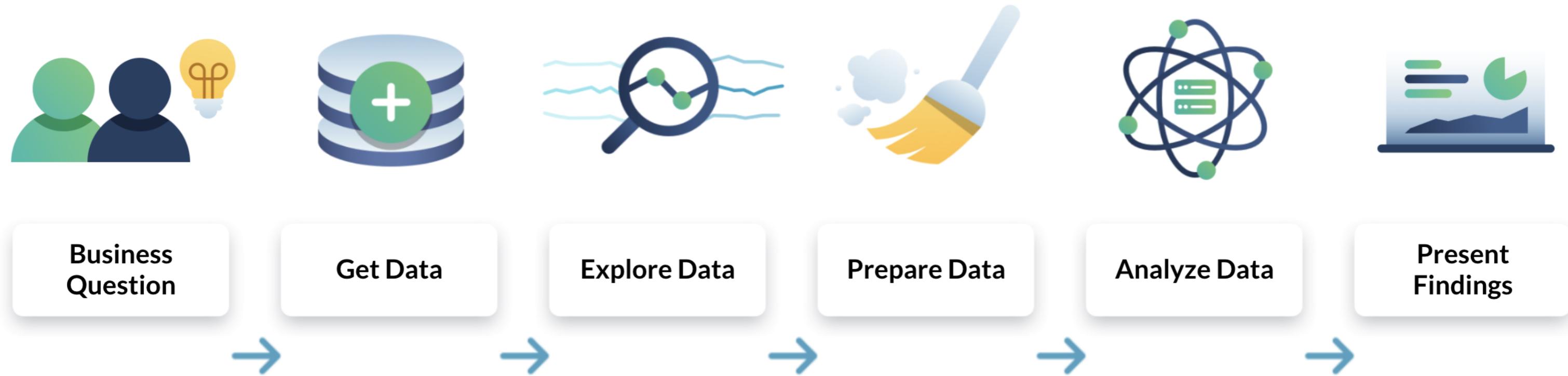




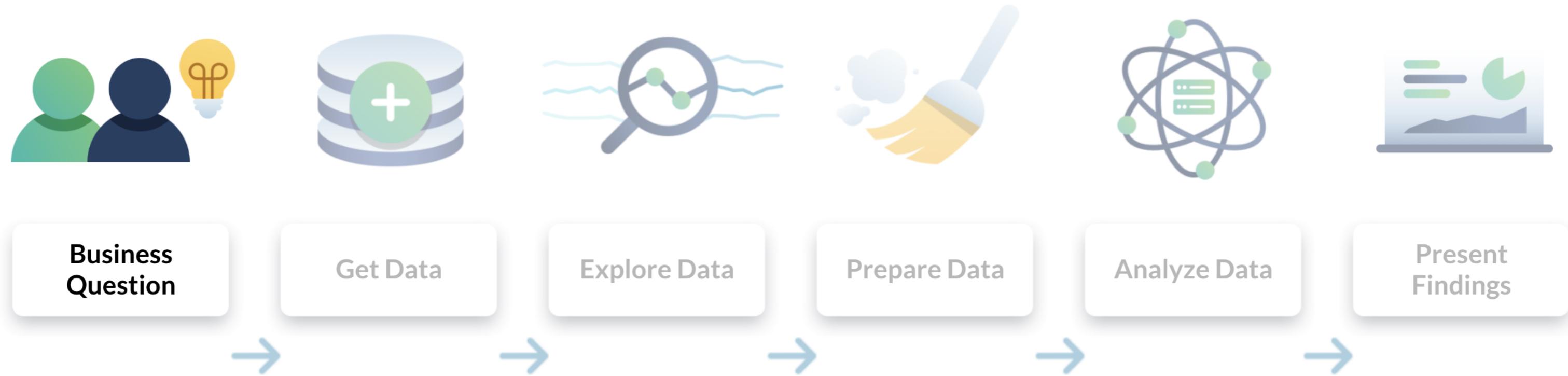
Excel



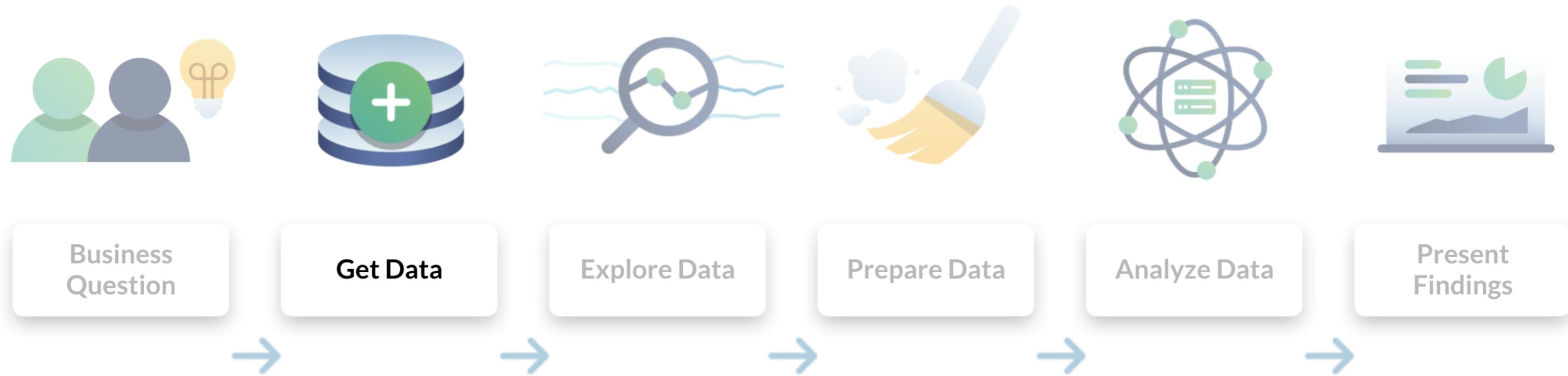
Data analysis process



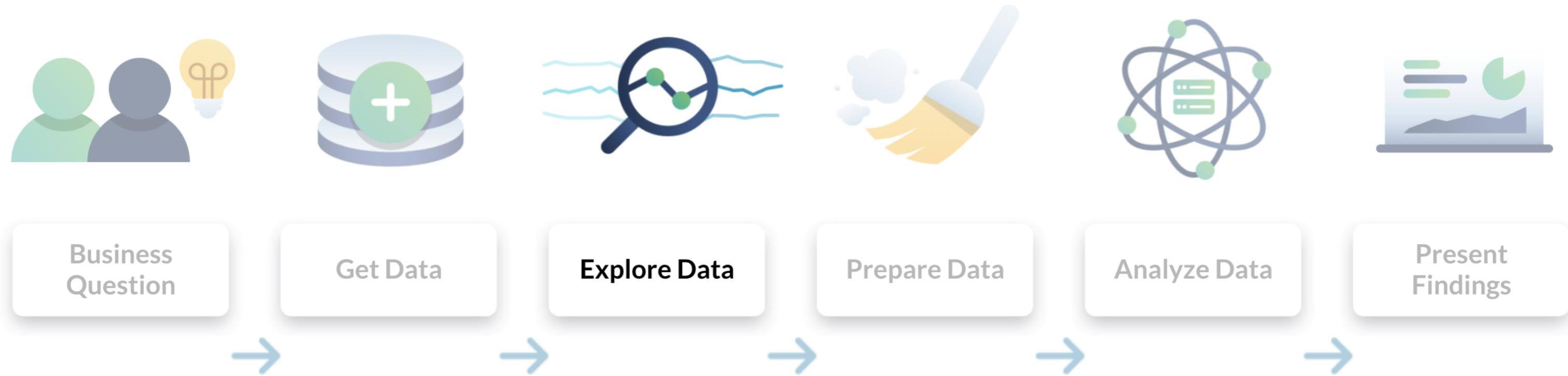
Data analysis process



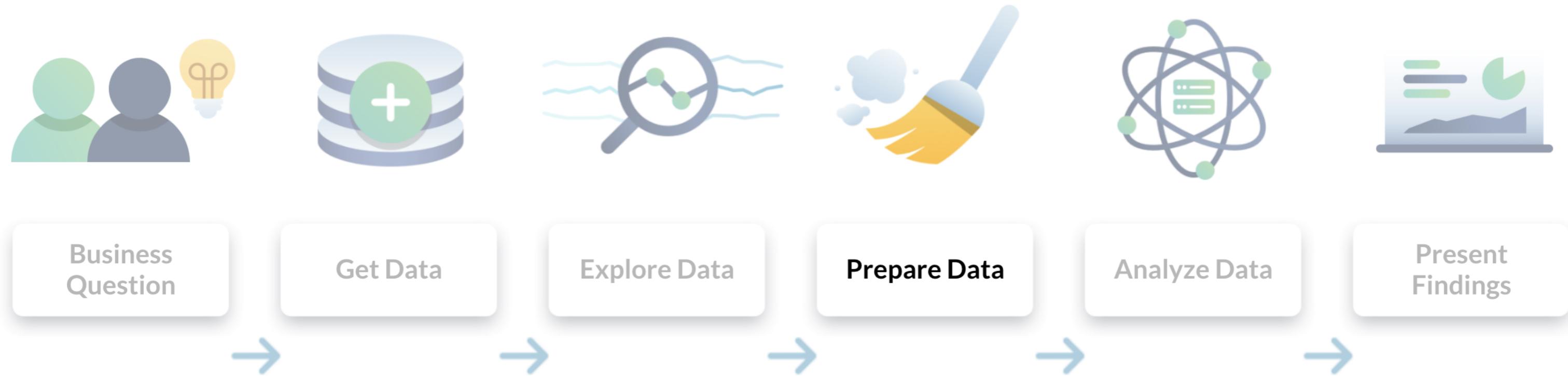
Data analysis process



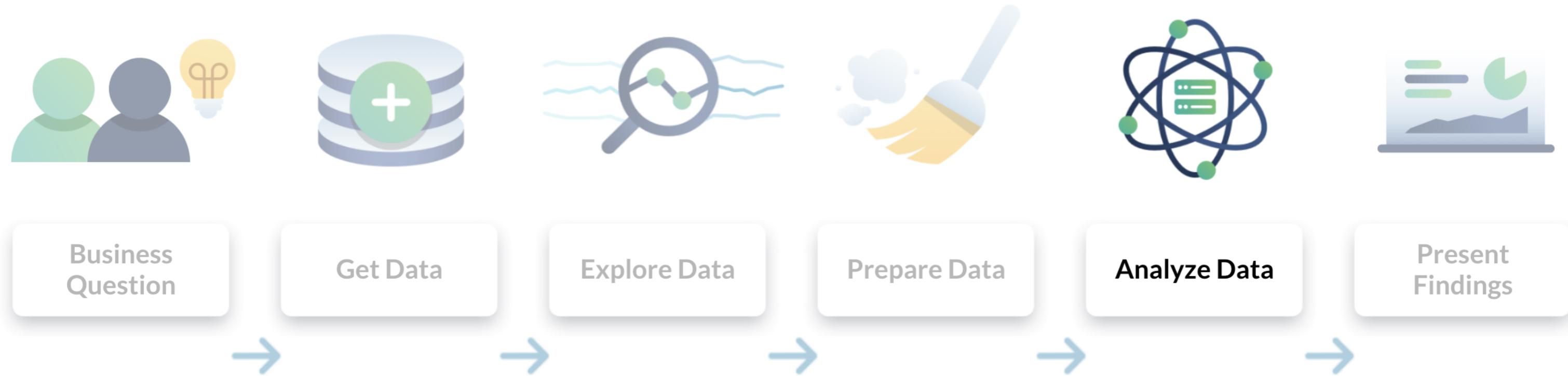
Data analysis process



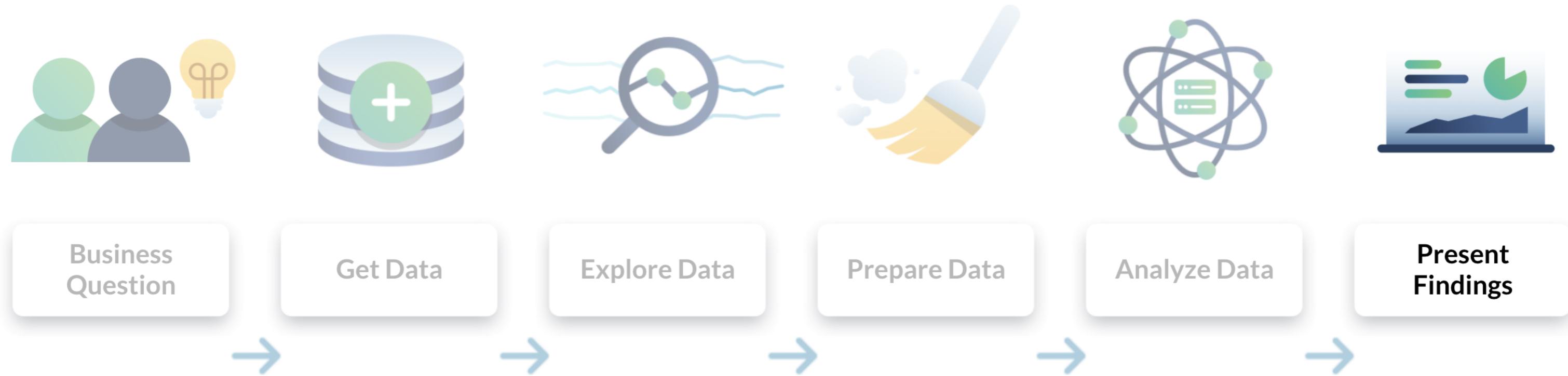
Data analysis process



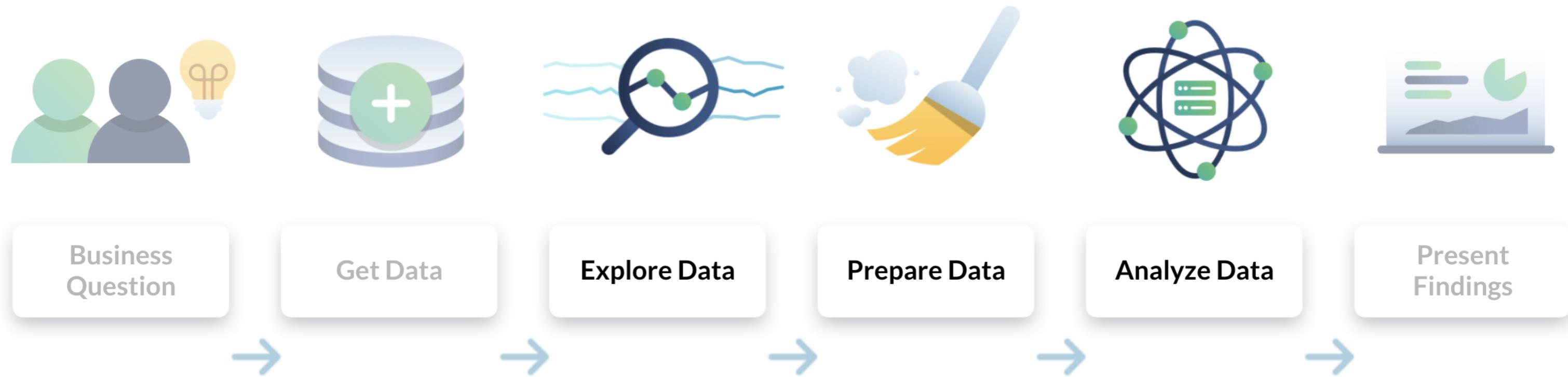
Data analysis process



Data analysis process



Course focus



Data table formatting

A	B		C	
1	id	name	created_at	launched_at
2	952844010	Hydrate Edge Hydration Monitoring Wearable (Canceled)	2-7-2013	30-8-2016
3	1299500496	Flyfit - Smart Ankle Tracker For Fitness, Cycling & Swimming	30-10-2013	13-2-2014
4	1613449735	KOR-FX Gaming Vest: 4DFX Haptic Feedback System	30-1-2014	9-6-2014
5	273890115	ProfileMyRun: Run the Right Way, Run the Natural Way	30-4-2014	10-10-2014
6	353045033	365 DAZE - Apple Watch minimal wallpapers	9-5-2014	19-10-2018
7	159764729	KYMIRA Sport: The Most Advanced Reactive Sports Apparel	18-6-2014	17-8-2014
8	906749645	UV Anti-Cancer Melanoma Skin Protection James Pratas Co	30-7-2014	5-10-2014
9	661560435	DAZLN: NFC Nails that Light Up Holiday Parties!	24-9-2014	4-11-2014
10	439377345	Vivir Wearable Technology - Heated Fitness Apparel	5-10-2014	26-1-2015
11	1253217418	jmpLite - The first human powered safety light for runners	6-10-2014	4-11-2014
12	375787146	3D My Kicks - 3dmykicks.com	14-10-2014	31-10-2014
13	946017695	Sole Spa, pedicure while you walk!!! (Canceled)	25-10-2014	7-11-2014
14	1320781728	iPhanny	25-10-2014	29-10-2014
15	1950299864	Fineck: The World,Äôs First Wearable Device For Your Neck	3-11-2014	26-11-2014
16	431595117	CHIPS-Æ - Universal Bluetooth Wireless All-In-One Headphones	12-11-2014	2-12-2014
17	1982588641	Stompz - The World of Virtual Reality at Your Feet	4-1-2015	11-3-2015

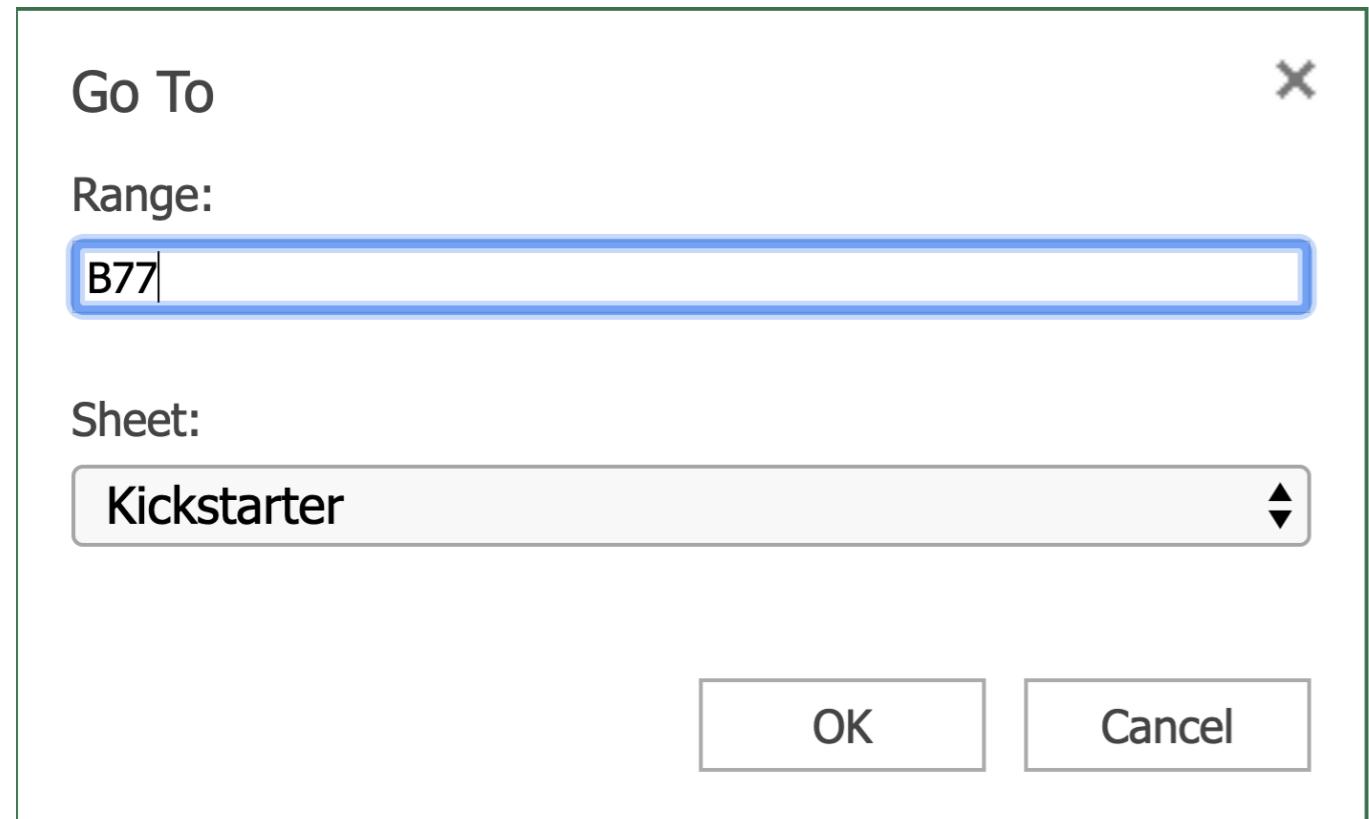
Navigating Excel



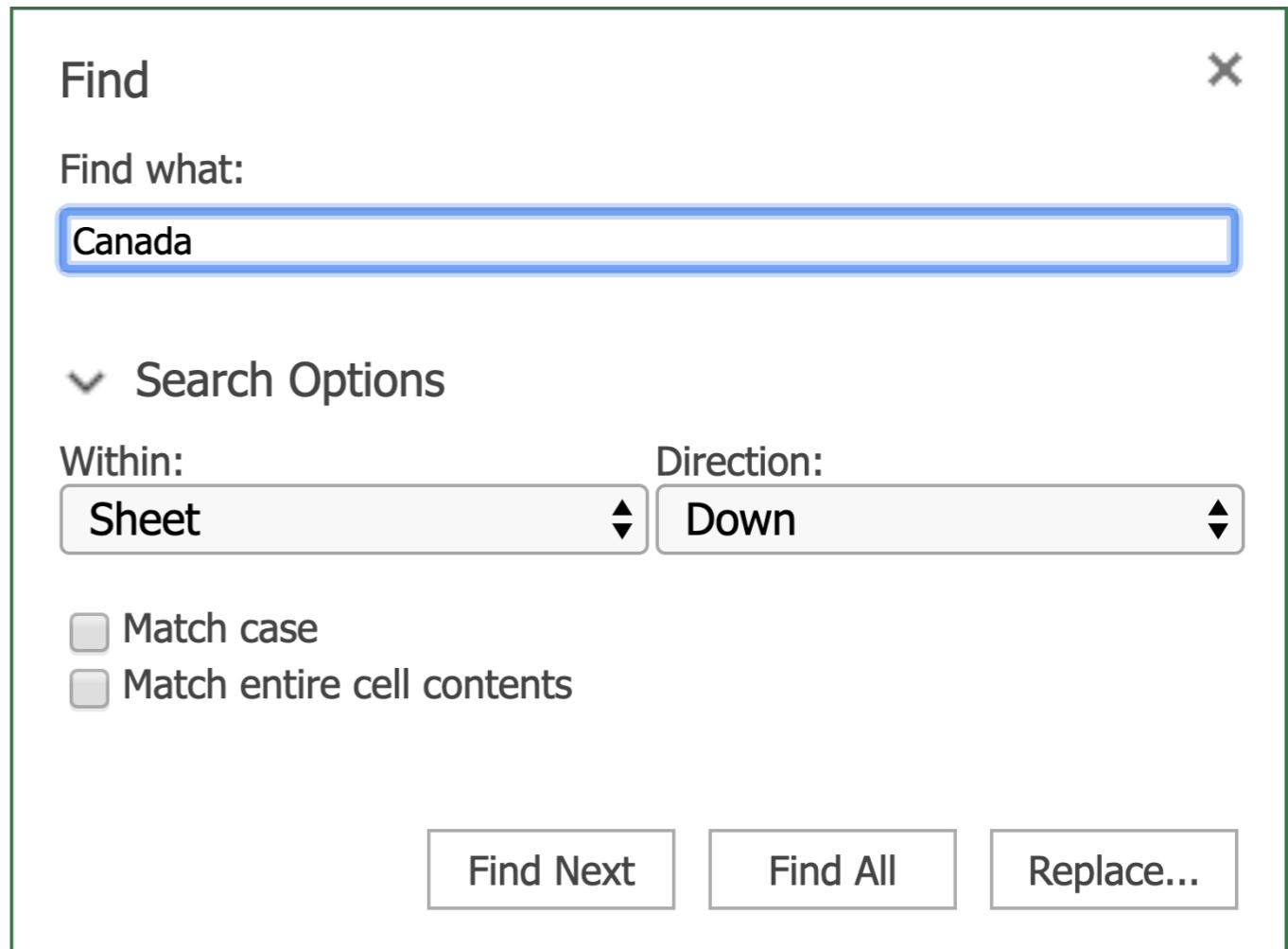
CTRL for PC and CMD for Mac

Shortcut	Description
CMD/CTRL + Arrow Key	Jump to the next blank cell in that direction
Page Up/Down/Left/Right	Jump one screen in that direction

Keyboard shortcuts



- **CMD/CTRL + G**



- **CMD/CTRL + F**

Let's practice!

DATA ANALYSIS IN EXCEL

Exploring data in Excel

DATA ANALYSIS IN EXCEL



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Head of Instructor Success, DataCamp

KICKSTARTER

NECKAIR: Portable Neck Muscle Massager and Warmer

10 adjustable massage levels | Far infrared warmer | Pack down small | Top-grade medical silicone | Foolproof remote control



⌚ Dispositivi Indossabili

📍 Middletown, DE

€89,024 (\$)

pledged of €2,722 goal

1,345

backers

15

days to go

Back this project

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All or nothing. This project will only be funded if it reaches its goal by Thu, April 16 2020 2:30 PM CEST.

Comparing values

	I	J
1	pledged	usd_pledged
2	1748	1748
3	123817,49	123817,49
4	183449,14	183449,14
5	1529	1529
6	42,29	32,4216332
7	5137	8575,53042
8	96	96
9	726	726
10	6473	6473
11	3863	3863

EXACT() function syntax

Syntax:

```
=EXACT(value1, value2)
```

Example:

```
=EXACT(I2,J2)
```

	I	J	K
1	pledged	usd_pledged	EXACT match
2	1748	1748	=EXACT(I2,J2)
3	123817.49	123817.49	TRUE
4	183449.14	183449.14	TRUE
5	1529	1529	TRUE
6	42.29	32.4216332	FALSE
7	5137	8575.53042	FALSE
8	96	96	TRUE
9	726	726	TRUE
10	6473	6473	TRUE
11	3863	3863	TRUE

Removing extra spaces

	A
1	id
2	952844010
3	1299500496
4	1613449735
5	273890115
6	353045033
7	159764729
8	906749645
9	661560435
10	439377345
11	1253217418

TRIM() function syntax

Syntax:

```
=TRIM(value)
```

Example:

```
=TRIM(A2)
```

	A	B
1	id	TRIM
2	952844010	=TRIM(A2)
3	1299500496	1299500496
4	1613449735	1613449735
5	273890115	273890115
6	353045033	353045033
7	159764729	159764729
8	906749645	906749645
9	661560435	661560435
10	439377345	439377345
11	1253217418	1253217418

Sorting data

	C	
1	name	
2	Hydrate Edge Hydration Monitoring Wearable (Canceled)	
3	Flyfit - Smart Ankle Tracker For Fitness, Cycling & Swimming	
4	KOR-FX Gaming Vest: 4DFX Haptic Feedback System	
5	ProfileMyRun: Run the Right Way, Run the Natural Way	
6	365 DAZE - Apple Watch minimal wallpapers	
7	KYMIRA Sport: The Most Advanced Reactive Sports Apparel	
8	UV Anti-Cancer Melanoma Skin Protection James Prattas Co	
9	DAZLN: NFC Nails that Light Up Holiday Parties!	
10	Vivir Wearable Technology - Heated Fitness Apparel	
11	jmpLite - The first human powered safety light for runners	
12	3D My Kicks - 3dmykicks.com	
13	Sole Spa, pedicure while you walk!!! (Canceled)	
14	iPhanny	

SORT() function syntax

Syntax:

```
=SORT(array, [sort_index], [sort_order])
```

Example:

```
=SORT(B2:B104, 1, -1)
```

- `sort_index` : column number to sort by
- `sort_order` :
 - A to Z: `1`
 - Z to A: `-1`

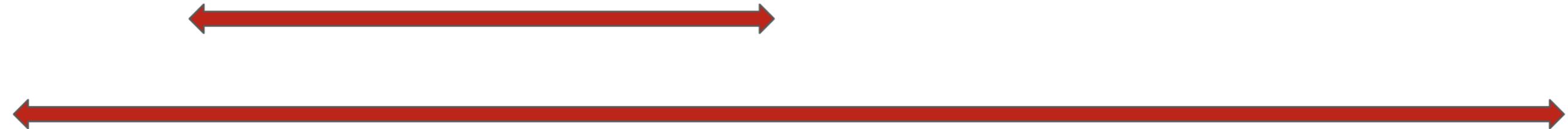
SORT() function continued

	B	Q	R
1	name		
2	Hydrate Edge Hydration Monitoring Wearable (Canceled)		=SORT(B2:B104)
3	Flyfit - Smart Ankle Tracker For Fitness, Cycling & Swimming		3D My Kicks - 3dmykicks.com
4	KOR-FX Gaming Vest: 4DFX Haptic Feedback System		8sense - start caring about your back health (Canceled)
5	ProfileMyRun: Run the Right Way, Run the Natural Way		A wearable sports light to make any cycle jersey illuminate! (Canceled)
6	365 DAZE - Apple Watch minimal wallpapers		Accessible Health Management Technology
7	KYMIRA Sport: The Most Advanced Reactive Sports Apparel		AirPod catcher and a magnetic case for Apple ear buds (Canceled)
8	UV Anti-Cancer Melanoma Skin Protection James Pratas Co		Anti-pollution Wearable Air Filter (Relaunch)
9	DAZLN: NFC Nails that Light Up Holiday Parties!		AR for Everyone Augmented/Mixed/Virtual Reality Headset
10	Vivir Wearable Technology - Heated Fitness Apparel		Automated CANE for the blind
11	jmpLite - The first human powered safety light for runners		Better Beanie
12	3D My Kicks - 3dmykicks.com		Brilliant safety backpack
13	Sole Spa, pedicure while you walk!!! (Canceled)		C'est pour toi
14	iPhanny		CHIPS-Æ - Universal Bluetooth Wireless All-In-One Headphones

Nested formulas

Nesting: using a function as part of another function

```
=SORT(FILTER(range,criteria), [sort_index],[sort_order])
```



FILTER() function syntax

Syntax:

```
=FILTER(range, criteria, [if_empty])
```

Example:

```
=FILTER(C2:C104, C2:C104>1000)
```

	C	R	S
1	backers_count		FILTER applied
2	15		=FILTER(C2:C104,C2:C104>1000)
3	942		1458
4	1202		1820
5	18		2383
6	7		1889
7	64		6480
8	5		2071
9	9		7501
10	25		
11	101		

SORT() with FILTER()

Syntax:

```
=SORT(FILTER(range,criteria),[sort_index],[sort_order])
```

Example:

```
=SORT(FILTER(B2:C104,C2:C104>1000),1,-1)
```

	B	C	R	S	T
1	name	backers_count		SORT with FILTER applied	
2	Hydrate Edge Hydration Monitoring Wearable (Canceled)	15		=SORT(FILTER(B2:C104,C2:C104>1000),1,-1)	1889
3	Flyfit - Smart Ankle Tracker For Fitness, Cycling & Swimming	942		The World's First Heated Down Jacket w/ 6X Mob	6480
4	KOR-FX Gaming Vest: 4DFX Haptic Feedback System	1202		The Customizable Smart Band that Lights Up Your	2071
5	ProfileMyRun: Run the Right Way, Run the Natural Way	18		PASSFORT - Your digital life, secure!	1458
6	365 DAZE - Apple Watch minimal wallpapers	7		OURA ring. Improve sleep. Perform better.	2383
7	KYMIRA Sport: The Most Advanced Reactive Sports Apparel	64		LVL ,Äì The First Wearable Hydration Monitor	7501
8	UV Anti-Cancer Melanoma Skin Protection James Prattas Co	5		KOR-FX Gaming Vest: 4DFX Haptic Feedback Syste	1202
9	DAZLN: NFC Nails that Light Up Holiday Parties!	9		Jewelbots: Friendship Bracelets That Teach Girls To	1820
10	Vivir Wearable Technology - Heated Fitness Apparel	25			
11	jmpLite - The first human powered safety light for runners	101			

Let's practice!

DATA ANALYSIS IN EXCEL

Understanding data types in Excel

DATA ANALYSIS IN EXCEL



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Data types in Excel

- **Text:** strings, numbers or dates represented in a text format
- **Number:** numeric values
- **Date:** dates and times in an accepted date-time representation
- **Boolean:** logical or TRUE/FALSE

Excel's preset alignment

	A	B	C	D
1	DATE	NUMBER	BOOLEAN	TEXT
2	deadline	goal	staff_pick	status
3	10/14/2016	75000	FALSE	canceled
4	3/25/2014	90000	FALSE	successful
5	7/24/2014	75000	TRUE	successful
6	11/9/2014	50000	FALSE	failed
7	11/24/2018	365	FALSE	failed
8	9/17/2014	5000	FALSE	successful
9	11/1/2014	50000	FALSE	failed
10	11/29/2014	10000	FALSE	failed
11	3/6/2015	22500	FALSE	canceled
12	12/14/2014	50000	FALSE	failed

- **Text:** left aligned
- **Logical:** center aligned
- **Numeric or datetime:** right aligned

Converting to text

	A
1	id
2	952844010
3	1299500496
4	1613449735
5	273890115
6	353045033
7	159764729
8	906749645
9	661560435
10	439377345
11	1253217418
12	375787146

¹ <https://support.office.com/en-us/excel>

TEXT() function

Syntax:

```
=TEXT(value, format)
```

Example:

```
=TEXT(A2, "00000000")
```

	A	B
1	id	TEXT id
2	952844010	=TEXT(A2,"00000000")
3	1299500496	1299500496
4	1613449735	1613449735
5	273890115	273890115
6	353045033	353045033
7	159764729	159764729
8	906749645	906749645
9	661560435	661560435
10	439377345	439377345
11	1253217418	1253217418
12	375787146	375787146

¹ <https://support.office.com/en-us/article/TEXT-function-20D5AC4D-7B94-49FD-BB38-93D29371225C>

Converting to numbers

L	1	usd_pledged
	2	\$1748
	3	\$123817.49
	4	\$183449.14
	5	\$1529
	6	\$32.4216332
	7	\$8575.53042
	8	\$96
	9	\$726
	10	\$6473
	11	\$3863
	12	\$37

VALUE() function syntax

Syntax:

```
=VALUE(text)
```

Example:

```
=VALUE(L2)
```

	L	M
1	usd_pledged	VALUE usd_pledged
2	\$1748	=VALUE(L2)
3	\$123817.49	123817.49
4	\$183449.14	183449.14
5	\$1529	1529
6	\$32.4216332	32.4216332
7	\$8575.53042	8575.53042
8	\$96	96
9	\$726	726
10	\$6473	6473
11	\$3863	3863
12	\$37	37

Rounding numbers

	L	M
1	usd_pledged	VALUE usd_pledged
2	\$1748	=VALUE(L2)
3	\$123817.49	123817.49
4	\$183449.14	183449.14
5	\$1529	1529
6	\$32.4216332	32.4216332
7	\$8575.53042	8575.53042
8	\$96	96
9	\$726	726
10	\$6473	6473
11	\$3863	3863
12	\$37	37

ROUND() with VALUE()

Syntax:

```
=ROUND(VALUE(text), decimal places)
```

Example:

```
=ROUND(VALUE(L2), 0)
```

	L	M
1	usd_pledged	VALUE & ROUND
2	\$1748	=ROUND(VALUE(L2),0)
3	\$123817.49	123817
4	\$183449.14	183449
5	\$1529	1529
6	\$32.4216332	32
7	\$8575.53042	8576
8	\$96	96
9	\$726	726
10	\$6473	6473
11	\$3863	3863

Let's practice!

DATA ANALYSIS IN EXCEL