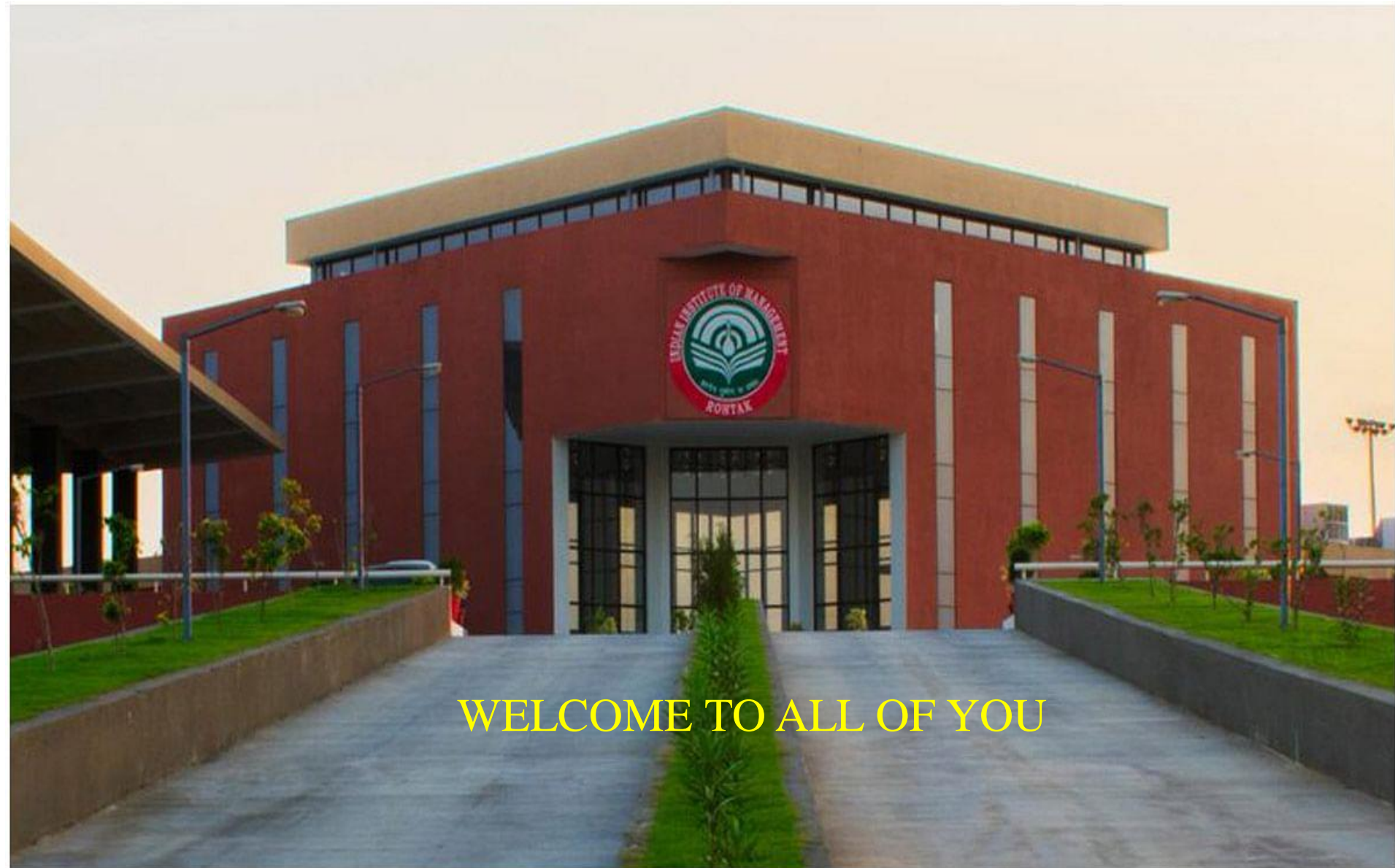


Business Analytics



WELCOME TO ALL OF YOU



Greetings & Best Wishes



Business Analytics

Data Warehouse Analysis

Data Analytics



Data Analytics



Data Analytics



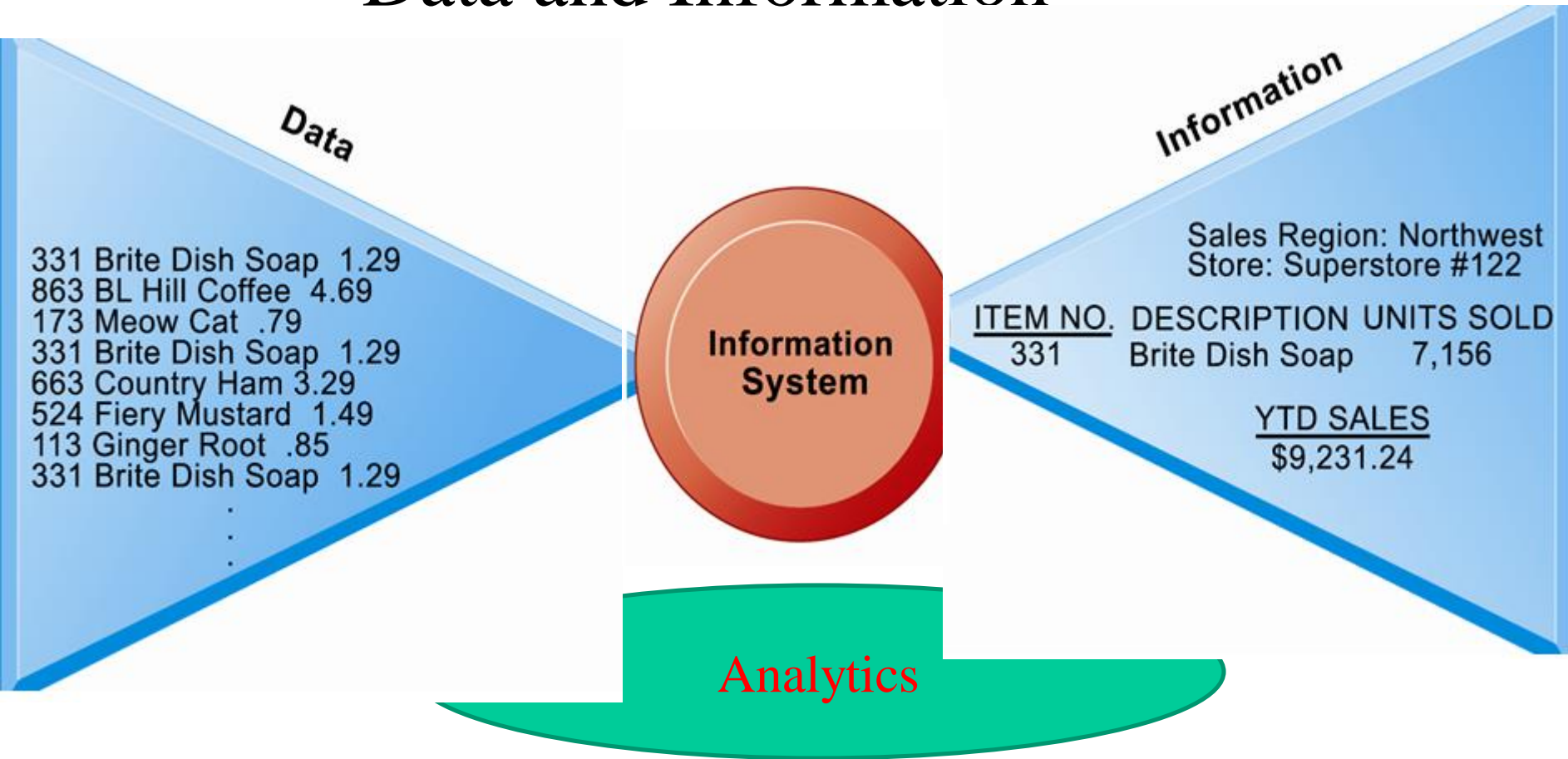
Data Analytics



Perspectives on Information Systems



Data and Information



Why We are here today ?





Data Analytics

Answer of “Why are you here today ?”

Salary Study with AnalytixLabs, Analytics **India** finds out that over the last Five years - 2016 to 2021 - there has been a pronounced growth in median salary across all experience levels, increasing from 9.5 lakh in 2016 to 11.7 lakh in 2017 and touching 12.7 lakh per annum in 2018 and 12.7 in the year 2019.

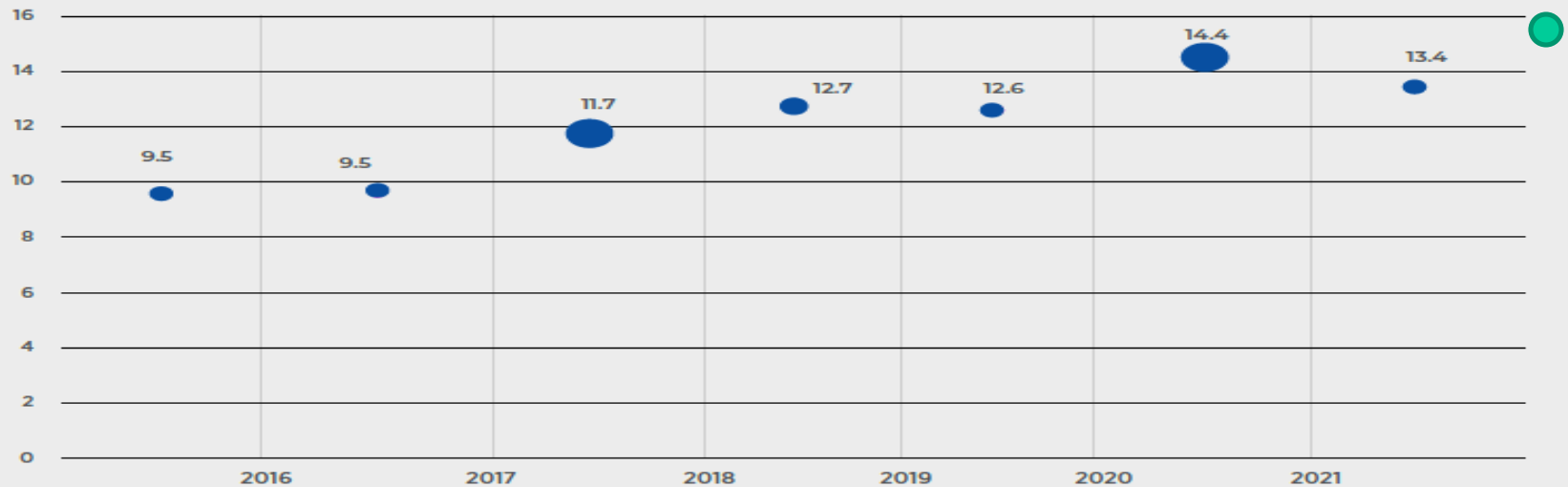
The median salary of Analytics professionals in India stands at 13.4 Lakhs per annum in 2021, a 6.9% drop as compared to 2020 (when it was 14.4 Lakhs). Much of the decrease in salary can be attributed to pandemic. In spite of this, the median has remained above the 2019 median. **Again In 2022 11.96% Jump.**



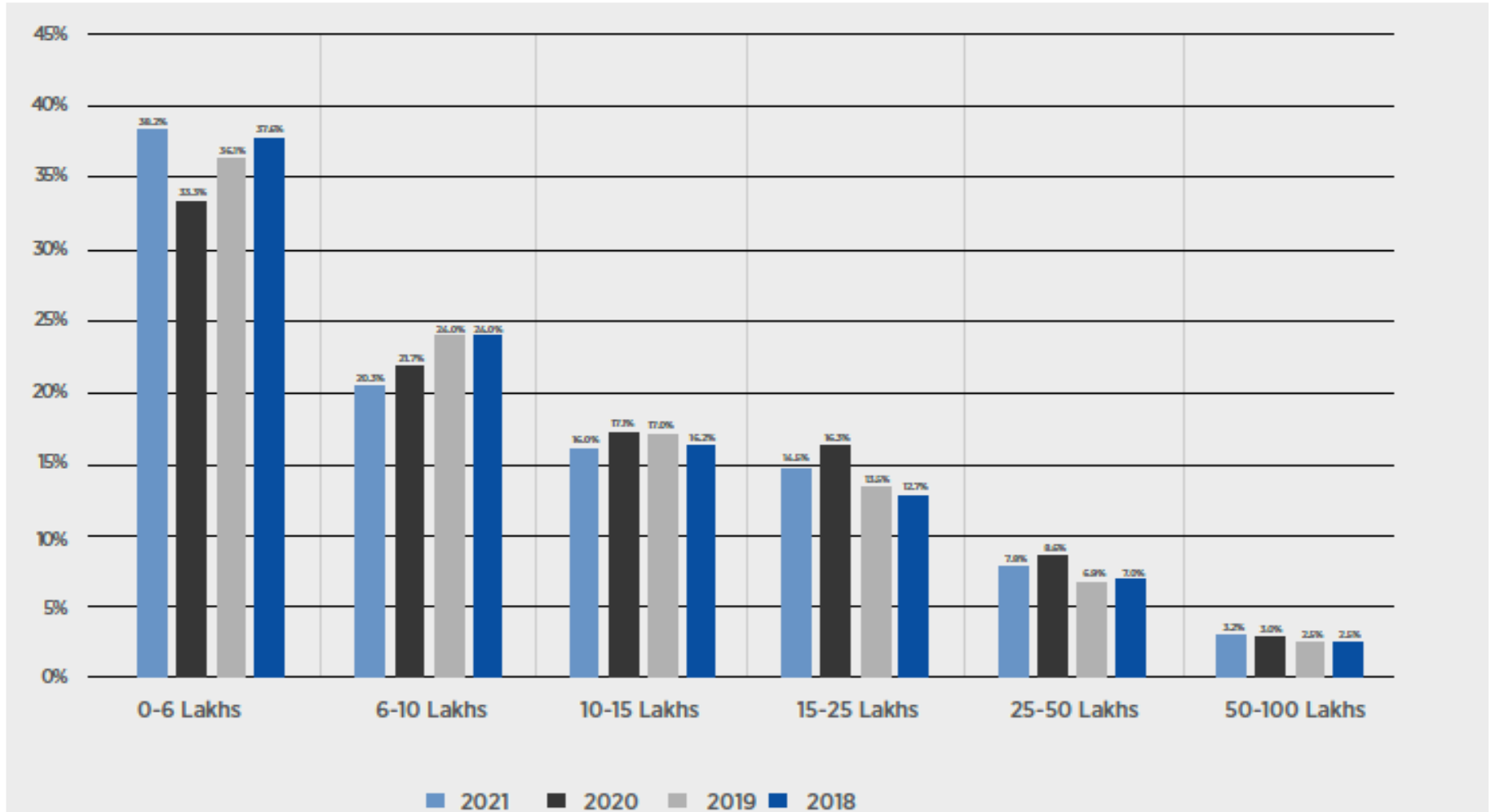
Data Analytics

Answer of “Why are you here today ?”

Median Salary Trend (in Lakhs per annum) for Analytics Professionals

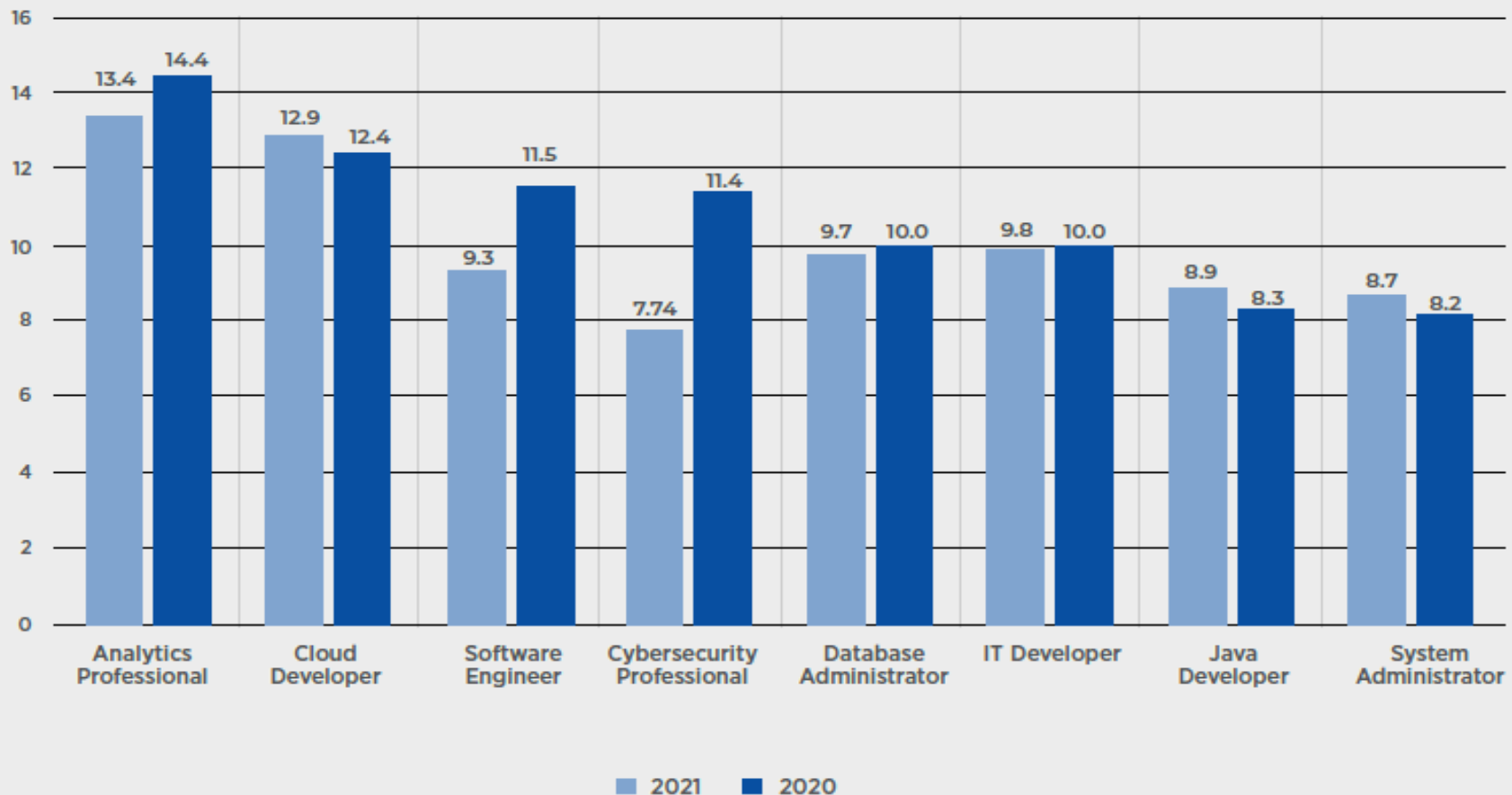


Answer of “Why are you here today ?”



Answer of “Why are you here today ?”

Comparison of Median Salaries of IT Roles (in Lakhs)



Answer of “Why are you here today ?”

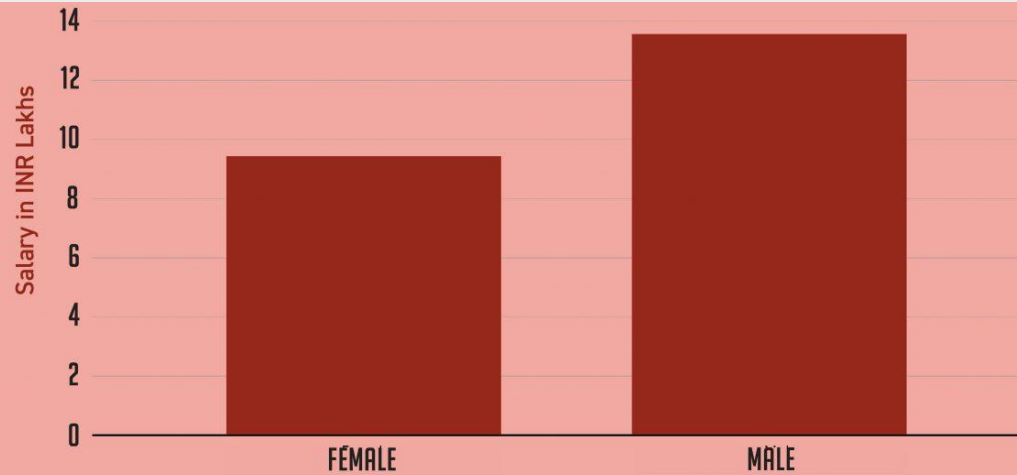
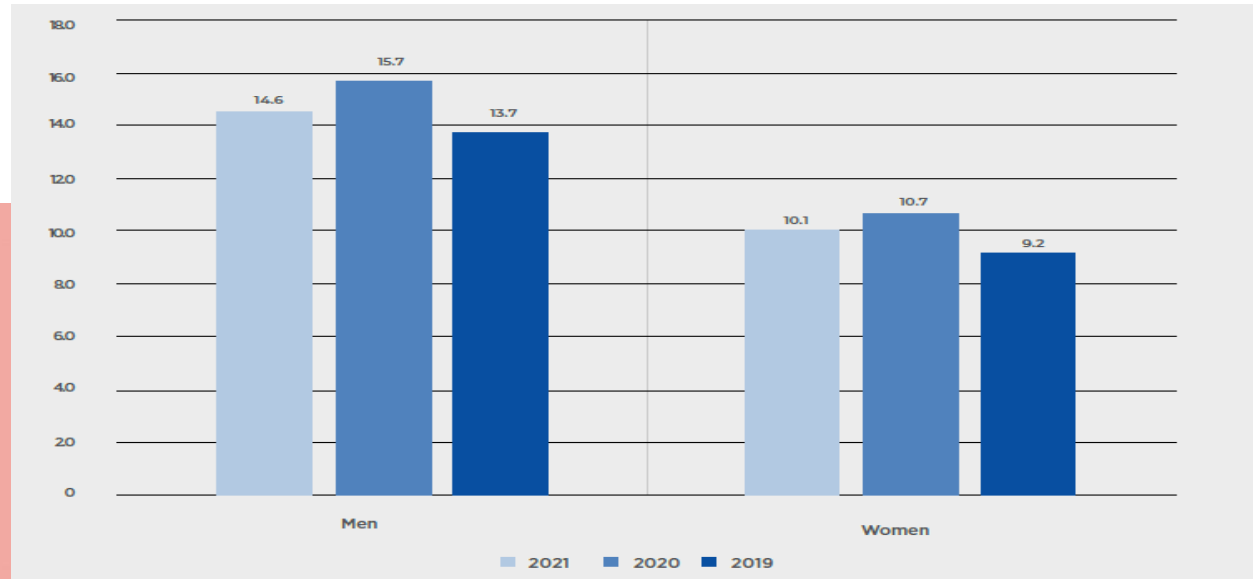


Gender Gap

WOMEN ANALYTICS
PROFESSIONALS GET

32%

LESSER SALARIES THAN
THEIR MALE COUNTERPARTS



MALE VS FEMALE ANALYTICS SALARY

Answer of “Why are you here today ?”



Why Data Science & Business Analytics is a versatile skills that opens new doors across sectors

THE HINDU

DECEMBER 07, 2021

Nearly 90% of all small, mid-size, and large organizations have adopted analytical capabilities over the last 5 years to stay relevant in a market where large volumes of data are recorded every day. They use it to formulate solutions to build analysis models, simulate scenarios, understand realities and predict future states.

According to a recent report by LinkedIn here're some of the fastest-growing in-demand jobs of the past year and the next few years to come. Hiring for the roles of Data Scientist, Data Science Specialist, Data Management Analyst, Statistical Modelling has gone up by 46% since 2019.

According to Report published by Gartner on Decision intelligence: By 2023, more than 33% of large organizations will have analysts practicing decision intelligence, including decision modelling.

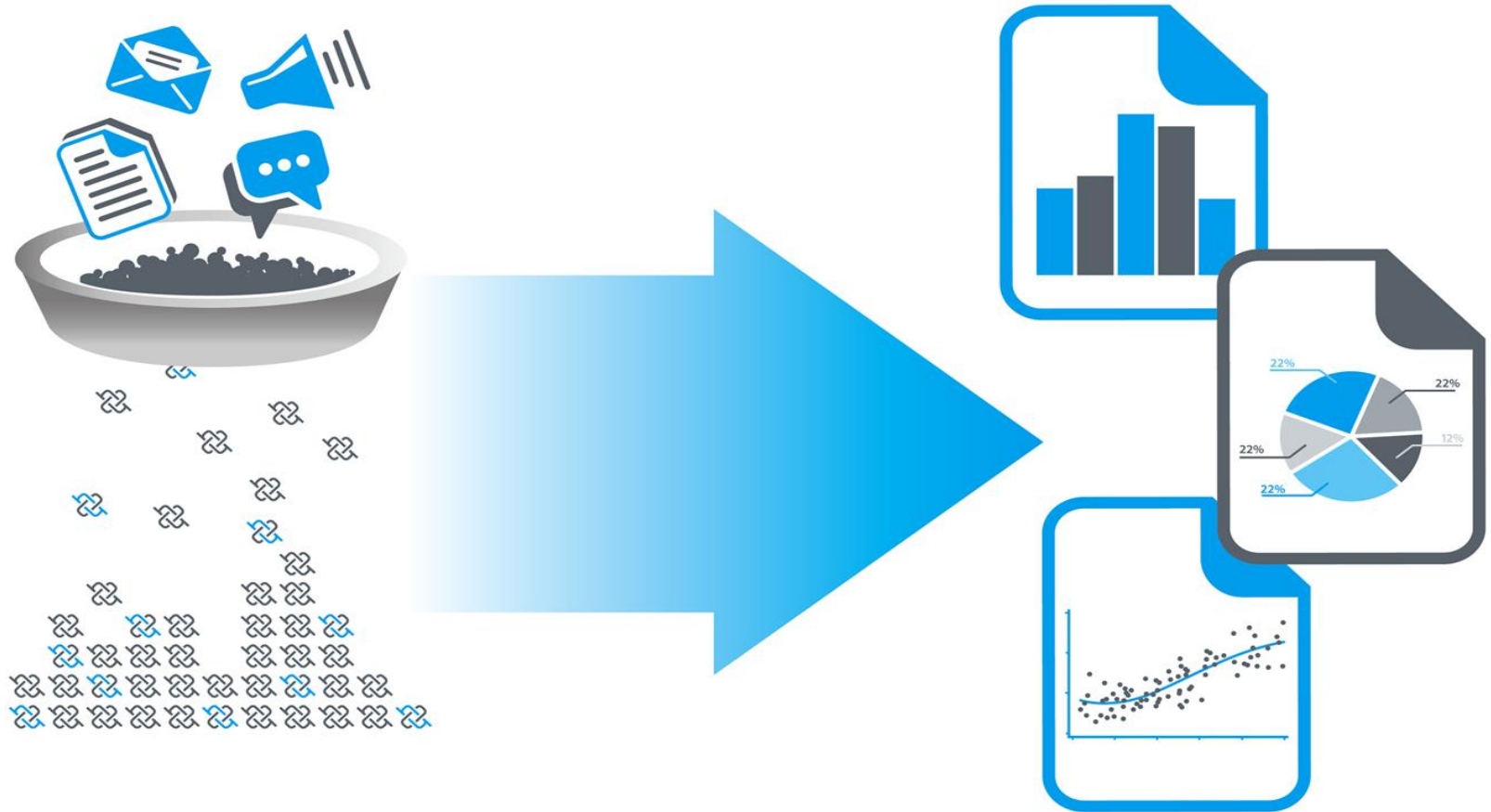


What is Analytics ??

Analytics is the discovery, interpretation, and communication of meaningful patterns in data. Especially valuable in areas rich with recorded information, analytics relies on the simultaneous application of statistics, computer programming and operations research to quantify performance.

(Data Analytics)

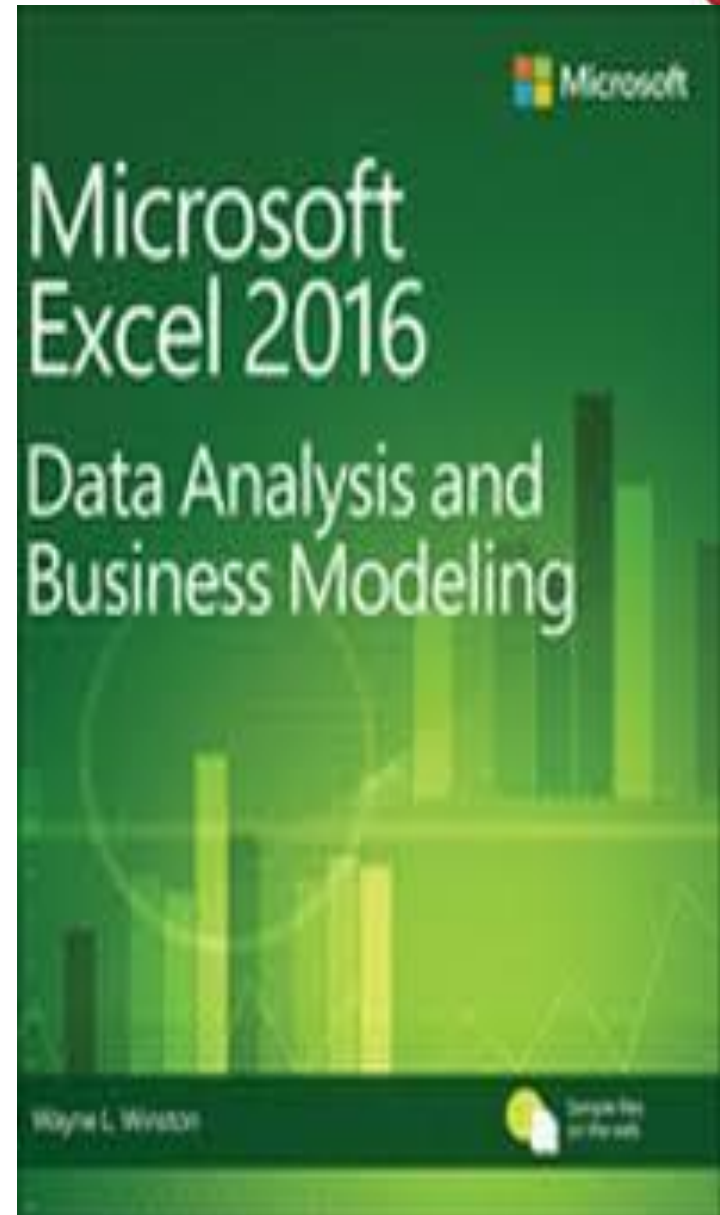
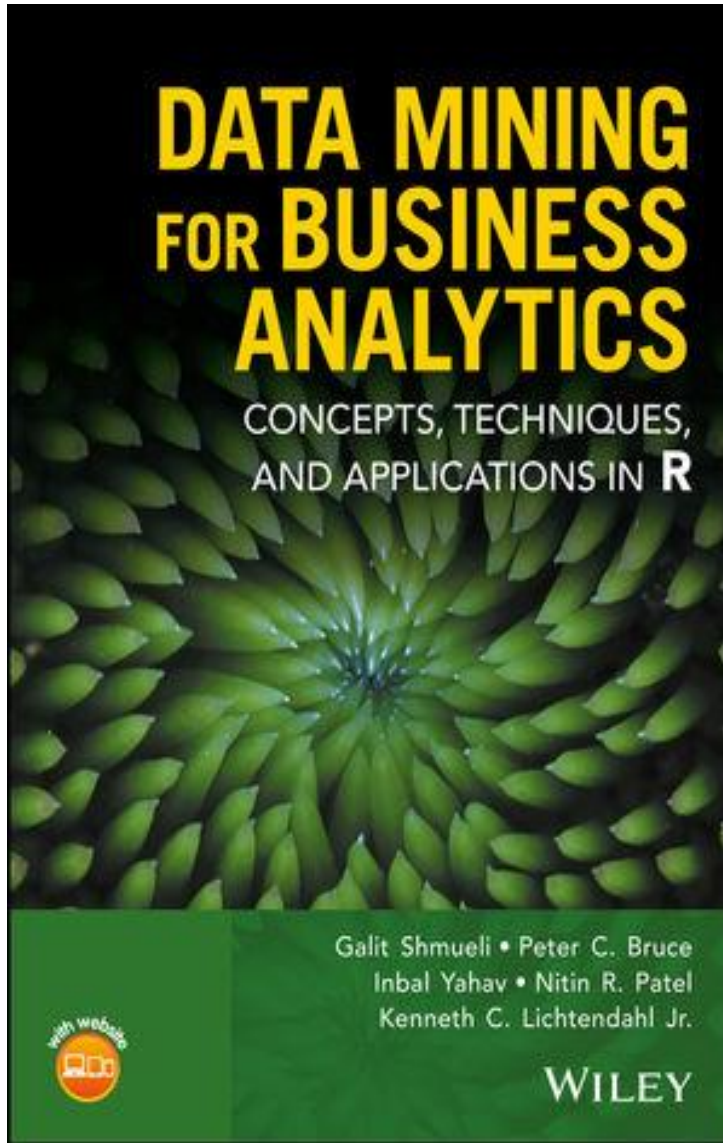
What is Data Analytics?





Types of Analytics

- **Descriptive Analytics** is, which use data aggregation and data mining to provide insight into the past and answer: “What has happened?”
- **Predictive Analytics** is, which use statistical models and forecasts techniques to understand the future and answer: “What could happen?”
- **Prescriptive Analytics** is, which use optimization and simulation algorithms to advice on possible outcomes and answer: “What should we do?”



Business Analytics

Data size
growing

Variety of
data

Need some
knowledge to
enhance my
business

Amount of Data

???



HAPPY
for future also

Many
more ??

Data Warehouse



Data Warehouse?

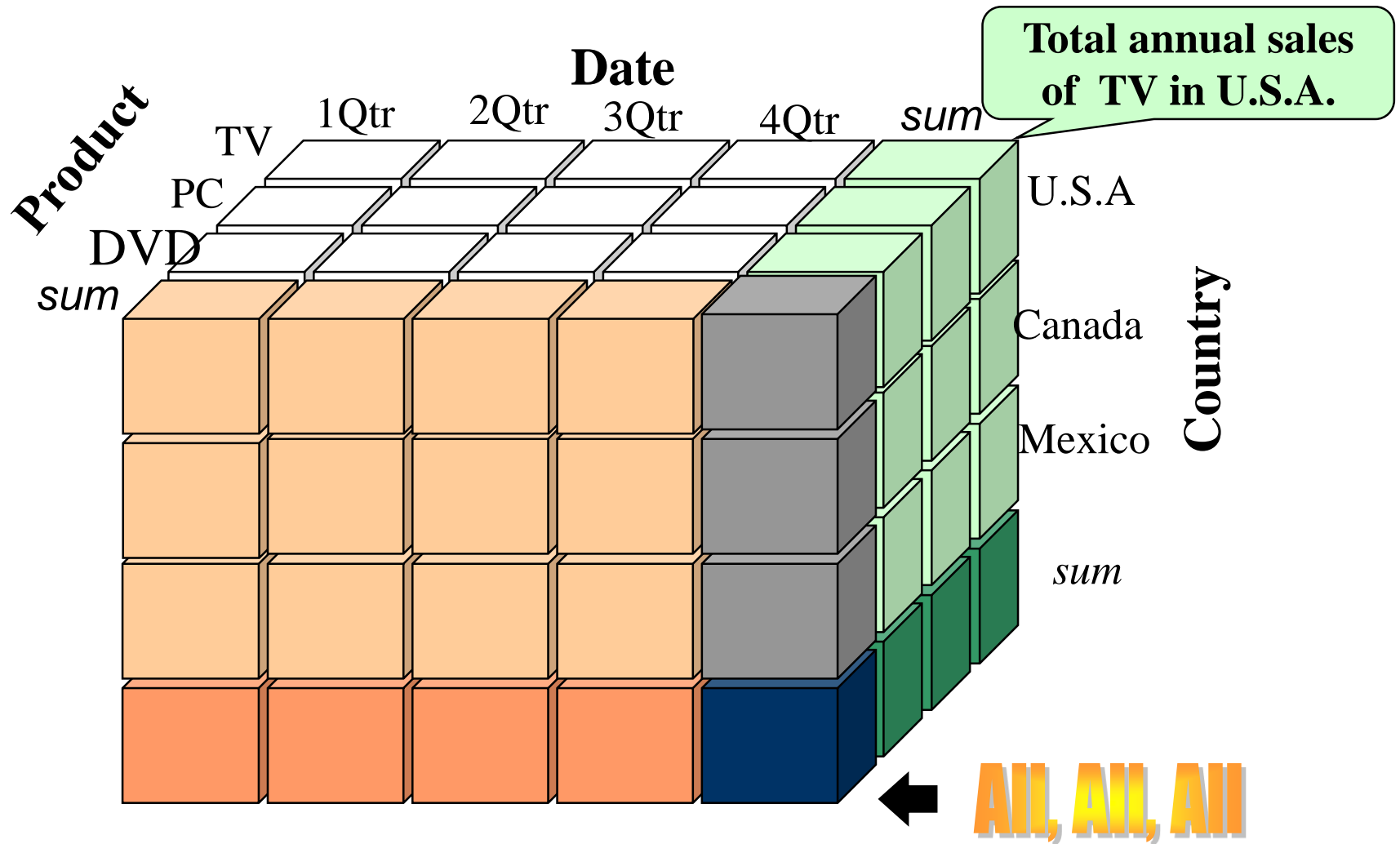
- **Defined in many different ways, but not rigorously.**
 - A decision support database that is maintained **separately** from the organization's operational database
 - Support **information processing** by providing a solid platform of consolidated, historical data for analysis.
- **“A data warehouse is a subject-oriented, integrated, time-variant, and nonvolatile collection of data in support of management's decision-making process.”—W. H. Inmon**
- **Data warehousing: useful for formulating knowledge**



OLTP vs. OLAP

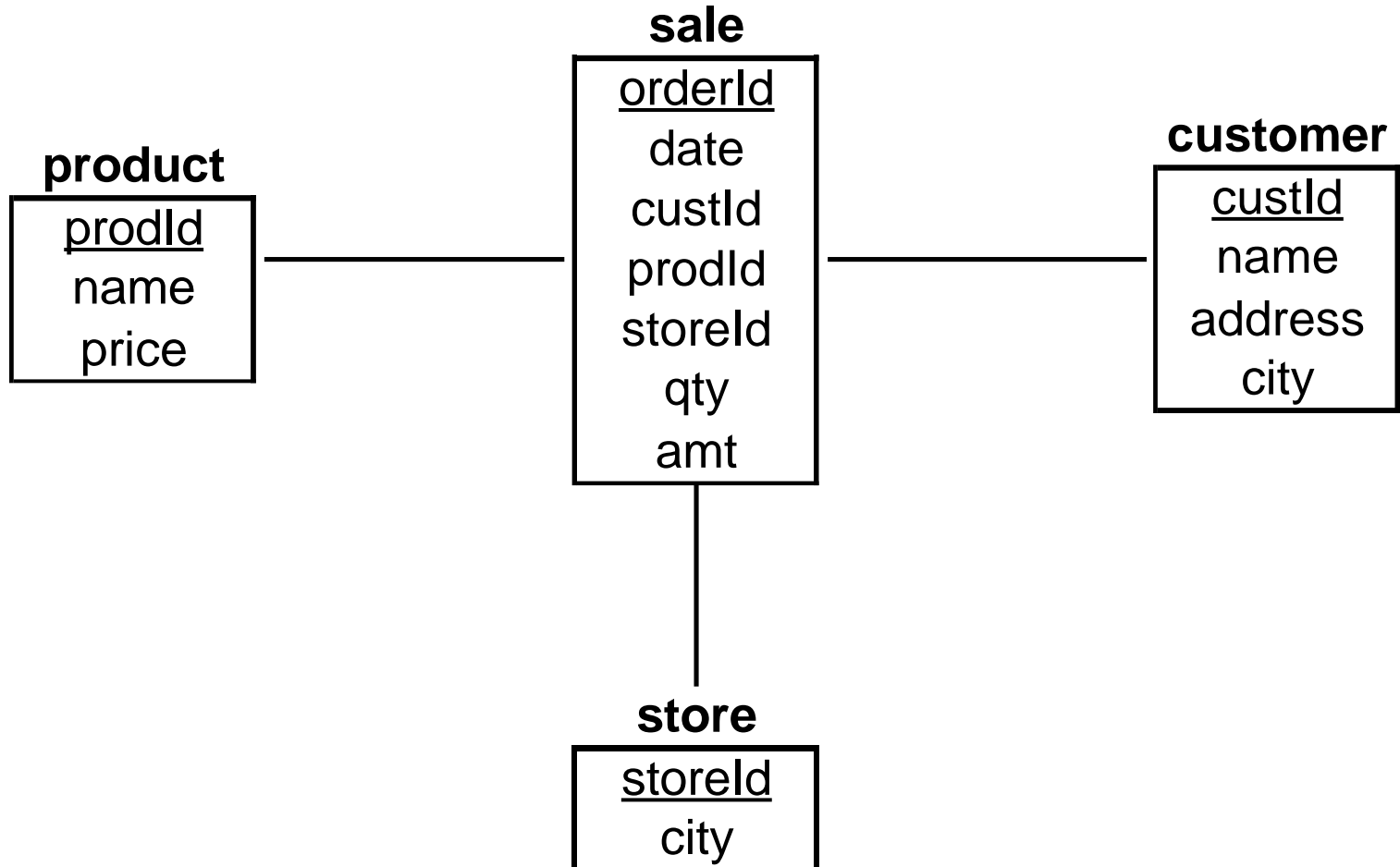
	DB	DW
users	clerk, IT professional	knowledge worker
function	day to day operations	decision support
DB design	application-oriented	subject-oriented
data	current, up-to-date detailed, flat relational isolated	historical, summarized, multidimensional integrated, consolidated
usage	repetitive	ad-hoc
access	read/write index/hash on prim. key	lots of scans
unit of work	short, simple transaction	complex query
# records accessed	tens	millions
#users	thousands	hundreds
DB size	100MB-GB	100GB-TB
metric	transaction throughput	query throughput, response

A Sample Data Cube





Example



Cube



Fact table view:

sale	prodlid	storeld	amt
	p1	c1	12
	p2	c1	11
	p1	c3	50
	p2	c2	8



Multi-dimensional cube:

	c1	c2	c3
p1	12		50
p2	11	8	

dimensions = 2

3-D Cube

Fact table view:

sale	prodlid	storeld	date	amt
	p1	c1	1	12
	p2	c1	1	11
	p1	c3	1	50
	p2	c2	1	8
	p1	c1	2	44
	p1	c2	2	4

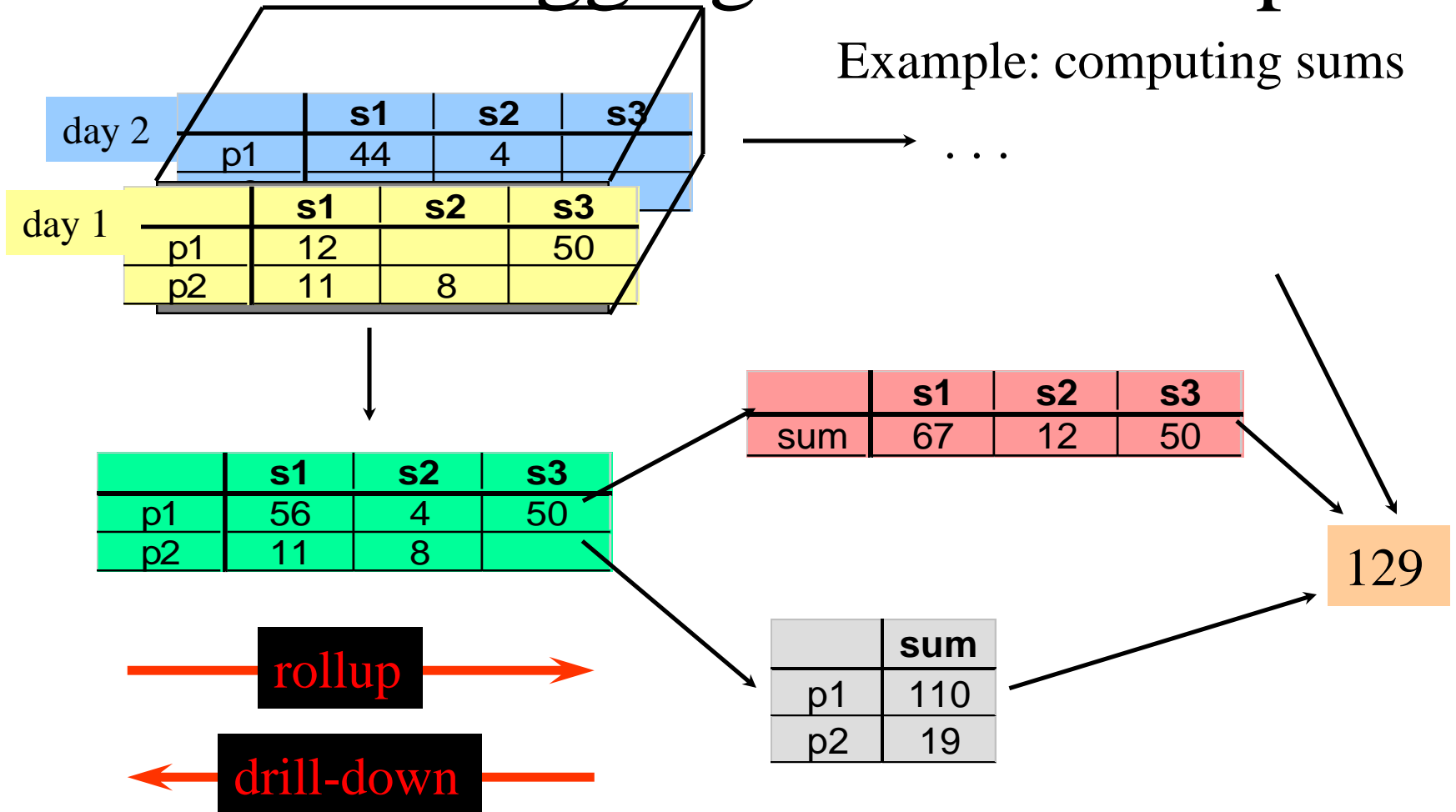
Multi-dimensional cube:

	c1	c2	c3
day 2	p1	44	4
day 1	p1	12	50
	p2	11	8

dimensions = 3

Cube Aggregation: Roll-up

Example: computing sums





A PIVOT TABLE is a program tool used to reorganize data in a spreadsheet to obtain a desired report more effectively.





A PIVOT TABLE is a program tool used to reorganize data in a spreadsheet to obtain a desired report more effectively.





What are the advantages of using Pivot Table?



**It sums up large
amount of Data into a
small amount of space.**





- **It helps decision-makers use data more efficiently.**
- **Keeps presentation of information more organized.**
- **It provides interactive data analysis.**
- **Data can be combined from multiple sheets.**
- **Can create chart of summarized data in the Pivot Table.**





SUMMARY OF RICE SALES				
Branch	Rice Variety	Period	Sales	
M-1	White Rice	Qtr 1	\$30,000	
M-1	Red Rice	Qtr 2	\$25,000	
M-1	Black Rice	Qtr 3	\$45,000	
M-1	Brown Rice	Qtr 4	\$55,000	
M-2	White Rice	Qtr 1	\$15,000	
M-2	Red Rice	Qtr 2	\$40,000	
M-2	Black Rice	Qtr 3	\$20,000	
M-2	Brown Rice	Qtr 4	\$50,000	
M-3	White Rice	Qtr 1	\$25,000	
M-3	Red Rice	Qtr 2	\$75,000	
M-3	Black Rice	Qtr 3	\$55,000	
M-3	Brown Rice	Qtr 4	\$25,000	
M-4	White Rice	Qtr 1	\$39,000	
M-4	Red Rice	Qtr 2	\$40,000	
M-4	Black Rice	Qtr 3	\$40,000	
M-4	Brown Rice	Qtr 4	\$45,000	



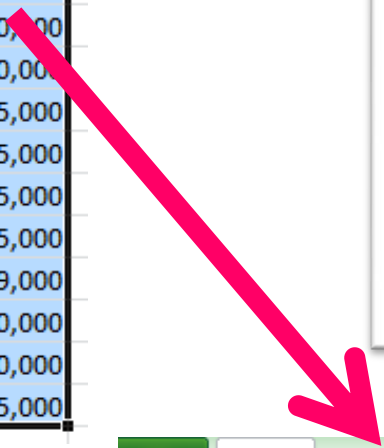
File Home Insert Page Layout

PivotTable Table Picture Clip Art Show

Tables

A2

SUMMARY OF RICE SALES	
Branch	Rice Variety
M-1	White Rice
M-1	Red Rice



File Home Insert Page Layout Formulas Data Review View Acrobat

Cut Copy Paste Format Painter Clipboard

Calibri 11 A+ A- B I U Font

Alignment

A1 SUMMARY OF RICE SALES

SUMMARY OF RICE SALES		
Branch	Rice Variety	Sales
M-1	White Rice	\$30,000
M-1	Red Rice	\$25,000

PivotTable Field List

Choose fields to add to report:

- Branch
- Rice Variety
- Period
- Sales

Drag fields between areas below:

Report Filter: Branch

Column Labels:

Row Labels:

Values:

Defer Layout Update Update

PivotTable Field List

Choose fields to add to report:

- Branch
- Rice Variety
- Period
- Sales

Drag fields between areas below:

Report Filter: Branch

Column Labels:

Row Labels: Rice Variety

Values:

Defer Layout Update Update

PivotTable Field List

Choose fields to add to report:

- Branch
- Rice Variety
- Period
- Sales

Drag fields between areas below:

Report Filter: Branch

Column Labels: Period

Row Labels: Rice Variety

Values:

Defer Layout Update Update

Choose fields to add to report:

- Branch
- Rice Variety
- Period
- Sales

Drag fields between areas below:

Report Filter: Branch

Column Labels: Period

Row Labels: Rice Variety

Values: Sum of Sales

Defer Layout Update Update

1	Branch	(All)				
2						
3	Sum of Sales	Column Labels				
4	Row Labels	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Grand Total
5	Black Rice			160,000		160,000
6	Brown Rice				175,000	175,000
7	Red Rice		180,000			180,000
8	White Rice	109,000				109,000
9	Grand Total	109,000	180,000	160,000	175,000	624,000
10						
11						



Pivot tables are one of Excel's most powerful features.

A pivot table allows you to extract the significance from a large, detailed data set. ([pivot-table.xlsx](#))

Our data set consists of 214 rows and 6 fields.

Order ID, Product, Category, Amount, Date and Country.

	A	B	C	D	E	F
1	Order ID	Product	Category	Amount	Date	Country
2	1	Carrots	Vegetables	\$4,270	1/6/2012	United States
3	2	Broccoli	Vegetables	\$8,239	1/7/2012	United Kingdom
4	3	Banana	Fruit	\$617	1/8/2012	United States
5	4	Banana	Fruit	\$8,384	1/10/2012	Canada
6	5	Beans	Vegetables	\$2,626	1/10/2012	Germany
7	6	Orange	Fruit	\$3,610	1/11/2012	United States
8	7	Broccoli	Vegetables	\$9,062	1/11/2012	Australia
9	8	Banana	Fruit	\$6,906	1/16/2012	New Zealand
10	9	Apple	Fruit	\$2,417	1/16/2012	France
11	10	Apple	Fruit	\$7,431	1/16/2012	Canada

Simple Query?
Which one is our main product



A3

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1																					
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					
15																					
16																					
17																					
18																					
19																					
20																					
21																					
22																					
23																					
24																					
25																					
26																					
27																					
28																					
29																					
30																					
31																					
32																					
33																					
34																					

PivotTable1

To build a report, choose fields from the PivotTable Field List

PivotTable Fields

Choose fields to add to report:

- Order ID
- Product
- Category
- Amount
- Date
- Country

MORE TABLES...

Drag fields between areas below:

▼ FILTERS	 COLUMNS
≡ ROWS	Σ VALUES

Defer Layout Upd...



Below you can find the pivot table. Bananas are our main export product. That's how easy pivot tables can be!

PivotTable Field List

Choose fields to add to report:

- Order ID
- Product**
- Category
- Amount**
- Date
- Country**

Drag fields between areas below:

Report Filter: Country

Column Labels: (empty)

Row Labels: Product

Values: Sum of Amount

Defer Layout Update Update

	A	B	C	D
1	Country	(All)		
2				
3	Sum of Amount			
4	Product	Total		
5	Apple	191257		
6	Banana	340295		
7	Beans	57281		
8	Broccoli	142439		
9	Carrots	136945		
10	Mango	57079		
11	Orange	104438		
12	Grand Total	1029734		
13				
14				

For example, which products do we export the most to France?



Filter

Because we added the Country field to the Report Filter area, we can filter this pivot table by Country.

	A	B	C	D
1	Country	France		
2				
3	Sum of Amount			
4	Product	Total		
5	Apple	80193		
6	Banana	36094		
7	Carrots	9104		
8	Mango	7388		
9	Broccoli	5341		
10	Orange	2256		
11	Beans	680		
12	Grand Total	141056		
13				
14				

1. Click the filter drop-down and select France.

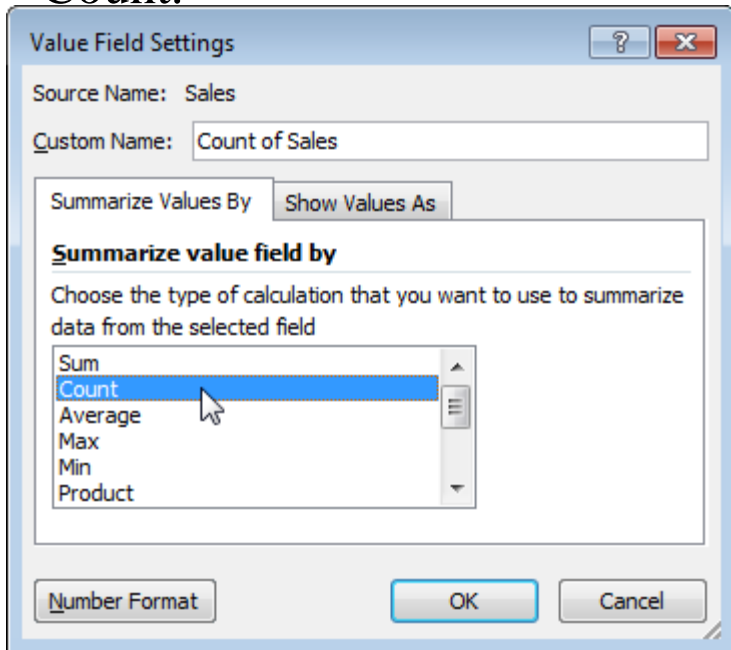
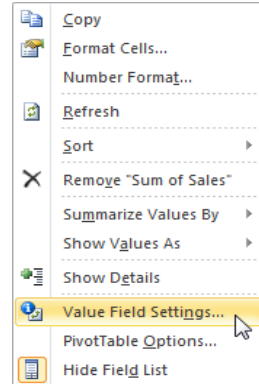
Result. Apples are our main export product to France



Change Summary Calculation

By default, Excel summarizes your data by either summing or counting the items. **To change the type of calculation that you want to use, execute the following steps.**

1. Click any cell inside the Total column.
2. Right click and click on Value Field Settings...
3. Choose the type of calculation you want to use. For example, click Count.



CLICK OK

Result. 16 out of the 28 orders to France were 'Apple' orders

	A	B	C	D
1	Country	France		
2				
3	Count of Amount			
4	Product	Total		
5	Apple	16		
6	Banana	7		
7	Carrots	1		
8	Mango	1		
9	Orange	1		
10	Beans	1		
11	Broccoli	1		
12	Grand Total	28		
13				
14				



Percentage Analysis of each country

Multiple Value Fields

First, [insert a pivot table](#). Next, drag the following fields to the different areas.

1. Country Field to the Row Labels area.
2. Amount Field to the Values area (2x).
3. Next, click any cell inside the Sum of Amount2 column.

Drag fields between areas below:

FILTERS	COLUMNS
	Σ Values
ROWS	Σ VALUES
Country	Sum of Amou...
	Sum of Amou...

Defer Layout Update

	A	B	C	D
1	Drop Report Filter Fields Here			
2				
3		Data		
4	Country	Sum of Amount	Sum of Amount2	
5	Australia	131713	131713	
6	Canada	94745	94745	
7	France	141056	141056	
8	Germany	155168	155168	
9	New Zealand	66782	66782	
10	United Kingdom	173137	173137	
11	United States	267133	267133	
12	Grand Total	1029734	1029734	
13				
14				



Percentage Analysis of each country

C8		f_{sc}	15.0687459091377%	
	A	B	C	D
1	Drop Report Filter Fields Here			
2				
3		Data		
4	Country	Sum of Amount	Percentage	
5	Australia	131713	12.79%	
6	Canada	94745	9.20%	
7	France	141056	13.70%	
8	Germany	155168	15.07%	
9	New Zealand	66782	6.49%	
10	United Kingdom	173137	16.81%	
11	United States	267133	25.94%	
12	Grand Total	1029734	100.00%	
13				
14				

Let say can you find out the difference between uk (apple) and US(orange)



Two-dimensional Pivot Table

If you drag a field to the Row Labels area and Column Labels area, you can create a two-dimensional pivot table. For example, to get the total amount exported to each country, of each product, drag the following fields to the different areas.

1. Country Field to the Row Labels area.
2. Product Field to the Column Labels area.
3. Amount Field to the Values area.
4. Category Field to the Report Filter area

PivotTable Field List

Choose fields to add to report:

- Order ID
- Product
- Category
- Amount
- Date
- Country

Drag fields between areas below:

Report Filter: Category

Column Labels: Product

Row Labels: Country

Values: Sum of Amount

Defer Layout Update Update

	A	B	C	D	E	F	G	H	I	J
1	Category	(All)								
2										
3	Sum of Amount	Product								
4	Country	Apple	Banana	Beans	Broccoli	Carrots	Mango	Orange	Grand Total	
5	Australia	20634	52721	14433	17953	8106	9186	8680	131713	
6	Canada	24867	33775		12407		3767	19929	94745	
7	France	80193	36094	680	5341	9104	7388	2256	141056	
8	Germany	9082	39686	29905	37197	21636	8775	8887	155168	
9	New Zealand	10332	40050		4390			12010	66782	
10	United Kingdom	17534	42908	5100	38436	41815	5600	21744	173137	
11	United States	28615	95061	7163	26715	56284	22363	30932	267133	
12	Grand Total	191257	340295	57281	142439	136945	57079	104438	1029734	
13										
14										



Pivot Chart

Analyze each item with country (graphical and more depth analysis)

Category	(All)							
Sum of Amount	Product							
Country	Apple	Banana	Beans	Broccoli	Carrots	Mango	Orange	Grand Total
Australia	20634	52721	14433	17953	8106	9186	8680	131713
Canada	24867	33775		12407		3767	19929	94745
France	80193	36094	680	5341	9104	7388	2256	141056
Germany	9082	39686	29905	37197	21636	8775	8887	155168
New Zealand	10332	40050		4390			12010	66782
United Kingdom	17534	42908	5100	38436	41815	5600	21744	173137
United States	28615	95061	7163	26715	56284	22363	30932	267133
Grand Total	191257	340295	57281	142439	136945	57079	104438	1029734

Category	(All)							
Sum of Amount	Product							
Country	Apple	Banana	Beans	Broccoli	Carrots	Mango	Orange	Grand Total
Australia	20634	52721	14433	17953	8106	9186	8680	131713
Canada	24867	33775		12407		3767	19929	94745
France	80193	36094	680	5341	9104	7388	2256	141056
Germany	9082	39686	29905	37197	21636	8775	8887	155168
New Zealand	10332	40050		4390			12010	66782
United Kingdom	17534	42908	5100	38436	41815	5600	21744	173137
United States	28615	95061	7163	26715	56284	22363	30932	267133
Grand Total	191257	340295	57281	142439	136945	57079	104438	1029734

File Home Insert Page Layout Formulas Data Review View Developer

PivotTable Table Picture Clip Art Shapes SmartArt Screenshot

Tables Illustrations

2-D Column

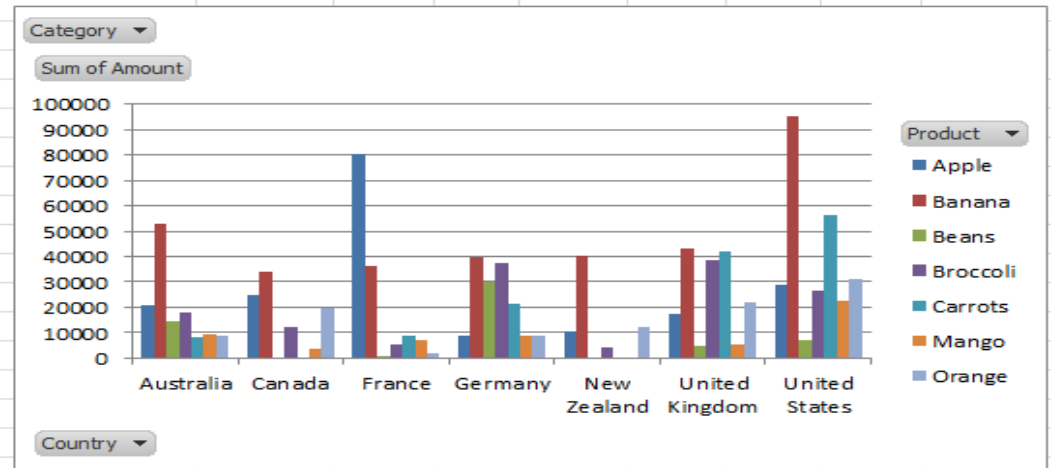
Clustered Column

3-D

Cone

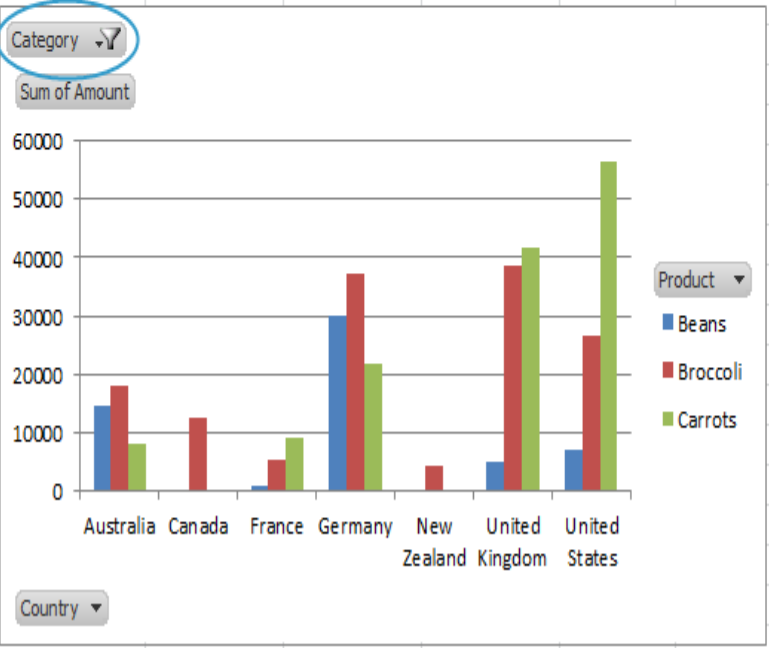
Pyramid

All Chart Types...

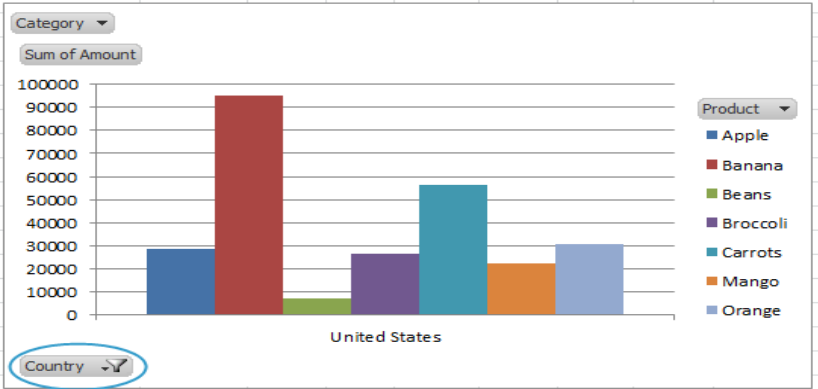




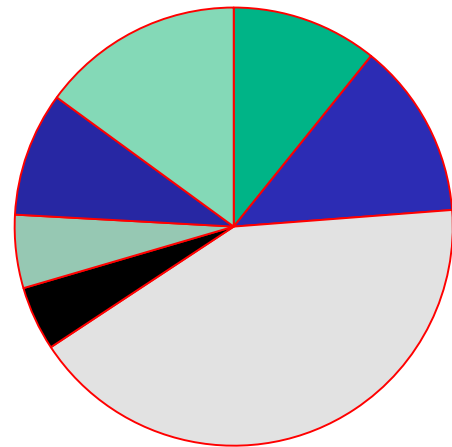
Category	Vegetables				Grand Total
Country	Beans	Broccoli	Carrots		
Australia	14433	17953	8106		40492
Canada		12407			12407
France	680	5341	9104		15125
Germany	29905	37197	21636		88738
New Zealand		4390			4390
United Kingdom	5100	38436	41815		85351
United States	7163	26715	56284		90162
Grand Total	57281	142439	136945		336665



Category	(All)								Grand Total
Country	Apple	Banana	Beans	Broccoli	Carrots	Mango	Orange		
United States	28615	95061	7163	26715	56284	22363	30932		267133
Grand Total	28615	95061	7163	26715	56284	22363	30932		267133



Apple



- Australia
- Canada
- France
- Germany
- New Zealand
- United Kingdom
- United States

slicers



Category	(All)								
Sum of Amount	Product								
Country	Apple	Banana	Beans	Broccoli	Carrots	Mango	Orange	Grand Total	
Australia	20634	52721	14433	17953	8106	9186	8680	131713	
Canada	24867	33775		12407		3767	19929	94745	
France	80193	36094	680	5341	9104	7388	2256	141056	
Germany	9082	39686	29905	37197	21636	8775	8887	155168	
New Zealand	10332	40050		4390			12010	66782	
United Kingdom	17534	42908	5100	38436	41815	5600	21744	173137	
United States	28615	95061	7163	26715	56284	22363	30932	267133	
Grand Total	191257	340295	57281	142439	136945	57079	104438	1029734	

Insert Slicers

- Order ID
- Product
- Category
- Amount
- Date
- Country

PivotTable Tools - Microsoft Excel

Options | Design

Filter | Refresh | Change Data Source | Clear | Select | Move PivotTable | Summarize Values By | Show Values As | Fields, Items, & Sets | PivotChart

Category	Fruit					
Sum of Amount	Product					
Country	Apple	Banana	Mango	Orange	Grand Total	
Australia	20634	52721	9186	8680	91221	
Canada	24867	33775	3767	19929	82338	
France	80193	36094	7388	2256	125931	
Germany	9082	39686	8775	8887	66430	
New Zealand	10332	40050		12010	62392	
United Kingdom	17534	42908	5600	21744	87786	
United States	28615	95061	22363	30932	176971	
Grand Total	191257	340295	57079	104438	693069	

Category

Fruit

Vegetables



Calculated Field/Item

Tax calculation ? Suppose >100000 then $x\%$ of tax otherwise 0

A3	Sum of Amount			
	A	B	C	D
1	Drop Report Filter Fields Here			
2				
3	Sum of Amount			
4	Country	Total		
5	Australia	131713		
6	Canada	94745		

PivotTable Tools

Options Design

Refresh Change Data Source Data

Clear Select Move PivotTable Actions

Summarize Values By Calculation

Show Values As Calculation

Fields, Items, & Sets

PivotChart OLAP Tools What Analysis

Calculated Field...

Calculated Item...

FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW POWERPIVOT ANALYZE DESIGN

PivotTable Name: Active Field: PivotTable1 Country

Options Field Settings Drill Down Drill Up

Group Selection Ungroup Group Field Group

Insert Slicer Insert Timeline Filter Filter

Refresh Change Data Source Data

Clear Select Move PivotTable Actions

Fields, Items, & Sets OLAP Tools Relationships Calculations

14				
----	--	--	--	--

Insert Calculated Field

Name: Tax

Formula: =IF(Amount>100000, 3%*Amount, 0)

Fields: Order ID, Product, Category, Amount, Date, Country

Insert Field

OK Close

A3	Sum of Amount			
	A	B	C	D
1	Drop Report Filter Fields Here			
2				
3		Data		
4	Country	Sum of Amount	Sum of Tax	
5	Australia	131713	\$3,951	
6	Canada	94745	\$0	
7	France	141056	\$4,232	
8	Germany	155168	\$4,655	
9	New Zealand	66782	\$0	
10	United Kingdom	173137	\$5,194	
11	United States	267133	\$8,014	
12	Grand Total	1029734	\$30,892	
13				
14				



Cases



Q1. Calculate Total Prices Store wise and also calculate the percentage of sales at each store?

Q2. Summarizing prices by month with store ?

Q3. Calculate total Prices of each product ?

Q4. identify products names which contains 80% values

Q5. Summarizing prices by month (Feb, July and December) with store wise for products (Adhesive1, Adhesive4, Adhesive9, Saftey5, Saftey8 and Tape4) ?

Q6. Find out store wise total in each of the month for the product (Saftey1---10 and Tape1.....10) only.



Case (store.xlsx)

Q1. Calculate Total Prices Store wise and also calculate the percentage of sales at each store?

The screenshot shows Microsoft Excel with a PivotTable named 'PivotTable1'. The PivotTable is set to show 'Sum of Price' and 'percentage' for 'Store'. The data is as follows:

Row Labels	Sum of Price	percentage
downtown	4985.5	51.98%
uptown	4606.5	48.02%
Grand Total	9592	100.00%

The PivotTable Field List on the right shows the following configuration:

- Report Filter: (Empty)
- Column Labels: Values
- Row Labels: Store
- Values: Sum of Price, percentage



Case (store.xlsx)

Q2. Summarizing prices by month with store ?

The screenshot shows Microsoft Excel with a PivotTable summarizing prices by month and store. The PivotTable is located in the range B4:D17. The PivotTable Field List on the right shows the following configuration:

- Report Filter: Store
- Row Labels: Month
- Values: Sum of Price

The PivotTable data is as follows:

Row Labels	downtown	uptown	Grand Total
January	482	363	845
February	363	457	820
March	299	332	631
April	407	369.5	776.5
May	408.5	404.5	813
June	400.5	450	850.5
July	446	395	841
August	372.5	311.5	684
September	446.5	389	835.5
October	394	359	753
November	503.5	370	873.5
December	463	406	869
Grand Total	4985.5	4606.5	9592



Case (store.xlsx)

Calculate total Prices of each product ?

PARETO_1_SOL - Microsoft Excel

PivotTable Tools: Options, Design

File Home Insert Page Layout Formulas Data Review View Acrobat Options Design

Clipboard: Cut, Copy, Paste, Format Painter

Font: Calibri, 11, Bold, Italic, Underline, Text Color, Background Color, Paragraph Spacing, Bullets, Numbering, Merge & Center

Alignment: General, Text Alignment, Orientation, Indentation, Merge & Center

Number: Currency, Percentage, Decimals, Thousands Separator

Styles: Conditional Formatting, Format as Table, Cell Styles

Cells: Insert, Delete, Format

Editing: AutoSum, Fill, Clear, Sort & Filter, Find & Select

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1															
2															
3	Row Labels	Sum of Price													
4	Adhesive 1	24													
5	Adhesive 10	70													
6	Adhesive 2	63													
7	Adhesive 3	49													
8	Adhesive 4	238													
9	Adhesive 5	168													
10	Adhesive 6	42													
11	Adhesive 7	70													
12	Adhesive 8	42													
13	Adhesive 9	91													
14	Safety 1	732													
15	Safety 10	90													
16	Safety 2	740													
17	Safety 3	140													
18	Safety 4	90													
19	Safety 5	50													
20	Safety 6	220													
21	Safety 7	420													
22	Safety 8	5050													
23	Safety 9	40													
24	Tape 1	93													

PivotTable Field List

Choose fields to add to report:

- Product
- Month
- Store
- Price

Drag fields between areas below:

Report Filter: Product

Column Labels: Sum of Price

Row Labels: Product

Values: Sum of Price

Defer Layout Update:

Update

Ready

100%

ENG 10:37 AM
INTL 9/4/2016



Case (store.xlsx)

Q4. identify products names which contains 80% values

The screenshot shows a PivotTable in Microsoft Excel with the following data:

Month	Location	Price	Product	Sum of Price
December	downtown	\$10.00	Adhesive 1	24
September	downtown	\$12.00	Adhesive 10	70
May	uptown	\$10.00	Adhesive 2	63
July	uptown	\$7.00	Adhesive 3	49
March	uptown	\$7.00	Adhesive 4	238
August	downtown	\$10.00	Adhesive 5	168
October	downtown	\$10.00	Adhesive 6	42
July	downtown	\$2.50	Adhesive 7	70
February	downtown	\$10.00	Adhesive 8	42
May	downtown	\$10.00	Adhesive 9	91
September	uptown	\$7.00	fety 1	732
August	downtown	\$10.00	fety 10	90
July	downtown	\$2.50	fety 2	740
January	downtown	\$10.00	fety 3	140
October	downtown	\$10.00	fety 4	90
December	uptown	\$10.00	fety 5	50
May	downtown	\$2.50	fety 6	220
March	uptown	\$2.50	fety 7	420
February	uptown	\$10.00	fety 8	5050
December	downtown	\$10.00	fety 9	40
April	uptown	\$10.00	Tape 1	93
May	uptown	\$10.00	Tape 10	490
November	downtown	\$10.00	Tape 2	25
September	uptown	\$2.50		

The PivotTable Field List on the right shows the following configuration:

- Report Filter: Product
- Column Labels: Price
- Row Labels: Product
- Values: Sum of Price



Case (store.xlsx)

Q4. identify products names which contains 80% values

The screenshot shows Microsoft Excel with a PivotTable. The PivotTable is set to show 'Labels' and 'Sum of Price'. The data is as follows:

Labels	Sum of Price
Adhesive 1	24
Adhesive 10	70
Adhesive 6	420
Safety 2	5050
Safety 9	40
Tape 1	93
Tape 10	490

Two 'Top 10 Filter (Product)' dialog boxes are overlaid on the spreadsheet. The top dialog box is set to show the top 80 Percent by Sum of Price, with the 'OK' button highlighted. The bottom dialog box is set to show the top 10 Items by Sum of Price, with the 'OK' button highlighted.



Case (store.xlsx)

Q4. identify products names which contains 80% values

The screenshot shows Microsoft Excel with a PivotTable summarizing data from a source named 'Safety 8'. The PivotTable is structured with 'Product' as the Row Labels and 'Sum of Price' as the Values. The data is as follows:

Product	Sum of Price
Safety 1	732
Safety 2	740
Safety 7	420
Safety 8	5050
Tape 10	490
Tape 7	340
Grand Total	7772

The PivotTable Field List on the right shows the following configuration:

- Report Filter: (empty)
- Column Labels: (empty)
- Row Labels: Product
- Values: Sum of Price

The task is to identify products that contain 80% of the total values. The 'Safety 8' product, with a value of 5050, represents approximately 65% of the total (5050 / 7772 ≈ 0.65), which is the highest value among all products.



Case (store.xlsx)

Q5. Summarizing prices by month(Feb, July and December) with store wise for products (Adhesive1, Adhesive4, Adhesive9,Saftey5,Saftey8 and Tape4)

Sum of Price	Column Labels							
Row Labels	Adhesive 1	Adhesive 4	Adhesive 9	Safety 5	Safety 8	Tape 4	Grand Total	
February		28		10	370	2.5	410.5	
July			21		20	470	511	
December	8	7		7		500	5	527
Grand Total	8	56	7	30	1340	7.5	1448.5	

Product

- Safety 7
- Safety 8**
- Safety 9
- Tape 1
- Tape 10
- Tape 2
- Tape 3
- Tape 4**

Month

- June
- July**
- August
- September
- October
- November
- December**

PivotTable Fields

Choose fields to add to report:

Search

- Product
- Month
- Store
- Price

MORE TABLES...

Drag fields between areas below:

FILTERS	COLUMNS
	Product

ROWS	VALUES
Month	Sum of Pri...

Defer Layout Update



Case (store.xlsx)

Q6. Find out store wise total in each of the month for the product (Saftey1---10 and Tape1.....10)Only.

The screenshot shows an Excel spreadsheet with a PivotTable. The PivotTable is located in the range B3:B24. The PivotTable Fields task pane is open on the right, showing the following configuration:

- Row Labels:** Product
- Columns:** Store
- Values:** Sum of Price

The PivotTable data is as follows:

Product	downtown	uptown
Safety 1	372	
Safety 10	30	
Safety 2	400	
Safety 3	100	
Safety 4	30	
Safety 5	40	
Safety 6	110	
Safety 7	180	
Safety 8	2250	
Safety 9	30	
Tape 1	42	
Tape 10	225	
Tape 2	17.5	
Tape 3	7.5	
Tape 4	12.5	
Tape 5	32.5	
Tape 6	27.5	
Tape 7	190	
Tape 8	10	
Tape 9	15	
Grand Total	4121.5	



Thank you !!!