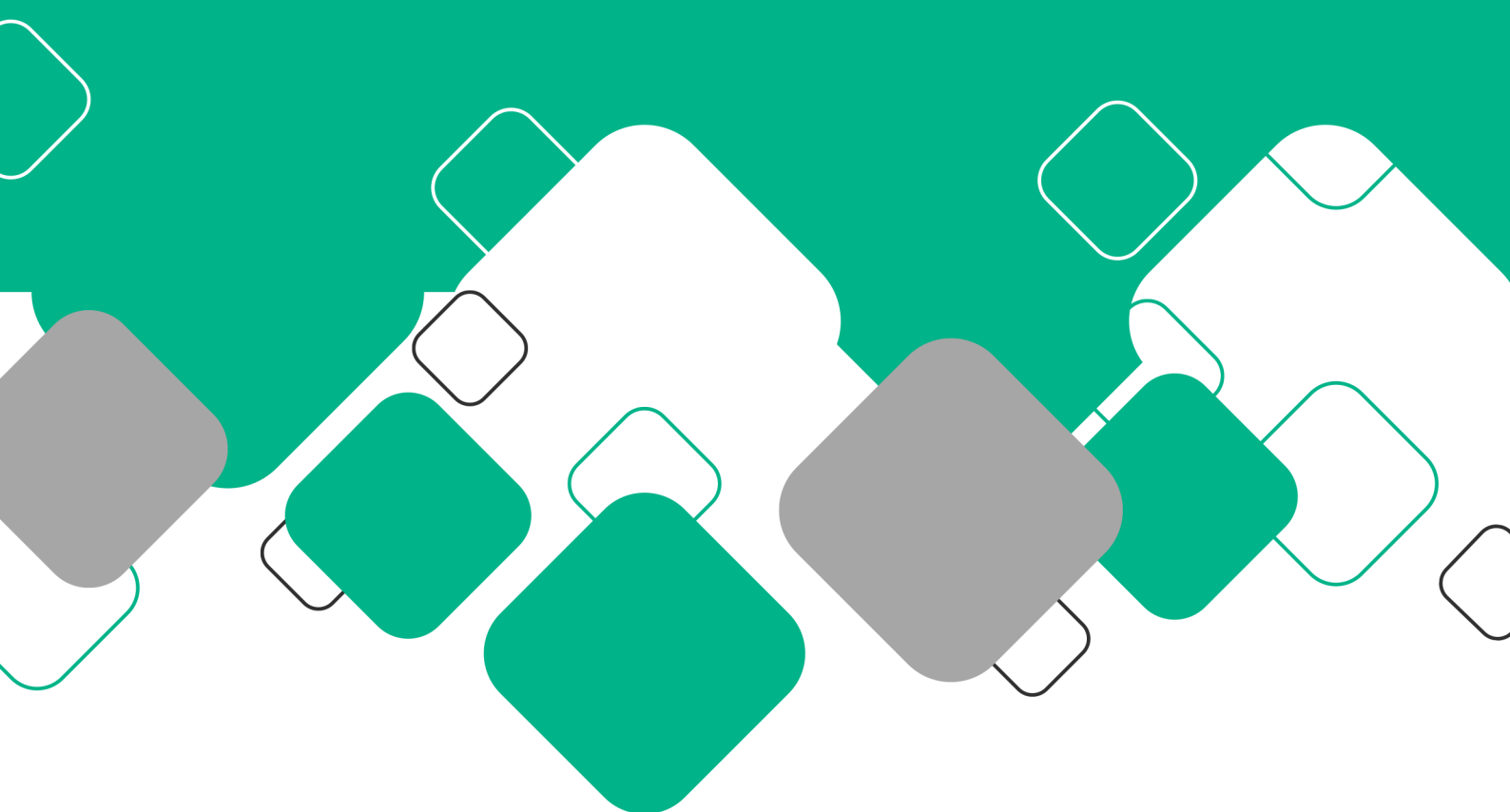


PIVOT TABLE EXAMPLES

An ultimate collection of 62 use cases
for 2022 that make you excel in your job



Pivot Table Examples

An ultimate collection of 62 use cases for 2022 that make you excel in your job

In this book, you'll find one of the most comprehensive databases of Pivot Table use cases.

These examples can be directly adopted and instantly used in your company. This can make you excel in your job role.

If you want to refresh your Pivot Table knowledge, have a look at the [complete beginners guide](#) we have published recently.

This is the complete list of examples this book presents:

Count of unique values

- [1. Tasks count by their State](#)
- [2. Orders count by Completion State](#)
- [3. Accounts by Industry](#)
- [4. Blank fields](#)
- [5. Count of Opportunities by State](#)
- [6. Count of Sales transactions by the Product line](#)
- [7. List of unique values](#)
- [8. Count of Interviews for individual Clients](#)
- [9. Count of Server Traffic records by Zone](#)

Basic sum of values

- [10. Sum of Opportunity Values by Stage](#)
- [11. Sum of Time worked on components](#)
- [12. Sum of complete and incomplete Orders](#)
- [13. Count of unique Industries in given Year](#)
- [14. Count of reports per Service](#)
- [15. Sum of Sales by City](#)
- [16. Count of unique Skill sets interviewed for individual Clients](#)
- [17. Sum of overall Bandwidth measured across Zones](#)

Advanced grouping

- [18. Interviews count by month](#)
- [19. Supermarket Sales amount by the hour of the day](#)
- [20. Average Complaint Response Time](#)
- [21. Sum of Time worked every Month, capped to hours](#)
- [22. Amount of Orders grouped by Months and Years](#)
- [23. Sum of Opportunity Values by quarter](#)
- [24. Sum of overall Bandwidth measured over Months](#)

Using relative values

- [25. Relative Sales by Product line](#)
- [26. Relative count of Accounts in our portfolio by the year of the first contact](#)
- [27. Relative count of Orders by their payment status](#)
- [28. Relative time spent working on each project Component](#)
- [29. Relative number of Complaints by Years](#)
- [30. Relative sum of Opportunity Values by quarter](#)
- [31. Relative count of Interviews per quarters](#)
- [32. Relative overall Bandwidth measured across Zones](#)

Grouping by two fields

- [33. Tasks by Assignee and State](#)
- [34. Accounts by Industry and Lead status](#)
- [35. Sales by Product line and Gender](#)
- [36. Sales by Supermarket and the hour of the day](#)
- [37. Interviews by Client Name and Date](#)
- [38. Value of Orders by Completed? and Paid? state](#)
- [39. Gross Income by Product Line and Branch](#)
- [40. Count of Opportunities by quarter of Date logged and State](#)

Grouping by two fields and showing relative values

- [41. Relative Count of Orders by Completed? and Paid? state](#)
- [42. Relative count of Accounts by Industry and Lead status](#)
- [43. Relative Gross Income by Product Line and Gender](#)
- [44. Relative Gross Income by Gender and Product Line](#)
- [45. Relative Gross Income relative to Product Line and Gender](#)
- [46. Relative Time worked on a project by individual Assignees](#)
- [47. Relative value of Opportunities according to State and Priority](#)
- [48. Relative count of Interviews by quarters and Position Type](#)
- [49. Relative overall Bandwidth measured across Zones and Months](#)

Complex scenarios

- [50. Relative count of Accounts by Industry and Lead status filtered to most significant Industries](#)
- [51. Relative amount of Sales by Branch, Gender and Product Line](#)
- [52. Tasks by Stage and Due date in quarters, count](#)
- [53. Tasks by Stage and Due date in quarters, Difficulty sum](#)
- [54. Tasks by Stage, State and Due date in quarters, count of Task](#)
- [55. Tasks by Assignee and State, count of Task, sum of Difficulty](#)
- [56. Relative Orders Total amount by Month and Year, and average Order value](#)
- [57. Relative Sales amount by the Day of week and Hour of the day](#)
- [58. Relative count of Opportunities according to State and Priority per quarters](#)
- [59. Relative count of Interviews by quarters, Industry and Position Type](#)
- [60. Relative count of Interviews by Industry, quarter and Position Type](#)
- [61. Relative average Bandwidth and average count Users in Zones across Weeks](#)
- [62. Relative average number of Users in Days of the week and Hours of the day](#)

Why do you need Pivot Tables?

Pivot Tables can quickly reveal many useful information in our records/data that were originally unknown to us or not obvious at first sight.

For example we can quickly spot any invoice after a due date. Or we can see how many tasks are planned for our team.

Pivot Tables are one of the basic business analytical tools. Their usage is essential to anyone who wants to base their decisions on hard facts. So that your decisions are the best you can make.

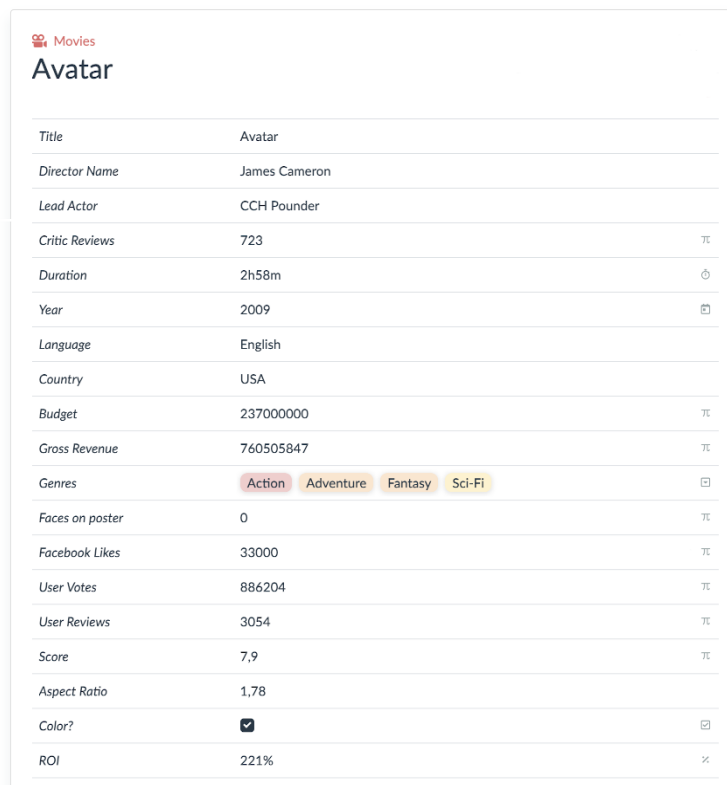
Sample datasets

In the examples, we use either our own sample datasets, or research datasets from [Kaggle](#) — a network that supports data science work.

If you want to play around a bit, we especially recommend the dataset based on the information from the [Internet Movie Database](#) (IMDb). There are many columns of various types that can be summarized in a Pivot Table.

You can [download the source dataset here](#). Or you can use our [slightly modified version](#).

This is what a single record looks like:



The screenshot shows a single record for the movie 'Avatar' from a dataset. The record is displayed in a table-like format with various attributes and their values. The 'Genres' field is highlighted with colored tags: Action, Adventure, Fantasy, and Sci-Fi. The 'Color?' field is marked with a checkmark, indicating it is in color. The 'ROI' field shows a value of 221%.

Avatar	
Title	Avatar
Director Name	James Cameron
Lead Actor	CCH Pounder
Critic Reviews	723
Duration	2h58m
Year	2009
Language	English
Country	USA
Budget	237000000
Gross Revenue	760505847
Genres	Action Adventure Fantasy Sci-Fi
Faces on poster	0
Facebook Likes	33000
User Votes	886204
User Reviews	3054
Score	7,9
Aspect Ratio	1,78
Color?	<input checked="" type="checkbox"/>
ROI	221%

We track many interesting attributes about each movie and as an exercise, you can try to mimic the individual techniques with this table.

In the examples in this article, the following 8 datasets are used. Every specific example refers to one of these source tables.

 Tasks  Orders  Accounts  CRM  Sales  Opportunities  Interviews  Server Traffic

1. Project Management

The Project Management area is represented by a table with Tasks.

Tasks

Every Task has the following attributes:

- Task – task name
- Created – creation date (format month/day/year)
- Due date – the same format as Created
- State - one of New, Open, In Progress, Done, Outdated
- Assignee – an email of a team member
- Component – the name of the system component the task is related to
- Stage – stage of the project the task is needed for
- Difficulty – an estimated task difficulty (1 – easiest, 5 – the most difficult)
- Time worked – how long did the assignee work on the task

Tasks

Task	Created	Due date	State	Assignee	Component	Stage	Difficulty	Time worked
Store visits to Costco	11/19/2019	11/29/2019	Outdated	pearl@lumeerio.com	UI	Staged	1	2w4h
Email design for existing customer outre	10/13/2019	11/03/2019	New	larry@lumeerio.com	Monitoring	Underway	3	2w2d2h45m
Send PVT v3 units for drop test	04/04/2019	04/28/2019	Outdated	eugen@lumeerio.com	Deployment	Planning	1	3w3d2h30m
Package results - presentation	06/28/2019	07/04/2019	New	eugen@lumeerio.com	Notifications	Production	3	3w3d4h
2nd round testing	09/17/2019	10/06/2019	Open	bob@lumeerio.com	Monitoring	Research	4	1w4d2h45m
Create new user onboarding flow - pare	06/17/2019	06/24/2019	New	larry@lumeerio.com	Load-balance	Production	0	1w4d2h
Replace sharks with puppies	08/13/2019	08/22/2019	Open	pearl@lumeerio.com	Database	Underway	5	1d3h45m
Draft copy for user manual	06/15/2019	06/16/2019	Open	larry@lumeerio.com	Load-balance	Underway	4	3w1d5h
New ad creative for ads	07/22/2019	07/31/2019	In Progress	john@lumeerio.com	Backend	Planning	2	3w7h15m
Refine proto build	04/16/2019	05/07/2019	New	sandy@lumeerio.com	Monitoring	Research	3	1w4d7h30m
Interaction model design	06/10/2019	06/27/2019	Done	john@lumeerio.com	Database	Production	0	4w6h45m
New version of setup & installation guid	04/03/2019	04/18/2019	Done	sandy@lumeerio.com	Deployment	Production	1	4w4h30m
Tealite hover state design	04/04/2019	04/15/2019	In Progress	larry@lumeerio.com	Monitoring	Research	4	4h15m

The Project Management use case is demonstrated in the following examples:

[1. Tasks count by their State](#)

[7. List of unique values](#)

[11. Sum of Time worked on components](#)

[21. Sum of Time worked every Month, capped to hours](#)

[28. Relative time spent working on each project Component](#)

[33. Tasks by Assignee and State](#)

[46. Relative Time worked on a project by individual Assignees](#)

[52. Tasks by Stage and Due date in quarters, count](#)

[53. Tasks by Stage and Due date in quarters, Difficulty sum](#)

[54. Tasks by Stage, State and Due date in quarters, count of Task](#)

[55. Tasks by Assignee and State, count of Task, sum of Difficulty](#)

2. Supply Chain





The Supply Chain area is represented by a table with Orders.

Orders

Every Order has the following columns:

- Order No – a simple counter
- Date created – when the order was placed (format month/day/year)
- Due date – when the order needs to be completed (the same format as Date created)
- Completed? – was the order already completed?
- Paid? – did we receive a payment for this order?
- Total amount – total value of the order in €

Orders

Order No	π	Date created 	Due date 	Completed? 	Paid? 	Total amount π
1		9/11/2019	10/2/2019	<input type="checkbox"/>	<input type="checkbox"/>	5330
2		8/19/2019	8/31/2019	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3606
3		4/11/2019	4/18/2019	<input type="checkbox"/>	<input type="checkbox"/>	1878
4		4/15/2019	5/11/2019	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3461
5		8/28/2019	9/14/2019	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4500

The Supply Chain use case is demonstrated in the following example:

[2. Orders count by Completion State](#)

[12. Sum of complete and incomplete Orders](#)

[22. Amount of Orders grouped by Months and Years](#)

[27. Relative count of Orders by their payment status](#)

[38. Value of Orders by Completed? and Paid? state](#)

[41. Relative Count of Orders by Completed? and Paid? state](#)

[56. Relative Orders Total amount by Month and Year, and average Order value](#)

3. Customer Relationship Management (CRM)

The CRM area is represented by two tables.

Accounts

The first one lists our Accounts. Every Account has the following attributes:

- Account – a company name
- Industry – an industry vertical of the company
- Year – the year we added the company into our database
- Web – the company's website
- Description – an optional description
- Lead Status – one of New, Open, In Progress, Open Deal, Unqualified, Attempted to Contact, Connected, Bad Timing

Accounts

Account	Industry	Year	Web	Description	Lead Status
Clickfacts	B2B	2005	http://clickfacts.com	Clicks ²	In Progress
Kiko	Consumer	2005	http://kiko.com	We're the bes	Open Deal
Loopt	Enterprise	2005	http://loopt.com	Best solution	Connected
Parakey	Consumer	2005	http://parakey.com		Attempted to Contact
Bad Timing	Consumer	2005	http://badtiming.com		Bad Timing

The Accounts use case is demonstrated in the following examples:

[3. Accounts by Industry](#)

[4. Blank fields](#)

[13. Count of unique Industries in given Year](#)

[26. Relative count of Accounts in our portfolio by the year of the first contact](#)

[34. Accounts by Industry and Lead status](#)

[42. Relative count of Accounts by Industry and Lead status](#)

[50. Relative count of Accounts by Industry and Lead status filtered to most significant Industries](#)

CRM

The second table for the CRM use case are results collected from a customer satisfaction survey. This is based on [NYS Department of Public Service Utility Company](#) data.

Every single row in the CRM table has the following attributes:

- Date – the month and year of the collection of the information
- Service Provider – the service provider being evaluated
- Initial Complaints – the number of complaints on the service quality
- Escalated Complaints – the number of complaints that were escalated to a higher authority

- CSM Index – the Consumer Satisfaction (CSM) Index scores the ratio of the number of initial complaints to the number of escalated complaints
- Complaint Response Time – how long it took to address the complaints in average (no. of days)
- CRM Index – the Complaint Response Time (CRM) Index scores the service providers responsiveness to initial complaints closed
- Escalated Complaint Response Time – the response time for escalated complaints separately
- ERM Index – the Escalated Complaint Response Time (ERM) Index scores the service providers responsiveness to escalated complaints closed
- Avg Age of Cases Pending – what is the average age of cases we did not resolve yet
- PCM Index – the Pending Case (PCM) Index scores the average age of all cases awaiting response by the service provider
- CSRI – the Customer Service Response Index (CSRI) is the overall score received by the service provider (it is the sum of the four indices – CSM, CRM, ERM, and PCM)

CRM

	Date	Service Provider	Initial Complaints	Escalated Complaints	CSM Index	Complaint Response Time	CRM Index	Escalated Complaint Response Time	ERM Index	Avg Age of Cases Pending	PCM Index	CSRI
1	9/2019	Cablevision of	25	5	3	14,6	1,9	3,4	2	9,7	1	7,9
2	9/2019	Cablevision of	36	2	4,4	11,4	2	5,3	2	8,1	1	9,4
3	9/2019	Central Hudson	18	1	4,4	1,7	2	4,4	2	6,5	1	9,4
4	9/2019	Citizens Comm	24	6	2,5	8,3	2	9,2	2	6	1	7,5
5	9/2019	Con Edison O	360	51	3,6	8	2	11,9	1,9	15,3	0,9	8,4
6	9/2019	Direct Energy	18	2	3,9	7	2	2,1	2	11,2	1	8,9
7	9/2019	Family Energy	13	1	4,2	14,5	1,9	8,8	2	11	1	9,1
8	9/2019	Frontier Comm	10	0	5	9,7	2	13,8	1,7	1	1	9,7
9	9/2019	Frontier Telep	18	4	2,8	8,2	2	1,5	2	9,2	1	7,8
10	9/2019	Josco Energy	24	4	3,3	10,6	2	6,8	2	6,1	1	8,3
11	9/2019	National Fuel	52	1	4,8	11,5	2	5	2	4,2	1	9,8

The CRM use case is demonstrated in the following examples:

[14. Count of reports per Service](#)

[20. Average Complaint Response Time](#)

[29. Relative number of Complaints by Years](#)

4. Sales and Marketing

The Sales and Marketing area is again represented by two tables.

Sales

The first one lists the Sales in grocery stores and every single record has the following attributes:

- Invoice ID – identifier of an invoice
- Branch – the specific grocery store code
- City – where the store is located
- Customer type – either Normal or premium Member
- Gender – gender of the customer
- Product line – which product line did the customer buy
- Unit price – price of a single unit
- Quantity – number of units sold
- Tax 5% – how much is the total tax
- Total – the total sum for the invoice
- Date – the date of the sale
- Time – the time of the day of the sale
- Payment – the type of the payment (one of Cash, Ewallet, or Credit card)
- COGS - Cost of Goods Sold
- Gross Margin Percentage – what is our margin in %
- Gross Income – what is our gross income
- Rating – what overall customer rating did we get

Invoice ID	Branch	City	Customer ty	Gender	Product line	Unit price	Quantity	Tax 5%	Total	Date	Time	Payment	COGS	Gross Margi	Gross Incom	Rating
750-67-8428	A	Yangon	Member	Female	Health and be	74,69	7	26,1415	548,9715	1/5/2019	14:08	Ewallet	522,83	4,761904762	26,1415	9,1
226-31-3081	C	Naypyitaw	Normal	Female	Electronic acc	15,28	5	3,82	80,22	3/8/2019	11:29	Cash	76,4	4,761904762	3,82	9,6
631-41-3108	A	Yangon	Normal	Male	Home and life	46,33	7	16,2155	340,5255	3/3/2019	14:23	Credit card	324,31	4,761904762	16,2155	7,4
123-19-1176	A	Yangon	Member	Male	Health and be	58,22	8	23,288	489,048	1/27/2019	21:33	Ewallet	465,76	4,761904762	23,288	8,4
373-73-7910	A	Yangon	Normal	Male	Sports and tra	86,31	7	30,2085	634,3785	2/8/2019	11:37	Ewallet	604,17	4,761904762	30,2085	5,3
699-14-3026	C	Naypyitaw	Normal	Male	Electronic acc	85,39	7	29,8865	627,6165	3/25/2019	19:30	Ewallet	597,73	4,761904762	29,8865	4,1
355-53-5943	A	Yangon	Member	Female	Electronic acc	68,84	6	20,652	433,692	2/25/2019	15:36	Ewallet	413,04	4,761904762	20,652	5,8
315-22-5665	C	Naypyitaw	Normal	Female	Home and life	73,56	10	36,78	772,38	2/24/2019	12:38	Ewallet	735,6	4,761904762	36,78	8
665-32-9167	A	Yangon	Member	Female	Health and be	36,26	2	3,626	76,146	1/10/2019	18:15	Credit card	72,52	4,761904762	3,626	7,2
692-92-5582	B	Mandalay	Member	Female	Food and bev	54,84	3	8,226	172,746	2/20/2019	14:27	Credit card	164,52	4,761904762	8,226	5,9
351-62-0822	B	Mandalay	Member	Female	Fashion acces	14,48	4	2,896	60,816	2/6/2019	19:07	Ewallet	57,92	4,761904762	2,896	4,5
529-56-3974	B	Mandalay	Member	Male	Electronic acc	25,51	4	5,102	107,142	3/9/2019	18:03	Cash	102,04	4,761904762	5,102	6,8
365-64-0515	A	Yangon	Normal	Female	Electronic acc	46,95	5	11,7375	246,4875	2/12/2019	11:25	Ewallet	234,75	4,761904762	11,7375	7,1
252-56-2699	A	Yangon	Normal	Male	Food and bev	43,19	10	21,595	453,495	2/7/2019	17:48	Ewallet	431,9	4,761904762	21,595	8,2
829-34-3910	A	Yangon	Normal	Female	Health and be	71,38	10	35,69	749,49	3/29/2019	20:21	Cash	713,8	4,761904762	35,69	5,7

The Sales use case is demonstrated in the following examples:

[6. Count of Sales transactions by the Product line](#)

[7. List of unique values](#)

[15. Sum of Sales by City](#)

[19. Supermarket Sales amount by the hour of the day](#)

[25. Relative Sales by Product line](#)

- [35. Sales by Product line and Gender](#)
- [36. Sales by Supermarket and the hour of the day](#)
- [39. Gross Income by Product Line and Branch](#)
- [43. Relative Gross Income by Product Line and Gender](#)
- [44. Relative Gross Income by Gender and Product Line](#)
- [45. Relative Gross Income relative to Product Line and Gender](#)
- [51. Relative amount of Sales by Branch, Gender and Product Line](#)
- [57. Relative Sales amount by the Day of week and Hour of the day](#)

Opportunities

The second table we have for the Sales and Marketing use case is a table with business Opportunities having the following columns:

- Opportunity – the name of a company
- Priority – priority of this business opportunity
- State – one of New, Open, In Progress, Open Deal, Unqualified, Attempted to Contact, Connected, Bad Timing
- Value – estimated value of the business opportunity
- Date logged – when we identified this opportunity (the format is month/day/year)
- Date closed – when we closed the opportunity (the format is the same as *Date logged*)
- Documents – any possible file attachments
- Notes – optional remarks

Opportunities

Opportunity	Priority	State	Value	Date logged	Date closed	Documents	Notes
Miso		Open	344700	04/25/2019			
Lendsnap		Open Deal	488500	01/23/2019	02/20/2019		
PlatelQ		In Progress	439300	12/26/2019			
Pantelligent		New	30200	01/30/2019			
Vertical		Open Deal	449500	05/29/2019	05/29/2019		
GetAccept		Unqualified	823000	01/12/2020	01/29/2020		
Homejoy		New	18500	06/27/2019			
Clara Labs		Open Deal	452200	04/25/2019	05/10/2019		

The Opportunities use case is demonstrated in the following examples:

- [5. Count of Opportunities by State](#)
- [10. Sum of Opportunity Values by stage](#)
- [23. Sum of Opportunity Values by quarter](#)
- [30. Relative sum of Opportunity Values by quarter](#)
- [40. Count of Opportunities by quarter of Date logged and State](#)
- [47. Relative value of Opportunities according to State and Priority](#)
- [58. Relative count of Opportunities according to State and Priority per quarters](#)

5. Human Resources (HR)

The table of planned Interviews is used to represent the HR use case.

Interviews

The table has the following attributes:

- Date – on which day the interview is scheduled
- Client Name – for which client we interview the candidate
- Industry – the industry of the client
- Location – location of the job position
- Position Type – what is the job role
- SkillSet Name – reference to a set of interview procedures
- Candidate ID – anonymized candidate ID
- Gender – candidate gender
- Current Location – location of the candidate
- Company Location – where the company headquarters are located
- Interview Venue – in which office the interview takes place
- Candidate Hometown – where the candidate comes from originally
- CV Ready – do we already have the candidate's CV?
- Marital Status – candidates marital status

Interviews

Date	Client Name	Industry	Location	Position Type	SkillSet Name	Candidate ID	Gender	Current Location	Company Location	Interview Venue	Candidate Hometown	CV Ready	Marital Status
06/19/2015	UST	IT Services	Bangalore	Dot Net	Routine	Candidate 27	Male	Bangalore	Bangalore	Bangalore	Bangalore	<input checked="" type="checkbox"/>	Married
06/19/2015	UST	IT Services	Bangalore	Dot Net	Routine	Candidate 28	Male	Bangalore	Bangalore	Bangalore	Bangalore	<input type="checkbox"/>	Single
06/23/2015	Standard Chartered	BFSI	Chennai	AML	Routine	Candidate 29	Female	Chennai	Chennai	Chennai	Chennai	<input checked="" type="checkbox"/>	Married
06/23/2015	Standard Chartered	BFSI	Chennai	AML	Routine	Candidate 30	Female	Chennai	Chennai	Chennai	Chennai	<input checked="" type="checkbox"/>	Married
06/23/2015	Standard Chartered	BFSI	Chennai	AML	Routine	Candidate 31	Female	Chennai	Chennai	Chennai	Chennai	<input checked="" type="checkbox"/>	Single
06/23/2015	Standard Chartered	BFSI	Chennai	AML	Routine	Candidate 32	Female	Chennai	Chennai	Chennai	Coimbatore	<input checked="" type="checkbox"/>	Single
06/23/2015	Standard Chartered	BFSI	Chennai	AML	Routine	Candidate 33	Male	Chennai	Chennai	Chennai	Trichy	<input checked="" type="checkbox"/>	Married
06/23/2015	Standard Chartered	BFSI	Chennai	AML	Routine	Candidate 34	Male	Chennai	Chennai	Chennai	Chennai	<input checked="" type="checkbox"/>	Married
06/23/2015	Standard Chartered	BFSI	Chennai	AML	Routine	Candidate 35	Male	Chennai	Chennai	Chennai	Chennai	<input checked="" type="checkbox"/>	Married
06/23/2015	Standard Chartered	BFSI	Chennai	AML	Routine	Candidate 36	Male	Chennai	Chennai	Chennai	Salem	<input checked="" type="checkbox"/>	Single
06/29/2015	Standard Chartered	BFSI	Chennai	Trade Finance	Routine	Candidate 37	Female	Chennai	Chennai	Chennai	Chennai	<input checked="" type="checkbox"/>	Married
06/29/2015	Standard Chartered	BFSI	Chennai	Trade Finance	Routine	Candidate 38	Male	Chennai	Chennai	Chennai	Chennai	<input checked="" type="checkbox"/>	Single
06/29/2015	Standard Chartered	BFSI	Chennai	Trade Finance	Routine	Candidate 39	Male	Chennai	Chennai	Chennai	Chennai	<input checked="" type="checkbox"/>	Married

The Human Resources use case is demonstrated in the following examples:

[8. Count of Interviews for individual Clients](#)

[16. Count of unique Skill sets interviewed for individual Clients](#)

[18. Interviews count by month](#)

[31. Relative count of Interviews per quarters](#)

[37. Interviews by Client Name and Date](#)

[48. Relative count of Interviews by quarters and Position Type](#)

[59. Relative count of Interviews by quarters, Industry and Position Type](#)

[60. Relative count of Interviews by Industry, quarters and Position Type](#)


6. DevOps

The DevOps scenario is represented using a server traffic statistics table.

Server Traffic

The Server Traffic table has the following attributes:

- Zone – the server location
- Time – date and hour of the day for which the data are collected
- Bandwidth – the overall bandwidth used in the given hour
- Users – the overall number of unique users connected in the given hour

 Server Traffic

Zone	Time	Bandwidth	Users
ZONE01	2017-10-23 20:00	22811,9318254545	360927
ZONE01	2017-10-23 21:00	27706,6749027273	365619
ZONE01	2017-10-23 22:00	32717,6439427273	401676
ZONE01	2017-10-23 23:00	37136,3705963636	395556
ZONE01	2017-10-24 0:00	34457,7717172727	377757
ZONE01	2017-10-24 1:00	22847,58041	273207
ZONE03	2017-10-23 2:00	254,716123636364	14280
ZONE03	2017-10-23 3:00	91,8040472727273	13311
ZONE03	2017-10-23 4:00	86,20341	12291

The DevOps use case is demonstrated in the following examples:

[9. Count of Server Traffic records by Zone](#)

[17. Sum of overall Bandwidth measured across Zones](#)

[24. Sum of overall Bandwidth measured over Months](#)

[32. Relative overall Bandwidth measured across Zones](#)

[49. Relative overall Bandwidth measured across Zones and Months](#)

[61. Relative average Bandwidth and average count Users in Zones across Weeks](#)

[62. Relative average number of Users in Days of the week and Hours of the day](#)

Pivot Table Examples

We will be using the standard terms for the Pivot Table settings like *Row Label*, *Column Label*, *Summation Value* that we listed in [our Pivot Table Guide](#).

Every single example describes the purpose (usage), the individual settings (Row Label, Column Label, Summation Value), possible alternatives and references to other examples that are based on them.

Count of unique values

This is the most basic use of a Pivot Table. We will simply count how many times each value is present in a given table column.

1. Tasks count by their State

Table:  Tasks

Usage: We want to see how many Tasks are in which State.

Row Label: State

Column Label: —

Summation Value: count of Title

	Count of Task
New	253
Open	574
In Progress	572
Done	850
Outdated	294
Sum total	2543

Optionally, we can also count the Tasks by Assignee.

Later, in the [example no. 33](#) we will see how to group the tasks by both the assignee and the state.

2. Orders count by Completion State

Table:  Orders

Usage: We want to count the number of completed and incomplete Orders.

Row Label: *Completed?*

Column Label: —

Summation Value: count of *Order No.*

	Count of Order No
<input type="checkbox"/>	360
<input checked="" type="checkbox"/>	880
Sum total	1240

Optionally, we can also group by the *Paid?* column to see whether we have any unpaid orders.

In the [example no. 12](#), we will be showing how to calculate the total value of complete and incomplete Orders, or even paid and unpaid Orders.

3. Accounts by Industry

Table: 📄 Accounts

Usage: We want to see how many sales Accounts we have for each Industry.

Row Label: *Industry*

Column Label: —

Summation Value: count of *Account*

	Count of Account
	9
B2B	277
Biomedical	30
Consumer	225
Developer Tools	97
Education	21
Enterprise	57
Fintech	47
Hardware	62
Marketplace	58
Sum total	883

Optionally, we can group the accounts by Lead status. Or, as we will see in [example no. 34](#), we can group by both the Account Industry and Lead status and see where our potential is.

4. Blank fields

Table: 📄 Accounts

Usage: We want to see how many sales Accounts do not have any Industry assigned.

Row Label: *Industry*

Column Label: —

Summation Value: count of *Account*

	Count of Account
	9
B2B	277
Biomedical	30
Consumer	225
Developer Tools	97
Education	21
Enterprise	57
Fintech	47
Hardware	62
Marketplace	58
Sum total	883

This is the same example as the previous one, however, as a side effect, we calculated blank fields (see the first row).

5. Count of Opportunities by State

Table:  Opportunities

Usage: We want to see how many opportunities we have in individual Lead states. This can help us understand where our process gets stuck or where we spend most of the time.

Row Label: *State*

Column Label: —

Summation Value: count of *Opportunity*

	Count of Opportunity
New	336
Open	308
In Progress	295
Open Deal	298
Unqualified	337
Attempted to Contact	319
Connected	325
Bad Timing	325
Sum total	2543

Optionally, we might count the total Value of the Opportunities in individual states to see what potential revenue is hidden there (see the [example no. 10](#)).

6. Count of Sales transactions by the Product line

Table:  Sales

Usage: We want to figure out what Product lines are best sold to see which we should further expand. We can also have a look on what is sold less to identify gaps.

Row Label: *Product line*

Column Label: —

Summation Value: count of *Invoice ID*

	Count of Invoice ID
Electronic accessories	170
Fashion accessories	178
Food and beverages	174
Health and beauty	152
Home and lifestyle	160
Sports and travel	166
Sum total	1000

Optionally, we can group by *Gender* to see who buys more, or we can group by both *Product line* and *Gender* as demonstrated later in the [example no. 35](#).

7. List of unique values

Table:  Sales

Usage: We want to see what unique values are used throughout the whole table column.

Row Label: *Payment*

Column Label: —

Summation Value: —

Cash
Ewallet
Credit card

Optionally, you can filter a specific time period to see what types were used during the weekend for instance. Of course we could also calculate the number of times a certain payment type was used.

8. Count of Interviews for individual Clients

Table: 👤 Interviews

Usage: We want to see who our biggest client is and with whom we might try to expand our business a little bit further.

Row Label: *Client Name*

Column Label: —

Summation Value: count of *Date*

	Count of Date
ANZ	22
Aon Hewitt	30
Astrazeneca	15
Barclays	5
Flextronics	23
Hewitt	20
Hospira	75
Pfizer	59
Prodapt	17
Standard Chartered Bank	882
UST	18
Williams Lea	11
Woori Bank	1
	0
Sum total	1178

Optionally, we can also group the interviews by months (see the [example no. 18](#)), or just add the date dimension to this table (see the [example no. 37](#)).

9. Count of Server Traffic records by Zone

Table:  Server Traffic

Usage: We want to see how individual server Zones are utilized overall.

Row Label: *Zone*

Column Label: —

Summation Value: count of *Time*

	Count of Time
ZONE01	783
ZONE03	240
Sum total	1023

Optionally, we can measure specific Bandwidth in the Zones as is shown in the [example no. 17](#).

Basic sum of values

In addition to counting the values and unique values, we can easily sum them up to see total costs, incomes, amounts etc. In addition to sum, we can also use functions like minimum, maximum, average and more...

10. Sum of Opportunity Values by Stage

Table:  Opportunities

Usage: We want to see what is the overall sum of the Value column for every Opportunity's State. I.e. the total sum of values by the business Opportunity State.

Row Label: State

Column Label: —

Summation Value: sum of Value

	Sum of Value
New	165,494,500
Open	154,049,900
In Progress	144,804,200
Open Deal	150,552,400
Unqualified	162,528,900
Attempted to Contact	165,335,500
Connected	173,651,000
Bad Timing	168,955,900
Sum total	1,285,372,300

Optionally, we can filter the opportunities by date to get reports only for a recent or future quarter. In the [example no. 23](#), you can see grouping by quarters.

11. Sum of Time worked on components

Table:  Tasks

Usage: We want to see how much Time we spent working on individual Components or parts of our project. We can possibly identify areas for outsourcing for the future.

Row Label: *Component*

Column Label: —

Summation Value: *sum of Time worked*

	Sum of Time worked
UI	3403d1h
Monitoring	3641d3h
Deployment	3264d1h
Notifications	3411d3h
Load-balancer	3323d
Database	3537d7h
Backend	3266d1h
Network	3186d3h
Sum total	27033d6h

Optionally, we can see the relative values in percentages to have a better overview of the time proportion as can be seen in the [example no. 28](#).

12. Sum of complete and incomplete Orders

Table:  Orders

Usage: We want to see what possible revenue we have in our incomplete Orders.

Row Label: *Completed?*

Column Label: —

Summation Value: sum of *Total amount*

	Sum of Total amount
<input type="checkbox"/>	1,790,447
<input checked="" type="checkbox"/>	4,407,244
Sum total	6,197,691

Optionally, we can also see what value is in our unpaid Orders or group by both attributes at once (see [example no. 38](#)).

13. Count of unique Industries in given Year

Table: 📊 Accounts

Usage: We want to see how many industries we did business with in every year. We also want to see if we are expanding and make sure that we do not split our efforts too much.

Row Label: Year

Column Label: —

Summation Value: unique count of *Industry*

	Unique of Industry
2005	4
2006	4
2007	5
2008	3
2009	7
2010	7
2011	8
2012	8
2013	8
2014	9
2015	9
2016	9

We can also see how we grew our portfolio in terms of account year by year (see the [example no. 26](#)).

14. Count of reports per Service

Table:  CRM

Usage: We want to see how many Customer Reports we received for every Service provider to estimate the relevance of the overall results.

Row Label: *Service Provider*

Column Label: —

Summation Value: count of *Date*

	Count of Date
ALL AMERICAN POWER & GAS, LLC	1
AT&T	138
AT&T (C)	1
AT&T of New York	4
Accent Energy Midwest, LLC	41
Adelphia Cable - Buffalo	1
Agway Energy Services, LLC.	8
Alpha Gas And Electric, Llc	7
Ambit Energy	42
American Power & Gas, LLC	25
Amplified Power & Gas, LLC	2
Aqua New York	2
Astral Energy LLC	7
Atlantic Energy, LLC	2
Atlantic Power & Gas LLC	1

And for the results, we can see the average Complaint Response Time (see the [example no. 20](#)).

15. Sum of Sales by City

Table:  Sales

Usage: We want to see the overall Sales by the store Location. We can use that information to optimize supplies, identify gaps and future opportunities.

Row Label: *City*

Column Label: —

Summation Value: sum of *Total*

	Sum of Total
Mandalay	106,197.67
Naypyitaw	110,568.71
Yangon	106,200.37
Sum total	322,966.75

We can also see the Sales by the hour of the day for instance (see the [example no. 19](#)).

16. Count of unique Skill sets interviewed for individual Clients

Table: 👤 Interviews

Usage: We want to see how many Skill Sets we search for our Clients. This can help us identify areas where the clients might cooperate with another agency. We should focus on that area to expand our contract.

Row Label: *Client Name***Column Label:** —**Summation Value:** unique of *SkillSet Name*

	Unique of SkillSet Name
ANZ	1
Aon Hewitt	6
Astrazeneca	1
Barclays	1
Flextronics	2
Hewitt	2
Hospira	13
Pfizer	17
Prodapt	2
Standard Chartered Bank	50
UST	1
Williams Lea	2
Woori Bank	1
	0
Sum total	99

Optionally, we can see how many interviews we perform for our clients over time (see the [example no. 37](#)).

17. Sum of overall Bandwidth measured across Zones

Table:  Server Traffic

Usage: We want to measure overall Bandwidth in individual server Zones.

Row Label: Zone

Column Label: —

Summation Value: sum of *Bandwidth*

	Sum of Bandwidth
ZONE01	13,888,606.97
ZONE03	300,351.08
Sum total	14,188,958.04

Optionally, we can see how the Bandwidth develops over time (see the [example no. 24](#)).

Advanced grouping

So far, our groups had just a list of unique values. Some software tools also understand the data we enter and can therefore offer extended features.

One such feature is taking only a certain part of a date/time column without the necessity to create a separate computed field.

18. Interviews count by month

Table: 👤 Interviews

Usage: We want to see how many interviews we did every month.

Row Label: month of *Date*

Column Label: —

Summation Value: count of *Client Name*

	Count of Client Name
	56
03.2014	4
04.2014	4
02.2015	10
03.2015	29
04.2015	64
05.2015	7
06.2015	80
12.2015	19
01.2016	68
02.2016	294
03.2016	32
04.2016	177
05.2016	136
06.2016	39
08.2016	45
09.2016	58
11.2016	25
12.2016	86
04.2017	1
Sum total	1234

Optionally, we could group by the *Client Name* and month of the *Date* to see how many candidates we interviewed for every single Client in a given month. This can be seen in the [example no. 37](#).

19. Supermarket Sales amount by the hour of the day

Table:  Sales

Usage: We can see at what time of the day people spend most in our shops and target special offers and events better.

Row Label: —

Column Label: hours of *Time*

Summation Value: count of *Invoice ID*

11	12	13	14	15	16	17	18	19	20	21
101	90	89	103	83	102	77	74	93	113	75

Optionally, we can group by multiple dimensions (see the [next section](#)) and inspect whether there are any differences for individual supermarkets (see the [example no. 36](#)).

20. Average Complaint Response Time

Table:  CRM

Usage: We want to see how our average *Complaint Response Time* gets better over time as we increase the quality of our services. Is it really the case?

Row Label: year of *Date*

Column Label: —

Summation Value: average of *Complaint Response Time*

	Average of Complaint Response Time
2005	11.23
2006	10.58
2007	11.08
2008	10.35
2009	8.77
2010	8.55
2011	7.75
2012	9.64
2013	10.78
2014	10.21
2015	9.77
2016	9.11
2017	8.60
2018	8.35
2019	8.06

Optionally, we could monitor other indexes and their improvements or see the whole development in a chart that better visualises the results.

In the [example no. 29](#), we can see the relative count of complaints over years which gives a better idea of the situation development.

We could also distinguish by a Service. Maybe a Service introduced lately made the results temporarily weaker...

21. Sum of Time worked every Month, capped to hours

Table:  Tasks**Usage:** We want to see how much time our team spent working on project Tasks every month. We want to see that in the number of hours for us to easily compare the results.**Row Label:** *Created date*, grouped by Month and Year**Column Label:** —**Summation Value:** sum of *Time worked*, capped to hours

	Sum of Time worked
01.2019	7307h30m
02.2019	16120h
03.2019	18380h45m
04.2019	16328h45m
05.2019	18306h45m
06.2019	16033h
07.2019	19836h45m
08.2019	18979h
09.2019	17035h
10.2019	19633h
11.2019	18909h30m
12.2019	18397h30m
01.2020	11002h30m
Sum total	216270h

Optionally, we can see the relative time worked on individual Components to compare changes over time more easily (see the [example no. 28](#)).

22. Amount of Orders grouped by Months and Years

Table:  Orders

Usage: We want to see the overall amount of orders made by individual month and year to make sure that our business is steadily expanding over time.

Row Label: *Date created*


Column Label: —

Summation Value: sum of *Total amount*

	Sum of Total amount
01.2019	277,305
02.2019	471,169
03.2019	590,995
04.2019	514,095
05.2019	569,477
06.2019	474,485
07.2019	498,839
08.2019	499,521
09.2019	445,066
10.2019	485,175
11.2019	525,162
12.2019	530,700
01.2020	315,702
Sum total	6,197,691

Optionally, we might have a look at the relative sum of Orders and the average Order value by months and the payment state (see the [example no. 56](#)).

23. Sum of Opportunity Values by quarter

Table:  Opportunities

Usage: We want to see what is the overall sum of all Opportunities in given quarters.

Row Label: *Date logged*, quarters

Column Label: —

Summation Value: sum of *Value*

	Sum of Value
Q1 2019	261,179,300
Q2 2019	337,536,400
Q3 2019	292,270,500
Q4 2019	325,096,900
Q1 2020	69,289,200
Sum total	1,285,372,300

Optionally, we can filter the Opportunities by State to see only those that are relevant to us. Or we can filter by date to get reports only for a recent or future quarter.

We can also switch to relative values to see the relative change between individual quarters (see the [example no. 30](#)).

24. Sum of overall Bandwidth measured over Months

Table:  Server Traffic

Usage: We want to see the overall Bandwidth of all servers over months to know whether we need to further expand our infrastructure.

Row Label: *Time*, months and years

Column Label: —

Summation Value: sum of *Bandwidth*

	Sum of Bandwidth
10.2017	13,546,085.48
11.2017	642,872.56
Sum total	14,188,958.04

Optionally, we can see the relative Bandwidth across Zones (see the [example no. 32](#)), or across both Zones and months (see the [example no. 49](#)).

Using relative values

Relative values are nothing more than just percentages. It is important to notice whether we count percentages of rows, columns, or all the values. This can change the whole meaning.

25. Relative Sales by Product line

Table:  Sales

Usage: We want to see which Product line generates the biggest revenue relatively in percentage, so that we can easily imagine the overall value.

Row Label: *Product line*

Column Label: —

Summation Value: sum of *Gross Income*, relative % of column

	Sum of gross income
Electronic accessories	16.82%
Fashion accessories	16.81%
Food and beverages	17.38%
Health and beauty	15.23%
Home and lifestyle	16.68%
Sports and travel	17.07%
Sum total	100.00%

As we can see, our sales are mostly balanced. We can see some opportunities in Health and beauty for example.

Optionally, we can differentiate by the buyer Gender as can be seen in the [example no. 35](#).

26. Relative count of Accounts in our portfolio by the year of the first contact

Table: 📊 Accounts

Usage: We want to see how good we are in scaling our sales funnel and in searching for new prospects.

Row Label: Year

Column Label: —

Summation Value: count of Account, relative % of column

	Count of Account
2005	0.68%
2006	0.79%
2007	2.15%
2008	1.59%
2009	2.72%
2010	4.42%
2011	8.27%
2012	12.00%
2013	8.38%
2014	15.29%
2015	21.97%
2016	21.74%
Sum total	100.00%

Optionally, we can filter out the accounts by Lead Status to remove those that are not relevant to us.

Or we can filter out the most significant Industries, and group by Industry and Lead Status as can be seen in the [example no. 50](#).

27. Relative count of Orders by their payment status

Table:  Orders

Usage: We want to see the relative count of Orders by their Payment state.

Row Label: *Paid?*

Column Label: —

Summation Value: count of *Order No*

	Count of Order No
<input type="checkbox"/>	58.79%
<input checked="" type="checkbox"/>	41.21%
Sum total	100.00%

Optionally, we can see a complete picture of both Paid? and Completed? states in percentages (see the [example no. 41](#)).

28. Relative time spent working on each project Component

Table:  Tasks

Usage: We want to see which part of the project took us the most relative time to complete. We can compare the real situation to our original estimates.

Row Label: *Component*

Column Label: —

Summation Value: sum of *Time worked*, relative % of column

	Sum of Time worked
UI	12.59%
Monitoring	13.47%
Deployment	12.07%
Notifications	12.62%
Load-balancer	12.29%
Database	13.09%
Backend	12.08%
Network	11.79%
Sum total	100.00%

Optionally, we can group the Tasks by *Assignee* or filter out Tasks only in certain *State* (e.g. Done) – see the [example no. 33](#) and the [example no. 46](#).

29. Relative number of Complaints by Years

Table:  CRM

Usage: We want to see the relative count of complaints over years which gives a better idea of the development of our quality of service.

Row Label: *Date, years*

Column Label: —

Summation Value: sum of *Initial Complaints*, relative % of columns

	Sum of Initial Complaints
2005	7.08%
2006	7.66%
2007	6.38%
2008	7.67%
2009	7.42%
2010	6.35%
2011	7.28%
2012	6.00%
2013	6.23%
2014	8.27%
2015	7.80%
2016	5.89%
2017	5.57%
2018	6.09%
2019	4.31%
Sum total	100.00%

30. Relative sum of Opportunity Values by quarter

Table:  Opportunities

Usage: We want to see what is the relative sum of all Opportunities in given quarters so that we can easily compare quarters between themselves.

Row Label: *Date logged*, quarters

Column Label: —

Summation Value: sum of *Value*, relative % of column

	Sum of Value
Q1 2019	20.32%
Q2 2019	26.26%
Q3 2019	22.74%
Q4 2019	25.29%
Q1 2020	5.39%
Sum total	100.00%

We can further group the Opportunities by both quarters and State as can be seen in the [example no. 40](#).

31. Relative count of Interviews per quarters

Table: 👤 Interviews

Usage: We want to see how many Interviews we perform relatively between individual quarters. This can reveal underutilization of our teams.

Row Label: *Date*, quarters

Column Label: —

Summation Value: count of *Client Name*, relative % of column

	Count of Client Name
Q1 2014	0.34%
Q2 2014	0.34%
Q1 2015	3.31%
Q2 2015	12.82%
Q4 2015	1.61%
Q1 2016	33.45%
Q2 2016	29.88%
Q3 2016	8.74%
Q4 2016	9.42%
Q2 2017	0.08%
Sum total	100.00%

Optionally, we can introduce one more dimension like Position Type as can be seen in the [example no. 48](#).

32. Relative overall Bandwidth measured across Zones

Table:  Server Traffic

Usage: We want to compare relative Bandwidth between individual server Zones to understand their utilization.

Row Label: Zone

Column Label: —

Summation Value: sum of *Bandwidth*, relative % of columns

	Sum of Bandwidth
ZONE01	97.88%
ZONE03	2.12%
Sum total	100.00%

Optionally, we can further group by months of the year as demonstrated in the [example no 49](#).

Grouping by two fields

Now, after grouping by one field (also called column or dimension), we will group the records by two fields.

Values from one column will be listed in rows and the values from another column will be listed in columns. And we will be using both configuration options – *Row Label* and *Column Label*.

33. Tasks by Assignee and State










Table:  Tasks

Usage: We want to see who has how many tasks in what state. This can help us identify bottlenecks and gaps in our task assignments.

Row Label: Assignee

Column Label: State

Summation Value: count of Task

	New	Open	In Progress	Done	Outdated	Sum total
 bob@lumeerio.com	31	61	57	90	31	270
 eugen@lumeerio.com	24	58	55	96	28	261
 gary@lumeerio.com	26	66	53	94	40	279
 john@lumeerio.com	30	64	68	106	36	304
 karen@lumeerio.com	28	56	65	104	36	289
 larry@lumeerio.com	36	75	76	97	22	306
 patrick@lumeerio.com	23	65	65	109	26	288
 pearl@lumeerio.com	24	66	64	73	39	266
 sandy@lumeerio.com	31	63	69	81	36	280
Sum total	253	574	572	850	294	2543

We can see that Larry has an outstanding amount of Tasks Open and In Progress. He has a similar overall number of Tasks to John. Maybe they could rebalance a few Tasks.

Optionally, we can switch to relative display in % by rows or overall. We can also filter out some states that are not interesting to us.

34. Accounts by Industry and Lead status

Table: 📊 Accounts

Usage: We want to see if there is any Industry where we are more successful. We can also see whether there is an Industry where our sales process stops suddenly in the middle.

Row Label: *Lead Status*

Column Label: *Industry*

Summation Value: count of *Account*

		B2B	Biomedical	Consumer	Developer Tools	Education	Enterprise	Fintech	Hardware	Marketplace	Sum total
New	3	34	5	33	6	4	5	5	4	3	102
Open	3	33	3	30	21	3	5	12	12	5	127
In Progress		29	6	37	8	3	10	3	5	7	108
Open Deal		41	1	20	13	1	6	8	8	12	110
Unqualified	1	42	4	27	13	6	4	9	10	9	125
Attempted to Contact		35	8	27	9	1	11	6	9	10	116
Connected		31	1	18	15		9	2	5	4	85
Bad Timing	2	32	2	33	12	3	7	2	9	8	110
Sum total	9	277	30	225	97	21	57	47	62	58	883

B2B and Consumer are definitely our core domains. On the other hand, Fintech seems to be struggling after opening the case.

Optionally, we can see the relative values for the whole table as is demonstrated in the [example no. 42](#).

35. Sales by Product line and Gender

Table:  Sales

Usage: We want to see the number of sales made in our supermarkets by Product line and Gender to see what the demand is and where our gaps are.

Row Label: *Product line*

Column Label: *Gender*

Summation Value: count of *Invoice ID*

	Male	Female	Sum total
Electronic accessories	86	84	170
Fashion accessories	82	96	178
Food and beverages	84	90	174
Health and beauty	88	64	152
Home and lifestyle	81	79	160
Sports and travel	78	88	166
Sum total	499	501	1000

What might provide us a slightly more precise value is the amount of total income. However, to compare it easily, we can switch to relative values as can be seen in the [example no. 43](#).

36. Sales by Supermarket and the hour of the day

Table:  Sales

Usage: We want to see how many Sales we have in our supermarkets depending on the hour of the day. We can then reconsider our opening hours for example.

Row Label: *Time, hours*

Column Label: *Branch*

Summation Value: count of *Invoice ID*

	A	B	C	Sum total
11	38	26	37	101
12	35	33	22	90
13	33	25	31	89
14	31	38	34	103
15	25	30	28	83
16	37	32	33	102
17	32	17	28	77
18	27	20	27	74
19	33	35	25	93
20	27	50	36	113
21	22	26	27	75
Sum total	340	332	328	1000

As we can see, the lowest sales are around 20. Both A and C open at 11 and start with 38 and 37 respectively. There might be a potential in opening at 10.

On the other hand, closing A an hour earlier might in the end bring some cost savings.

Optionally, we can see the relative Sales by the hour of the day and the day of the week – see the [example no. 57](#).

37. Interviews by Client Name and Date

Table: 👤 Interviews

Usage: We want to see how many candidates we interviewed for every single Client in a given quarter.

Row Label: *Client Name*

Column Label: *Date, quarters*

Summation Value: count of *Date*

	Q1 2014	Q2 2014	Q1 2015	Q2 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q2 2017	Sum total
ANZ							22				22
Aon Hewitt			5				25				30
Astrazeneca							15				15
Barclays			5								5
Flextronics				4	19						23
Hewitt			9	11							20
Hospira			5	30			40				75
Pfizer	0	4		1			33	20		1	59
Prodapt		4	13								17
Standard Chartered Bank	0			77		394	217	83	111		882
UST				18							18
Williams Lea			2	9							11
Woori Bank				1							1
	0										0
Sum total	0	4	4	39	151	19	394	352	103	111	1178

Optionally, could see the relative count of Interviews by quarter and Position Type as demonstrated in the [example no. 48](#).

38. Value of Orders by Completed? and Paid? state

Table:  Orders

Usage: We want to see what potential in our revenue we have hidden in complete and incomplete Orders and what is the value that is still unpaid.

Row Label: *Completed?*

Column Label: *Paid?*

Summation Value: sum of *Total amount*

	<input type="checkbox"/> Paid?	<input checked="" type="checkbox"/> Paid?	Sum total
<input type="checkbox"/> Completed?	1,065,045	725,402	1,790,447
<input checked="" type="checkbox"/> Completed?	2,546,159	1,861,085	4,407,244
Sum total	3,611,204	2,586,487	6,197,691

Optionally, we can add more dimensions to see which customers are our biggest debtors. Or we can switch to relative values as can be seen in the [example no. 41](#).

39. Gross Income by Product Line and Branch

Table:  Sales

Usage: We want to see our Income by Product line and Branch to understand what and where do we sell. This can help us identify new opportunities and further prioritize our marketing efforts.

Row Label: *Product line*

Column Label: *Branch*

Summation Value: sum of *gross income*

	A	B	C	Sum total
Electronic accessories	872.24	811.97	903.28	2587.50
Fashion accessories	777.74	781.59	1026.67	2586.00
Food and beverages	817.29	724.52	1131.76	2673.56
Health and beauty	599.89	951.46	791.21	2342.56
Home and lifestyle	1067.49	835.67	661.69	2564.85
Sports and travel	922.51	951.82	750.57	2624.90
Sum total	5057.16	5057.03	5265.18	15379.37

We are good in Food and beverages and Sports and travel. A and B seems a bit behind in the first Product line while C has a gap in the later Product line.

We can further examine other views of the Income as is demonstrated in the examples no. [43](#), [44](#), and [45](#).

40. Count of Opportunities by quarter of Date logged and State

Table:  Opportunities**Usage:** We want to see how successful we are in carrying forward our Opportunities. This is best seen in their grouping by quarters and State. Older Opportunities should be more advanced in the cycle. Is it the case?**Row Label:** *Date logged***Column Label:** *State***Summation Value:** count of *Opportunity*

	New	Open	In Progress	Open Deal	Unqualified	Attempted to Contact	Connected	Bad Timing	Sum total
Q1 2019	68	55	44	58	72	69	70	84	520
Q2 2019	90	92	77	83	81	82	83	68	656
Q3 2019	79	61	77	63	86	80	81	76	603
Q4 2019	81	83	78	84	84	72	78	78	638
Q1 2020	18	17	19	10	14	16	13	19	126
Sum total	336	308	295	298	337	319	325	325	2543

We can see that we have a lower number of Open Deals in Q3 compared to Q2 and Q4. We probably missed something there which might be worth investigating.

For a more advanced use case, have a look at the [example no. 58](#).

Grouping by two fields and showing relative values

When we combine the previous knowledge, we can group by multiple fields, even fields with aggregated values (like months and years), and showing relative values.

Let's have a look at what this can bring to us!

41. Relative Count of Orders by Completed? and Paid? state

Table:  Orders

Usage: We want to see how many Orders we have relatively in every possible combination of Paid? and Completed? state. This can help us understand where we need to focus most to improve our cash flow.

Row Label: Completed?

Column Label: Paid?

Summation Value: count of Order No, relative % of all values

	<input type="checkbox"/> Paid?	<input checked="" type="checkbox"/> Paid?	Sum total
<input type="checkbox"/> Completed?	16.85%	12.18%	29.03%
<input checked="" type="checkbox"/> Completed?	41.94%	29.03%	70.97%
Sum total	58.79%	41.21%	100.00%

As in the previous example, we can focus on what clients cause us the high amount of unpaid Orders and improve our business deals with them.

For a more advanced use case based on the Orders table, have a look at the [example no. 56](#).

42. Relative count of Accounts by Industry and Lead status

Table: 📊 Accounts

Usage: We want to see if there is any industry where we are more successful. We can also see whether there is an industry where our sales process stops suddenly in the middle.

Row Label: *Lead Status*

Column Label: *Industry*

Summation Value: count of *Account*, relative % of all values

		B2B	Biomedical	Consumer	Developer Tools	Education	Enterprise	Fintech	Hardware	Marketplace	Sum total
New	0.34%	3.85%	0.57%	3.74%	0.68%	0.45%	0.57%	0.57%	0.45%	0.34%	11.55%
Open	0.34%	3.74%	0.34%	3.40%	2.38%	0.34%	0.57%	1.36%	1.36%	0.57%	14.38%
In Progress	0.00	3.28%	0.68%	4.19%	0.91%	0.34%	1.13%	0.34%	0.57%	0.79%	12.23%
Open Deal	0.00	4.64%	0.11%	2.27%	1.47%	0.11%	0.68%	0.91%	0.91%	1.36%	12.46%
Unqualified	0.11%	4.76%	0.45%	3.06%	1.47%	0.68%	0.45%	1.02%	1.13%	1.02%	14.16%
Attempted to Contact	0.00	3.96%	0.91%	3.06%	1.02%	0.11%	1.25%	0.68%	1.02%	1.13%	13.14%
Connected	0.00	3.51%	0.11%	2.04%	1.70%	0.00	1.02%	0.23%	0.57%	0.45%	9.63%
Bad Timing	0.23%	3.62%	0.23%	3.74%	1.36%	0.34%	0.79%	0.23%	1.02%	0.91%	12.46%
Sum total	1.02%	31.37%	3.40%	25.48%	10.99%	2.38%	6.46%	5.32%	7.02%	6.57%	100.00%

B2B and Consumer are definitely our core domains. On the other hand Fintech seems to be struggling after opening the case.

We can see that B2B, Consumer and Developer Tools are our top three industries. Next, we can filter those industries and see relative column values to verify that the process does not get stuck anywhere (see the [example no. 50](#)).

43. Relative Gross Income by Product Line and Gender

Table:  Sales

Usage: Now, we want to have a look on our Gross Income based on the Product line and Gender from multiple perspectives. We will start with inspecting how the interest in individual Product lines is split inside each of the Gender groups.

Row Label: *Product line*

Column Label: *Gender*

Summation Value: sum of *gross income*, relative % of column

	Male	Female
Electronic accessories	17.56%	16.14%
Fashion accessories	15.39%	18.13%
Food and beverages	14.81%	19.76%
Health and beauty	19.75%	11.06%
Home and lifestyle	15.36%	17.89%
Sports and travel	17.12%	17.02%
Sum total	100.00%	100.00%

We can see that surprisingly, men are mostly interested in Health and beauty Product line while women shop most in the Food and beverages area.

Please proceed to the next [example no. 44](#) for further experimentation.

44. Relative Gross Income by Gender and Product Line

Table:  Sales

Usage: Next, we will have a look how the interest in individual Product lines is divided between genders. This ignores the overall amount of Male and Female customers, it just compares their interest in the Product lines.

Row Label: *Product line*

Column Label: *Gender*

Summation Value: sum of *gross income*, relative % of row

	Male	Female
Electronic accessories	50.12%	49.88%
Fashion accessories	43.95%	56.05%
Food and beverages	40.92%	59.08%
Health and beauty	62.27%	37.73%
Home and lifestyle	44.23%	55.77%
Sports and travel	48.16%	51.84%
Sum total	48.02%	51.98%

It mostly provides the same information as in the previous example. However, we can now see the relative difference between men and women. For example, the Food and beverages Product line division is almost 40:60, or 2:3 if you will. This is a significant difference that deserves further investigation.

Please proceed to the last [example no. 45](#) in this series.

45. Relative Gross Income relative to Product Line and Gender

Table:  Sales**Usage:** The last example uses the overall relative value across the whole table. It reflects both Product lines and Genders at the same time.**Row Label:** *Product line***Column Label:** *Gender***Summation Value:** sum of *gross income*, relative % of all values

	Male	Female
Electronic accessories	8.43%	8.39%
Fashion accessories	7.39%	9.42%
Food and beverages	7.11%	10.27%
Health and beauty	9.48%	5.75%
Home and lifestyle	7.38%	9.30%
Sports and travel	8.22%	8.85%
Sum total	48.02%	51.98%

We can see that our no. 1 best seller is the Food and beverages Product line being bought by women. Following is Health and beauty bought by men.

Some more advanced examples are listed under [no. 50](#) and [no. 57](#). Especially the later one ([57](#)) reveals quite an interesting way of looking at the data.


46. Relative Time worked on a project by individual Assignees

Table:  Tasks**Usage:** We want to see how individual team members participated on a project to better align bonuses etc.**Row Label:** Assignee**Column Label:** —**Summation Value:** sum of *Time worked*, relative % of column

	Sum of Time worked
 bob@lumeerio.com	12.47%
 eugen@lumeerio.com	12.16%
 gary@lumeerio.com	11.06%
 john@lumeerio.com	9.42%
 karen@lumeerio.com	11.50%
 larry@lumeerio.com	10.67%
 patrick@lumeerio.com	11.16%
 pearl@lumeerio.com	10.96%
 sandy@lumeerio.com	10.59%
Sum total	100.00%

Optionally, we can further group the Time by months. More advanced examples can be found under [no. 52](#), [no. 53](#), [no. 54](#) and [no. 55](#).

47. Relative value of Opportunities according to State and Priority









Table:  Opportunities

Usage: We want to see what Opportunities we have in what state of the process depending on their Priority. We would expect the ones with higher Priority to be further.

Row Label: State

Column Label: Priority

Summation Value: count of Opportunity, relative % of all values

									Sum total
New		3.39%		2.78%		3.02%		3.69%	12.88%
Open		3.74%		2.77%		2.78%		2.69%	11.98%
In Progress		2.77%		2.95%		2.95%		2.59%	11.27%
Open Deal		3.24%		2.84%		2.58%		3.05%	11.71%
Unqualified		3.46%		2.85%		3.37%		2.97%	12.64%
Attempted to Contact		3.06%		3.26%		2.97%		3.57%	12.86%
Connected		3.20%		3.64%		3.52%		3.15%	13.51%
Bad Timing		3.31%		3.03%		3.10%		3.72%	13.14%
Sum total		26.17%		24.12%		24.28%		25.42%	100.00%

Surprisingly, over lowest priority (blue) holds the biggest share. We can reconsider how we spend our efforts.

In the [example no. 58](#), you can find one more advanced use case.

48. Relative count of Interviews by quarters and Position Type

Table: 👤 Interviews

Usage: We want to see the relative count of Interviews by quarter and Position Type. Do we have experts in our team for specific Position Types who can be better utilised in some quarter?

Row Label: Date, quarters**Column Label:** Position Type**Summation Value:** count of Client Name, relative % of rows

	AML	Dot Net	Niche	Production- Sterile	Routine	Selenium testing	Trade Finance	Sum total
Q1 2014	0.00	0.00	0.00	0.00	100.00%	0.00	0.00	100%
Q2 2014	0.00	0.00	0.00	0.00	100.00%	0.00	0.00	100%
Q1 2015	0.00	0.00	12.82%	12.82%	61.54%	12.82%	0.00	100%
Q2 2015	5.30%	11.92%	8.61%	0.00	66.89%	0.00	7.28%	100%
Q4 2015	0.00	0.00	0.00	0.00	100.00%	0.00	0.00	100%
Q1 2016	0.00	0.00	0.00	0.00	100.00%	0.00	0.00	100%
Q2 2016	0.00	0.00	26.99%	0.00	73.01%	0.00	0.00	100%
Q3 2016	0.00	0.00	33.01%	0.00	66.99%	0.00	0.00	100%
Q4 2016	0.00	0.00	0.00	0.00	100.00%	0.00	0.00	100%
Q2 2017	0.00	0.00	0.00	0.00	100.00%	0.00	0.00	100%
Sum total	0.68%	1.53%	12.48%	0.42%	83.53%	0.42%	0.93%	100%

We can see that we were successful in some domains where we had only one contract (Production-Sterile, Selenium testing, Trade Finance). We are obviously able to meet customer needs and we can seek for more contracts in these areas.

Optionally, we can even add the Industry dimension as can be seen in the examples [no. 59](#) and [no. 60](#).

49. Relative overall Bandwidth measured across Zones and Months

Table:  Server Traffic

Usage: We want to see the relative Bandwidth of all servers in Zones over months to know whether we need to further expand our infrastructure.

Row Label: Zone

Column Label: Time, months and years

Summation Value: sum of *Bandwidth*, relative % of columns

	10.2017	11.2017	Sum total
ZONE01	98.01%	95.23%	97.88%
ZONE03	1.99%	4.77%	2.12%
Sum total	100.00%	100.00%	100.00%

One more advanced use case for Server Traffic can be seen in the [example no. 61](#).

Complex scenarios

In this section we will combine all the features of Pivot Tables that we have seen so far. We will also use multiple fields both as *Column Labels* and *Row Labels*. Advanced grouping and relative values are demonstrated as well.

50. Relative count of Accounts by Industry and Lead status filtered to most significant Industries

Table: 📊 Accounts

Usage: We want to see if there is any industry where we are more successful. We can also see whether there is an industry where our sales process stops suddenly in the middle.

Row Label: *Lead Status*

Column Label: *Industry*

Filter: Industry in B2B, Consumer, Developer Tools

Summation Value: count of *Account*, relative % of column

	B2B	Consumer	Developer Tools	Sum total
New	12.27%	14.67%	6.19%	12.19%
Open	11.91%	13.33%	21.65%	14.02%
In Progress	10.47%	16.44%	8.25%	12.35%
Open Deal	14.80%	8.89%	13.40%	12.35%
Unqualified	15.16%	12.00%	13.40%	13.69%
Attempted to Contact	12.64%	12.00%	9.28%	11.85%
Connected	11.19%	8.00%	15.46%	10.68%
Bad Timing	11.55%	14.67%	12.37%	12.85%

As we can see, we have a relatively high number of Bad Timing results in the Consumer industry. This is definitely an area of opportunity.

51. Relative amount of Sales by Branch, Gender and Product Line

Table:  Sales

Usage: We want to see how the Product lines sales are distributed among individual Branches and customer Gender groups. We can easily search for any anomalies that can be identified as opportunities or gaps.

Row Label: *Branch; Gender*

Column Label: *Product Line*

Summation Value: sum of *Total*, relative % of row

		Electronic accessories	Fashion accessories	Food and beverages	Health and beauty	Home and lifestyle	Sports and travel
A	Male	15.78%	12.27%	19.20%	13.00%	18.48%	21.27%
	Female	18.71%	18.47%	13.14%	10.73%	23.72%	15.23%
Summary of A		17.25%	15.38%	16.16%	11.86%	21.11%	18.24%
B	Male	16.68%	13.76%	8.83%	25.49%	15.00%	20.23%
	Female	15.43%	17.16%	19.86%	12.09%	18.06%	17.41%
Summary of B		16.06%	15.46%	14.33%	18.81%	16.52%	18.82%
C	Male	20.46%	20.54%	16.58%	20.80%	12.38%	9.24%
	Female	14.54%	18.67%	25.39%	10.45%	12.71%	18.23%
Summary of C		17.16%	19.50%	21.50%	15.03%	12.57%	14.26%
Sum total		16.82%	16.81%	17.38%	15.23%	16.68%	17.07%

If we look for anomalies, we can see that in Branch B, male customers spend significantly less for Food and beverages. The same applies to males in Branch C in the Product line Sports and travel.

These are our areas of opportunity.

52. Tasks by Stage and Due date in quarters, count

Table:  Tasks

Usage: We want to know how many Tasks are about to be completed for which project Stage in given quarters. We would expect the project to mature over time and our Tasks to shift more toward more mature Stages. Is this the case?

Row Label: Stage**Column Label:** Due date, quarters**Summation Value:** count of Task

	Q4 2019	Q2 2019	Q3 2019	Q1 2019	Q1 2020	Sum total
Planning	111	100	117	76	41	445
Research	108	121	97	63	54	443
Underway	96	99	113	54	36	398
Staged	119	121	102	56	43	441
Production	109	117	98	69	36	429
Deferred	93	106	101	51	36	387
Sum total	636	664	628	369	246	2543

Unfortunately, our expectations are not met. The result looks rather balanced and almost equally distributed. We need to focus on increasing project stability.

53. Tasks by Stage and Due date in quarters, Difficulty sum

Table:  Tasks

Usage: This is a similar example to the previous one. However, now we watch for the overall Difficulty of tasks being worked on in individual stages and quarters. We expect the project to mature more. And even though we might be having more tasks to work on, they should be getting relatively easier.

Row Label: Stage**Column Label:** Due date, quarters**Summation Value:** sum of Difficulty

	Q4 2019	Q2 2019	Q3 2019	Q1 2019	Q1 2020	Sum total
Planning	284	252	300	183	89	1108
Research	286	323	235	170	138	1152
Underway	250	254	261	132	72	969
Staged	293	279	267	139	98	1076
Production	270	315	244	167	94	1090
Deferred	240	290	241	115	92	978
Sum total	1623	1713	1548	906	583	6373

And this is really true – the difficulty gets lower over time. Almost a third of what we have started with.

54. Tasks by Stage, State and Due date in quarters, count of Task

Table:  Tasks**Usage:** In addition to the [example no. 52](#), we want to drill down a bit further and group the Tasks also by their State. We should see more completed Tasks in the pre-mature Stages.**Row Label:** Stage; State**Column Label:** Due date, quarters**Summation Value:** count of Task

		Q4 2019	Q2 2019	Q3 2019	Q1 2019	Q1 2020	Sum total
Planning	Done	35	35	38	26	12	146
	In Progress	29	24	23	20	4	100
	Open	30	23	32	19	8	112
	Outdated	7	8	15	7	9	46
	New	10	10	9	4	8	41
Summary of Planning		111	100	117	76	41	445
Research	Outdated	9	15	10	5	8	47
	In Progress	22	25	24	15	13	99
	Done	41	43	38	26	16	164
	Open	28	26	17	11	12	94
	New	8	12	8	6	5	39
Summary of Research		108	121	97	63	54	443
Underway	Open	18	21	27	13	13	92
	Done	37	31	34	14	11	127
	New	9	10	7	4	2	32

55. Tasks by Assignee and State, count of Task, sum of Difficulty










Table:  Tasks

Usage: Let's have a look at the Task Difficulty and their assignments to individual team members. We expect our senior people to work either on a larger amount of Tasks or taking the more Difficult Tasks.

Row Label: Assignee

Column Label: State

Summation Value: count of Task; sum of Difficulty

	New		Open		In Progress		Done		Outdated	
	Count of Task	Sum of Difficulty	Count of Task	Sum of Difficulty	Count of Task	Sum of Difficulty	Count of Task	Sum of Difficulty	Count of Task	Sum of Difficulty
 bob@lumeerio.com	31	82	61	153	57	131	90	231	31	82
 eugen@lumeerio.ci	24	63	58	153	55	148	96	228	28	70
 gary@lumeerio.cor	26	63	66	171	53	143	94	235	40	93
 john@lumeerio.cor	30	73	64	151	68	153	106	269	36	92
 karen@lumeerio.cc	28	61	56	148	65	161	104	281	36	78
 larry@lumeerio.cor	36	99	75	189	76	182	97	238	22	59
 patrick@lumeerio.x	23	59	65	180	65	154	109	294	26	50
 pearl@lumeerio.coi	24	67	66	171	64	149	73	181	39	93
 sandy@lumeerio.cc	31	63	63	161	69	193	81	194	36	84
Sum total	253	630	574	1477	572	1414	850	2151	294	701

56. Relative Orders Total amount by Month and Year, and average Order value

Table:  Orders**Usage:** We want to see the relative sum of Orders and the average Order value by months, further divided by the payment state. The ideal situation would be to have only a few unpaid Orders in earlier months.**Row Label:** *Date created***Column Label:** *Paid?***Summation Value:** sum of *Total amount*, relative % of column; average of *Total amount*

	<input type="checkbox"/> Paid?		<input checked="" type="checkbox"/> Paid?	
	Sum of Total amount	Average of Total amo...	Sum of Total amount	Average of Total amo...
01.2019	4.72%	4732.28	4.13%	5628.58
02.2019	7.16%	4875.43	8.23%	5319.28
03.2019	9.90%	4897.96	9.03%	5693.76
04.2019	9.16%	5511.70	7.09%	4584.83
05.2019	9.34%	5031.84	8.98%	4646.88
06.2019	7.31%	4979.83	8.14%	5135.46
07.2019	7.11%	4941.06	9.35%	5258.78
08.2019	8.23%	4793.56	7.82%	5187.69
09.2019	7.70%	5052.47	6.46%	4399.47
10.2019	7.01%	4605.76	8.96%	5655.07
11.2019	7.27%	4774.84	10.15%	4606.07
12.2019	9.92%	5270.25	6.66%	5068.32
01.2020	5.17%	4669.88	4.98%	5156.28
Sum total	100.00%	64136.86	100.00%	66340.47

The results are actually almost the exact opposite of what we expected. The older the orders, the higher ratio of unpaid orders. But this might be caused by simply having more or larger orders in the past.

57. Relative Sales amount by the Day of week and Hour of the day

Table:  Sales

Usage: We want to see at what time of the day and what day of the week the customers spend the most with us. This can help us to better target special events, discounts etc.

Row Label: *Date*, day of week

Column Label: *Time*, hour of the day

Summation Value: sum of *Total*, relative % of all values

	11	12	13	14	15	16	17	18	19	20	21	Sum total
Sun	1.26%	1.47%	1.46%	1.60%	1.45%	0.83%	0.69%	1.29%	1.13%	1.85%	0.74%	13.77%
Mon	1.16%	0.89%	1.46%	1.16%	0.62%	1.59%	1.45%	0.98%	0.87%	0.80%	0.74%	11.73%
Tue	1.42%	1.62%	1.16%	1.23%	1.53%	2.17%	1.19%	0.92%	0.75%	2.85%	1.11%	15.94%
Wed	0.98%	1.55%	1.00%	2.09%	0.99%	1.50%	1.00%	0.96%	1.31%	1.29%	0.86%	13.54%
Thu	2.13%	1.36%	0.79%	0.80%	1.69%	1.34%	1.34%	1.26%	0.94%	0.99%	1.40%	14.04%
Fri	1.76%	0.82%	0.67%	2.11%	1.60%	1.14%	0.96%	0.59%	0.98%	1.70%	1.28%	13.60%
Sat	1.02%	1.70%	1.52%	1.76%	1.65%	1.07%	1.18%	1.57%	2.09%	2.82%	0.99%	17.38%
Sum total	9.73%	9.41%	8.07%	10.75%	9.55%	9.65%	7.81%	7.57%	8.06%	12.29%	7.11%	100.00%

We are experiencing two peaks – at 2PM (14) and at 8PM (20). Also Tuesday and Saturday seems to be our strongest days. Also notice that the rush hours in our strongest days are shifted from the average.

























As you can see, we are using the same field for both Row and Column Labels. We are just grouping by a different part of it which creates a very useful matrix.

58. Relative count of Opportunities according to State and Priority per quarters

Table:  Opportunities

Usage: We want to make sure we put higher stress on Opportunities of higher priority (blue - lowest, green, yellow, red - highest). We also filter out only relevant states – In Progress, Open Deal, Unqualified, Bad Timing. We want to see more Open Deals with higher priorities and we want to be getting better over time.

Row Label: Date, quarter; Priority**Column Label:** State, filtered to In Progress, Open Deal, Unqualified, Bad Timing**Summation Value:** count of Opportunity

			In Progress	Open Deal	Unqualified	Bad Timing
Q1 2019			14.29%	20.78%	28.57%	36.36%
			25.00%	26.92%	28.85%	19.23%
			13.79%	18.97%	34.48%	32.76%
			16.90%	23.94%	21.13%	38.03%
Summary of Q1 2019			17.05%	22.48%	27.91%	32.56%
Q2 2019			31.17%	28.57%	23.38%	16.88%
			25.68%	25.68%	28.38%	20.27%
			23.61%	27.78%	26.39%	22.22%
			19.77%	25.58%	26.74%	27.91%
Summary of Q2 2019			24.92%	26.86%	26.21%	22.01%
Q3 2019			22.54%	21.13%	29.58%	26.76%
			26.32%	21.05%	30.26%	22.37%
			25.88%	14.12%	32.94%	27.06%
			27.14%	28.57%	20.00%	24.29%

59. Relative count of Interviews by quarters, Industry and Position Type

Table: 👤 Interviews

Usage: We want to know what Position Types we sourced for individual Industries over the past quarters. This can show us the evolution of our agency and identify areas with expertise that we have abandoned and where we can get more contracts.

Row Label: Date, quarters

Column Label: Industry; Position Type

Summation Value: count of Client Name, relative % of rows

	BFSI				Electronics		IT		IT Products and Servi...		IT Services		Pharmaceuticals			Telecom
	AML	Niche	Routine	Trade Finance	Niche	Routine	Niche	Routine	Niche	Routine	Dot Net	Selenium testing	Niche	Production- Sterile	Routine	Routine
Q1 2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00%
Q2 2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00%	0.00
Q1 2015	0.00	12.82%	0.00	0.00	0.00	0.00	0.00	5.13%	0.00	23.08%	0.00	12.82%	0.00	12.82%	0.00	33.33%
Q2 2015	5.30%	3.31%	35.76%	7.28%	2.65%	0.00	2.65%	3.31%	0.00	7.28%	11.92%	0.00	0.00	0.00	20.53%	0.00
Q4 2015	0.00	0.00	0.00	0.00	0.00	100.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Q1 2016	0.00	0.00	100.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Q2 2016	0.00	6.25%	61.65%	0.00	0.00	0.00	0.00	0.00	3.41%	3.69%	0.00	0.00	17.33%	0.00	7.67%	0.00
Q3 2016	0.00	14.56%	66.02%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.45%	0.00	0.97%	0.00
Q4 2016	0.00	0.00	100.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Q2 2017	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00%	0.00
Sum total	0.68%	3.99%	71.65%	0.93%	0.34%	1.61%	0.34%	0.59%	1.02%	2.80%	1.53%	0.42%	6.79%	0.42%	5.43%	1.44%

Again, we should focus on the columns where there are only a few non-zero values!

60. Relative count of Interviews by Industry, quarter and Position Type

Table: 👤 Interviews

Usage: This is almost the same setup as in the [previous example](#). However, we moved the Industry from the Column Label to the Row Label. This creates an effect of multiple tables and also reveals missing quarters in some of the Industries.

Row Label: *Industry; Date, quarters*

Column Label: *Position Type*

Summation Value: count of *Client Name*, relative % of rows

		AML	Dot Net	Niche	Production- Sterile	Routine	Selenium testing	Trade Finance
BFSI	Q1 2015	0.00	0.00	100.00%	0.00	0.00	0.00	0.00
	Q2 2015	10.26%	0.00	6.41%	0.00	69.23%	0.00	14.10%
	Q1 2016	0.00	0.00	0.00	0.00	100.00%	0.00	0.00
	Q2 2016	0.00	0.00	9.21%	0.00	90.79%	0.00	0.00
	Q3 2016	0.00	0.00	18.07%	0.00	81.93%	0.00	0.00
	Q4 2016	0.00	0.00	0.00	0.00	100.00%	0.00	0.00
Summary of BFSI		0.88%	0.00%	5.16%	0.00%	92.75%	0.00%	1.21%
Electronics	Q2 2015	0.00	0.00	100.00%	0.00	0.00	0.00	0.00
	Q4 2015	0.00	0.00	0.00	0.00	100.00%	0.00	0.00
Summary of Electronics		0.00%	0.00%	17.39%	0.00%	82.61%	0.00%	0.00%
IT	Q1 2015	0.00	0.00	0.00	0.00	100.00%	0.00	0.00
	Q2 2015	0.00	0.00	44.44%	0.00	55.56%	0.00	0.00
Summary of IT		0.00%	0.00%	36.36%	0.00%	63.64%	0.00%	0.00%
IT Products and Services	Q1 2015	0.00	0.00	0.00	0.00	100.00%	0.00	0.00
	Q2 2015	0.00	0.00	0.00	0.00	100.00%	0.00	0.00
	Q2 2016	0.00	0.00	48.00%	0.00	52.00%	0.00	0.00
Summary of IT Products and Services		0.00%	0.00%	26.67%	0.00%	73.33%	0.00%	0.00%
IT Services	Q1 2015	0.00	0.00	0.00	0.00	0.00	100.00%	0.00

61. Relative average Bandwidth and average count Users in Zones across Weeks

Table:  Server Traffic

Usage: We want to see how the relative average Bandwidth and relative average number of Users is divided between server Zones over the weeks. This can reveal important information about spikes in the overall server usage as well as underutilization of our infrastructure.

Row Label: Time, weeks

Column Label: Zone

Summation Value: average of *Bandwidth*, relative % of row; average of *Users*, relative % of row

	ZONE01		ZONE03	
	Average of Bandwidth	Average of Users	Average of Bandwidth	Average of Users
W39 2017	100.00%	100.00%	0.00	0.00
W40 2017	100.00%	100.00%	0.00	0.00
W41 2017	100.00%	100.00%	0.00	0.00
W42 2017	100.00%	100.00%	0.00	0.00
W43 2017	93.37%	93.34%	6.63%	6.66%
W44 2017	92.94%	93.52%	7.06%	6.48%
Sum total	97.83%	97.70%	2.17%	2.30%

62. Relative average number of Users in Days of the week and Hours of the day

Table:  Server Traffic

Usage: We want to see how our servers are utilized by users in particular day of week and hour of the day to see when they mostly use our services. This can help us better organize our release and maintenance times, special offers etc.

Row Label: Time, day of week

Column Label: Time, hour of the day

Summation Value: average of Users, relative % of columns

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Sum total
Sun	15.69%	16.86%	15.96%	16.79%	15.80%	15.81%	15.55%	14.83%	13.73%	14.88%	17.52%	17.60%	17.51%	15.55%	15.17%	17.64%	17.54%	16.92%	16.38%	15.93%	16.24%	16.05%	15.21%	15.14%	16.11%
Mon	14.54%	14.03%	12.70%	12.72%	12.80%	13.19%	13.91%	13.98%	13.76%	13.06%	13.15%	13.02%	13.23%	13.44%	13.25%	13.16%	13.34%	13.35%	13.38%	13.26%	13.26%	13.31%	13.32%	13.24%	13.37%
Tue	12.90%	12.37%	12.96%	12.89%	12.83%	13.10%	13.49%	13.71%	13.95%	13.27%	12.95%	12.88%	13.08%	13.39%	13.13%	12.96%	13.18%	13.23%	13.20%	13.27%	13.27%	13.31%	13.35%	13.13%	13.16%
Wed	12.91%	12.42%	13.04%	12.97%	13.66%	13.21%	13.50%	13.64%	13.74%	13.38%	12.97%	12.88%	13.09%	13.37%	13.17%	12.95%	13.11%	13.33%	13.42%	13.37%	13.46%	13.46%	13.45%	13.24%	13.23%
Thu	12.92%	14.57%	14.82%	14.94%	15.88%	15.53%	15.30%	15.84%	15.93%	15.22%	14.94%	14.98%	15.03%	15.29%	14.99%	14.64%	14.14%	14.11%	14.23%	14.48%	14.50%	14.49%	14.95%	14.83%	14.77%
Fri	15.29%	14.75%	15.07%	14.71%	14.45%	14.51%	14.01%	14.26%	14.77%	15.26%	14.14%	14.19%	13.99%	14.50%	15.18%	14.14%	14.35%	14.46%	14.45%	14.78%	14.63%	14.57%	15.02%	15.18%	14.65%
Sat	15.75%	15.00%	15.44%	14.98%	14.57%	14.65%	14.24%	13.74%	14.12%	14.93%	14.33%	14.45%	14.07%	14.45%	15.11%	14.50%	14.33%	14.61%	14.93%	14.91%	14.64%	14.81%	14.71%	15.23%	14.72%
Sum total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Summary

Throughout the 62 comprehensive use cases, we have demonstrated how powerful Pivot Tables are. You should also have an idea how the Pivot Tables can be used to facilitate decisions and create business reports that make you excel in your job.

We hope that you have enjoyed this book and that it brought some inspiration to you.

We would like to encourage you to experiment with the configuration of Pivot Tables as much as possible.

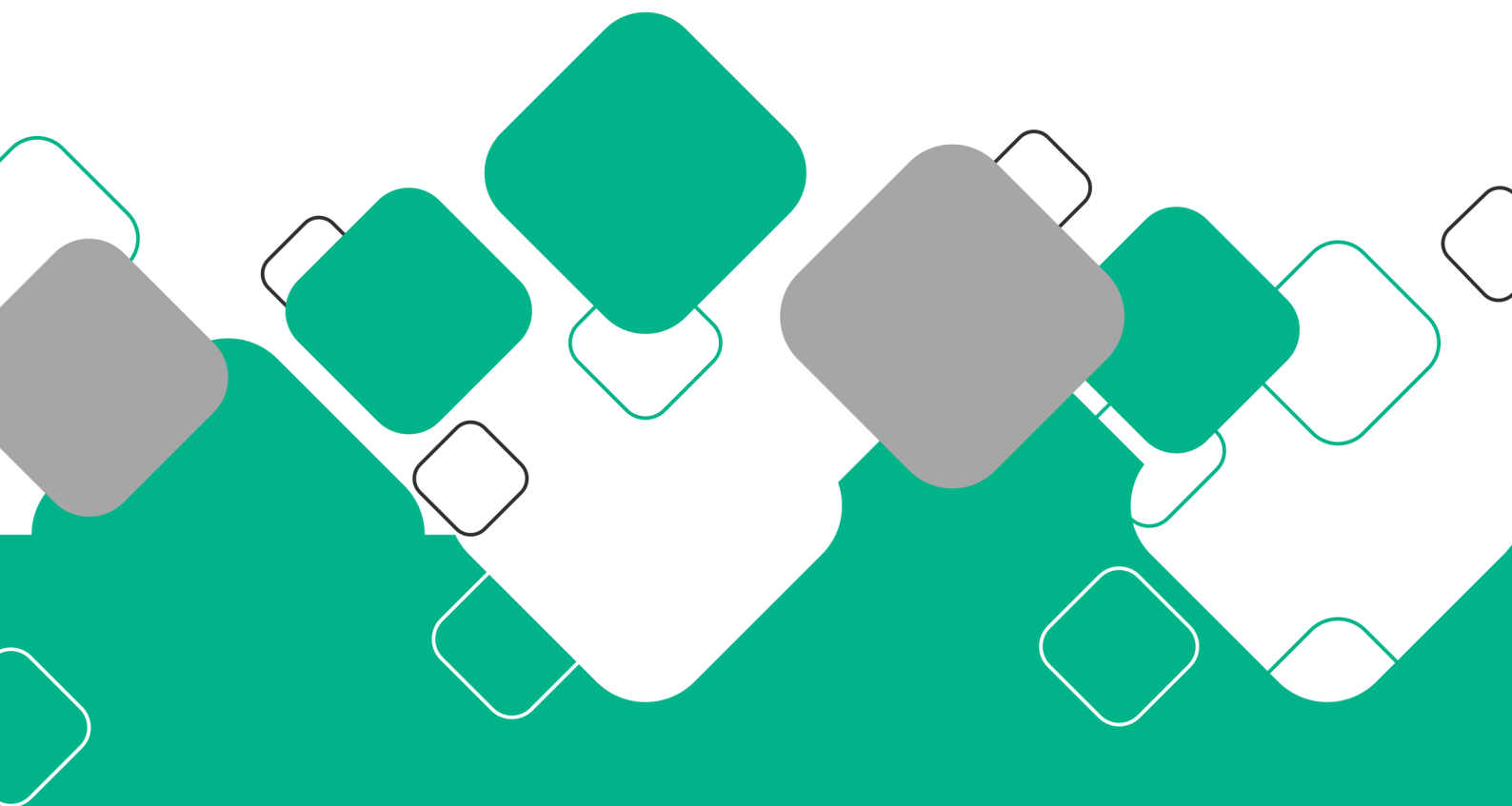
You cannot break anything. In the worst case, the output will not make much sense. In the best case, you will reveal brand new information!

All the screenshots were made with the help of Lumeer: Easy visual project management tool, because their creation and configuration was a real piece of a cake.

You can [try the Pivot Tables in Lumeer](#) on your own completely for free!

Thank you in the name of the whole Lumeer team!

Martin Večeřa
Co-founder & CEO



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