Ferntech

Ferntech a startup that enables centralized monitoring and control easier ways to create new systems, monitor their performance and perform maintenance remotely. In order to maintain data c onfidentiality the data and numbers are not real.

Situation

We needed to know more of what is happening with the business costs and sales revenues. The start up received an 800000 funding given in installments. The first is 500000 2018 and the rest, in 2019 220000 and 80000. The purpose is to see how the costs are distributed in the startup, after funcding, where the money goes most and who is best paid.

Operational costs

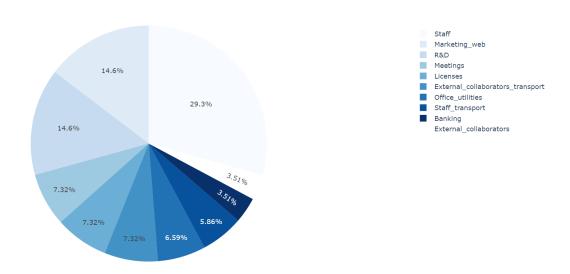


Figure 1. Showing cost distribution

The money is more invested on staff, followed by marketing and then R&D.

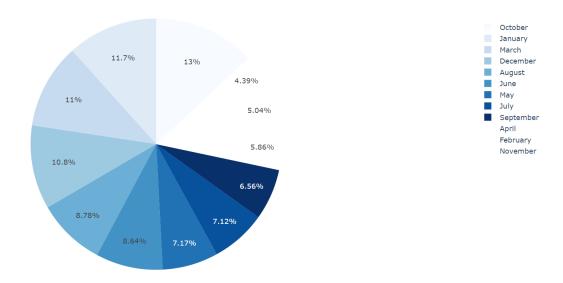


Figure 2. Showing operational costs distribution across months

Costs are higher during winter months, October, December and January.

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Hottest Year

| Year | Costs |
|:-----|
| 2019 | 183600 |
| 2018 | 157900 |
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Banking costs
 Opp_costs | Costs |
                        Year | Month
                                         Day
                        2019 | February
  Banking
                                           Tuesday
               2400
  Banking
               2400
                        2019 | December
                                           Tuesday
  Banking
               2400
                        2018
                               September
                                           Friday
  Banking
               2400
                        2018
                               February
                                           Tuesday
  Banking
               2400
                        2018
                                           Friday
                               January
```

R&D costs				
Opp costs	Costs	Year	Month	Dav
			:	' '
R&D	10000	2019	February	Tuesday
R&D	10000	2019	December	Tuesday
R&D	10000	2018	September	Friday
R&D	10000	2018	February	Tuesday
R&D	10000	2018	January	Friday

Employee insights

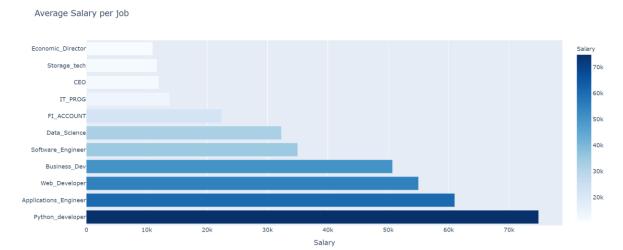


Figure 1 showing who is best paid among all employees

People in IT are best paid in the company.

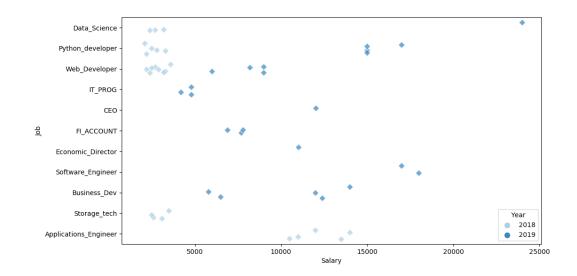


Figure 2. Showing Salary per years.

It seems that in 2018 the best paid job was Data Scientist and in 2019 Python Developer. In 2019 the lowest paid job was Business developer and in 2018 the lowest paid job was Applications developer.

Sales exploratory data analysis

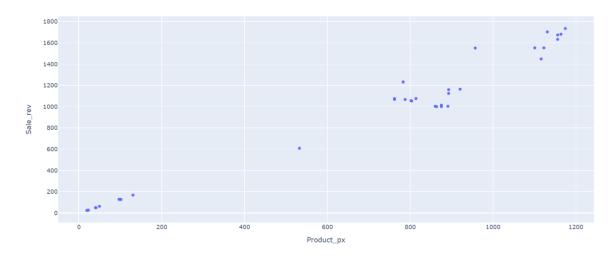


Figure 1. Showing the relationship between the products prices and sales revenue.

It shows a growth of sales revenue along with an increase of product price.

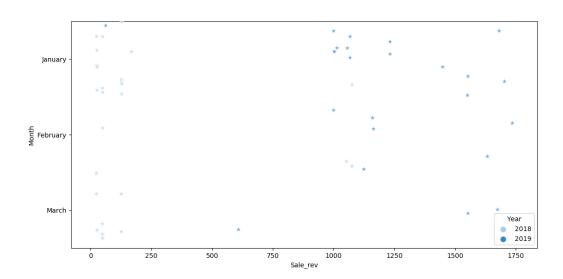


Figure 3. Showing sales revenue distribution across months in two years.

2019 Was more active than 2018. Sales revenue are highest in January and February while March is a not so active month.

Product_px	Sale_rev	Year	
: :-	:-		
(783.03, 1232.16)	2464.32	2019	
(1174.44, 1735.04)	1735.04	2019	
(1131.05, 1702.99)	1702.99	2019	
(1163.97, 1681.09)	1681.09	2019	

Conclusions

The money goes most on Staff Marketing, R&D

Python Developer and IT jobs are best paid.

Costs were higher in winter.

Costs estimate in two years up to 720000, in 2019 remaining with 300000.

Sales were best at the beginning of the year.

In 2019 sales are considerable higher than the previous year. So are the costs.