

Effect of Covid-19 on Data Analysis Process at Various Organizations

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Abstract – The coronavirus COVID-19 pandemic is the defining global health emergency of our time and the huge difficulty we have suffered since World War Two. Since its evolution in the world late last year, the virus has reached every continent except Antarctica. Cases are rapidly increasing daily in the world. Countries are racing to slow the spread of the virus by examining and healing patients, carrying out contact tracing, restricting travel, quarantining citizens, and eliminating large gatherings such as corporate jobs, and schools.

The COVID-19 pandemic has made fast-moving and unexpected variables, some of which current crisis plans and companies weren't planned to handle. Many companies fortunately developed event management strategies explicit to this crisis and are now studying ahead. But due to the lockdown period, now the company has gathered lots of unpredictable data related to their business.

This research paper will describe whether organizations are going to use such anonymous data for the data analysis process or not.

Key Words: Data Analysis, Data Graph, COVID-19, Lockdown Effects.

1. INTRODUCTION

The disease of unexplained causes found in Wuhan was first reported to the WHO Country Office in China on 31 December 2019. WHO is working 24/7 to analyse data, provide guidance, coordinate with partners, help countries prepare, increase supplies, and manage the expert network. This situation was declared a Public Health Emergency of International Concern on 30 January 2020. On 11 February 2020, WHO declared a name for the new coronavirus illness: COVID-19.

As governments make essential interventions in response to the coronavirus, businesses are rapidly adapting to the changing needs of their employees, their customers, and suppliers, while driving the financial and operational challenges. Because of this, every organization is suffering from various situations. They are collecting lots of anonymous data as businesses are not functioning well. This results in an unstable data graph for the current fiscal year.

Now the question is how people are going to treat such anonymous data. Will they consider it for the current fiscal year's data analysis process? Do they have to change their

existing data analysis methods and formulas to carry out the data analysis process on such anonymous data? And is there company ready to handle such a pandemic situation for the whole year? To answer all these questions, I have carried out this research.

2. WHAT IS DATA ANALYSIS PROCESS?

Data analysis is described as a method of cleaning, transforming, and modelling data to identify useful knowledge for business decision-making. The purpose of Data Analysis is to obtain useful information from data and taking the decision based upon the data analysis.

Why do we analyze data?

To develop your business even to develop in your life, sometimes all you need to do is Analysis! If your business is not growing, then you must look back and recognize your mistakes and decide again without repeating those mistakes. And even if your business is growing, then you must look ahead to making the business grow further. All you need to do is analyze your business data and business rules.

3. WHAT IS DATA GRAPH?

Graphs are a well-known approach to illustrate relationships in the data visually. The purpose of a graph is to display data that are too many or complicated to be represented appropriately in the text and in less space. Do not, however, use graphs for small amounts of data that could be carried succinctly in a sentence. Moreover, do not reiterate the data in the text since it destroys the purpose of using a graph. If the data shows proclaimed trends or reveals relations between variables, a graph should be used. If the data doesn't show any notable trend in the evidence, a graph is not the figure of selection.

Graphic illustration is another way of examining data. The graph is a sort of view through which statistical data can be observed in the form of lines or curves drawn across the co-ordinate points drafted on its surface. Graphs enable us to examine the cause and effect relation between two variables. Graphs help to gauge the extent of variation in one variable when other variable changes by a specific quantity.

Graphs also allow us in analyzing both time series and frequency distribution as they give a clear description and exact picture of the obstacle. Graphs are also easy to read and eye catching.

4. ORGANIZATION APPROACH FOR DATA ANALYSIS

Once data is gathered online, it can be manipulated and analyzed much the same way as data obtained through other approaches. That said, there is no one approach for qualitative data analysis that organizations can utilize. Additionally, having concluded their data collection, organizations find they have many types of materials to organize, analyze, and interpret.

With the appearance of numerous software kits for qualitative analysis, organizations also must decide which steps of the process to do by hand and which to carry out with the help of technology.

I have conducted one survey where I have added questions related to the organization's approach towards the data analysis process to do analysis on the anonymous data which they must have collected during the lockdown period. In this survey, almost 50% of responses are in favor of considering such anonymous data for their respective organization's data analysis process, and 50% of responses are opposed to counting such anonymous data for their respective organization's data analysis process.

Among all the responses, 48% of employees are working in a service-based organization and 52% of employees are working in a product-based organization as you can see in the Chart -1.

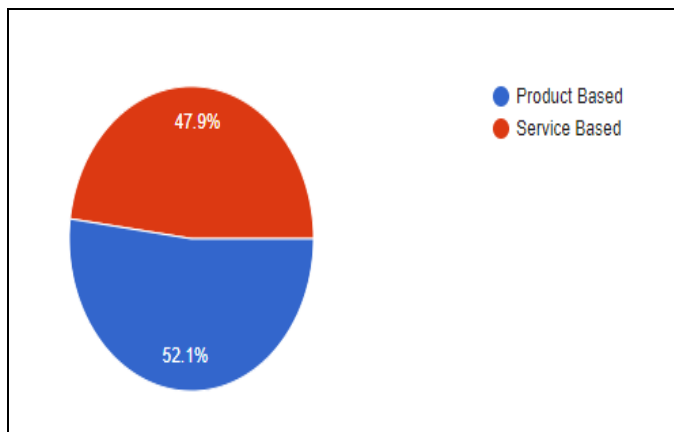


Chart -1: Company typed covered in this research

And almost 87.5% of people are working from home, where 12.5% of employees are not working at all. Detailed result we can view in Chart -2.

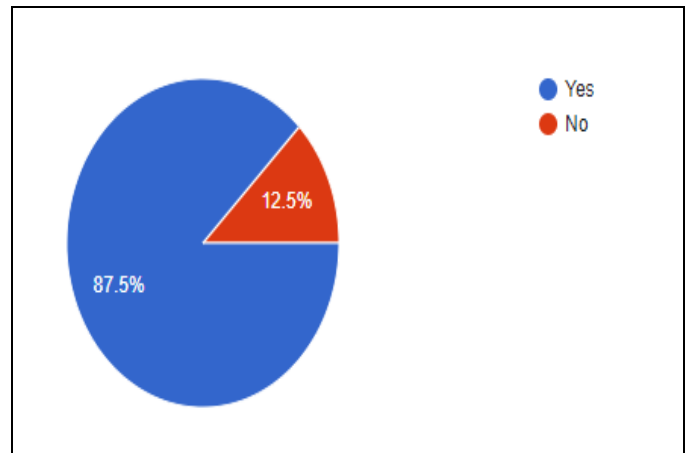


Chart -2: Analysis to get the count of people working from home

Also, through the survey, I tried to figure out how COVID-19 is affecting an individual's organization, and surprisingly 20.8% of people said that their organization is not affected at all. Where 20.8% of other people said that their organization is affected totally, and 58.3% of other people said that their organization is affected partially due to this COVID-19 pandemic. Detailed view of results displayed in Chart -3.

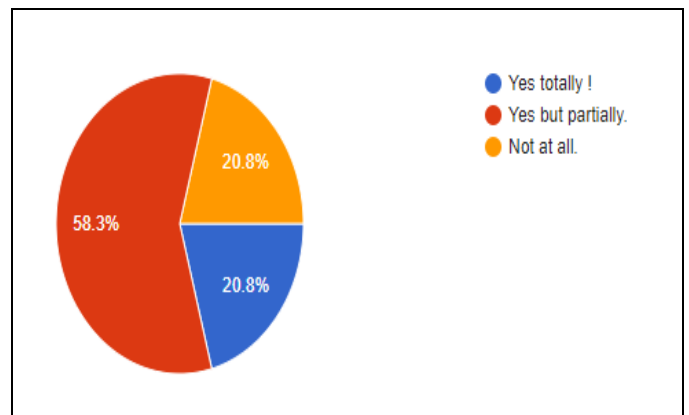


Chart -3: Analysis to understand whether organization is affected due to COVID-19

Further, we tried to know which part of the organization is affected more. Almost 48% of people said that client's involvement in the business and employee engagement is affected the most, followed by the Finance, Production, and End User involvement. Detailed result we can see in Chart -4.

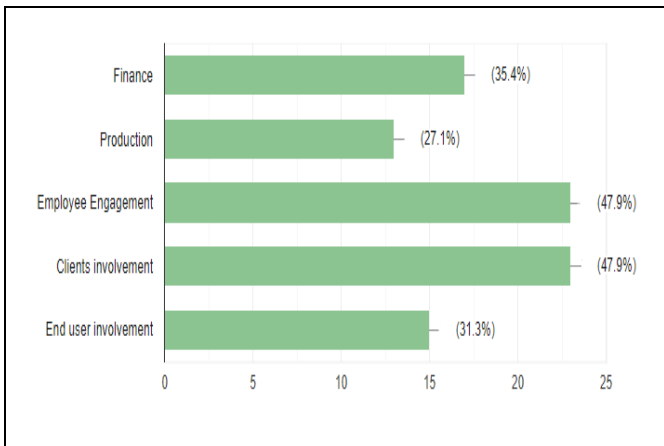


Chart -4: Analysis to understand which part of your business is affected more

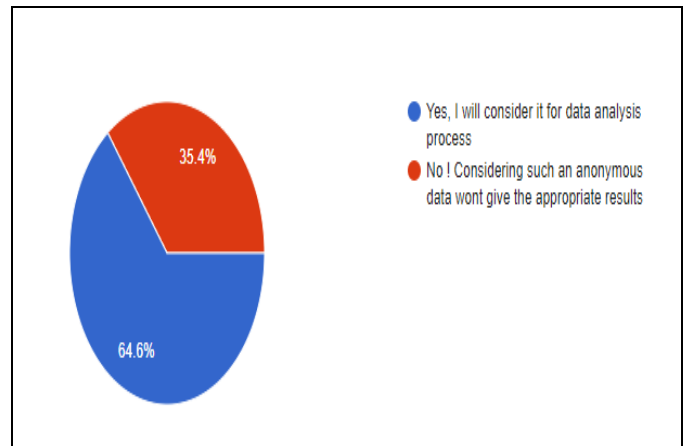


Chart -6: Analysis to check whether people considering the anonymous data of covid19 for your fiscal year's data analysis process

5. ARE ORGANIZATIONS READY WITH DATA ANALYSIS REQUIREMENTS?

As companies have collected anonymous data, will this data fit into their regular data analysis formula? To understand this, I added this question in the survey form, and the exact 50% of responses say that the existing formulas are flexible enough to analyze such anonymous data. And surprisingly, the other 50% of responses say that they have to invent new formulas suitable for such a situation. You can view the graphical representation of this in the Chart -5.

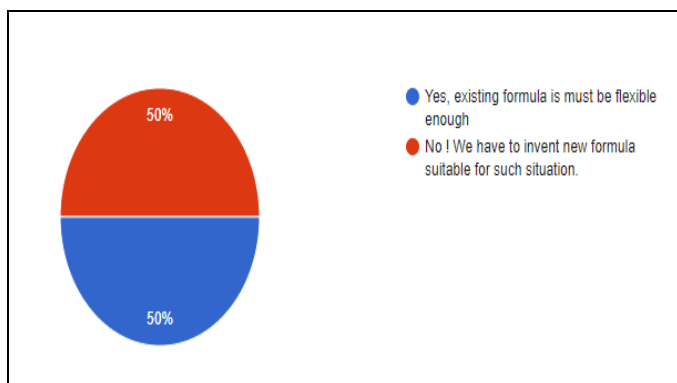


Chart -5: Analysis to verify data gathered in the period of pandemic fits in existing data analysis formula or not.

The next important question in the survey is, Will you consider the data which has occurred in the period of lockdown for your fiscal year's data analysis process? And 35% of responses were in favor of considering such anonymous data for the data analysis process, and 65% responses said that they will totally scrap out this data. For reference view Chart -6.

6. CONCLUSION

Some organizations are going to consider the anonymous data which have occurred in the period of lockdown due to COVID-19, for the current fiscal year's data analysis process. So that even if such global emergency happens in the future, these companies would be ready to handle the anonymous data. Some organizations are totally scrapping out such anonymous data for current year's data analysis process, as such pandemic don't happen that frequent or usual.

REFERENCES

[1] World Health Organization (WHO) , who.int , to understand the COVID-19 background.

BIOGRAPHIES



Ms. Sayali Krishna Sanaye received BSC degree in Computer Science from Mumbai University, India in 2017. Currently she is pursuing degree in Master's in computer application (MCA) from MET, Institute of Computer Science, and Mumbai, India. Her area of interest is Software Development, Robotic Process Automation, Artificial Intelligence and Data Visualization.