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Generating Sales Insights

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Abstract: Due to the development of information technology, every enterprise has a lot of data which magnifies the difficulties of selecting the most relevant. Hence, appears the error of measuring too many things. Owning an excessive amount of information will cause to vagueness, the other effect of a measuring system. This phenomenon does not depend on the manager's ability to compute and communicate, but rather on the ability to provide adequate information, to make good decisions, and to compare results with the planned objectives. These are often done through an interface – Dashboard, which may be a tool that permits the alignment of business processes and methods implementation. Dashboards are quite a set of indicators and graphics, they're found in several forms and interfaces. Dashboards answer to several questions of the organization and are addressed to various types of audience. Once an enterprise has identified a requirement for dashboard, managers must undergo the method of defining what they are going to include in their dashboard. In the case study is created a dashboard for sales analysis of an enterprise, using Power BI.

Keywords: Dashboard, Data visualization, Power BI, MySQL, Business Intelligence.

I. INTRODUCTION

According to the International Institute of Business Analysis, business analysis identifies the weaknesses of the enterprise and tries to realize those changes that give additional worth to stakeholders. Business analysis should be enforced across the enterprise and facilitate in defining strategies, goals, requirements for projects and also the improvement of technology. Each enterprise needs to amplify the business process and to focus the activities on a clear set of goals. It is advancement in company analytics that doesn't need offline paper work surveys with multiple employees to figure out and study on a particular survey. After that as well, some do not get the accurate results of company analytics which ends up in decrement within the company sales and many other sectors.

Using dashboards will be easy for managers who can analyse a single screen where key risk or performance indicators are monitored and decisions can be made for undertaking actions to mitigate the risks and improve the performance of the enterprise. This can be done by implementing a Dashboard for each strategic objective of the company, which selects, arrange and shows the indicators to study the enterprise activity in a single glance. In this extended abstract, we propose a dashboard being embedded to a website for generation of sales insights. In section 2, proposed system is described. Then, in section 3, we briefly discuss implementation of the proposed system.

II. PROPOSED SYSTEM

By using a database from Kaggle i.e. online community for datasets; the database is imported into MySQL for preprocessing. After finding the inaccurate records from the databases, data cleaning is done by correcting and deleting those records. After that the pre-processed database is imported into Power BI Query Editor. Here data can be modified by selecting multiple rows and columns by splitting, pivoting, unpivoting, etc. Data cleaning is performed and that data is published into Power BI dashboard.

A dashboard is created by plotting different UI elements i.e. pie chart, graph, map view & many more on the dashboard. Similarly, other table measures will be added on the canvas and customized accordingly. Hence, the dashboard will be created. A website is created using Html, Css, JavaScript and Bootstrap and will reflect the whole dashboard to the website which is been created. Hence, through the Power BI dashboard the dashboard is embedded to a website which can be accessed from anywhere in the world.

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III. IMPLEMENTATION AND DISCUSSION

The proposed system will be implemented according to the given system flow:



IV. CONCLUSION

The growing use of IT within the business world has led to the event of huge and sophisticated datasets for various organizational functions. Understanding their businesses and making decisions supported very large datasets has become a crucial challenge for organizations. The IT industry refers to the present development as "Big Data" to point the complexity and size of knowledge sets. Traditional database applications don't have the capabilities to research such big data and address the decision-making needs of organizations. So tools like Power BI are used to make the process easier for both analysts and clients.

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