**4. HOTEL INSPECTION DATA ANALYSIS**

1. **ABSTRACT**

Generally, hotels are complex and costly when it comes to maintenance with various things like quality of food, usage of spaces that have different schedules and uses for guest rooms, restaurants, health club, swimming pool, retail store and each has a functional engineering system required for its maintenance. Maintenance therefore has to be done throughout the year, requiring competent staff to undertake building services, operation and maintenance, supplemented by outsourced contractors.

In the hospitality industry the maintenance of the engineering systems is important despite its complex processes as its effectiveness will directly affect the quality of hotel service, food, and beverage which have direct and significant effect on guest’s impression of the hotel.

Here is the data of various inspections done on Hotels in various parts o USA .The data deals with the violations made by the hotel managements and their violation codes. Data also explains the action taken by the government according to the violation codes on the hotel.

We analyze the data based on which parts they are violating the codes, so that the new hotels will exclude this problem and survive in the market.

1. **INTRODUCTION**

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1. **EXISTING SYSTEM:**

These days for any organization, company or a business firm the most important things for them is survive in the market and compete with the competitors. As to do so the firm need to analyze their position in the market.

Analyzing the market needs the data which they have generated from long years. The data from last year’s, which has been rapidly, multiply in numbers and creating a lot of problems in terms of storing and analyzing the stored data.

These days we have a tedious improvement in storing technologies rather than in analyzing techniques. We are having problems in analyzing the data stored in our Traditional RDBMS (Mysql, Db2...) and at same time the data size is also exceeding our storage probabilities.

1. **PROBLEM DEFINITION:**

The following are the problems which we are facing with the existing systems.

**4.1 Storing:**

Since couple of years we can see how the data has rustically increased in its size and creating lot of problems in storing them.

**4.2 Processing:**

Since the data is very huge we are not able to analyze the dataset in the fixed period of time and so unable to get the results in an efficient way.

1. **PROPOSED SYSTEM:**

In our proposed system we are using new technologies for analyzing the datasets. The framework we are using is Hadoop.

This is a framework which is capable of storing any tedious amount of data and can processing the dataset in a less time and in a efficient way compared to other technologies.

1. **CONCLUSION**

Hadoop is trending technology in the market. Hadoop solves the big data problem more effectively and efficiently. More importantly Hadoop can analyze any kind of data. Analyzing the data based on Hadoop requires very less amount of time, and it reduces the production time which directly affects the economy of the organization.

Analyzing the dataset based on the Apache Hadoop will overcome all the issues caused by the traditional RDBMS and Master slave Architecture of Servers.

In our project we are trying to analyze Hotel Inspection dataset using Hadoop.

This analysis makes to analyze total number of hotels, their violations and their descriptions.

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