Pragmatic Analysis of Big Data Applications in Educational Organization

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ABSTRACT: Retrieval of the data from use database is very difficult in present scenario. In a country you have limited state universities and more private engineering colleges. The private engineering colleges allotted the seats to the student based on their eligibility test and some seats allotted for non-resident of the country. The state technical universities give the permission to the private engineering colleges to allot some seats who are not qualified for in the eligibility test. So in this paper we retrieved the related information regarding student from huge data. We used QlikView tool for segregate and retrieve the information.

KEYWORDS: QlikView, Data Warehouse, Data Mining, Sample data, Reports, Chart

I. INTRODUCTION

Government generally grants money in the form of Scholarship to the people who can’t bare the Educational Expenses. So this people need not pay single penny from their pocket. So Educational institution will not except money from scholarship students. Money flows in many ways in Educational institution. The money sometimes will be sufficient for the basic resources. This kind of situation will neither lead to profit or loss. Sometimes Money flow could be excess beyond their expectation this will lead to profit situation. Profit attained could be in many ways Student who don’t qualify the exam yet they want to get into Reputed institute will opt for management seats. The money taken from the will be more than the actual amount. People who fall into NRI category will also paid excess fees. We are considering here different academic year evaluation. For example year1 we have zero profit means educational institute didn’t receive the amount as expected. As popularity increases people get know about more educational institutions. Data-driven decision system support, such as data ware houses can serve the requirement of extraction of information from more than one subject area. Data warehouses standardize the data across the organization so as to have a Single view of information. Data warehouses can provide the information required by the decision makers. The cost of building is very expensive for any educational institution as it requires data warehouse data mining for extracting the tool. The present study data information provides an alternative to build data warehouse and extract useful information using data warehousing and data mining open source tools.

II. RELATED STUDY

Education domain plays pivotal role in the society. Many researchers have been carried out on its educational domain. Information is gather based on parameter driven analysis like internal and external factors are taken consideration. To research paper for publish based on student performance by considering results as basic parameter. Few other papers for
publish to find out most favorite subjects of students by considering marks. Researches for carried out for the attendance progress. Evaluation of behavior is taken into consideration by taking the feedbacks of faculty is another research paper. Few other research papers was publish like students being deviated to the SNS (social networking sites). Data warehouse is the storage area where data mining techniques are applied for example if we have data related to student marks we have to search data manually in large amount of records which is difficult but by using mining tools search a particular part would become easier. In this paper we are going to explore QlikView is the data warehouse tool that is used to store the data generated in the form reports that are usually represented in the form of the charts and graphs. We are considering sample data by taking different year’s student intake.

III. BI REPORTING

Swedish company developed QlikView in QlikTech. QlikTech was founded in 1993. QlikTech has over 24,000 customers. QlikTech has over 1000 Employees. With QlikView you can analyze data in sources such as Excel Spreadsheets, Databases, or text files.

The main advantages of QlikTech are:
1. We can create chart from our data.
2. We can search data very quickly.
3. We can enlarge the data with the help of our decisions.

For example: In the past 20 years ago, QlikView has been difficult to implement when we are using the data about the orders of the customer. The data should be held in the memory and all calculation should perform with out any priority in the QlikView. So in 1993 QlikTech has founded that it as a crazy idea. But now, trend as lifted the constraints so that the organizations of different sizes are now benefited with the new ideas.

IV. A REVOLUTION IN BENEFITS OF QLIKVIEW

1. QlikView is very important in Fastest Time Value:
   When constructing OLAP cubes it consume time requires expert skills. This process takes months some time over a year. Cube must be constructed before it is calculated, process which it self will take an hour. User will see the answer to his questions, because the data which is loaded in memory is created in QlikView with in a seconds. The time implement in QlikView will spend the location of data and decide. What analysis will be interesting or relevant to solving business questions. Typically this process will take only a week or two.

2. QlikView is Easy to Use:
   The end users uses QlikView because it works the way which their mind does. Each time end-user wants to review the data in a new way, so they simple click on the data which they want to evaluate, because QlikView operates a memory with each click all the data and measures and recalculated to reflect the selected data. User can go from high level implementation to individual record can go from high level implementation to individual record can go from high level implementation to individual record in a click, with out predefining the path to the individual record.

3. QlikView is a Powerful tool:
   In QlikView calculation and quires are performed in memory, which are extremely in click. QlikView is not constraint by the speed, even if underlying the data is store with a poor query performance(for instance, a text file) performance is optimal because the data is loaded in memory. QlikView is also compress the data which stored in memory.

4. QlikView is Flexible:
   The problem which is raised by OLAP is controlled by IT. With the help of QlikView, during analysis by new dimensions changing a measures can be perform by business professionals in few seconds. QlikView can analyze the data sources like standard interface including odbc and web services.

5. QlikView is a Scalable:
QlikView is very easy to handle the data and the number of users work in with it. It is simple to develop the 1000 users who are utilize all available hardware power across all available processors and cores, which required only a web browser.

V. RESULT ANALYSIS

<table>
<thead>
<tr>
<th>YEARS</th>
<th>INTAKE</th>
<th>DEPT1</th>
<th>CONVENER students</th>
<th>Convener FEES</th>
<th>Management Students</th>
<th>Management FEES</th>
<th>SCHOLARSHIP students</th>
<th>Scholarship FEES</th>
<th>PROFIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>60</td>
<td>40</td>
<td>15</td>
<td>28000</td>
<td>5</td>
<td>28000</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2008</td>
<td>60</td>
<td>55</td>
<td>25</td>
<td>28000</td>
<td>15</td>
<td>32000</td>
<td>7</td>
<td>0</td>
<td>4000</td>
</tr>
<tr>
<td>2009</td>
<td>60</td>
<td>57</td>
<td>30</td>
<td>28000</td>
<td>20</td>
<td>40000</td>
<td>12</td>
<td>0</td>
<td>12000</td>
</tr>
<tr>
<td>2010</td>
<td>60</td>
<td>60</td>
<td>31</td>
<td>28000</td>
<td>20</td>
<td>42000</td>
<td>12</td>
<td>0</td>
<td>14000</td>
</tr>
<tr>
<td>2011</td>
<td>60</td>
<td>60</td>
<td>33</td>
<td>28000</td>
<td>25</td>
<td>42000</td>
<td>13</td>
<td>0</td>
<td>14000</td>
</tr>
<tr>
<td>2012</td>
<td>60</td>
<td>60</td>
<td>28</td>
<td>28000</td>
<td>24</td>
<td>45000</td>
<td>15</td>
<td>0</td>
<td>17000</td>
</tr>
<tr>
<td>2013</td>
<td>60</td>
<td>60</td>
<td>20</td>
<td>28000</td>
<td>22</td>
<td>50000</td>
<td>18</td>
<td>0</td>
<td>22000</td>
</tr>
<tr>
<td>2014</td>
<td>60</td>
<td>60</td>
<td>16</td>
<td>28000</td>
<td>23</td>
<td>50000</td>
<td>20</td>
<td>0</td>
<td>22000</td>
</tr>
<tr>
<td>2015</td>
<td>60</td>
<td>60</td>
<td>23</td>
<td>28000</td>
<td>25</td>
<td>50000</td>
<td>21</td>
<td>0</td>
<td>22000</td>
</tr>
</tbody>
</table>

In the year 2007, A department has the invoke of 60 students, in which 15 students are convener students, 5 students are management students and 4 students are scholarship students. The convener fee and management fee is 28000. The scholarship fee for this year is 0. Hence after all the calculation, the profit for the year 2007 is 0. In the year 2008, A department has the invoke of 60 students, in which 25 students are convener students, 15 students are management students and 7 students are scholarship students. The convener fee is 28000 and management fee is 32000. The scholarship fee for this year is 0. Hence after all the calculation, the profit for the year 2008 is 4000.

The year 2009, A department has the invoke of 60 students, in which the convener students are 30, 20 students are management students and 4 students are scholarship students. The convener fee is same in above years and management fee is 40000. The scholarship fee for this year also 0. Hence after all the calculation, the profit for the year 2009 is 12000. The year 2010, A department has the invoke of 60 students, in which the convener students are 31, 20 students are management students and 4 students are scholarship students. The convener fee is same in above years and management fee is 42000. The scholarship fee for this year also 0. Hence after all the calculation, the profit for the year 2010 is 14000. The year 2011, A department has the invoke of 60 students, in which the convener students are 33, 25 students are management students and 13 students are scholarship students. The convener fee is same in above years and management fee is 40000. The scholarship fee for this year also 0. Hence after all the calculation, the profit for the year 2011 is 14000. The year 2012, A department has the invoke of 60 students, in which the convener students are 28, 24 students are management students and 15 students are scholarship students. The convener fee is same in above years and management fee is 45000. The scholarship fee for this year also 0. Hence after all the calculation, the profit for the year 2012 is 17000.

In the year 2013, A department has the invoke of 60 students, in which students are convener students 20, 22 students are management students and 18 students are scholarship students. The convener fee is 28000 and management fee is 50000. The scholarship fee for this year is 0. Hence after all the calculation, the profit for the year 2013 is 22000. In the year 2014, A department has the invoke of 60 students, in which students are convener students 16, 23 students are management students and 20 students are scholarship students. The convener fee is 28000 and management fee is 50000. The scholarship fee for this year is 0. Hence after all the calculation, the profit for the year 2014 is 22000. In the year 2015,
A department has the intake of 60 students, in which students are convener students 23, 25 students are management students and 21 students are scholarship students. The convener fee is 28000 and management fee is 50000. The scholarship fee for this year is 0. Hence after all the calculation, the profit for the year 2015 is 22000.

In this graph by representing by using QlikView software. In this domain as “year” and expression as “sum (convener fees)” as taken. It visualize given the chart like this. In this we can calculate total amount of convener fees.

In this graph visualizing by using QlikView software. In this domain has “year” and expression as “sum (management fees)” In this graph by representing for all years management fees amount.
In this graph we represent total convener students in the all years. In this domain has “convener fee” and expression as “sum(convener students)”. 

In this bar graph visualize the all years students join details. In this domain as “year” and expression as “sum(convener students)+sum(management students)+sum(scholarship students)”.
VI. CONCLUSION

The government sanctioned the scholarship who are studied in private engineering colleges. Here we analyzed the result with QlikView. The Management disables to identify the profit or loss in their organization at any time. We analyzed the data in terms of convener fee, management fee, scholarship fee from 2007 to 2015 years. This analysis will help to the management very well.

REFERENCES