

USING ORACLE BUSINESS INTELLIGENCE TO ANALYZE COMPANY RESULTS AND CREATE STRATEGIES

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ABSTRACT

Business Intelligence can be defined as the ability of an organization to collect, manage and organize data. This process brings in a large amount of data that can help develop new business opportunities. Identifying these opportunities and implementing efficient strategies can bring a competitive advantage on the market on the long term. In this article we will be analyzing the financial results over a 3 year period for a corporation that has 3 companies under its wing and the management strategy this corporation employed to raise their financial results.

Keywords: business intelligence, oracle OBIEE, decision support systems, financial results, OLAP, data warehouse.

1. INTRODUCTION

Business Intelligence technologies make historical, current and predictive perspectives of company operations available. Common functions of BI technologies are reporting, online analytical processing (OLAP), data mining, process mining, complex event processing, business performance management, business efficiency testing, text mining, predictive analytics and more.

The purpose of modern business intelligence systems is to provide assistance in decision making. Considering this, a business intelligence system can be called a decision support system. Although the term business intelligence is sometimes synonymous with competitive intelligence (because they are both decision support systems), BI uses technologies, processes and applications in order to analyze mostly structured internal data and business processes, while competitive intelligence is used to gather, analyze and disseminate information mostly regarding company competitors. On broader meaning, business intelligence may include a subset of competitive intelligence.

Most of the time BI applications use data from a data warehouse. Nevertheless, not all business intelligence applications need a data warehouse and not all data warehouses are used for business intelligence.

In order to make a distinction between business intelligence concepts and data warehouse concepts, Forrester Research (a research company that makes studies about the impact of technology available to the public) defines business intelligence in two ways.

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Using a broad definition: “Business Intelligence is a set of methodologies, processes, architectures and technologies that transform raw data into significant and useful information used to build perspectives and make efficient strategic, tactic and operational decisions”. When this definition is used, BI also includes technologies like data integration, data quality, data warehousing, master data management, text and content analytics and many more others that the market reunites under the Management of Information segment. This way, Forrester refers to data preparations and data usage as being to separate but strongly tied segments of the business intelligence architecture.

Forrester uses a second, narrower definition of business intelligence: BI only refers to the upper layer of the fore mentioned architecture that is reporting, analysis and dashboards.

2. ORACLE BUSINESS INTELLIGENCE

Oracle Business Intelligence is a set of technologies offered by Oracle for the BI system that is composed of applications acquired from Siebel Systems and Hyperion Solutions.

The main competitors of OBI are Microsoft BI, IBM Cognos, SAP AG Business Objects and SAS Institute Inc.

Oracle defines their product like this: “OBIEE 11g is a comprehensive business intelligence platform which offers a broad range of capabilities – amongst which interactive dashboards, ad hoc queries, alerts and notifications, financial reporting, management strategies, business processes, search and collaboration, integrated system management, mobile access and many more. OBIEE 11g is based on a proved unified architecture based on web services that integrates with the IT infrastructure of an existing company in order to benefit from the lowest cost and the highest yield of investment”.

Oracle Business Intelligence was conceived to easily integrate with existing data sources and IT infrastructure. The final result is represented by reports and analytics of high complexity obtained from data found in multiple sources offering the user maximum ease of usage, configuration and packing.

3. ANALYZING THE STRATEGY

In order to raise the financial results the corporation established a strategy of 4 key points as follows:

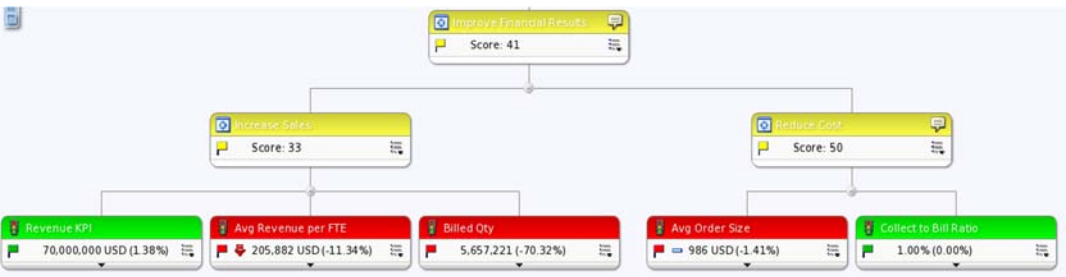


Fig 1 Improve the financial result



Fig 2 Increase costumer satisfaction



Fig 3 Streamline operations



Fig 4 Increase employee efficiency

As we can see from the figures above, the 4 key points are:

1. Improve financial results
 - 1.1 Increase sales
 - Increase revenue
 - Increase average revenue per employee (FTE- full time equivalent)
 - Increase billed quantity
 - 1.2 Reduce costs
 - Average order size
 - Influx versus bill report
2. Increase customers satisfaction
 - 2.1 Percent early shipped
 - 2.2 Fulfillment Days
3. Streamline operations
 - 3.1 Fulfillment Days
 - 3.2 Number of orders
4. Increase employee efficiency
 - 4.1 Number of employees
 - 4.2 Attrition Rate

4.3 Average revenue per FTE

4. EXPLANATION OF KEY POINTS

- Increase revenue (KPI)



We can notice from the chart that the increase revenue target was achieved with a variation of 1.38%. The strategy is shown in green in the strategy tree chart, the output being normal.

- Increase average revenue per employee (FTE)



We can notice from the chart that the target of average revenue per employee was not achieved. The variation is -11.38%. The strategy is shown in red in the strategy tree chart and the situation is critical.

- Increase billed quantity



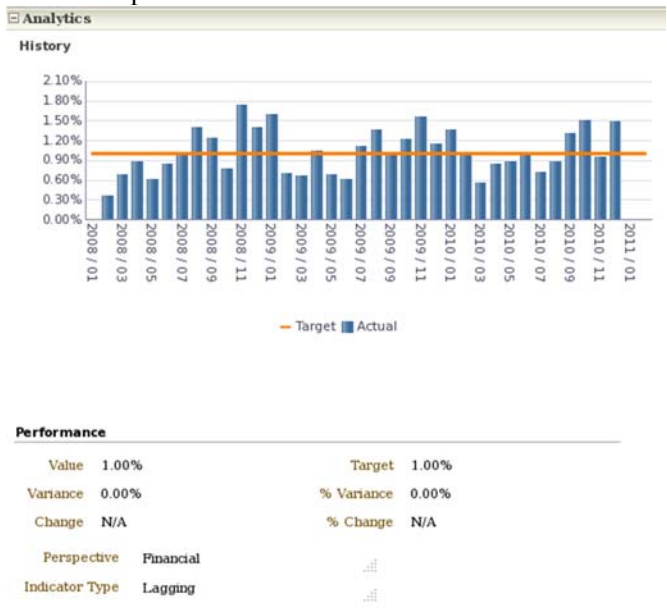
The chart tells us that the target of increasing billed quantity was not achieved, the variation being -70.32%. The strategy is shown in red in the strategy tree chart. The situation is critical.

- Average order size



The chart shows that the target of average order size was not achieved, the variation being -1.41%. The strategy is shown in red in the strategy tree chart. The situation is critical.

- Influx versus bill report



We notice from the chart that the target for the influx versus billed report was achieved with a variation of 0%. The strategy is shown in green in the strategy tree chart and the situation is normal.

- Percent early shipped



The chart says that the target for early shipped was not achieved, the variation being -46.15%. The strategy is shown in red in the strategy tree chart. The situation is critical.

- Fulfillment Days



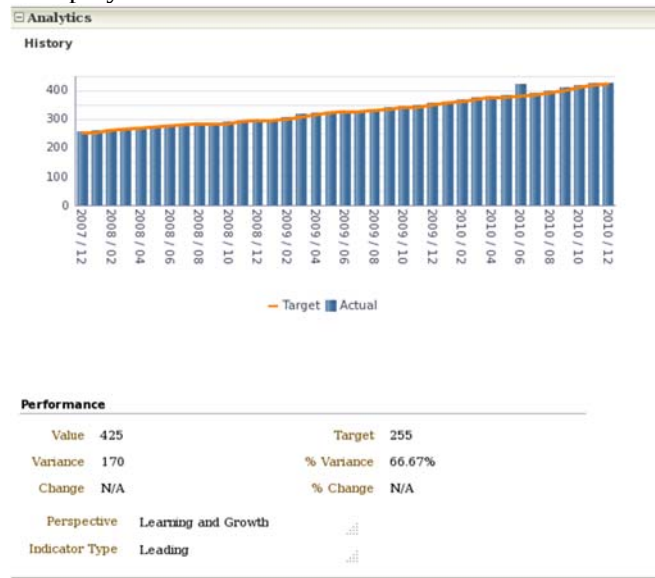
We see from the chart that the number of days for order fulfillment falls inside the target with a variation of -0.79%. The strategy is shown in green in the strategy tree chart and the situation is normal.

- Number of orders



The chart tells us that the number of orders is rising and the target was reached with a variation of 4.17%. The strategy is shown in green in the strategy tree chart. The situation is normal.

- Number of employees



The chart says that the number of employees is rising and the target number is achieved with a variation of 66.67%. The strategy is shown in green in the strategy tree chart and the situation is normal.

- Attrition Rate



We notice from the chart that the attrition rate is huge, the target is not achieved and the variation is 6566.67%. The strategy is shown in red in the strategy tree chart. The situation is critical.

- Average revenue per FTE



The chart is telling us that the average revenue per FTE is fluctuating but finds itself more under the target mark. The target is not achieved and the variation is -11.34%. The strategy is shown in red in the strategy tree chart. The situation is critical.

5. FINANCIAL RESULTS FOR THE STUDIED PERIOD

The following charts show the financial performance of the 3 companies during the 3 years.

Chart 1 Results 2008

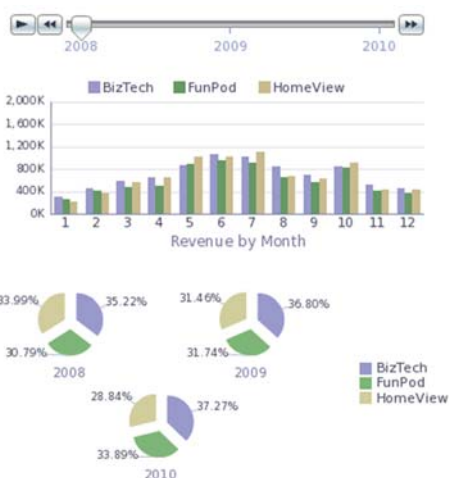
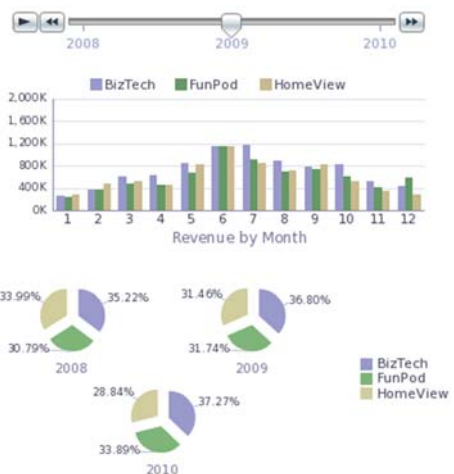


Chart 1 Results 2009



In chart 4 we can see an age group distribution of customers for the 3 companies. In chart 5 we can see the company target.

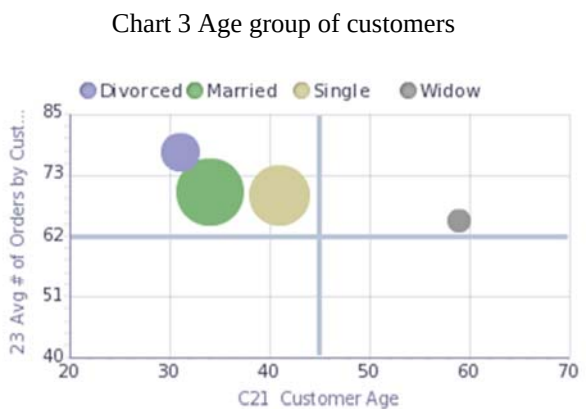
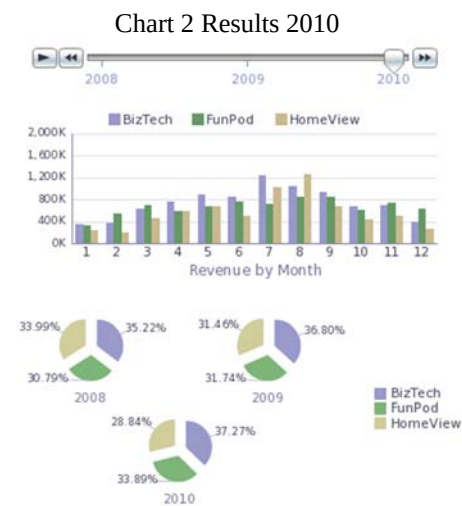


Chart 4 Target

With a map chart we can see an outline of different states of orders.



Chart 5 Orders

6. CONCLUSION

Oracle Business Intelligence is a suite of very useful tools that provides managers with an important set of reports right out of the box. The visualization modules are straightforward and help in the decision making process.

7. AKNOWLEDGEMENTS

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