

RESEARCH PAPER

Research Paper

Yuji Shimojo

CMIS 320

Instructor: Denton Guy-Williams

July 12, 2015

Introduction

With no exception, all companies have their customers who pay money to them whether they focus on business-to-business or business-to-consumer; therefore, customer relationship management, or CRM is a very important activity affecting their profits. So I will propose use of relational databases for improving CRM to my boss by appealing the following three reasons.

The Three Reasons Why Companies Should Use Relational Databases for CRM

First of all, by using relational databases, you can retrieve what data records you want depending on various needs by setting multiple conditions. In other words, you would analyze information on customers on demand. When you try to manage your customer information by using a spreadsheet application such as Microsoft Excel, sometime data types of specific attributes might be incoherent. For example, some people might add hyphens to customer phone numbers like "123-456-7890," but others might not do so. Or, some people might input "male" as customer genders, but others might just input "m" which stands for male. Because data analysis by using Excel usually needs to format messy data called data cleansing, you can easily waste of your time and effort. In relational databases, you can regulate input data types finely to avoid such incoherence of data systemically.

Second, you are able to be more flexible to choose or implement front-end applications based on relational databases. When you adopt a commercial relational database management system, or a commercial RDBMS such as Oracle, you can easily connect your exist business applications with Oracle because most proprietary or open source applications are compatible with popular RDBMSs. Even if you develop an application from scratch, most programming languages and frameworks provide versatile interfaces with those RDBMs. Most retailers, for

RESEARCH PAPER

instance, have point of sales systems at each retail store. When they integrate data from each system into master data, they would rather use relational databases than Excel to lower risks of inconsistent data and improve the operating efficiency.

Finally, RDBMSs can process a number of transactions simultaneously, and protect data integrity by share or exclusive lock and rollback functions. Although you are perhaps able to verify your customers' data integrity manually as long as the number of your customers is few, once the data is increased rapidly, you can hardly manage that. Unless you systematize the operations, you would have to hire many of people for that. Among RDBMSs, Oracle Database is one of the most robust ones. Actually, Salesforce.com which has the biggest market share in worldwide CRM software (Columbus, L., 2014) adopts Oracle. The company was also selected as the world's most innovative company by Forbes (2014). They build a number of large Oracle RAC database clusters as the basis for the CRM software (Harrison, G., 2012).

Conclusion

In conclusion, I believe that companies should use relational databases for CRM with certain RDBMSs for the reasons as I pointed out above: fulfillment of on-demand customer analysis by highly functional retrieval property, improvement of productivity by system coordination with various business applications, and enhancement of data robustness for your crucial customer information.

RESEARCH PAPER

References

- Columbus, L. (2014). Gartner CRM Market Share Update: 41% Of CRM Systems Are SaaS-based, Salesforce Dominating Market Growth. *Forbes.com LLC*, Retrieved July 12, 2015, from <http://www.forbes.com/sites/louiscolumbus/2014/05/06/gartners-crm-market-share-update-shows-41-of-crm-systems-are-saas-based-with-salesforce-dominating-market-growth/>
- Forbes. (2014). The World's Most Innovative Companies. Retrieved July 12, 2015 from <http://www.forbes.com/innovative-companies/list/>
- Harrison, G. (2012). Salesforce's Database in the Clouds. *Information Today, Inc*, Retrieved July 12, 2015, from <http://www.dbta.com/Columns/Notes-on-NoSQL/Salesforces-Database-in-the-Clouds-73567.aspx>