

## **Learning and Practicing Data Analytics using SAP In-Memory Computing**

### **Description**

The analysis and organization of Big Data is becoming important in the business industry. Using and understanding ERP (Enterprise Resource Planning) software to interpret Big Data is essential to the evolution of Information System Technology. This research on SAP HANA and SAP Lumira allows us the opportunity to explore.

### **Keywords**

In Memory Database, Analytic platform, SAP HANA, SAP Lumira

### **Abstract**

The purpose of this research is to share in the experience of learning and practicing data analytics using In-Memory Computing (IMC) with SAP HANA and SAP Lumira. As Big Data grows so rapidly and immensely, it is important to keep the track of the data, with the fast processing speed. SAP HANA, which is a data analytic tool that uses IMC, is very effective in management and analysis of Big Data. Most of the data analytics tools in use today are using traditional Database Management Systems (DBMS). Traditional DBMSs keep their data on hard disk, which decreases in its speed over time. Unlike traditional DBMS, DBMS using IMC, which we call In-Memory DBMS, keeps the data in a server's Random Access Memory (RAM) to optimize and accelerate the process. During summer 2016, three and two Information Technology and one accounting major students teamed up for learning IMC concepts and skills. Materials and labs are provided by SAP University Alliance through California State University, Chico's server. The data sample is provided by SAP practicing with the real version of company of Global Bike Incorporated (GBI). Since the data is from the actual company, it gives much practical experiment and experience using SAP HANA. Once the data is stored and structured, the data is used by SAP Lumira to enhance the visualization. SAP HANA uses SQL commands creating queries as well as using query by example. Since SAP HANA is utilized similar to Microsoft Access, the traditional DBMS users can easily be adopted to this In-Memory DBMS, SAP HANA even without understanding IMC implementation in SAP HANA.