Learning and Practicing Data Analytics using SAP In-Memory Computing

Hong G. Jung¹, Jihoon Park ² and Vincent Mitchell¹ (Presenter) Advisor: Sam Chung, Ph.D¹
¹School of Information Systems & Applied Technologies, College of Applied Sciences and Arts
²School of Accountancy, College of Business, Southern Illinois University Carbondale

Summary
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.

Motivation
As Big Data grows so rapidly and immensely, it is important to keep the track of the data, with the fast processing speed. Using and understanding ERP (Enterprise Resource Planning) software to interpret Big Data is essential to the evolution of Information System Technology.

Problem Statement
Which is a data analytic tool that is very effective in management and analysis of Big Data? Does SAP HANA improve on traditional business practices?

What is IMC?
• IMC use a type of middleware software to store all the data in RAM (Random Access Memory) instead of hard disk and process in parallel.
• Approximately 5,000 times faster than traditional spinning disk.

Why use SAP HANA?
• SAP HANA is the In Memory Computing platform enables to accelerate business processes.
• It removes burden of maintaining separate legacy systems for the data.

Approach
• Assemble a team of students to learn and practice Data Analytics using SAP HANA.
• By using Canvas, learn IMC and SAP HANA through materials and labs 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).

Evaluation and Conclusion
• 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.

Future Work
• Hold workshops / speaking events on the importance of how data is analyzed now and in the future.

References