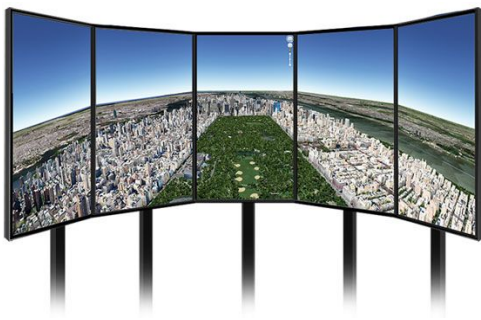*Google Code-In 2017-2018*

Liquid Galaxy Use Case For Big Data

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Introduction of Liquid Galaxy

Liquid Galaxy, in essence, reimagines they way desktops look, and how they are interacted with. They create a virtual like, panoramic display set which stretches beyond our peripheral vision. They do this, by combining multiple displays together as can be seen in the image above. Liquid Galaxy has a wide variety of features - like viewing rich satellite imagery from Google Earth.

Introduction to Big Data

Now more then ever, there have been great amounts of information at our fingertips. In the era of information explosion, enormous amounts of data are now available to companies. In order to be up to date, many companies need to make sure their systems can handle this amount of data. It is very important to companies that their systems can produce the right and best information for their company to result in a greater outcome and new organizational capabilities. Companies must now, find a

practical way to deal with big data to stay competitive — to learn new ways to capture and analyze growing amounts of information about customers, products, and services. Big data enables companies to manage, store and manipulate vast amounts of different data at extremely quick speeds. Today typical implementation of big data involves building Hadoop clusters to store massive data in HDFS and executing multiple parallel jobs in Map Reduce, along with other technologies like pig, hive, NiFi, Kafka, and others.

Liquid Galaxy Use Cases For Big Data

Companies and organizations of the world of tomorrow - will be centered on Big Data. Until now, businesses didn't need Big Data - instead, they would survey people, or just blindly see what people are interested in. However now with online websites, and growings franchisees or physical stores there are now billions of customers. With typical software, it would be impossible for the company to see its best products, or what customers like. Now with big data with Liquid Galaxy, companies can display customer trends using Liquid Galaxy's panoramic display. Using the space navigator they can reorder and move around the data, to help get better results. Now the companies can know what products to focus on, and what ones do not. They can account for the demand, and get more accurate supply which will save the company a lot. But this only helps current customers, there are billions of other people who are not yet customers. Thus the company decides to use Google AdMob, in order

to spread their business digitally online. Google now has to display these ads to viewers. But AdMob only displays to potential customers. But how do they know who to display these ads too? They store the user's history, and tailor ads based on their history. They use Big Data and Liquid Galaxy to store and view the data. They store zettabytes worth of data, on their Big Data clusters. Now comes the hard part - to display all this data. Liquid Galaxy can reorder and organize the data, now with Liquid Galaxy data analysists at AdMob can tailor ads to potential customers. However, Google realizes that there are some really good data analysists and some okay data analysists. They decided to put sensors in their data analysists name tags, and they record the habits of the top analysis, compared to the habits of the ok data scientists. They put these habits and value in Big Data clusters. Then with the implementation of Liquid Galaxy, they can reorder these values compare the differences between the top data analysists compared to the average one. Then with this information AdMob, can optimize their employes to do the best, and could save a lot of resources. Overall due to Liquid Galaxy's smart implementation of Big Data tools, companies could profit even more.