First of all, the idea of Extended Vehicle Concept is impressive, it tries to convenience and serve the best service to the public. Extended Vehicle Concept provides the data confidentiality of confidentiality, which assure that private or confidential information is only made available or disclosed to authorized third party. The data are communicated by the manufacturer to an off-board facility because if it accesses the vehicle functions from third-party directly, it can facilitate hacker attacks. Every new external data interface increases the number of potential targets and entry points. In this case, hacker or cracker can do intrusion. Other than that, what if a hacker or cracker bribe someone in the manufacture. The inside attack sounds not too hard for me. This concept sympathize the privacy of confidentiality, which assures that customer control or influence what information related to them may be collected and stored in their third party. Also, the customer has the right to change data or decide which data can be stored, it is referring to data integrity.

Neutral Vehicle Platform :

The ides of Neutral Vehicle Platform offers an end-to-end framework service to transfer data from the ground to the cloud, allowing development of advanced application and service also by third parties. Mainly, it is based on three concepts: Openness, security, and interoperability.

Openness allows different service providers to innovate and build applications to end users continuously by using a common set of APIs and common Vehicle Data Set. The security requirements are based off advanced industry best practices,

recommendations and standards. The department will regularly review, check, and update as part of the security governance framework. All the information will be collected, encrypted, stored into the cloud. Their interoperability provides a set of APIs based off common standards as Representational State Transfer (REST) and JSON that promotes an efficient data exchange. And this platform runs on a cloud environment so it is easier to scale.

Third, describe the key differences between the two approaches?

Both concepts operates by third party. However, Extended Vehicle Concept is accessing data by off-board facilities, so vehicle owners transfer their data into off-board facilities and then the third party can process the data. The other is a platform design on the cloud that must be open and modular so different providers can connect and operate their products and/or platform components. Their idea is letting vehicle owners, fleet managers and third party product to compete and innovate.

I personally like their ideas of transfer data, stored in their facilities, but I cannot trust their security. Even though they mentioned it is security in their data center but I do not think it is secure enough. Maybe they just have not encountered any flaws in security, especially after I am learning the concept of cyber security. The main concern I have is their faculties. Since these two concepts are new, their faculties are new as well. I do let Google store my personal data but Google is a well known company in the world. Reputation matters. Maybe I will try one of these concepts someday. It is just not now. I would suggest both concepts to double check the possibility of inside attack. Be sure to train their employees well enough not to betray.