Data and Smart Mobility

Data has reached the mobility arena. The car has evolved from a mechanical device into a "data-producing embedded software platform", and the internet is rapidly linking up supply and demand to meet our transport needs very effectively. There's a huge potential of these developments to make mobility more sustainable. Something that is urgently needed, because the negative effects of mobility are costing society more than three percent of the gross national product, apart from all non-material damage. This financial damage is mainly due to accidents, but also the costs of pollution, congestion and the unwanted use of the public space count in the calculation.

The potential of technological development to meet these disadvantages is great and data plays a key role in two dimensions:
1. Smarter vehicles that record, process and share more and more data in order to achieve a safer, cleaner and more effective system. Examples are traffic information that uses data generated by the traffic itself, but also direct vehicle-to-vehicle communication via specific WiFi systems, all data that can be read on the vehicle's internal communication system, and communication between traffic lights and the vehicle. With the increasing number of sensors and cameras that are mounted on cars, an explosion of useful data from mobility is already under way.
2. Better services around mobility. Examples of this are "Mobility As A Service", in which people do not own a vehicle but purchase rides, regardless of how the ride is organized is carried out. Examples are the Ubers facilitating demand and supply of modality, new sharing concepts and ride-services, bicycle lending systems and smart parking services. But you can also see enormous improvement in the logistics through the smart use of data.

Both developments depend to a great extent on the quantity and quality of the underlying data. In the case of smarter vehicles, one of the biggest challenges is to process the 10 terabytes per hour of data that a vehicle produces nowadays into usable metadata, and to organize the communication to and from the vehicle safely and reliably. With regard to the services the challenges lie in the quality of the service, access rights to data and concerns about privacy and security.

Here is a great opportunity for JADS. There is a growing realization that data management is the key to the success of these developments. And like many parts in the high-tech industry, the progress of development will not be determined by the budgets or technical possibilities, but by the amount of manpower that can be found to solve these problems. This is the main reason why the reason why the industry has a strong interest in the activities of JADS.