The department of Very Large Business Applications under the lead of Prof. Dr.-Ing. Jorge Marx Gómez is strongly focused on information technology based sustainability research. Especially the fields of environmental information systems and sustainability reporting are represented in the offered courses. In addition, we are working on several practical cooperation projects with different companies.

Figure: Runtime Environment – IT-for-Green (as Example of VLBA projects)

Showcase Electric mobility Lower Saxony

- Provide planning and assistance services to enable intermodal and sustainable mobility with adaptive provision of information according to customer preferences
- Integration of incentive systems
- Implementation of CRM and BI strategies
- Provide analytics and reports for customers and operators

Regional Car Balancing (ReCaB)

- Examine how far car dealers can turn into regional suppliers of mobility (using the example of car-sharing)
- Examine in which degree the car dealers competences and existing services gives them a competitive advantage in comparison to other providers of mobility
- Evaluate the economic and technical feasibility
- Develop a ‘roadmap of transformation’ for car-dealers

IT-for-Green

The department VLBA focuses in the project IT-for-Green on the development and deployment of a service-oriented infrastructure as a runtime environment for the individual modules in the project and module "Sustainability reporting and communication". Furthermore, the project lead and management are main task of our department in the project.

Smart Wind Farm Control

The project Smart Wind Farm (as example of a project group topic) deals with the identification of average lifetimes of the individual components of wind turbines in order to optimize the maintenance work for the offshore sector. By using different analyses the current condition and approximate remaining lifetime of the wind turbine components shall be identified. This knowledge can be used to replace components with a short remaining life-time proactively in a routine maintenance. This way, unscheduled repairs can be minimized.

Further project information

Showcase Electric Mobility Lower Saxony - http://www.ikts-niedersachsen.de/en
ReCaB - http://vlba.informatik.uni-oldenburg.de/en/63500.html
IT-for-Green - http://it-for-green.eu

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