Challenge
Optimizing user comfort
The goal of powertrain optimization is to increase the user comfort. This includes building various complicated component models, such as manuals, transmissions, shifting gears, dual-mass flywheels, dampers, release bearings and measuring machines.

Solution
SimulationX Professional Edition
ITI provided user-specific library enhancements and ready-to-use models that can be reused by BMW in its own models and environment, e.g. a driver model to simulate the man-machine interaction. To make modeling easier, the guided user interface was enhanced.

Benefits
Ease of calculation
The efficiency of the design process could be increased considerably. BMW benefits from better usability and is able to integrate digital components of vendors and to calculate entirely new phenomena – this helps BMW to optimize the user comfort of their products significantly.

SimulationX enables BMW to model and simulate new phenomena with great ease of use.

The Bavarian OEM and ITI enjoy a longstanding business relationship in the field of system simulation developing versatile solutions in all kinds of physical domains for now more than a decade.

Both ITI’s software and its engineering services have helped BMW optimize power trains and hydraulic applications. ITI’s fundamentally new simulation models make system simulation not only more accessible, but also expand into completely new fields of application across departments.

With SimulationX BMW is now able to model, simulate and analyze powertrains comprehensively throughout the whole design process – and its engineers benefit from a great ease of use.