



### Topic of the Presentation

CATER for Mass Customization of Vehicle

### Speaker

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### Abstract

To meet challenging market demands, automotive manufacturers are becoming increasingly customer-centric. Mass customization over the Internet makes it possible for customers to design their own vehicle, which adds competitive advantage.

The main goal of the CATER – Computerized Automotive Technology Reconfiguration – System is to deliver an integrated networked business system. Networked or N-business can bring about higher levels of productivity, and reduce the cost of design, manufacturing and marketing for automotive industries. The CATER methodology takes a holistic approach in implementing system-wide solutions.

In the CATER project several innovative features are integrated: Assessment of customer affect or *citarasa*, 3D Do-It-Yourself Design, Teardown information of vehicle design, Semantic database for concurrent design, Manufacturing production linked to supply chain management, and Sales-service support in interactive commerce. The ultimate goal of CATER is to achieve an "F2B2C" e-Commerce.

The CATER research activities address four important aspects: A design philosophy that showcases the best practices of N-business; ICT innovations in business processes and product development that can enhance customer relationship; while supporting the needs of concurrent engineering teams; and development of a semantic driven system that ties together concurrent engineering and customers.

CATER is an EU funded project under the Sixth Framework. There are 12 partners in Europe, plus Malaysia and Singapore.

### Curriculum Vitae

Halimahtun Dato' Mohd Khalid is Executive Director of Damai Sciences, Malaysia and Singapore. The company specializes in Interactive Design and Human Factors Engineering. She has held positions at Universiti Malaysia Sarawak as Professor of Cognitive Ergonomics, Director of the Institute of Design and Ergonomics Application, and Dean, Centre for Applied Learning and Multimedia. She received her PhD in Cognitive Ergonomics from University College London, and a M.Sc. in Applied Experimental Psychology from Monash University, Australia.

She has been principal investigator and project leader of several international and national grants, and has consulted internationally in ergonomics and G2B portal usability. Her research interests include: Virtual Collaboration, Concurrent Design, Mass Customization, Affective Design, Applications of Speech recognition, Design of Assistive Devices, a research area that won the MOSTI Gold Medal award.

Dr. Khalid is Co-Technical Manager of the EU funded CATER project. She is currently the Principal Investigator of the US Air Force project ROSETTA II on multicultural cognition. She has authored more than 100 publications and has delivered keynote addresses at major international conferences.

Dr. Khalid is Chair of the Committee of Science Technology & Practice of the International Ergonomics Association. She is also a Past President of the Work with Computing Systems Group, and the Southeast Asian Ergonomics Society.

