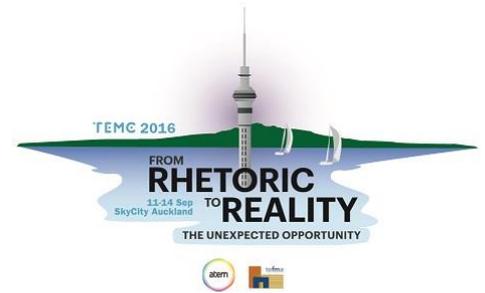


Concurrent Session C
Monday 12 September 2016
1:30pm – 2:20pm



Session 7
Smart Campus Initiative at the University of Melbourne -
Facilities Management using Wireless Big Data

Dr Jan Dethlefs

University of Melbourne

Dr Jan Dethlefs is leading the Smart Campus Project at the University of Melbourne, With a PhD in mathematical modelling he is providing the analytical component of the Wireless Big Data Initiative.

Wireless communication opens up new possibilities on a daily base in every aspect of our lives. Not only can we collect information faster and better, but we can also distribute information faster, more target specific and facilitate timely decision making.

The University of Melbourne is currently implementing smart campus technology that will fundamentally change the approach to managing and operating its facilities through a stream of real-time data. Capital planning, business case development, reducing greenhouse emissions, providing a campus that is better tailored to the needs of its occupants, targeted waste collection and maintenance are just a few of the goals of this project.

As the 5th largest “city” in Victoria the University has a huge economic, environmental and social impact on its surroundings and the city of Melbourne. More than 150,000 visitors travel across the campus on a daily base during the semester periods. The University started the Big Data Wireless project in January 2016 to better understand how the campus functions given the large number of people who visit, study, work, live, eat and shop on campus.

Wireless technology is used to manage, model and forecast movement and occupancy on the multiple campuses. De-identified data sets analysed and used to guide maintenance, space planning, resource distribution, refurbishments and other aspects of space and infrastructure management.

Wireless Big Data has improved our understanding how to build a more sustainable and efficient campus to compete globally in the 21st century.

