

# **Robust Trust Assessment Model for the Selection of Trustworthy Cloud Services**

*Keynote address by Lynn Margaret Batten*

**Abstract:** Trustworthy service selection has become a major area of research in cloud computing due to the increase in the number of cloud service providers. From a user's perspective, identifying an appropriate service provider who complies with her service requirements is a difficult task. This has resulted in the introduction of various cloud marketplaces, such as AWS Marketplace, Oracle Marketplace, Microsoft Windows, Azure Marketplace and Salesforce.com's AppExchange, which offer help in selecting a suitable cloud service. None of these marketplaces makes trust a major thrust of their evaluation, whereas the recent research literature has shown that one of the most important components for the success of a cloud market is its ability to provide the customer with the level of trust they need to satisfy themselves that the services offered are reliable and the most suitable for their needs. Consequently, trustworthy service selection is now viewed as being an important factor and has become a major area of research in cloud computing.

This talk describes the development of a robust trust assessment model for the identification of trustworthy cloud services. This trust management architecture forms a basis of the evaluation system and for the first time, introduces a concrete approach to measuring relative and transparent trust. The system is designed to assess whole cloud marketplaces, cloud brokers and service providers, as well as individual cloud service sub-offerings, against particular customer requirements. It supplies users with metrics evaluated according to those requirements that are considered by the customer to be essential for their choice of service.