Presentation of: Cloud Computing's Software-as-a-Service (SaaS) Delivery Model Benefits Technical Courses in Higher Education

Janet L. Kourik and Jiangping Wang
Webster University, St. Louis, Missouri, USA

KourikJL@webster.edu Wang@webster.edu

Abstract

Software-as-a-Service (SaaS) is a form of cloud computing that relieves the user of the burden of hardware and software installation and management. SaaS can be used at the course level to enhance curricula and student experience. When cloud computing and SaaS are included in educational literature, the focus is typically on implementing administrative functions. Yet, SaaS can make more immediate and substantial contributions to the technical course content in educational offerings. This paper explores cloud computing and SaaS, provides examples, reports on experiences using SaaS to offer specialized software in courses, and analyzes the advantages and disadvantages of using SaaS at the course level. The paper contributes to the literature in higher education by analyzing the major technical concepts, potential, and constraints for using SaaS to deliver specialized software at the course level. The paper is offered as a discussion session during the Informing Science & IT Education 2012 conference to increase the exchange of information and enable more students and educators to benefit from this emerging technology

Keywords: Cloud computing, software-as-a-service (SaaS), e-service, higher education.

Dr. Janet L. Kourik is a Professor in the Mathematics and Computer Science Department, Walker School of Business and Technology at Webster University.   She received her Ph.D. in Information Systems from Nova Southeastern University after working in the IT industry. Her areas of teaching include database, information systems, operating systems, and distributed systems. Her work has appeared in international conferences and journals including the Journal of Business and Educational Leadership and the Journal of Research in Higher Education. Her research interests include databases, analytics, information systems, agile methods, and computer science education

Dr. JiangPing Wang has a B.A. in Electrical Engineering from Chongqing University, Chongqing, China, a M.S. in Information Systems from the University of Leeds, Leeds, United Kingdom and a Ph.D. in Engineering Management from the Missouri University of Science and Technology, Rolla, Missouri. Dr. Wang's areas of teaching include database design, database applications, data warehousing, web databases, databases in web services, distributed application development, computer programming, operating systems and computer architecture. His areas of research include database management systems, decision support systems, business intelligence, e-commerce data processing, and software project management. Dr. Wang has been published in Web Enabled Online Analytical Processing for Intelligent Business Decision-Making and the proceedings of 10th Wuhan International Conference on E-Business.