

## Information Systems Outsourcing and Application Service Provision

Information Systems (IS) Outsourcing has undergone several changes over the last four decades. Traditional outsourcing in the 1960s and 1970s saw the introduction of the service bureau. During this period, the term *facilities management* was used rather than the more fashionable term of outsourcing. *First wave* outsourcing of this type saw companies outsourcing their mainframe and data center facilities to third-party vendors. The economics of traditional outsourcing tended to benefit the large customer, as the financial opportunities for the small and medium enterprise (SME) were limited. This era was replaced with *second wave* enterprise outsourcing in the 1980s and 1990s, with the growth in client server technologies, Enterprise Resource Planning (ERP) systems, and other 'shrink-wrapped' *off-the-shelf* applications. Outsourcing practice increased particularly in North America, Europe and Asia. Both private and non-private (government/federal) organizations embraced outsourcing and this led to the growth of global outsourcing providers.

Whilst outsourcing continues to gain momentum, the development of Internet technologies has led to new opportunities in the form of Industry-centric *third wave* outsourcing. This is where Application Service Providers (ASPs) will manage and deliver application capabilities to multiple entities from data centers over a wide area network (WAN). Between 1999 and 2001, the ASP industry was largely vendor-driven, characterized more by marketing-hype than tangible examples of customer reference sites using the ASP model. The Application Service Provider Industry Consortium, set up in 1999, reached 700 members by 2000. Various research analysts predicted that the ASP industry would grow to figures between \$18bn and \$25 bn by 2003. But during 2000, the dot.com shake-out saw many ASPs filing for Chapter 11 in the US, with others disappearing altogether.

This first phase of the ASP industry has now ended and a second phase has now begun. Currently, the ASP industry is now concentrating upon broader issues than just applications delivery and enablement. ASP vendors now realize that issues of applications integration and managed services are vital to the success of this business model. In this HICSS-35 Mini Track on Information Systems Outsourcing and ASP, seven research papers address the general field of IS outsourcing or the specific area of ASP, which is a sub-set of the former. A broad theme of many of the papers is the extent to which the lessons of past IS outsourcing theory and practice can be applied to the ASP area.

The papers by Bryson and Sullivan on 'Designing effective incentive-orientated outsourcing contracts for ERP' and Brehm, Dibbern and Heinzl on 'Re-thinking ERP outsourcing decisions for leveraging technological and preserving business knowledge' both discuss the important issue of ERP outsourcing. The former paper explores ERP outsourcing in terms of ASP; whilst the latter analyses how different categories of knowledge influence the sourcing decision of crucial tasks within the ERP life-cycle. Papers by Yao and Murphy, 'Client relationship development for application service providers; a research model'; Jayatilaka, Schwarz and Hirschheim, 'Determinants of ASP choice: an integrated perspective'; Seltsikas and Currie, 'Evaluating the ASP business model: the challenge of integration'; Klueber, 'ASP strategic and solutions for eProcurement processes offered by an eMarket'; all focus upon the relationship between IS outsourcing and the ASP model. Some address the relationship between traditional outsourcing and 'third wave' ASP outsourcing drawing from relevant theoretical perspectives (transaction cost theory, resource dependency and knowledge-based approaches) whilst others seek to evaluate different taxonomies of ASP models and eMarkets. Finally Sun, Lin and Sun, in their paper, 'The factors influencing information systems outsourcing partnership- a study integrating case study and survey methods' employ social theories to investigate the influencing factors of outsourcing partnerships between firm and the IS of outsourcing providers.

The seven research papers revisit past work on IS outsourcing theory and practice and address emerging developments in the delivery, integration, enablement and management of web-enabled software applications using the software-as-a-service or ASP business model.