
Editorial

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Biographical notes: Türkay Dereli is a Professor of Industrial Engineering Department at the University of Gaziantep, Turkey. He has published numerous technical papers in professional academic journals and conferences and has several textbooks on CAD/CAM, ICT and quality management. He is also an active referee for many professional journals and edited several conference proceedings. His current research interests include innovation and technology management, CAD/CAM, process planning, feature technology, TQM, agile and responsive manufacturing and management, soft computing, informatics and applications of artificial intelligence.

Mehmet Emin Aydın received his BSc from İstanbul Technical University, his MA from İstanbul University and his PhD from Sakarya University, Turkey. He is currently a Lecturer at the Department of Computer Science and Technology of the University of Bedfordshire, UK. His research interests include grid-enabled/parallel and distributed metaheuristics, network planning and optimisation, evolutionary computation and intelligent agents and multi-agent systems. He is currently a member of The OR Society UK, ACM and IEEE Computer Society.

Global economy increasingly becomes service-oriented with key impact of services in the public, and therefore, service management receives growing interest. It draws remarkable attention to the problems emerging in/around service industry and accredits great importance to service system studies in which finding 'robust solutions' for the problems encountered in service management (*design, strategy, quality, deployment and configuration of services, service operations management, service pricing, service*

reliability, etc.) remains essential. Thereby, the main aim is to find ‘*robust and acceptable solutions*’ within affordable time periods although many service industry problems incur significant difficulties in that respect. On the other hand, Emergent Computing (EC) studies keep exploring through and offering a horizon of nature-inspired problem solving approaches for highly complex and dynamic problems in/around service systems. The growing confidence and appreciation in success of EC based problem solving drive us to an expectation that the use of EC for solving service management problems can improve not only ‘*service intelligence*’ but also quality and performance of the service systems.

The main motivation behind this special issue is to increase the awareness of the service sector on the effectiveness and power of EC technologies through high quality research papers. Our call for papers has been responded with 16 research papers on recent research experiences of respected investigators from both academia and industry. All consider EC applied to service management problems. Two of the submissions were co-authored by us, *by guest editors*, therefore the review process of these two has been handled by editors, and hence, the reviewers being completely anonymous to us. The received manuscripts were reviewed by, at least, three independent reviewers while rigorously following the editorial policy of the *EJIE – European Journal of Industrial Engineering*. All of the papers required several revisions before final acceptance. After a strict review process, we managed to accept three papers out of sixteen alongside the two co-authored by us. By accepting this set of papers, we tried to draw attention of researchers to successful applications of EC in solving various service management problems.

The first paper by *Dereli et al.* presents a survey on the applications of swarm intelligence methodologies in a wide range of public service problems, which draw attentions to public service sector and discusses its problems with applicability of swarm intelligence. The second paper by *Baykasoğlu et al.* brings forward the power of bee colony algorithms in solving workload balancing problems (in examination job assignment), which have NP-hard nature. Following two papers reflect the subjectivities causing difficulties in solving assessment and performance handling problems, and recommend the use of such comprehensive approaches. *Öztemel and Salmona* introduce an agent-based framework for performance assessment of services provided by local governments, while *Parameshwaran et al.* discuss a performance management system based on an integrated fuzzy AHP and DEA for automobile repair shops. The final paper by *Chan et al.* discusses the applicability of context aware genetic algorithm to improve the service quality of power supply systems, where the problem is modelled and solved.

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