Queue configurations and customer ownership: An analytical and experimental investigation

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Abstract

Contrary to traditional queueing theory, recent field studies in health care and call centers indicate that pooling queues may not lead to operational efficiencies relative to dedicated queues. We use an equilibrium queueing model analysis and a series of controlled experiments to examine the conditions under which this may be the case and to test several behavioral mechanisms that may explain why. We also examine whether the order in which servers are exposed to one type of queue configuration versus another has an impact on their performance, and why.