A Simulation Based Framework of Performance Monitoring and Incentive Mechanism for Succesful Interactions in Virtual Environment

Abstract

The success of any interaction through a virtual medium can be determined by the continuity of service delivery. The promptness and competence of service, delivered as promised oragreed, are indicators used to measure the success of service delivery. To ensure successful service delivery, we designed a proactive continuous performance monitoring and incentive mechanism. The delivery of service is checked at every intermediate point, so that the progress of the delivery can be monitored easily. With this monitoring design, performance discrepancies can be identified and resolved quickly, thereby preventing theescalation of aproblem. Moreover, the incentive mechanism is designed to support continuous performance monitoring. It is proposed that the incentive be given at any intermediate checkpoint instead of at the end of the interaction. We built a prototype and conducted simulations under a variety ofconditions. The experiment results showthat our proposed framework is effective in facilitating successful service delivery.