Analysis of Call Routing Rules for Improving Call Centre Operations in Nigeria

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Abstract

Routing rules plays a very important role in the services offered by call centres in a competitive environment. For example, a call centre whose priority is to reduce overall mean time to service completion, one might think it best to route calls to agents who can handle it the fastest sometimes even holding a call in queue to wait for that agent to free up rather than routing it to a slower agent. However, this rule does not account for the increase in congestion resulting from repeated phone calls associated with unresolved issues. On the other hand, for a call centre that is primarily focused on call resolution, it seems optimal to route each call type to the agent who can handle it the best, thus holding that call in queue even if other agents are idle and/or become available earlier. However, in an environment where there is significant variability across different agents’ resolution probabilities. Routing rules that are based solely on these rates are likely to lead to long queues.

This work attempts to determine whether average handling time and call resolution rate are true
determinants of operational success of a call centre to reduce waiting queue. It also aim at examining whether emphasis should be on reducing handling time or effective call resolution including the trade-offs between these two criteria. The result emphasizes the trade-offs between Average Speed of Answer (ASA) and Call Resolution (CR) rates and also shows that neither waiting-time nor resolution oriented rules are superior to each other; it is subjectively dependent on the value the call centre places on either of the rule.

References


Index Terms

Computer Science     Networks
Keywords

Call Centre, Routing rule, Call Centre, Simulation Analysis.