

# Using Data-Variety for Improving QoR of Big Data Processing

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## ABSTRACT

Enterprises use Big Data processing as solution for wide range of their calculations and analytics. Due to the limitation of resources such as processing time and processing cost, the Quality of Result (QoR) may be decreased. In this paper, we present a data variety-aware approach for improving QoR in case of budget and finish time limitations. In this approach we divide the input data same size portions. This same size portions have different significance on final answer. We offer an algorithm to manage the resources and variety aware allocation. In this algorithm, we move the most important portions to higher configure servers. We evaluate our work by wide range of application from various area. Based on the results, our approach can achieve higher QoR in compared with other approaches in case of budget and finishing time. Our approach improves QoR up to 33% compared to other approaches.

**Keywords:** Big Data, Significance, QoR, Data-Variety, Budget Constraint.