Determining the performance of a major project is a challenge for both practitioners and scholars. In the context of operational change projects, the challenge is exacerbated by the service-intensive nature of the transformation, temporal disconnects between contracting and delivery, and lack of appropriate metrics. This paper considers performance from a service delivery perspective. Current measures of performance were noted to be inadequate in practice. The service operations literature provided frameworks which were investigated for their utility and supplemented by qualitative data to generate an enhanced service performance model. This was then tested using a survey and a structural equation model derived. Development of this yielded new classifications but most importantly, provided a more meaningful method for measuring the performance of operational transformation projects. Specifically, it is shown that expectations and perceptions are measured on different scales, and that quality performance is inseparable from other performance aspects. The contributions of this paper are to address an important practical problem but also to contribute to the development of the discussion of performance management in major projects from an OM perspective.