

Quality, Risk and Operations Management: The Integration

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Quality, just as risk, is measured as a consequence resulting from factors and events defined in terms of the statistical characteristics that underlie these events. Operations management deals with management decisions whose goal is to achieve efficiency and effectiveness in the design, manufacturing and delivery of products and services. In this work, we investigate how quality, risk and operations management can integrate, both conceptually and technically, thus expanding the concerns that these domains are confronted with and challenged by.

The paper builds on specific case studies derived from past and current work of the author. Throughout such applications, we demonstrate how quality and risk management can merge with operations management in order to improve management processes. The case studies we refer to include group testing of Service Oriented Architectures (SOA), usability analysis of Web Services (WS) and Operational Risks (OpR) of information and communication systems.

Our objective here is to encourage an integrated approach for handling complex technological and organizational problems, combining tools of methodologies from different sources. Overall, we make the point that Integrated Management is an essential perspective that needs to be researched and encouraged in education, industry and service organizations.

For the case studies referred to in this work see Bai and Kenett (2009), Harel et al. (2008), Kenett and Zacks (1998), Kenett and Raphaeli (2008), Kenett and Salini (2008). A general introduction to integrated management is available in Godfrey and Kenett (2007), Kenett (2004, 2007, 2008, 2009). The MUSING (2006) web site provides information on state of the art risk assessment of financial and operational risks integrating semantic, unstructured data, with structured data.

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