

# MODELLING NON-FUNCTIONAL REQUIREMENTS OF BUSINESS PROCESSES

Faisal Aburub, Mohammed Odeh, & Ian Beeson  
Faculty of Computing, Engineering, and Mathematical Sciences,  
University of the West of England (UWE),  
Coldharbour Lane, Frenchay, Bristol BS16 1QY, United Kingdom  
Tel: +44(0)117 328 3343, Fax: +44(0)117 328 2587  
Email: [Faisal2.Aburub@uwe.ac.uk](mailto:Faisal2.Aburub@uwe.ac.uk)

## Abstract

This paper presents an approach to the identification and inclusion of 'non-functional' aspects of a business process in modelling for business improvement. The notion of Non-Functional Requirements (NFRs) is borrowed from software engineering, and a method developed in that field for linking NFRs to conceptual models is adapted and applied to business process modelling. Translated into this domain, NFRs are equated with the general or overall quality attributes of a business process, which, though essential aspects of any effective process, are not well captured in a functionally oriented process model. Using an example of a healthcare process (cancer registration in Jordan). We show how an analysis and evaluation of NFRs can be applied to a process model developed with Role Activity Diagramming (RAD) to operationalise desirable quality features more explicitly in the model. This gives a useful extension to RAD and similar modelling methods, as well as providing a basis for business improvement.

## Keywords

Non-Functional Requirements, Business Process Modelling, Role Activity Diagramming, Business Process Improvement.