

## Innovation of IT metasystems by means of event-driven paradigm using QDMS

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Globalisation of world economy brings new and more complex demands to business systems. In order to respond to these trends, business systems apply new paradigms that are inevitable reflecting on management metasystems – quality assurance (QA), as well as on information technology (IT) metasystems. Small and medium enterprises (in particular in food industry) do not have possibilities to access external resources to the extent that could provide adequate keeping up with these trends. That raises the question how to enhance synergetic effect of interaction between existing QA and IT metasystems in order to overcome resource gap and achieve set goals by internal resources. The focus of this article is to propose a methodology for utilisation of potential of quality assurance document management system (QDMS) as prototypical platform for initiating, developing, testing and improving new functionalities that are required by IT as support for business system management. In that way QDMS plays a role of catalyst that not only accelerates but could also enhance selectivity of the reactions of QA and IT metasystems and direct them on finding new functionalities based on event-driven paradigm. The article tries to show the process of modelling, development and implementation of a possible approach to this problem through conceptual survey and practical solution in the food industry.

**Keywords:** system management; quality; document management; QDMS; HACCP; SOA; event driven; BAM; CEP

### 1. Introduction

Companies today face a trend of accelerated changes in market conditions, requirements and activities at a global and local level Hoyle (2006). This requires new approaches to work organisation in order to provide maximum agility, reusability and flexibility in order to achieve optimum performance, cost, speed and quality of products and services. According to Zhuge (2002), this has resulted in a shift from primarily functional silo-based organisations (entities are the key business functions) to object-based process management (key entities are business processes as objects of business systems). As companies' business processes need to change and adapt with a frequency much greater than before (Lu, Sadiq, and Governatori 2009), and knowledge of business process management (BPM) becomes the most valuable commercial and academic resources

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