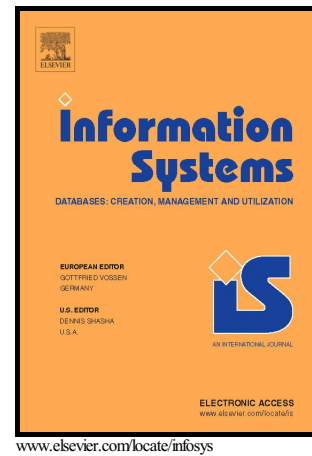


Author's Accepted Manuscript

Augmenting process elicitation with visual priming:
An empirical exploration of user behaviour and
modelling outcomes

Joel Harman, Ross Brown, Daniel Johnson,
Stefanie Rinderle-Ma, Udo Kannengiesser



PII: S0306-4379(15)30106-X
DOI: <http://dx.doi.org/10.1016/j.is.2016.01.005>
Reference: IS1110

To appear in: *Information Systems*

Received date: 26 September 2015
Accepted date: 13 January 2016

Cite this article as: Joel Harman, Ross Brown, Daniel Johnson, Stefanie Rinderle Ma and Udo Kannengiesser, Augmenting process elicitation with visual priming An empirical exploration of user behaviour and modelling outcomes, *Information Systems*, <http://dx.doi.org/10.1016/j.is.2016.01.005>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Augmenting Process Elicitation with Visual Priming: An Empirical Exploration of User Behaviour and Modelling Outcomes

Joel Harman^a, Ross Brown^a, Daniel Johnson^a, Stefanie Rinderle-Ma^b, Udo
Kannengiesser^c

^aQueensland University of Technology (QUT), Science and Engineering Faculty

^bUniversity of Vienna, Faculty of Computer Science, Austria

^cMetasonic GmbH, Munchner Strasse 29 - Hettenshausen, 85276 Pfaffenhofen, Germany

Abstract

Business process models have become an effective way of examining business practices to identify areas for improvement. While common information gathering approaches are generally efficacious, they can be quite time consuming and have the risk of developing inaccuracies when information is forgotten or incorrectly interpreted by analysts. In this study, the potential of a role-playing approach to process elicitation and specification has been examined. This method allows stakeholders to enter a virtual world and role-play actions similarly to how they would in reality. As actions are completed, a model is automatically developed, removing the need for stakeholders to learn and understand a modelling grammar. An empirical investigation comparing both the modelling outputs and participant behaviour of this virtual world role-play elicitor with an S-BPM process modelling tool found that while the modelling approaches of the two groups varied greatly, the virtual world elicitor may not only improve both the number of individual process task steps remembered and the correctness of task ordering, but also provide a reduction in the time required for stakeholders to model a process view.

Keywords: Business Process Management, Process Elicitation, Subject-oriented Business Process Management, 3D Virtual Worlds, Human-computer Interaction

1. Introduction

Expert knowledge elicitation has for many years been a problem of much significance within a wide range of fields [12]. Tasks ranging from software requirements elicitation to graphic design all require an accurate flow of information between developers and end users. The inaccurate communication of this information has the potential to manifest in a variety of ways [46], including extended development times, higher construction costs or irrelevant products.

Download English Version:

<https://daneshyari.com/en/article/6858641>

Download Persian Version:

<https://daneshyari.com/article/6858641>

[Daneshyari.com](https://daneshyari.com)