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A MULTIPLE PERSPECTIVES QUESTIONING TOOL FOR INFORMATION SYSTEMS DEFINITION

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Abstract

In Information systems developments a non-holistic view has lead analysts and designers to omit important factors that later proved to be significant, thus leading to systems failures (Mitroff and Linstone 1993). This research in progress draws on the IS project management, soft systems and multiple perspectives literature to show how shortcomings in the systems analysis process might be overcome, proposing that a multiple perspectives tool, called T.O.P² (Hillier 2002) will prove useful in expanding the number of issues included in the systems development effort and thus lead to a reduction in the endemic number (Keil and Robey 1999) of systems failures. The author proposes that the use of the T.O.P² framework as a broad structure for questioning, utilising seven question types based on Kipling's (1902) '6W' questions, will lead to some Argyris (1993) style actionable knowledge. The intention is to apply the questioning tool within the context of other systems development methodologies, such as Checkland's Soft Systems (Checkland and Scholes 1999), thus generating the required context for specific question generation. For example, the questions generated under each question type (for Objects, Organisation and People), when looking at a particular business process, might include; What: [(What is the business processes? What data/information is required to perform a particular process?), (What rules are in place that governs its operation? What reward structures are in place? What performance measures are used to measure success?), (What personal or other attributes of individuals could lead to facilitation/blocking of the process or changes to the process/development effort?)], Who: [(Who owns the objects or processes under examination?), (Who are the organisations or groups involved/or effected by the process?), (Who controls the process? Who carries out the process? Who can stop the process?)], Which: [(Which other process are impacted upon. dependant upon/required buy this process. Which processes are outside he scope of consideration?), (Which (significant) organisations are not involved?), (Which –significant-people are not involved or should be involved?)], How: [(How is it performed? How might it be performed?), (How are/will organisations be impacted by this process or changes to this process?), (How will individuals be impacted by this process or changes to this process? How do/will individuals interpret the process/changes to the process?)], When: [(When does it take place? Can it take place at any time?), (When will organisation involved with this process be able to carry it out?), (When are people available to carry out this process?)], Where: [(Where does the process take place?), (Where are the organisations?), (Where are the people located or available to carry out this process?)], and Why: [(Why is the process performed?), (Why do organisations carry out this process? Why might they not carry it out?), (Why do people carry out this process? Why might they not carry it out?)]. The research will follow a staged approach, where by lessons learnt will be re-injected onto the research as it progresses. Mini cases involving small team based website developments will be used to along with a more in-depth action research project where the researcher will be placed within a systems investigation team. Participants and stakeholders will be questioned via interviews before and after their use of the tool to gauge their reactions to it. Part of the interviewing process of stakeholders will also utilise the T.O.P² framework, so in effect T.O.P² will assist in analysing the performance of the T.O.P² questioning tool itself.

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