

INFORMATION ENVELOPE AND ITS INFORMATION INTEGRITY IMPLICATIONS

(Research Paper)

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Abstract: Physical and informational works are strongly interrelated in a business process. This facilitates modeling a business process as an integral part of a closed loop information and control system. Various uncertainties due to internal and external system environmental factors of complexity, change, communication, conversion and corruption (i.e., 5“C”s) affect this model and raise Information Integrity issue for the same. This complex information and control system delivers a flexible information decision to control business process in a changing environment. The paper argues that a more useful view of information decision is as a process of ‘information origination and processing endogenous to decision situation’ rather than the conventional view of decision as choice between various alternatives identified exogenous to the decision situation. This flexible decision process should have the stages viz. Operable goal setting, Definition of complexity criteria, Construction of opportunity and constrain spaces, Development of information structure dynamics model, Customized planning and design of alternatives and, finally, the Choice of alternative. The conclave of information bases for these information origination and processing stages characterized by their respective contexts is normally not considered for business process *IS* modeling. It is this conclave that the paper defines as ‘Information Envelope’, and shows it to be central to the information and control system to which the business process is integral. More importantly, each of these information bases is affected by uncertainty of the type not encountered earlier. This results in further loss of Information Integrity for a business process operating in a complex and changing environment.

Key Words: Fixed vs. Flexible Automation; Informational and Physical Work Systems; Business process *IS* View; Dynamic Decision Process Stages; Maximal and Minimal Information Processing; Uncertainty; Unstructured and Aperiodic Information Processing; Information Origination and Processing.

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