

A Planning Framework for Information Integrity for Complex Business Environment characterized by Uncertainty

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Abstract: This paper investigates the research issue of Information Integrity for complex business environment characterized by uncertainty. The paper begins with a study of the planning framework for homogeneous business environment with ‘no surprises,’ which the paper identifies as a ‘closed’ system. This leads to the study of an informational view of a complex business environment. The paper argues that complex systems are essentially ‘open’ systems, which, with time, undertake shifts in IS goal, direction and targets (i.e., standards for plans and programs). These shifts, and the uncertainty due to system complexity and other environmental factors identified, infest the IS with hitherto unknown errors resulting in loss of integrity. This calls for “adaptive learning” as a requirement for the planning framework. Accordingly, the paper goes on to construct the components of the planning framework to ensure Information Integrity in a complex business environment. In addition to adaptive learning capability, it comprises the servo control systems built around the meaningful use of pre-estimated targets (standards). This brings about improvements in processes, operations, and inputs by controlling them to achieve desired outputs and meeting business system objectives. Finally, the paper presents a conceptual view of the systems representation of the planning framework.