

# Comments on “Failure, Identity Loss and Living Information Systems”

by P. Kanellis, M. Lycett, and R.J. Paul

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Information system (IS) failure is a pervasive phenomenon. Like the paper’s introduction, common sense and statistics show information system failure is common and also important, because huge amounts of human effort and economic resources are spent without much gain. The issue of failure is also related to FRISCO report and the theme of the conference in two ways. First our concepts and ideas about information system and the nature of information system development can affect either positively or negatively our intellectual and technical capabilities to influence the likelihood of IS failure. Second, because information system definition forms one key concept and focus of the FRISCO report it may help achieve a common and more precise understanding of “what it is” that is failing.

The paper by Kanellis, Lycett and Paul delivers four distinct but interrelated results:

- 1) a definition / survey of IS success and a criticism of the prevailing positivistic accounts of the topic
- 2) a survey of IS failure literature and an attempt to develop a synthesis of the pertinent literature and conceptions of IS failure,
- 3) a proposal of a concept *identity loss* which is defined as the gap between the espoused functional whole (identity) and the actual

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The original version of this chapter was revised: The copyright line was incorrect. This has been corrected. The Erratum to this chapter is available at DOI: [10.1007/978-0-387-35500-9\\_30](https://doi.org/10.1007/978-0-387-35500-9_30)

E. D. Falkenberg et al. (eds.), *Information System Concepts: An Integrated Discipline Emerging*  
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performance of that functionality w. r. t. environmental change. This change may result in losing the identity in two different dimensions:

- in relation to environment i.e. a. k. a. misfit failure, and
- in relation to technical platform i.e. a. k. a. internal failure.

The concept is illustrated with a case study that demonstrates the validity of the use of the “identity loss” in relation to developing an internal accounting system for a large national company that is being privatised.

- 4) a call for a paradigm shift which defines Information systems as “living” systems based on the work of Maturana and Varela.

Overall I find the paper to be interesting and a fresh addition to the expanding discourse on IS failure. It offers a new and possibly exciting attempt to use concepts like identity and social construction of identity to understand the dynamics of legitimation and commitment creation in relation to IS development initiatives. It also points out the current weakness in the FRISCO report to understand second order change and the dynamic interactions between the IS and its environment.

Despite these positive observations I have a few critical observations and reservations to the approach adopted:

- 1) It is not really clear how the concept of identity loss synthesises previous failure concepts, and if so, what is the value added of this synthesis. Who could use it and for what purposes?
- 2) It is not clear how the concept leads to “web” like descriptions of failure (as alleged in the paper) in any way better than the past definitions of Lyytinen and Hirschheim or Sauer, and in what sense the resulting description is non-deterministic? If the description would be totally non-deterministic all failures would be totally random and no explanation would be possible, and needed. So, some sort of “intermediating” concept of causality is needed here which is lacking from the paper (like systemic dependencies, emergent features and path dependencies)
- 3) It is not clear how the paper would lead to a different type of failure analysis than in the past, and if this is the case, what would be those differences?
- 4) I found the concept of an identity loss at most vaguely defined. Clearly the concept of system here is not self-referential in the sense that the information system builds its own identity. Rather the identity is constructed by the stakeholders (which are not part of the system,

but in the environment) through social action and talk. Yet, how this attribution of the identity is accomplished, what mechanisms are used and by whom, is not discussed, though I find it critical for the whole concept of "identity". In this sense I do not see here much difference what is proposed from what a stakeholder based analysis would suggest.

- 5) The equation of identity with functionality is problematic. Normally identity during systems development is not defined by what the system is supposed do (i.e. its functions), because these may change or the actors do not know them. Rather it is defined by the goals (this is why we do this), the work units (this is how much we can spend and how long we can work on this), the contracts (this is what we agree to exchange with one another) etc. Therefore I would have expected a more detailed analysis of mechanisms of identity construction.
- 6) Instead of an identity loss (due to difficulties observed above) I would rather discuss information systems and their development and maintenance trajectories in Marchian terms as "Garbage-cans" that bundle together varying actors, interests, competencies, resources, and solutions over time. These can stay in the organisational landscape for long periods of time until no support (=interest) is available. Therefore an identity for such "garbage-can" is dependent on the mobilisation of bias i.e. on the attribution of something which is worth of building and using resources by some stake-holders.

I was puzzled by the claim that "living systems" is something new in the field. In fact there is nothing new here (for a detailed analysis see J. Porra, Information Colonies and Punctuated Prototyping, PhD Thesis, University of Jyväskylä, 1996). I would find it much more worthwhile to ask *why* do we need fixed requirements and a clear identity for the task units of systems development. Then we should start looking at agency-dynamics, task complexity and uncertainty and issues that deal with institutional regulation and evolution in complex organisational domains. In particular it is not clear how "living systems" would be different from what is currently accomplished with evolutionary designs and incremental development, interoperability, portability and enhanceive maintenance.