

Green information systems design framework: a systematic literature review

ABSTRACT

The research on information systems (IS) and environmental sustainability has grown under the notion of green IS. Hence, it is important to comprehend the concept of green IS and to ascertain existing frameworks for designing it. This paper presents the definition and taxonomy of green IS, areas of green IS research currently being addressed by IS academics and research directions for future studies on green IS design framework. This paper follows systematic literature review (SLR) procedures with snowballing approach as the main method. Relevant articles were mainly selected by referring to the Association of Information Systems (AIS) and thus, are relevant to the IS academic community. This paper synthesized the six elements for green IS design framework namely context, goals, roles, design principles, functions and features. This provides a foundation for the future green IS design framework. The evidence indicates that there is absence of metrics in measuring green IS design, which is valuable in assessing such systems.

Keyword: Design; Framework; Green IS; Snowballing; Systematic literature review