

# Losing the Boxes: Fragmentation as a Source of System Complexity

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**Abstract.** Despite the advances in mature engineering disciplines, some complex systems continue to fail, and sometimes catastrophically. The lack of understanding of a problem and *all* its constituting elements is a key determinant in project failure. This paper, which looks at systems containing people, argues that the use of transdisciplinary approaches will aid in the insight and comprehension of complex problems. It will also be shown that the inclusion of subjective and inter-subjective system aspects can contribute to a holistic systems approach, however, the appropriate tools to do that need to be selected.