

Author	Disciplinary Perspective	Thesis	Assumption	Theory Name	Key Concept	Method	Phenomena Addressed	Bias
M. Pradhan J. Noll	Cybersecurity & Comp-Sci	“This article proposes and applies a concept for security, privacy, and dependability evaluation of IoT systems that could be used for V&V processes. This would enable more streamlined and standardized evaluations of IoT systems before they can be deemed usable for military contexts.” (Pradhan, Noll p. 14)	This method can be used to evaluate the SPD of future IoT devices and provide rationale for the results.	Root Mean Square Weighted Data; RMSWD	SPD (security, privacy, dependability) of military legacy systems	Evaluation, Case Study	Military IoT Systems	This method works with all government or non-government entities and organizations

<p>J. Crotty I. Horrocks</p>	<p>Business Management (Economics)</p>	<p>“Financial services organizations spend a significant amount of their IT budgets maintaining legacy systems. This paper identifies the characteristics of legacy systems and explores why such systems are so costly to maintain and support.” (Crotty, Horrocks p. 175)</p>	<p>Financial institutions have to pay a fortune to keep legacy systems maintained and supported with updates.</p>	<p>Meta-assessment models and Financial Management</p>	<p>Use of meta-models for financial and cost analysis</p>	<p>Situational Analysis, Documental Analysis</p>	<p>Costs of operating and maintaining legacy systems of big corporations</p>	<p>Meta-assessment models may not work for all companies and organizations in the world today</p>
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<p>Z. Irani R. Abril V. Weerakkody A. Omar U. Sivarajah</p>	<p>Computer Science Business Management Sociology</p>	<p>“In a ‘digital world’ where gov’ts are striving to offer transparent digital public services to user (i.e., citizens, businesses, and other public administrations) using a single point of interaction, these legacy systems continue to act as a major obstacle to innovation and transformation in PA.” (Irani et al)</p>	<p>Legacy systems have become an obstacle for public admin. They are also proving to be a security risk to both gov’t and citizens.</p>	<p>Moore’s Law Obsolescence</p>	<p>No Legacy Principle as a means of replacing systems over 15 years old</p>	<p>Qualitative Multi-Case Study, Digital Solutions, Interviews,</p>	<p>How outdated legacy systems are and an approach on how they should be replaced.</p>	<p>Not everyone will adopt this “no legacy principle” and will continue to use these legacy systems.</p>
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<p>R. Cao M. Iansiti</p>	<p>Computer Science (Digital Transform), Business Management (Economics), Sociology (Survey)</p>	<p>“Legacy servers reduce data architecture coherence particularly at corporations with complex software systems, consistent with the hypothesis that costs of digital transformation are greater when workers need to develop more complicated co-invention processes to interact with technical systems.” (Cao, Iansiti p. 50)</p>	<p>With the use of legacy systems, corporations have seen significant drops in productivity growth and market concentration in the world economy.</p>	<p>Machine Learning, Digital Transformation,</p>	<p>Data Architecture, Machine Learning, Intangible Capital, Third-Party Maintenance (Legacy Hardware),</p>	<p>AI Intensity Scorecard (Surveys), Regression Analysis,</p>	<p>How much firms depend on legacy systems and the cost of it. How legacy systems hinder the architecture of data and digital transformation</p>	<p>Digital Transformation is the way forward when it comes to replacing legacy systems, but corporations might not be willing to convert or transform their existing systems.</p>
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A. Alexandrova	Business Management, Computer Science, Sociology, Engineering	<p>“The problem is not easy to identify and qualify, unless a critical stance to requirements analysis is taken, and unless requirements are examined in the context of processes that are creative, exploratory and collaborative. We propose a solution to legacy reproduction issues in the development of a game-based tool that through competition enables the analysis and transformation of business requirements by applying risk and opportunity criteria.” (Alexandrova)</p>	Legacy systems in the public sector often get in the way of government and e-gov’t innovation.	Triadic Game Design	E-government, systematic adoption, legacy replacement projects	Survey Instrument, Survey Analysis	E-government Project Failure, Legacy Replacement Projects	Thinking that a game would offer a real move when it came to legacy system replacement. A light-hearted approach may have been the better idea in 2012, but probably would not work today.
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References

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