

# Literature Review on Software Engineering Standard



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### INTRODUCTION

A literature review is a critical analysis of previous research about a specific topic. This is different from a literature review for a research project, where we use past research findings to identify and justify new research topics. This SOTA Method Organising and synthesising previous research around Software Requirement Specification

Software Engineering Standard is a guide in developing a system. Systems that are developed without applying certain standards will cause many problems after the system is implemented. The quality of software developed by applying a standardization certainly produces reliable and efficient software.

### REFERENCES

- 1 Mirna, Jezreel, Adriana, Graciela, Claude. Transitioning international software engineering standards to academia: Analyzing the results of the adoption of ISO/IEC 29110 in four Mexican universities. 2019
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- 3 Xabier, Borja. A mapping study about the standard ISO/IEC29110. 2019
- 4 Alena. Using ArchiMate to model ISO/IEC 29110 standard for very small entities. 2019
- 5 Setyawan Widyarto(2022). Rancangan Perangkat Lunak(1<sup>st</sup> ed.). International Community Forum (ICF).
- 6 <https://library.aut.ac.nz/doing-assignments/literature-reviews>

Source Information	Mirna Muñoz, Jezreel Mejia, Adriana Peña, Graciela Lara, Claude Y. Laporte	Luis Castillo-Salinas, Sandra Sanchez-Gordon, Jorge Villarroel-Ramos	Xabier Larrucea, Borja Fernandez-Gauna	Alena Buchalcevova
Research topic/question	Transitioning international software engineering standards to academia: Analyzing the results of the adoption of ISO/IEC 29110 in four Mexican universities	Evaluation of the implementation of a subset of ISO/IEC 29110 Software Implementation process in four teams of undergraduate students of Ecuador. An empirical software engineering experiment	A mapping study about the standard ISO/IEC29110	Using ArchiMate to model ISO/IEC 29110 standard for very small entities
Methodology	quant	Survey : quant & qual	quant	Survey : quant & qual
Findings	the processes of the Basic profile of ISO/IEC 29110 are better covered by the universities curricula than MoProSoft	Implementing a software process (ISO/IEC TR 29110–5–1–2) of better quality than without the guide	The results of this mapping reveal that ISO/IEC 29110 has been used in a broad range of small contexts, and the main contributions are basically from research experiences during the recent last ten years	defining specific mapping between the ISO/IEC 29110 Basic Profile and ArchiMate, which enabled to develop the ISO/IEC 29110 Basic Profile ArchiMate Model aimed at improving Basic Profile implementation in Very Small Entities
Limitations	Focus on universities curricula	four teams of undergraduate students of a university of Ecuador	184 papers were retrieved from the literature and selected as primary studies	this research is thus to use the ArchiMate modeling language to express the content of the ISO/IEC 29110 Basic Profile and this way to facilitate its implementation in Very Small Entities.
Areas for future research	Implementing the requirements of MoProSoft to cover other needs regarding organizational management and business management.	Important factors such as the level of satisfaction of the team members as well as their soft skills and previous experience should be considered in the experiment design	More research and experimental outcomes are needed in order to observe how VSEs behave under specific circumstances.	modeling of other aspects of the ISO/IEC 29110 standard in the ArchiMate language should be considered, especially other Motivation elements could be used, as well as Strategy and Implementation and Migration elements.



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