# Requirements Traceability Background

In (2009), Valderas and Pelechano raised the concerns about the needs of requirements traceability in the context of model-driven web application system. They created a tool called TaskTracer to generate traceability report to assist analysts to monitor how the conceptual models are structured to support requirements. In (Mellor, Clark & Futagami) paper, it pointed out the popularity of model-driven development in software projects nowadays. According to the paper, software systems which are developed based on the programming language such as (C#, Java and SmallTalk) can be simply classified as model-driven development (MDD) projects. In MDD, the project phases can be divided into three components; namely requirements model, conceptual models and code. In requirement model, it study and define user needs. Then, requirements models is transform into one or more conceptual models, which produce the system process excluding technological aspects. In final, these models are either directly covert into code, if it contains enough information or transform into other models to cover the needs technological concepts to convert into code.

Similarly in 2010, (Zhang et al.) introduced the traceability concept in the area of agribusiness production system. The researchers proposed the evolutionary prototyping model approach to study the current business process in order to integrate traceability system. A case study was conducted in one of the meat production firm located in Shandong province, China. The study highlighted the facts that when considering traceability aspects of the system, it is important to note requirements are dynamic rather than static. Hence, the usefulness of traceability system relies on how well the system can handle the frequently changing needs of business.

In the past few decades, requreiments tracability practice was incorporated in safety critical systems in order to monitor system implementation based on regulartoray compliance. Previously, system verification and validation are the key compoents addresed by requirements traceability. Recently, (Regan et al. 2013) develped new apporach called Med-Trace lightweight acessement method to apply traceabiity in software development life cycle. The researchers evaluded their method on software-based medical devices systems created by two companies located in Ireland and UK.

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