

Software Obsolescence Drivers in Aerospace: An Industry Analysis

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Abstract : Software applications have become crucial for the aerospace industry, providing a wide range of functionalities and capabilities. However, due to the considerable time difference between aircraft and software life cycles, obsolescence has turned into a major challenge for industry in last decades. This paper aims to provide a view on the different causes of software obsolescence within aerospace industry, as well as a perception on the importance of each of them. The key research question addressed is what drives software obsolescence in the aerospace industry, managing large software application portfolios. This question has been addressed by conducting firstly an in depth review of current literature and secondly by arranging an industry workshop with professionals from aerospace and consulting companies. The result is a set of drivers of software obsolescence, distributed among three different environments and several domains. By incorporating monitoring methodologies to assess those software obsolescence drivers, benefits in maintenance efforts and operations disruption avoidance are expected.

Keywords : aerospace industry, obsolescence drivers, software lifecycle, software obsolescence

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