# Chapter 95

# Dilbert Moments: Exploring the Factors Impacting Upon the Accuracy of Project Managers' Baseline Schedules

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## **ABSTRACT**

Developing and delivering a project to an agreed schedule is fundamentally what project managers do. There is still an ongoing debate about schedule delays. This research investigates the development of schedules through semi-structured in-depth interviews. The findings reveal that half of the respondents believe that delays reported in the media are not real and should be attributed to scope changes. IT project managers estimating techniques include bottom-up estimates, analogy, and expert judgement. Impeding factors reported for the development of realistic schedules were technical (e.g. honest mistakes) and political (e.g. completion dates imposed by the sponsor). Respondents did not mention any psychological factors, although most were aware of optimism bias. However, they were not familiar with approaches to mitigate its impacts. Yet, when these techniques were mentioned, the overwhelming majority agreed that these mitigation approaches would change their schedule estimate.

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# INTRODUCTION

Software development projects are a key enabler for any organisation (De Reyck et al., 2005) but when reviewing the literature as to whether these projects are successful, there is an abundance of literature highlighting issues with their performance when compared to initial estimates (Frese & Sauter, 2014).

The impacts of a project exceeding its original schedule or cost estimate include the inability to fully deliver the identified business benefits, potential loss of market share and company reputation (Pinto 2013, p. 644). There is also a loss of trust from the project stakeholders to the project management team (Baccarini, 1999, p. 26; Davis, 2014) and in some cases, significant financial impact to the company that is providing the project management services, due to contractual conditions. Specifically, if the project was undertaken under a fixed price agreement (a valid risk reduction strategy) the inability of the contractor to complete the project within the agreed timeframe would cause significant issues for the contractor.

One of the key tools to manage a project is the initial schedule. This tool is used extensively by the project manager to motivate the project team as well as to communicate the aims and approach of the project. Psychological factors (Flyvbjerg, 2008), such as optimism bias can and do impact on the development of schedules and research has recommended a number of mitigation approaches.

One specific area that there is limited research into is what tools and techniques have been developed by project management practioners to mitigate these psychological factors as several of their projects that they have managed would have been impacted by optimism bias. Thus, over time, whether at a conscious or subconscious level, they would have developed to tools or techniques to mitigate or minimize the impacts.

As a result, to the ongoing debate about schedule delays, this research, aims to investigate and evaluate the implementation of software development project schedules. Specifically, the investigation focuses on whether project managers are aware of psychological factors, such as optimism bias and its impact on initial schedules. Respondents were also asked to comment on the frequent media reporting about poor initial schedule development and how this related to their own personal experiences whilst managing software development projects.

In order to achieve the aim of this research, the researchers explored whether project management practitioners' experience reflects the schedule overruns reported in the media, what, if any, specific approaches are used to develop and check initial schedules, what do project management practitioners believe is the main barrier to creating an accurate initial schedule and finally whether project management practitioners understand the terms and approaches identified in research, to mitigate psychological factors affecting schedule development.

# DEVELOPING REALISTIC SCHEDULES: IMPEDING FACTORS AND MITIGATION TECHNIQUES

# **Software Development Project Scheduling**

This research was initiated to explore what project managers perceive crucial, among several issues relating to managing projects and initial schedule estimates. Issues with initial schedules, can and do receive significant media attention, particularly with the reporting of software development projects when they run over time or budget (Eveleens & Verhoef, 2010). These issues include insights into how

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