Systems Analysis and Design

13 Systems Failures

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Systems are often delivered late, over budget, with serious shortcomings, or are abandoned before they are completed. Why? We look at some reasons.

13.1 Methodology

Perhaps the hardest aspect of systems analysis and design is to manage size and complexity. A recognised methodology is essential. It does not really matter which methodology you use, but not systematically following one leads to an unstructured mess.

13.2 Completion Date

A common problem is to set a completion date without understanding whether it is possible to complete the project in the expected time. There are always unexpected problems that can lead to delays. Forcing a project to completion by an unreasonable deadline causes errors to be missed.

13.3 Integrated Data Model

It is easy to construct database tables as required, with many duplications. It is harder to integrate a collection of tables into a coherent database.

13.4 Project Leader

A project leader with experience is essential. Would you like a canteen cook to perform essential brain surgery on you?

13.5 Developers

A small, integrated team of well-lead developers is more effective than a large team without a good leader.

13.6 Programming Language

People are tempted to use the latest programming language. But the right programming language for the job is usually better.

13.7 Data Migration

One often-ignored problem is the need to copy data from an old system to a new one. This is often a larger problem than expected and could be a project in its own right.

13.8 Testing

Testing is sometimes skipped when a project is behind schedule. This is a disaster. Letting users find your mistakes ruins their confidence in your product.

13.9 New Critical Requirements

Discovering that essential requirements were missed at the requirements gathering stage, or management insisting on new requirements near the end of the project (as often happens) is a disaster.

13.10 Off the Shelf Package

Using an off-the-shelf package often means either the business has to change to suit the package, or the package has to be customised to suit the business - not always an easy task.

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