

: *What are examples of database project failures?*

by Daniel J. Power

Editor, DSSResources.COM

Database centered projects for decision support and transaction processing do fail. How often? According to a study of IT projects by The Standish Group reported in 1995, "Only 9% of projects in large companies were successful. At 16.2% and 28% respectively, medium and small companies were somewhat more successful." Hopefully not that often. Failure meant time and cost overruns and content deficiencies in IT projects. These were a variety of IT projects and perhaps project management has improved. Let's review some database centered project failures and more recent research on project failure.

Occasionally news organizations report large-scale failures of information systems, The following examples of IT project failure all had databases as a central components of the project:

UK National Offender Management Information System project. According to Kringsman (2009), the project was supposed to create a single database allowing UK prison authorities to track and manage offenders while they are in custody and following their release. After a three-year delay and doubling of costs, authorities abandoned the critical, single database concept.

National Programme for IT in the NHS. The project was intended to "ensure every NHS patient had an individual electronic care record which could be rapidly transmitted between different parts of the NHS, in order to make accurate patient records available to NHS staff at all times". The UK Department of Health spent approximately £6.4 billion on the failed project, cf., Guardian editorial, 2011. The Guardian argued "A project that was supposed to transform patient care in England has achieved little except enrich IT consultants and waste billions".

U.S. Air Force IT modernization project. In 2005, an Enterprise Resource Planning (ERP) project was initiated to update the Air Force's logistics systems with Oracle software. The project was called the Expeditionary Combat Support System (ECSS), cf., Shaw (2012) notes "the financial decision to cancel the project was made when Air Force leadership determined that another billion dollars and eight more years would produce one-quarter of the planned system capabilities."

FBI Virtual Case File. Virtual Case File (or VCF) was a software application developed by the

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United States Federal Bureau of Investigation (FBI) between 2000 and 2005. The project was officially abandoned in January 2005, while still in development stage and cost the federal government nearly \$170 million, cf., http://en.wikipedia.org/wiki/Virtual_Case_File .

Hershey Foods Corp. ERP system. In 1999, Hershey faltered during the final leg of its ERP implementation, cf., Perepu, 2008. The IBM-led installation and integration of SAP, Manugistics Group Inc. and Siebel Systems Inc. software was a failure. To meet the Halloween and Christmas candy rush, Hershey compressed the rollout of a new \$112 million ERP system by several months. According to ComputerWorld, "inaccurate inventory data and other problems caused shipment delays and incomplete orders. Hershey sales fell 12% in the quarter after the system went live — down \$150.5 million compared with the year before." Software and business-process fixes took more than a year. This failure was especially harmful because it occurred during Hershey's busiest product sales season.

Gartner predicted back in 2005 that 50% of data warehouse projects would have limited acceptance or be outright failures, as a result of lack of attention to data quality issues. Was Gartner correct? The problem is broader than data quality. So many questions about project success and so few answers. Gartner was probably correct in their forecast.

According to Computerweekly.com (May 2011) "Over half of businesses gave their business intelligence and data warehouse projects a rating of 'average' when asked how well they met business objectives." Why? "The major difficulty mentioned in the study is that information is scattered across multiple systems making it difficult to find and access".

Baroudi Bloor International, Inc. notes "we still hear about projects that fail because the performance of the relational database used is just not good enough." Is technology ever the problem? Yes.

Perhaps the methodology is the key to success. The CHAOS report says "Agile projects are successful three times more often than non-agile projects".

Larock (2012) argues the problems that lead to failure include: 1. Scope creep, 2. Unmanaged requirements, and 3. Blamestorming, blaming everyone for the failure but yourself. Failure occurs because of the development team and the client. Why do data warehouse projects fail? Projects have a scope of work that is too broad and ambitious, 2) Competing projects take needed resources, 3) Lack of corporate vision, 4) Dirty data and 5) Insufficient technical design.

Why do IT and database projects fail? Pedersen lists 8 reasons: 1) Users failed to provide complete

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requirements, 2) Users were not involved in the development process, 3) The project had inadequate or no resources that were vital for its completion, 4) Executive management just did not seem interested in seeing the project through, 5) Specs kept on changing during the project's tenure, 6) Planning was a casualty, 7)

The project's scope had become outdated due to change in business environment, and 8) The project team was technically incompetent.

In 2003, Kendrick asked the question "How many projects fail? and Why?" In the context of a series of workshops on risk management, he asked hundreds of project leaders to describe typical past IT project problems. Based on data from project leaders, he concluded "Projects fail for three primary reasons: 1) The project deliverable, as defined, is infeasible, 2) The project deliverable is possible, but the timing and resource objectives are insufficient for delivery, 3) The project is poorly planned, chaotic, and badly managed."

The blame for failed IT and database projects is multi-causal, the blame is widely shared, and the frequency of failure is much too high. Improving the technical and project management skills of people working on database projects is the best hope for improving project success.

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Author: Daniel Power

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