VIRTUAL FAILURE: NEVER-ENDING GOVERNMENT TECHNOLOGY PROJECTS

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Context

The Federal Bureau of Investigation (FBI) investigates criminal activity and also has jurisdiction to investigate domestic terrorism. Its 2012 budget was $8.1 billion and it has approximately 36,000 employees. The FBI, a United States executive branch government agency, is currently divided into five main divisions, with over 50 national field offices and hundreds of additional sites.

An FBI investigation can be widely geographically dispersed. An FBI case is a set of material that captures individual events in the field and integrates them into an investigation.

Failure

The terrorist attacks of September 11, 2001 and the loss of thousands of lives caused the FBI and other government agencies to question what went wrong. The 9/11 Commission's final report specifically stated that the FBI needed to increase its analytic capability (9/11 Commission Report, 2004, p 401). At the time, an analyst who wanted to gather multiple cases together had to call agents, make requests, fax or possibly visit multiple offices. The goal was to have all case materials electronic. An analyst could compare cases entered in different offices and across different divisions.

An early modernization effort system, installed 1995, was the ACS Automated Case Support system. The ACS tracked standard paperwork forms. The FBI started a new computer project in 2000 called Trilogy. Trilogy was built to do three things: support agents, provide secure networks, and consolidate existing software.

In 2001, the FBI changed the scope of the Trilogy contract to the Virtual Case File (VCF) system. There were no requirements, defined architecture, or definition of completeness. The VCF project did not rely on existing software code. The contractor was responsible for writing new code. The FBI did not have documentation of current work practices. Without guidance, the contractor conducted a wide-range of interviews to determine the current case workflow and incorporate it into the VCF. The new electronic workflow standardized practices across several groups and was perceived as changing existing workflows. In 2005, and 170 million dollars later, the VCF project was canceled.

Domain
Public ☒
Private ☐

Non-profit ☒
Commercial ☐

Business: ___

Start up (0-1yr) ☐
Growth (1-5 yrs) ☐
Mature (5yrs +) ☒

Micro (Staff <10) ☐
SME (10 – 250 Staff) ☐
Large (250+) ☒

Regional ☐
National ☒
Multinational ☐

Methods
Longitudinal ☒
Cross-sectional ☐

Access ☐
Exemplar ☐
Random ☐

Innovation
Top Down ☐
Bottom-up ☐

Product ☐
Process ☐
Organizational ☐

Radical ☐
Incremental ☐

Role of Leadership

The Inspector General and others outside of the technology group did not have easy to access the progress of the project. Managers in 2002, 2005 and 2010 reported that it was difficult to understand where the project was relative to deadlines. In addition, the leadership of the FBI changed several times over the course of the project.

This project was consistently approached at the highest level with an attempt to integrate all 122 existing forms, 40 application software programs, and 10 years of case data into one single new system. The Director's office received funding from Congress for a large scale technology project. In 2005, the external advisory recommended that the CIO build prototypes but the CIO chose to skip this step and build the whole system at once to meet funding obligations.

In 2006, a contract was awarded to create Sentinel a new case-management software system that would replace the VCF project. From 2007-2010, the project was run by contractors. In 2010, the FBI management ended the contract and asked the internal technology group to manage the Sentinel project.

Innovation & Transformation

The FBI technology group emphasized the need for agile computing. Agile computing is an approach to software engineering that anticipates and welcomes failure. In agile computing, the software is tested for failure at multiple points. Agile methods also provide ways for people to interact and respond to developments as needs change.

In August 2012, the ACS was finally closed to new entries. ACS is still available for lookup inquiries because not all ACS data has been transferred to the new system. The Sentinel system completed testing and went into production in late 2012.

Data

This case study relies on data collected in formal inquires published between 2001 and 2012. The reports are based on internal governance reports as well as external hearings and witness statements.

Further Reading

* National Commission on Terrorist Attacks Upon the United States (2004). The 9/11 Commission Report. New York: W.W. Norton & Company http://www.9-11commission.gov/report/911Report.pdf

Failure

Caused externally ☐
Caused internally ☐

Step1 Invent ☐
Step2 Select ☐
Step3 Implement☐
Step4 Capture ☐

Transformation

Internal to Organisation ☐
External to Organisation ☐
Delivered by Organisation ☐
Delivered by Others ☐

Role of Leadership

Strategic Recovery ☐
Employee-led Recovery ☐

New Leader Engaged to lead transformation ☐
Existing Leader-led transformation ☐

Recovery Strategy Published ☐
Recovery Led by Operational Activity ☐

Strategy Announced ☐
Recovery Evolved ☐

Learning outcomes

- Fail Fast, Fail Early
- Use internal expertise
- Fund small prototype projects

* U.S. Department of Justice Office of the Inspector General. Status Of The Federal Bureau Of Investigation's Implementation Of The Sentinel Project. Report 12-08 December 2011

* Chad Fulgham, Jeffrey Johnson, Mark Crandall, Leo Jackson, Nathan Burrows, The FBI Gets Agile. IT Professional, vol. 13, no. 5, pp. 57-59

* U.S. House of Representatives, Committee on Judiciary. Cost Savings and Efficiencies at the Department of Justice. April 10, 2013 Hearing.