Case Study – IT at the speed of Business

Fast-paced Solution Design for $100 Million Business Growth

Background

- A large online job application software product company is **expecting $100 million in new business**. The product is expected to handle **45 times current maximum load**.

- The product has a **high error rate** for Optical Character Recognition (OCR), resources are dedicated to fix these errors through manual intervention.

- Current customers complain of occasional busy fax signals and **product crashes**. Help desk routinely advises frustrated Customers to try again later.

Approach and Tools

- Voice of the Customer: Interview and collaboration with Help desk, Sales, IT teams, Business Executives

- Six Sigma DMAIC, ITIL, COBIT, CMMI

- Risk Management

- Effort-Benefit Analysis

- IT Architecture: Software, Hardware, Telecommunication

Eye Openers: Data Measurement and Analysis

- The current OCR error rate is 50%; not 20% as initially measured.

- 150 full time resources will be needed just to manually fix the OCR errors if the software is implemented as-is for the new customers

Results: Identified and managed critical risks that the business was not initially aware of

- The size limitation for the legacy database will be reached in about 3 months. The product will be unusable once this limit is reached. This is a HIGH business risk with no workaround.

- Identified solution to address this risk.

Results: Avoided $1 million cost of new software procurement and potential loss of revenue due to additional implementation time

- **Original Plan:** Procure new fax imaging software (for OCR) from leading document management software vendors.

- **Proposed Plan:** The leading software vendors use an OEM version of the same software that Customer already has. Some of the errors are user errors not OCR errors. Improve user instructions, upgrade version, and tune configuration for optimum performance.

Results: Redesigned process and product to handle 45 times the existing maximum load and enable $100 million in additional revenues

- Tactical Plan

  - Address high risk near term database size limitation

  - Improve instructions to reduce user errors

  - Performance tuning for OCR software to reduce error rate

  - Fail-over design and higher performance telecommunication

- 3 year Strategic Plan

  - Scalability: Multi-threaded and parallel processing design

  - Maintainability: Standardize on a single programming language

  - Hardware and Telecommunication platform scalability plan

  - Maturity Assessment: CMMI and ITIL

Other Results

- Reduced labor cost through improved **automation**

- Improved **customer satisfaction** through faster process and lower downtime