Audit of New Customer Information System (NCIS) Implementation

SEATTLE OFFICE OF CITY AUDITOR

David G. Jones, City Auditor

Jane Dunkel, Auditor-in-Charge

Melissa Alderson, Assistant City Auditor

APRIL 11, 2017

Introduction

Councilmember Burgess asked us to provide a timeline of key project decisions and answer these questions:

1. Why did the project cost more and take longer than anticipated?

2. Why weren't Councilmembers informed of cost and schedule changes?

3. Was the Quality Assurance expert used effectively?

Introduction (cont.)

We partnered with Gartner, Inc. for technical assistance.

Our audit resulted in two reports:

1. Audit of New Customer Information System Implementation (City Auditor memo)

2. Emerging and Best Practices in Public Sector IT Management (Gartner report)

Question 1: Why did NCIS cost more than originally anticipated?

The project took over 10 months longer than anticipated.

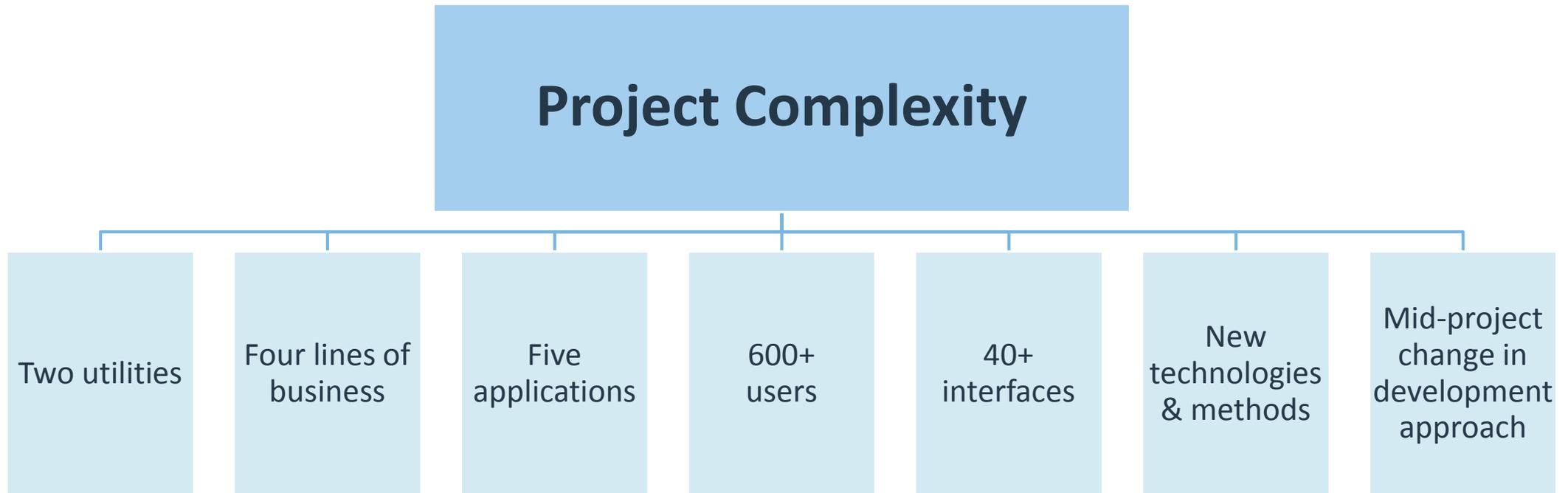City and Consultant labor was much larger than originally estimated.

For example, as of December 31, 2016:

- City labor was $20.6M over budget
- Consultant labor (PwC) was $10.8M over budget

We used the January 2014 project initiation budget to compare to actual costs.

Why did it take longer?

Project Complexity

| Two utilities | Four lines of business | Five applications | 600+ users | 40+ interfaces | New technologies & methods | Mid-project change in development approach |

Why did it take longer? (cont.)

Changes in scope and schedule.

		32 months 5 applications
24 months 1 application Business case submitted	21 months 5 applications PwC contract signed	 Actual duration
January 2013	January 2014	September 2016

Why did it take longer? (cont.)

Project leaders intentionally prioritized quality.

- Executive Sponsors were applying lessons learned from other jurisdictions

- Additional testing was performed to gain confidence in the system's performance

Question 2: Why weren't City Councilmembers informed?

There was no effective mechanism to report status of Information Technology (IT) projects to City Council.

Recommendation 1: The responsibility for reporting to the Seattle City Council on the status of IT projects should be assigned formally to the City's Chief Technology Officer (CTO).

CTO Action Plan: CTO submits monthly IT status reports to Council Central Staff and Affordable Housing, Neighborhoods & Finance Committee Chair.

Question 2: Why weren't City Councilmembers informed? (cont.)

The uncertainty behind cost estimates was not communicated clearly to City Council.

Recommendation 2: The CTO should develop a method for communicating the uncertainty of budget estimates in the early phases of large IT projects when the budgets for these projects are discussed with the City Council.

CTO Action Plan: CTO is implementing a project "stage gating" process that refines budget estimation over time, and requests budget approval in phases.

Question 2: Why weren't City Councilmembers informed? (cont.)

Financial reporting could be improved to facilitate external oversight.

Recommendation 3: Executive sponsors of large IT development projects should assign a dedicated finance analyst as part of their project management team.

CTO Action Plan: Executive Sponsors will assign a dedicated finance analyst to large IT projects. Project budgets will factor in the cost of these positions.

Question 3: Was the Quality Assurance expert used effectively?

Responding to high risks was not timely, contributing to project delays.

- 8 risks were open for an average of 16 months

Recommendation 4: IT project managers should be responsible for monitoring and tracking quality assurance risks, and presenting the Executive Steering Committee with options to address them.

CTO Response: Additional consideration will be given for improving the tracking of QA risks.

Question 3: Was the Quality Assurance expert used effectively? (cont.)

Recommendation 5: The Executive Steering Committee should be held accountable on information technology projects for resolving or lowering high risks identified by the quality assurance expert in a timely manner.

CTO Response: Additional consideration will be given for improving the tracking of QA risks.

Questions?

Copies of our reports can be found at:
www.seattle.gov/cityauditor