

THE CITY OF LONG BEACH AND SIMPLER SYSTEMS

A REVIEW OF THE **SIMPLER**/GOV IMPLEMENTATION

EXECUTIVE SUMMARY

On May 12th and 13th 2009 Elizabeth Haynes from the City's Department of Financial Management and Simpler Systems conducted 16 interviews with 22 employees of the City. The purpose of the interviews was to evaluate the impact of **simpler**/gov on the lives and productivity of City employees.

Simpler/gov is a search engine for all forms of data in any location. Originally implemented for FAMIS General Ledger data, the team soon added budget and then labor information.

The purpose of the interviews was to identify and circulate **simpler**/gov success stories elsewhere in the City. The results of the interviews showed that **simpler**/gov, along with the enthusiasm and creativity to which it has been applied, has made a huge impact on employee productivity and job satisfaction. From all indications, this is only the beginning.

The cross-section of employees interviewed was familiar with financial transactions, budgets, and general accounting, and the interview questions were simple: "What did you do before **simpler**/gov?" "What did you do after?" "Does the idea of 'search' make sense?" and "What other data sets should be linked?" From that baseline we extracted the business benefits and compiled quotes.

FAMIS is an internally robust financial system with archaic input and output. Users uniformly described spending the majority of their time gathering, formatting, and presenting information—a tedious process while living in the information age—with not much time left for analysis. Data was first dumped from FAMIS, then re-processed in "shadow" systems. It was subject to manual handling multiple times, significantly increasing the chance for error.

Life after **simpler**/gov has been remarkably improved with the ability to search data. Users spend little time gathering and formatting information and are now able to spend their time in analysis (most interviewees were analysts or managers). Technically average users who used to depend on others for the preprocessing of data now work independently. Likewise, the more technically-inclined spend less time in low-level data manipulation. Shadow systems and small supplemental databases are also disappearing as a result of **simpler**/gov. Implementing a search engine for data has made this possible.

The business benefits are notable, ranging from extreme increases in productivity (hundred-fold) to several softer but laudable benefits such as employee empowerment, higher service levels, and greater job satisfaction. We recorded comments such as: "Things that used to take two days are now taking two seconds", "Over a year this will save months of analyst time", and "**simpler**/gov has made a lot of people independent."

The cross-section of employees interviewed was deeply familiar with managing transactions, and accounting in general. One salient observation is that technically average users no longer depend on others for the preprocessing of data, but can now work independently. Likewise, the more technically-inclined user can spend less time in low-level data manipulation. Implementing a search engine for data, **simpler**/gov has made this possible.

Search eliminates complexity and allows users to interact with data directly. Users who had been marginalized by sophisticated, outdated, or clumsy tools are now able to process and analyze information directly, without mediation. And they can do so quickly.

Today, the search-able data is primarily financial, General Ledger transactions, linked to budget and labor. However, several other data sets were suggested, including purchasing, the B&C revenue (the Billing & Collection system), crime statistics with personnel data and financial data with property or geographic information. There seems to be great opportunity for linking financial transactions to operational detail.

Interview details follow.

FAMIS

FAMIS was built as a mainframe application in the 1990s by KPMG and is one of the few general accounting systems built specifically for the public sector by programmers and functional analysts from the public sector. In the words of a contemporary analyst, “it is rock solid.” It survives today in many municipalities across the nation, and processes billions of dollars in transactions daily.

However, FAMIS scores poorly with input, suffering from all the horrors of a mainframe: green screens, function-key input, complex logic that is difficult to master. It is batch-oriented and not customer-friendly. Output is even more difficult, with data access limited to clumsy copy/paste and a report writer that only intrepid analysts master—who, consequently, become ‘go-to-people’ for data.

BEFORE SIMPLER/GOV

There was remarkable consistency amongst the interviewees regarding the period “before **simpler/gov**.” Analysts, accountants, and managers were consumed with the laborious, time-consuming process of gathering information. Tedious time was spent on extensive copy/paste, manual data entry, parsing through huge downloads, or poring over lengthy printed reports.

This intensive handling of data greatly increased the risk of error, which required even more time for checking and balancing. The three-part process of gathering information, analyzing it, and formatting it for presentation may have divided time into, by one estimate, forty-five percent gathering, ten percent analyzing, and forty-five percent formatting in a spreadsheet for presentation.

Before **simpler/gov**, many users relied on “the programmers,” or those analysts that had mastered the download process (using Systemwide). Following the download, the handling of data greatly increased the risk of error, which required even more time checking and balancing. This was true across the financial spectrum, including: journal vouchers, preparing and comparing budgets and estimates to close, prepping for auditors, and managing vendors.

AFTER SIMPLER/GOV

The contract with Simpler was signed and work started in March 2008 and the first queries were available for testing in mid-April 2008. End user training started early in July 2008, with a Go-Live later in the month. Budget development data was rolled out in December 2008, and labor cost detail was rolled out in April 2009.

The “after **simpler/gov**” stories are equally consistent. The minimal user interface of **simpler/gov** now permits all users to conduct searches, find information, and create reports without the former dependencies on more technically inclined coworkers. This empowerment has led to a more productive workforce and greater job satisfaction. A search engine like **simpler/gov** suddenly makes the rich store of transactions available even to casual users.

A significant benefit comes from the “exclude” function. Project managers no longer parse large amounts of data looking to isolate critical project information. Now they ask questions, set parameters excluding irrelevant data, and evaluate only pertinent information.

Service levels bound to inefficient work have decreased, and service levels of true work have increased. Several examples of this improved productivity were provided.

An employee described the need to quickly find a vendor check in the amount of \$44,000, which would have been difficult to nearly impossible to locate easily in FAMIS. In **simpler/gov**, however, the user searched by amount and was immediately able to locate two \$22,000 journal entries verifying that the amount was paid and properly allocated.

A redevelopment analyst used to take over two weeks (144 hours) to prepare a budget report that combined actual General Ledger data from FAMIS with budget data in BPREP. The report, presented to the Board, consisted of individual groupings that do not exist in the financial system. She would have to pull out every object in detail—thousands and thousands of lines, organizing them by groups. But with **simpler/gov**, it is easy to filter by fund and by project; the system does all the grouping for her. Every month she puts in the fund for each project—six reports each with different excludes and includes. With **simpler/gov** it took her half a day to set up the system that produced matching bottom lines, and now she doesn’t have to change anything except the fiscal year. The report now takes 4 hours, down from 144.

The City is phasing out the error-prone process of handling large blocks of data in secondary systems—spreadsheets, databases, and other analytical tools that had become shadow data processing operations. (In fact, Elizabeth now hunts databases to eliminate them. “Database killing,” she calls it.)

BUSINESS BENEFITS

Remarkable business benefits have accrued in layers, from the most literal benefit of measurable productivity increases to more nuanced advantages.

Self-assessed productivity has increased markedly. What were projects are now tasks. Individual work loads have decreased in the range of twenty to fifty percent. Time that was spent parsing and preparing large blocks of data is now spent with specific pieces of information that are being used either to solve problems or provide decision-support. Rote tasks are reduced or eliminated, freeing analysts to be analysts and not shadow data processors.

What took days now takes hours or even minutes. **Simpler/gov** filters by fund and by project so the system does all the grouping. Now, every month an analyst puts in the fund for each project—six reports each with different excludes and includes. It used to take a half a day to set up the system and run tests—as soon as he saw that the bottom line matched. Now he does not have to change anything except the fiscal year.

Overall, the benefits stack up:

- *direct time savings of considerable proportions*
- *more time for analysis*
- *more selective and effective handling of the budget*
- *employee empowerment, both within the employee domain and in helping others*
- *increased job satisfaction*
- *the value of timely information*
- *better, more informed, decision making*

DIRECT QUOTES

The response to **simpler/gov** was enthusiastic:

- *“**Simpler/gov** has made a lot of people independent.”*
- *“I just think we’re being more productive.”*
- *“Things that used to take 2 days are now taking 2 seconds.”*
- *“Over a year this will save months of analyst time.”*
- *“**Simpler/gov** takes the first level analysis and does it for you.”*
- *“Before **simpler/gov** I had a great excuse for why I needed overtime and why I had to hire temp staff. There were lots of things I had to do that would take me hours and hours.”*
- *“When an auditor asks for numbers and you’re able to give it to them right away it gives them much more confidence in the numbers. You’re printing it right off the general ledger.”*
- *“It helps people understand how the budget works because it breaks down the hourly cost, not just the salaries, includes all the benefits.”*
- *“I don’t have to review reports now, I just search for stuff.”*
- *“**Simpler/gov** is the most amazing tool for finding things that need to be cleaned up.”*
- *“I am getting asked more questions now and I am helping people help themselves.”*
- *“I love it.”*

And from one department: *“We would call up Elizabeth and sing her our We Love **Simpler/gov** song.”*

SEARCH

One of **Simpler**’s interview objectives was to examine the practice of search. **Simpler** began in the report-writing arena, and has progressively moved beyond reports to arrive at a search engine for data. **Simpler**’s questions were: “Does search make sense to you?” “Is search resonant?” “Or are you just reporting in a new and different way?” The answers came back clearly and consistently, validating search as an important IT tool.

Based on the interviews, search is viewed very differently than reports. Reports contain extended information—consisting of many pages, sometimes thousands. They are very formal in structure, and are based on a single, saved query (albeit complex ones). Reports contain large, fixed blocks of data and reflect fixed groupings that are all-inclusive.

Search is specific, granular. A report is requested, queued, run, delivered, and reviewed. Search is very iterative. Users conduct inquiries quickly, looking for discrete information. The iteration is, “I have a need—ask a question—get an answer—ask another question—get a better answer.” Query parameters can be and are often changed quickly depending on the data that is returned.

The old adage, “We have lots of data but no information,” has been updated to, “We have tons of data, lots of information, and now we have answers.”

As a footnote to the topic, a search engine for data is clearly different than business intelligence (BI) or business analytics. BI increases complexity through the application of formulas to preset views of data held in a data warehouse. Search is not statistical analysis—it is the simple, time-tested process of improving a business through the access to and use of information.

LINKED DATA

Current linked data sets are the General Ledger from FAMIS, budget information from BPREP, and labor data. Each interviewee was asked what other data might be usefully linked. While the response was not overwhelming, we compiled the following list:

- Purchasing for estimate costs, vendor lists, and links to specific vendor information
- Comprehensive Annual Financial Report (CAFR) and budget data
- Linking G/L with performance management
- Project data for the engineering department
- Labor is very important, not just for capital improvement projects (CIP) but for any index code
- Link crime data to labor data: link call data to address data to financial data to determine how much is being spent at each address
- Technology reports: who a specific technology is assigned to, how much it costs. E.g. voice, cell phones, pagers. Tied to personnel reports
- Ability to compare ETCs to revenue
- Linking the B&C System information to be able to see the revenue side

A number of individuals expressed strong interest in linking to the B&C System information: “If we could see the revenue side that would be amazing.” “The B&C System is even more archaic than FAMIS.” “It doesn’t matter how ETCs are doing unless you can compare them to revenue. You have to do one query and then another and then magically combine them together.”

And finally, land/GIS information. In addition to the Police interest in tying crime statistics to addresses, Redevelopment is interested in locating information geographically, and linking expenditures to blocks, addresses, and parcel numbers.

CONCLUSION

The Rosetta Stone is an ancient artifact that significantly advanced modern understanding of ancient Egyptian hieroglyphics. **Simpler/gov** has become an information age Rosetta Stone—a tool to clarify and elucidate hieroglyphic data that has been processed, stored, and reprocessed.

The overall success of **simpler/gov** has been well beyond expectation, by any measure. The purpose of the interviews was to identify and circulate **simpler/gov** success stories elsewhere in the City. Direct cost savings are being accrued. The right information is easier and faster to get to, resulting in better, more accurate decisions. Job satisfaction has increased. But more than easing job frustration and increasing worker productivity, **simpler/gov** provides a level of transparency that demands fiscal responsibility.

For the first time, information is available quickly with a level of accountability that did not exist before **simpler/gov**. Throughout these interviews, Simpler Systems documented story after story of Long Beach City employees saving time and money, taking initiative and making informed spending decisions. In the long run, as the City of Long Beach and **simpler/gov** grow, we expect to record more and greater benefits.

From all indications, this is only the beginning.