Memo

To: Sitka Assembly

Via: Jim Dinley

From: Mike Middleton

Date: 10/5/2012

Re: Enterprise Resource Planning System (ERP) purchase proposal

---

Summary

The ability of senior management of the City and Borough of Sitka (CBS) to make effective resource allocation and management decisions is severely restricted by outdated software technology over 25 years old. As a result, decisions are made with incomplete analysis and information, and resources (especially human resources) are inefficiently managed. Better overall management of information will lead, in the long run, to a much stronger organization.

Investment in modern Enterprise Resource Planning (ERP) software technology is an extremely critical, high priority requirement for the CBS. This proposal presents a compelling case for investing in a new ERP and requests both approval and supplemental funding.

Background

The current financial management software utilized by the CBS is the New World System i Series, a technology originally developed in the 1980's. The technology was developed for IBM mainframe computers, before personal computer (PC) networks became the *de facto* computer hardware standard for most office environments. Over the last two decades, enhancements have been made to the i Series allowing for PC-based graphical interfaces (GUIs) and pointing device (mouse) technology, but the core look and functionality of the i Series is essentially unchanged since its adoption by the CBS in 1992.

The i Series software was designed for a different time and place, when financial management systems were more of a vehicle for accounting and recording financial transactions than a necessary tool for enhancing management decisions. The main user interfaces are "green screens" where the user is required to use the keyboard to enter data into required fields. Pointer/mouse use, as well as the standard drop down boxes we all see in everyday programs such as Microsoft Office Suite, are absent. PCs are essentially "dummy terminals" and all reports are rigidly constructed "canned reports".

Since 1992, financial management software technology has improved so dramatically as to be almost unrecognizable from the current i Series technology the CBS is using. The name of the technology has even changed. No longer are systems referred to as "accounting software"; instead, systems are called ERPs. This is reflective of the evolution of the systems from simple recording of accounting data to being a key tool enabling managers to make timely and effective decisions. In essence, the ERPs are *decision support systems*.

A key feature of all modern ERPs are the business analysis capabilities. Such capabilities provide convenient, flexible, and rapid reporting capabilities for managers. No longer do managers have to ask Finance to produce a report which takes hours or days to prepare. Instead, modern ERPs allow managers to answer their own questions, immediately, through dashboards and/or query capabilities on their own PC. Compare this to our own query capability at CBS. Even the simplest of questions require time-consuming research which delays meetings. In most cases, managers make an educated guess on data because they can't afford to wait for slow answers. This is the old problem of accuracy versus timeliness of data. New ERP systems provide better information in less time.

1

Old technologies have also led to increasingly inefficient use of employee resources. Valuable employee time is spent slowly extracting information from unwieldy reports to answer a manager's questions when it could have been spent more productively elsewhere. Over time this has resulted in employees developing expertise at entering and extracting information rather than critical thinking and analysis skills. This has slowly led to increasingly inefficient use of our valuable Municipal employees. In short, we are paying employees to work harder, not smarter, by denying staff essential tools to increase productivity.

The lack of key functionality in the old technologies causes the creation of parallel systems – for accounting this means Excel worksheets to track various accounts in greater detail. This is how grants, assets, projects, vehicles, and debt are tracked. The information is pulled from the finance system and then "worked" as necessary. Report are created off of this information. Then each of these parallel systems must be reconciled back to the primary system. This increases the workload and causes the same information to be entered manually in several different places, further decreasing the efficiency of staff.

Imagine using 25+ year old software in your daily life, being stuck with computing as you remember it from 1992 and approaching your own work or personal tasks from such a technological perspective. Imagine working on a PC without Windows-like functionality, before Word and Excel were refined, before the internet, before mice were in widespread use. We have new employees coming to work at the CBS now who were born after the i Series was developed. They are essentially being asked to enter a technology time machine and go _backwards_ in terms of workplace technology skill levels to do their jobs.

Currently , of Sitka's three major governmental organizations (the CBS, Sitka School District (SSD) and Sitka Community Hospital (SCH)), only the CBS is a technological laggard. The SSD and SCH have both made the required investments in technology necessary to support effective management decision making and analysis, making their respective employees as efficient and productive as possible.

Cost and financing plan
The primary concern at this point is the cost of the system. The purchase price is $438,000 for the purchase and implementation. As this is a significant amount, consideration of a financing plan was paramount. The implementation is where the majority of the costs are, as this is a two year process.

To finance the purchase of the ERP software, management recommends utilizing the fund balance in the MIS (Management Information Systems) fund to pay for $200,000 of the purchase. This leaves a balance of $60,000 for the fund, which functions as a sinking fund for computer purchases for the CBS. Management believes this balance will be sufficient to maintain current levels of support and will build back up.

Management proposes to finance the remaining $238,000 by using the Southeast Economic Development fund for a loan. A five year loan at 3.5% would add an additional $21,800 to the cost of the software over the term of the loan. The annual payment would be $51,960 and would be spread out over all the departments based on the computer data services charges.

Other options considered
The purchase could be handled by a third party financing or capital lease. With this option, the CBS would be paying interest to a third party, so it would only be an expense. This is not as beneficial to the CBS as using the Southeast Economic Development funds. Currently a balance is available for lending and the interest earned is less than if the amounts were utilized in a loan. So, the interest paid could either go to a third party, or back to a fund for other lending for CBS projects. Management feels third party lending is inferior to the presented option.

Another acquisition option could be a process called, "software as a service". In this option, the CBS has a monthly or annual payment. The CBS doesn't own the software and isn't responsible for maintaining the servers. However, this is not an option that is well developed for the vendor. The CBS would be a "beta" subject for this and never would own the program. The CBS could be eventually be backed into higher rates or rebuilding a system already in place. The schedule of system updates also becomes a concern as to how this would be handled. A poorly timed or tested update can cause major disruptions in staff productivity. Once again, this is the danger of being in a "beta" testing position – the extent of this risk is unknown at this time. Management does not recommend using the "software as a service" option.

Cloud computing can be a part of "software as a service" or stand on its own. Either way, this has risks involved. First, New World Systems is only in the "beta" stage with a cloud computing model. Second, the vendor has specifically stated they do not believe a cloud solution is the best choice for the CBS. Third, there is only one (1) fiber optic cable connecting Sitka to the internet. If anything happens to the cable, the CBS would fall back to the microwave transmissions – which are more crowded and getting more so each year. Fourth, depending on the location of the cloud, the connection is subject to varying levels of internet traffic. When something drives internet traffic to peak levels, the system performance would slow, sometimes to a crawl. Fifth, currently the email program is on a cloud and has problems with volume and lost emails. The idea of lost data – while painful for email – is very troubling for the ERP records. At this time, management finds the cloud computing option to be lacking but has potential and should be examined again in the future after the technology has been more fully developed.

The ERP system being proposed to upgrade to is from the same vendor as the current software. A different vendor could be used with different software, and this has been examined. The problem is the cost to implement. All finance and ERP systems are built differently so to change from one system to another is no simple matter. This takes time and increases the cost of the implementation. Whereas New World – the current vendor – has already upgraded multiple clients from the exact version the CBS is currently using to the new ERP .NET version. This experience leads to more efficient transfer and a lower implementation cost and has been taken into account by management in determining if remaining with the current vendor is preferable to selecting a new vendor. After reviewing the software market, management feels staying with New World is the most cost effective choice.

System improvements
The ERP is a windows environment using the .NET programing. This will allow access to the system by only using a browser – such as Internet Explorer, Firefox, Safari, etc. The computers will not require the program to be installed on the desktop units. This could allow remote access when staff members are traveling so that productivity loss is decreased. It would also allow information to be accessed during meetings with a laptop or even potentially a smart phone.

The ERP has a business intelligence suite. This is software used to pull information together from across the system – not just financial. The information accessed is limited by the security profile of the individual. Creating the reports or queries are simplified and easily modified. The information is put directly into Excel and can be worked with to analyze quick and easily without having to run through a cumbersome intermediary program or manually enter the data off of a printout.

The ERP has a dashboard when an individual logs on. This is customizable by individual to contain data relevant to the person. Links to items to approve, current reports or balances on specific accounts or groups, aging reports, graphic charts or any other metric management wants to regularly see and use.

The ERP has an eSuite integrated into the system. This is a solution to increase the online services to customers of the CBS. It would enable all bills to be viewed and/or paid online. It would allow choices to be set up for automatic payments on all accounts. It would provide employees the ability to view

and change personal information, enter hours and access their payroll information. It would also allow for the online submission of applications and resumes.

The ERP financial module integrates with Excel, Word and Outlook to provide ease of analysis. The Outlook integration allows the system to send email notices to staff when specific triggers are activated. The reports have drill down capability which is lacking in the current system. The tracking of assets is integrated into the system. Additionally, banking accounts can be reconciled on the system.

The ERP payroll and human resource module streamlines the payroll process and allows employees to access their data. The reporting is quicker, more flexible and easy to configure. Informationi is stored in one system and not duplicated for a Payroll and then a Human Resources system. Calculations are automated and accounts can be reconciled on the system instead of in outside documents. Many of the current process are manual and the use of an automated system will greatly increase the efficiency of the functions.

The ERP utility management module would use the eSuite to allow customers to request service changes and make payments anytime. All the information for a customer is available on a single screen instead of having to go through multiple screens to see the needed data. The system has delinquent account tracking built into the system.

The ERP has an integrated budget building module. This pulls the creation of the new budget into the system allowing for updates as changes are made – such as changing payroll or benefit selections. The system has many automated calculation features and allows the user to create more. Currently, a major time component of the budget is just data entry – pulling information from the prior year to give departments a starting point and then manually entering the final approved budget. This integration eliminates those processes while still allowing multiple potential budgets to be developed until one is selected.

Request
Management requests the Assembly approve the purchase and implementation of New World Systems .NET ERP system. This purchase will be accomplished by utilizing $200,000 of fund balance in the MIS fund and the remaining $238,000 to be borrowed from the Southeast Economic Development fund at a rate of 3.5% for 5 years. This will result in debt service of $51,960 for five (5) years allocated out to all the CBS departments.

.