NEW WORLD FIELD MICROSOFT PRODUCT IMPLEMENTATION (2012-2014)

PROJECT YEAR   2012-2014

CUSTOMER DEPARTMENT(S)   Primary:

Richmond County Sheriff's Office , E911, Fire Department

Secondary:

District Attorney, Courts

PROJECT COST $4.7 million over 10 years

PROJECT NEED

Augusta has been a user of the AEGIS system from New World Systems (NWS) since the late 1990's. Augusta uses the AEGIS software to manage 911 Computer Aided Dispatch (CAD), Fire Department Automatic Vehicle Location (AVL) and Richmond County Sheriff's Office (RCSO) processes which includes records management, case management, and corrections management. This has been a very capable system over the years and Augusta has expended the AEGIS footprint in our public safety departments by acquiring new modules from NWS.

Unfortunately, the technology behind this solution is based on an IBM AS400 system, which uses an old operating system and does not incorporate any significant advances in technology. The New World Microsoft Product (MSP) uses a smaller, less expensive hardware platform and integrates more easily with new database, mobile, and GIS technology. The RCSO personnel who have evaluated the MSP product are also enthusiastic about the potential for reporting improvements and an enhanced user interface.

Remaining on the current AS400-based system is not practical for the RCSO in the long-term because it does not incorporate current and evolving technology that the RCSO would like to be able to use.

PROJECT FUNDING

Augusta has worked with NWS in order to create a funding model that utilizes discounts on the NWS side of the equation and operating funds on the Augusta side of the equation in order to satisfy a "subscription" model as opposed to a traditional capital purchase for software licenses. Cost comparisons (not included here for confidentiality purposes) demonstrate that the subscription agreement with New World Systems is projected to yield operating savings of over $550,000 for the total length (10 years) of the subscription. There are additional benefits in hardware acquisition as well as the capital software purchase itself, which would not be possible under a traditional model. In short, this purchase is similar to a Software-as-a-Service purchase but the software is hosted locally.

PROJECT RISK

Risk assessment takes place on some level with most IT projects, but the larger, more costly, more resource-intensive projects require special and detailed attention in regard to risk. The upgrade of a public safety records system and the migration of data from one database and hardware platform to another is a risky venture. For purposes of this project review, the risks of the project are explored.

What are the Risks of NOT Doing this Project?

What is the Customer-Safety Risk of NOT Doing this project?

This issue is paramount where law enforcement is concerned. The point can be argued that the deputies will be in no greater danger than they are now if the same system is used. It can also be argued that they would be safer if the system had better tracking/locational capability. RISK=LOW

What is the Financial Risk of NOT Doing this Project?

This is an expensive project. The least-costly option is, of course, to stay with the current system. The subscription method proposed by NWS minimizes this risk somewhat. RISK=LOW

What is the Political Risk of NOT Doing this Project?

If Augusta does not execute this project, then the IT Department does not move toward its goal of Application Consolidation. This element of risk carries political ramification because SPLOST funds were allocated for this express purpose. SPLOST is approved by the voters of the city. While this specific project was not voted on, the funds that are being applied to this project were intended for this purpose. RISK=LOW

What is the Database-associated Risk of NOT Doing this Project?

NWS has not set an end-of-life for the current hardware and database platform. The aforementioned problem related to the IBM AS-400 database and the inability to grow and utilize newer technology is actually a low-risk venture. In the short term, there would be no change for Augusta. In the longer term, Augusta would be missing out on opportunities for using better technology. SHORT TERM RISK=LOW, LONG TERM RISK=UNCERTAIN

What is the Hardware/Server-associated Risk of NOT Doing this Project?

NWS has not set an end-of-life for the current hardware and database platform. IBM has continued the support for the 400-series as well, so there is virtually no risk where the ongoing support of the hardware platform is concerned. In the short term, there would be no change for Augusta. In the longer term, Augusta would be missing out on opportunities for using better technology. SHORT TERM RISK=LOW, LONG TERM RISK=UNCERTAIN

What is the Personnel-associated Risk of NOT Doing this Project (IT personnel)?

In the short term, Augusta IT staff would be able to move on to other projects and there would be no impact on IT schedules. RISK=LOW

What is the Personnel-associated Risk of NOT Doing this Project (Non-IT personnel)?

An upgrade will cause the need for testing, meetings, assistance with conversion, training, etc. No change means that we face none of those inconveniences. RISK=LOW

What is the Conversion-associated Risk of NOT Doing this Project?

There is no conversion risk associated with NOT doing this project. RISK=LOW

What is the Risk of DOING this Project?

What is the Customer-Safety Risk of Doing this project?

This issue is paramount where law enforcement is concerned. The point can be argued that the deputies will be in greater danger than they are now if a different system is used, a system which is using technology that has not been proven in Augusta before. RISK=MEDIUM/HIGH

What is the Financial Risk of Doing this Project?

This is an expensive project. The alternative to an upgrade; however, is to do nothing and continue the steady march toward obsolescence. There has to be a balance between the risk being taken and the benefit being derived. RISK=MEDIUM

What is the Political Risk of Doing this Project?

There is high political-oriented risk associated with this project because the Sheriff is an elected official with a large department, and is traditionally the most powerful elected official in Richmond County. This is a project that will affect public safety at a time when a new Sheriff is under scrutiny from the community, and the expectations are high for him to have a successful tenure. Augusta IT's SPLOST considerations, which were the most "political" risk in the past, are miniscule in this context. RISK=HIGH

What is the Database-associated Risk of this Project?

The SQL Server platform is part of Augusta's overall technology strategy. By changing, we're moving to a platform that has been very successful overall, but which has had difficulties with larger systems in other jurisdictions. The NWS AEGIS MSP system will be the largest implementation/upgrade within Augusta government. RISK=HIGH

What is the Hardware/Server-associated Risk of this Project?

The SQL Server platform is part of Augusta's overall technology strategy. The change forces Augusta from the proven AS400 platform to Microsoft Windows Server-base-servers. By changing, we're moving to a platform that has been very successful overall, but which has had difficulties with larger systems in other jurisdictions. The NWS AEGIS MSP system will be the largest implementation/upgrade within Augusta government. RISK=HIGH

What is the Personnel-associated Risk of this Project (IT personnel)?

There is personnel-oriented risk associated with this project. The personnel on IT's team can perform this project, even though workload will be high and much will be expected from many staff members in multiple groups. RISK=MEDIUM

What is the Personnel-associated Risk of this Project (Non-IT personnel)?

There is a higher-risk involved with non-IT personnel since the end users of the existing software are typically change-averse. An upgrade will cause the need for testing, meetings, assistance with conversion, training, etc. which would place a great burden on staff that already feels they are working beyond their capacity. RISK=HIGH

What is the Conversion-associated Risk of Doing this Project?

There is some risk associated with the conversion of our existing data. IT staff understand that pitfalls of conversion, and can guide the end users toward a successful conversion. The difficulty lies in testing and validation, which is dependent on end users. RISK=HIGH

Conclusion

Overall, any change from the current environment to a new environment will entail a great deal of risk. The assessment above demonstrates that there is great risk associated with many aspects of the change. With such a risky assessment, the drive to move forward with the project will have to come from financial and the potential benefits that the RCSO (since they are the largest group of users) will derive from the technology. In summary,

the government has to ask the question: Does the NEED to make this change outweigh the RISK inherent in making the change?

PROJECT DESCRIPTION

The major advantage of this upgrade is that the RCSO and 911 will have access to new analysis and data management tools that are available in a modern server environment that is capable of being fitted with new technologies (such as mobile apps, GIS, etc.). This provides opportunities in the future that are not available in the current system.

There are several components to this project. They are described below in terms of the problems that they are addressing as well as the benefits to be derived from them:

- Database Change: Augusta is moving from an AS400-based DB2 database to a Microsoft SQL Server database. This project provides a benefit since this change by eliminates a database (DB2), which is the only one of its kind with the city. Moving one of our major platforms to an easier-to-maintain database architecture permits us to take advantage of a more diverse set of technological tools (through Microsoft). This change satisfies part of IT's goal of consolidating applications and databases to a smaller number of platforms.

- The contract for the upgrade includes a vast amount of pre-implementation training for the new MSP application, which will permit Augusta to refresh the knowledge base for all employees that utilize the system and bring everyone to a common level of understanding on the software and its capabilities. This permits Augusta to have a new group of "experts" in the use of the software rather than a group that has been whittled away by attrition. This training mission is particularly ambitious because the Sheriff's Office is a 24/7/365 department with hundreds of employees and the training schedules must be staggered in order to accomplish the goal of making training available to everyone.

- Conversion is perhaps the most problematic part of the project because there are millions of records in the NWS database. This include incident records, investigative records, documents that have been scanned and attached to records, "jackets" (personnel records) for everyone who has ever been arrested by the RCSO, etc. The need to convert and test data will place a great strain on the personnel tasked to participate and support this part of the project.

- The sheer size of the Sheriff's Office and the need to update the mobile software (which is a different product than the desktop software) will cause administrative challenges to occur. There are over 200 Mobile Data Terminals (MDT) in the field, and each one will need to be upgraded manually at some point in the upgrade/implementation process.

- New Modules will also be implemented. These modules include enhanced GIS software (requiring cooperation and creativity from Augusta's IT-GIS Division and Database Administrators), as well as two other modules that the RCSO is excited about implementing:

  o Gang Tracking: The Gang Tracking module allows users to enter and maintain records on gangs, gang-related intelligence (information), and gang informants. Users can also track and search the following gang-related information: Locations, MO, Weapons, Vehicles, Gang Activity, Gang Colors, Members, Intelligence, and Informants.

  o Narcotics Management: The Narcotics Management module allows users to enter and maintain records related to Narcotics Investigations, Narcotics-related Intelligence gathered, Narcotics-related Informants, and a Narcotics Fund Ledger. The module gives jurisdictions a method of efficiently tracking narcotics offenders and related contacts. This can also be utilized to support departmental Drug Enforcement activities. Narcotics Management can also serve as a support

mechanism for undercover surveillance by tracking individuals, businesses, equipment, private residences and more.

- The change to MSP permits Augusta to put funding into a hardware & software platform (Microsoft) that is more open than the existing IBM platform and can be easily linked with other systems. This is very important considering that there are many interfaces needed for "downstream" government agencies that need Law Enforcement records to populate their own software.

The project will take place throughout 2012, 2013, and into 2014, with an anticipated go-live in the 1st-2nd quarter of 2014.

CONCLUSION

The scheduled due date of the project was February 17, 2014. The Augusta area was hit by Winter Storm Pax on February 12. The devastation caused by the ice and snow from the storm forced a change to May 26, 2014 as the implementation date. At the time of the original February date, Augusta public safety team members had been working non-stop for several days in the aftermath of the storm, which you can read about here: http://www.augustaga.gov/1885/2014-Ice-Storm-Management

The NWS AEGIS software was eventually implemented on May 26, 2014. The risks that were identified in the risk section of this assessment were nearly all proven correct. There were widespread problems with conversion, software issues, insufficient hardware, user training shortcomings, reporting difficulties, etc., leading to some acrimonious conversations between Augusta and NWS. In August 2014 the system has stabilized but there is a list of issues that Augusta is working with NWS to have corrected. In the long term, it appears that the risk will be worth the reward.