

From  
**ORACLE ON-PREMISES**  
to **HYPERION BUDGETING**  
**IN THE CLOUD** and  
Remaining Sane

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# As Oracle Public Sector Budgeting (PSB) approached its support sunset, Polk County had to find a planning and budgeting solution that would meet its unique needs and, hopefully, make life a little easier for its users as well.

The County explored both on-premises and cloud-based options, and it was Oracle Hyperion EPM Planning and Budgeting Cloud Service (PBCS) that offered the best fit. This article highlights the journey from evaluation to implementation and how the challenges encountered along the way were addressed.

## Background

Polk County is located in Central Florida between Tampa and Orlando along Interstate 4. It is the fourth-largest county in the state with a population of roughly 650,000, per 2016 Census data, and it is home to 17 municipalities. The Board of County Commissioners (“Board”) employs roughly 1,915 persons and has a budget of \$1.3 billion; this includes funding provided to the County elected officials (Clerk of Courts, Supervisor of Elections, Property Appraiser, Tax Collector, and Sheriff) for an additional 2,230 employees.

The County operates on an October to September fiscal year, and budget development begins in February with the annual board retreat to establish priorities and biennial budget assumptions. By Florida statute, the County manager must present a balanced budget to the board in July, and two public hearings are held in September for final adoption.

## Solution Evaluation and the Selection Process

In November 2005, the County approved a contract to implement 21 modules of Oracle E-Business Suite (EBS) to support roughly 500 users throughout the County. The general ledger and related financial systems went live in October 2006, followed by payroll and human resources in January 2007. Public Sector Budgeting (PSB) went live in April 2007.

Given the County’s large and diverse program offerings, the out-of-the-box tools within the budget module didn’t meet the County’s budgeting and reporting needs, so a number of customizations and enhancements were made to the functionality. The lack of seeded Oracle reports in the base installation relevant to local County

government led to the County’s decision to purchase and implement third-party EIS reporting tools in June 2009 for improved reporting and data extraction capabilities.

During fiscal year 2012/2013, the County upgraded to Oracle EBS R12.1.3. (The transition to R12.2 is expected within the next year or two.) Oracle informed its users that all PSB support would cease in version R12.2, so the County’s core team of IT administrators and functional lead users and the Budget and Management Services division began the process of replacing PSB with a tool that could provide the same or improved functionality.

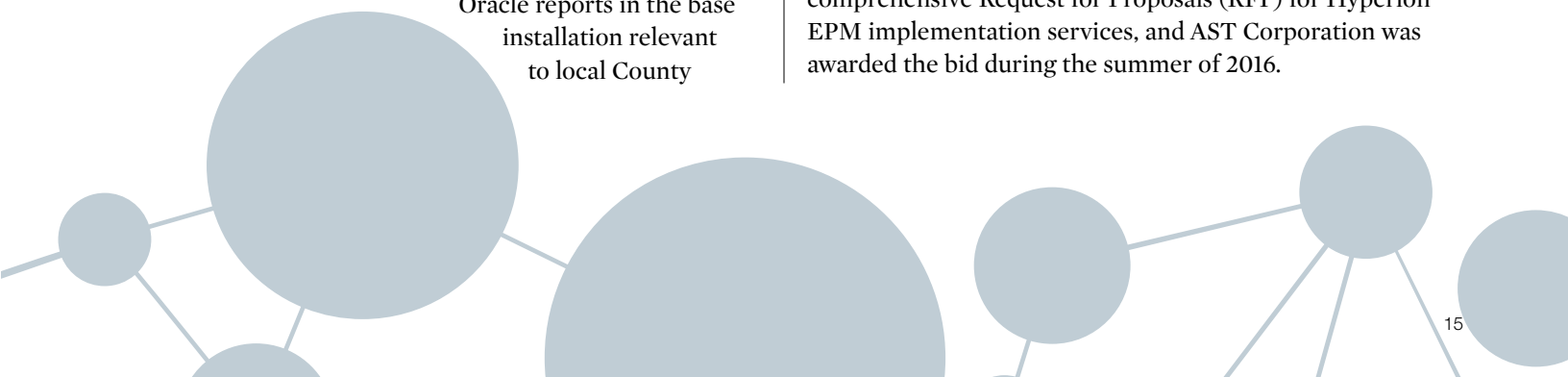
The budget director sent an email to the other County budget directors throughout the state to inquire about their budget software.

- What budget software are you currently using?
- What are the pros and cons of your software?
- Would you recommend this software to another organization?

Only three systems were explicitly recommended by the users who responded, so those systems became the base points for research. A budget core team was established, and site visits/demonstrations were set up to explore the options and, ultimately, produce a recommendation for procurement and implementation to best meet the County’s needs.

One of the most critical evaluation points was the ability of the new system to interact and integrate as seamlessly as possible with Oracle EBS Human Resources and General Ledger modules. It became clear right away that only Oracle Hyperion EPM PBCS could provide integration with a high level of confidence. The team determined that the other two options were primarily stand-alone systems that would likely meet the needs of municipalities and small counties, but they were not equipped for the size of and complexities intrinsic to Polk County.

Following procurement policies, the County developed a comprehensive Request for Proposals (RFP) for Hyperion EPM implementation services, and AST Corporation was awarded the bid during the summer of 2016.



## Key Challenges of Cloud Implementation

Thoughts on relinquishing control:

- Is our data safe?
- Are we going to be confined to a cookie-cutter program that doesn't necessarily meet our needs and doesn't allow for customization?
- Will anyone care about our best interests?
- What happens if we have a problem and they don't see it as a priority?
- Is all of our information going to be in the cloud now?
- Will people in IT lose their jobs?

### Key Challenges of Cloud Implementation in an On-Premises Organization

The decision to use the Hyperion EPM implementation as a cloud pilot program came with much deliberation. The County had always operated as an on-premises organization, and it is safe to say that there was a comfort in knowing most technical problems could be solved by dispatching a County IT employee who could touch the actual hardware and software involved.

The idea of relinquishing control to the ethereal IT gods of the cloud caused a degree of concern for some users. *Is our data safe? Are we going to be confined to a cookie-cutter program that doesn't necessarily meet our needs and doesn't allow for any customization? Is anyone going to care about our best interests? What happens if we have a problem and they don't see it as a priority? Does this mean all of our information is going to be in the cloud now? Will people in IT lose their jobs?*

### Risk and Reward in Cloud Implementation

A number of the risks associated with cloud implementation have an intrinsic, flip-side reward. For instance, users are dependent upon internet connectivity to access their data. Despite the level of technology available in 2017, internet connections are still subject to outages and service interruptions on occasion.

On the other side of the coin, however, this means the users are able to use cloud-based applications with only

a web browser. Fewer resources are required to support cloud operations, and organizations have greater flexibility in controlling and limiting access by user because they are not constrained by per-user licensing costs and hardware capital costs for the application.

Another example is the dependency upon a third party to provide cloud services. It's only natural to have some degree of uncertainty when handing over control to even a reliable and trusted business partner. However, a reputable vendor understands that every organization's data is critical, and prolonged or frequent service problems will result in the loss of customers. Providers are able to achieve economies of scale, and they have the ability to employ highly-trained and specialized staff to respond to issues at all hours of the day and night.

### Fundamental Steps for Migrating Data from On-Premises to Cloud Services

One of the most compelling challenges of the project was the implementation timeline. Ideally, the work would have begun in July for the necessary February go-live, but as is typically the case, the realistic situation did not follow the ideal. Work actually began in September, but the go-live date could not be extended due to the statutorily-driven budget process timeline.

The decision was made to follow industry standards and migrate five years of historical data from PSB and the general ledger into Hyperion EPM PBCS. This included adopted budgets, amended budgets, and actuals. The County also requested that current year amended budget and actual data be uploaded to Hyperion EPM PBCS periodically, adding a functionality not formerly present. In order to access this

### Fundamental Steps for Migrating Data

- Evaluate timeline.
- Define requirements.
- Establish security needs.
- Gather existing spreadsheets.
- Identify reporting needs.
- Identify business requirements.
- Define hierarchies (funds, cost centers, accounts, divisions, programs, etc.).
- Design dimension and calculation needs.
- Project timeline.
- Historical data migration.
- Extraction queries and logic.
- Scripts and automation.

data, users had to switch Oracle responsibilities and enter a different module.

County IT system analysts and developers knowledgeable in the existing general ledger and human resources tables and data developed queries and code to extract data from the on-premises system. General ledger queries were much simpler to build, so more time was invested in the more complex position data queries. Data in existing position control reports was reviewed in order to identify what data was required for cloud analysis and reporting. Logic pertaining to unique and specific business conditions was applied in order to extract accurate, relevant, and useable data, and this process led to ideas for improvement along the way as well.

The specific development tools utilized were SQL, PL/SQL and EIS Reports. A batch script was created to call the EPM Automate Utility to import the data into PBCS using a scheduler; the EPM Automate Utility is beneficial because it permits the automation of specific tasks such as loading the data to the planning database, running a business rule, or refreshing the planning database. A script was also created to download the daily maintenance backup to create local backups of artifacts and data.

A DataPush script was created to automatically push position data into line items and the reporting cube every three hours to ensure users had access to more recent data, rather than waiting for a nightly push and potentially increasing the likelihood of input errors.

Additionally, business rules were created to clear individual data segments such as position, salary, benefit, or distribution data in the event that significant errors were discovered during data validation or budget preparation. A single flat-file load could then be performed to replace only the affected area.

## Lessons Learned

As with most experiences, hindsight is 20/20. The team emerged with lessons learned and points of consideration to offer other organizations facing implementation. Multiple team members offered thoughts, and the following are the most common themes:

- Communication – Be diligent in communicating and making sure everyone understands what is being said. There is a language

## Lessons Learned

- Communication.
- Documentation.
- Timing.
- Testing.
- System limitations.
- Planning.
- Staff resources.
- Post go-live procedures.

barrier when functional and technical staff collaborate. The same terminology sometimes has a different meaning to different disciplines, and misunderstandings/miscommunications are going to occur. Requirements should be not only identified but reiterated in order to make sure the team understands exactly what is needed.

*I didn't realize you meant that; my interpretation was this.*

- Documentation – Make sure both implementation and organization staff have thorough notes. A County team member suggested that a dedicated notetaker be assigned to make sure everything is captured.

*In six months, you are not going to remember the details of this meeting.*

- Timing – If at all possible, allow for a time cushion to ensure the inevitable bugs can be worked out prior to rolling out access to all users. In the County's case, Hyperion EPM PBCS go-live occurred two days prior to the budget kickoff, with training classes to begin the following business day. Within the process, begin extract query and automation script development and testing early to allow for multiple rounds of testing, fixing, and retesting.

*The more you test, the more accurate your data will be.*

Additional points of consideration include understanding the limitations of the system and its process standardizations, simplifying processes when possible, and planning for certain enhancements and less-critical reports after go-live. ♦

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