SAP Quality Assurance Report
Summary
Municipality of Anchorage
January 7–23, 2015
• **Background**
  • QA Services
  • Team
  • Scope and Methodology
  • Approach and Timeline
• Municipality’s QA Results
Quality Assurance Assessments

About quality assurance

- Is designed to help customers maximize quality and minimize risk
- Covers the various dimensions of project quality
- Is available for all stages of the project lifecycle
- Uses SAP’s global quality assurance assessment methodology
- Is independent and objective
- Is proven: Approximately 500 QA Reviews conducted in North America in the last 4 years
  ~25% conducted for state, local, and utility customers
Goals of a Design Review

The Design Review of SAP Solutions provides an assessment of your solution design.

**Goals of a Design Review of SAP Solutions:**

- Assess whether the design meets the customer’s business needs
- Evaluate application design flexibility, efficiency, completeness, and maintainability
- Ensure that the proposed solution is in line with SAP’s standards and with leading practices
- Identify risks and present clear, actionable recommendations

The Design Review of SAP Solutions is delivered by an experienced SAP knowledgeable Review team.
Top five common findings

1. Resource management
   - Unclear roles and responsibilities
   - Insufficient resources
   - Leadership and soft-skill issues
   80%

2. Schedule
   - Incomplete schedule
   - Unrealistic schedule
   - Unmaintained schedule
   79%

3. Testing management
   - Not focused on business scenarios
   - Insufficient time and resources
   - Parallel test cycles
   67%

4. Integration management
   - Ineffective change control
   - Informal project or phase closure
   - Ineffective overall solution integration
   - Ineffective data management
   62%

5. Scope management
   - Unclear scope definition
   - Ineffective scope and change control
   - Informal deliverable review and acceptance
   57%
Scope of the quality assurance assessment for the Municipality

Assess alignment of the Municipality’s functional solution to its business requirements and SAP standards and leading practices.

The Municipality contracted with SAP for the following assessments:

1. Solution Design Assessment
2. Data Migration Assessment
3. Testing Assessment
4. Project Schedule Assessment
5. ~2,500 hours of effort
Focus areas of the Municipality’s QA Assessment

- **Legacy systems** (PeopleSoft and so on)
- **Data migration**
- **Interfaces** (66)
- **Testing**
  - Validated transactions and reports
- **Organizational change and training**
- **Custom objects**
- **Core SAP software**
  - GL, GM, FM, PS, AA, SAP SRM, SAP ERP HCM, and so on
- **Blueprint, process flows and specifications**
- **Conﬁguration of SAP software**
- **As-is and to-be business needs and requirements**

Program governance, project management and scheduling, project track, and SAP Solution Manager
Municipality’s landscape of SAP solution

**Business function view**

- Finance
- Human Resources

**Functional organizations**

**Business processes and transactions**

**System view**

- Finance and Logistics
- Human Capital Management

**Master data | Enterprise structure**

- **FI, CO, and general ledger**
- Accounts receivable
- Accounts payable
- Asset management
- Project system
- Grants management
- Organization management
- Personnel administration

- **Banking and cash management**
- Funds management
- Suppliers: SRM
- Materials management
- FERC
- Time
- Payroll
- Benefits

- **System security**
- Data migration and management
- System integration
- Test

**Reporting: BI and SAP Business Objects solutions**

**Municipality of Anchorage**
Progressive building steps

- Project preparation
- Blueprint
- Realization
- Final preparation
- Go-live support
- Operate

**Business process master list**

- Enhancements
- Authorizations
- Reports
- Conversions
- Interfaces
- Organizational structure

- Baseline scope

- Procedures
- Test cases
- Reports
- Interfaces
- Conversion

- Test plan
- Training mat.
- Go-live plan

**Municipality of Anchorage**

**Progressive, traceable, and verifiable**

**Maintainable**

**Supportable**

**Adaptable**

**System performance evaluation**
Design Review of SAP Solution

Delivery methodology

Initiate
- Initiate first contact
- Build SAP review team
- Review project information

Plan
- Conduct review planning meeting
- Conduct SAP internal kick-off
- Maintain QAS delivery checklist

Execute
- Prepare team
  - Prepare for interviews
  - Conduct SAP internal review team meeting
  - Analyze documentation
- Conduct review and develop draft report
  - Conduct on-site kickoff
  - Perform interviews
  - Study system solution
  - Analyze interviews
  - Analyze solution
  - Develop and present preliminary observations
  - Develop and present draft findings
- Complete work
  - Finalize reports
  - Perform SAP internal review of reports
  - Present final report
- Conduct SAP internal review team meeting

Close
- Response plan returned
- Complete SAP internal closing

**Dates:**
- Initiate: 10/17–1/2
- Plan: 1/3–1/5
- Execute: 1/6–1/23
- Close: 2/2–2/13
- Delivery duration: 2/14 – 2/27

**Notes:**
- Delivered remotely
- Remote (can be changed to on site)
- Delivered on site
- Delivery duration

**Municipality of Anchorage**
• Background
• QA Services
• Team
• Scope and Methodology
• Approach and Timeline
• Municipality’s QA Results
Design review team

Lynne Ketchie
18 years of experience:
16 years SAP for Utilities and SAP for Public Sector

Nitin Joshi
19 years at SAP; 8 years focused on data

Prashant Iyappan
14 years of experience:
SAP SRM and procurement with SAP ECC

Haritha Biradavolu
8 years of experience:
SAP Business Warehouse

Tim Gernhardt
9 HR implementations

Hiroaki Ajari
20 years of experience:
Testing

Leisa Wood
19 full-scale implementations of HR;
>30 years of experience

Tim Keohan
>10 years of experience:
SAP Grants Management and funds management

Robert Lake
13 years of experience:
Project system and fixed assets

Fanny Limontje
18 years of experience:
SAP ERP HCM and organizational management

Wayne Liu
20 years of functional and technical experience:
Procurement with SAP ECC and with SAP SRM

Ken Medved
14 years of experience:
Security; 25 years experience: State and local

Ram Ramaswamy
14 years of experience:
Finance and controlling; 4 years of experience with FERC

Ron Keith
15 years of experience with time in SAP ERP HCM; Kronos interface experience

Heider Vakilzadeh
29 years of experience:
SD and resource-related billing

Long Vu
14 years of experience:
Security

Jacqueline Willoughby
13 years of experience:
State and local – budget and funds management
**QA overall risk summary**

### Finance and Logistics

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<th>Category</th>
<th>Risk Level</th>
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<th>2</th>
<th>3</th>
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<tbody>
<tr>
<td>Finance and billing</td>
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<td>23</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>Logistics and inventory</td>
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<td>3</td>
<td>6</td>
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<tr>
<td>Grants</td>
<td>High</td>
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### Human Resources

<table>
<thead>
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<tbody>
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<tr>
<td>FERC</td>
<td>Medium</td>
<td>4</td>
<td>3</td>
<td>2</td>
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<td>SAP Business Warehouse and SAP BusinessObjects Solutions</td>
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<td>3</td>
<td>6</td>
<td>10</td>
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<td>Human capital management</td>
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<tr>
<td>Security</td>
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<td>9</td>
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<td>Data</td>
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<td>Testing</td>
<td>Low</td>
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<td>10</td>
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<td>Integration and Master Data</td>
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<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Reporting</td>
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<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>
Key findings across Assessment areas

1. Missing critical project artifacts, such as:
   - Approved blueprint
   - Approved functional and technical specifications
   - Test strategy

2. Design and configuration issues

3. Incomplete data conversion

4. Incomplete testing

5. Incomplete report definition

6. Lack of knowledge transfer

7. Software and hardware not current

8. Internal resourcing issues

9. Lack of project schedule discipline
5.8 Enter or correct time
- Four different collection subsystems for time entry exist.
  - Condense the multiple time-entry systems to a single system, providing a single point of entry to support all employees and a single system to use, troubleshoot, and maintain.
- Most time data for parallel testing will be interfaced.
  - Perform a beginning-to-end test of the entire payroll if at all possible (common practice).
  - Use as many HCM super users as available to enter time in their staff’s external timekeeping system.
  - Devise a way to collect preevaluated time-clock entries in the external timekeeping systems if the number of hands available to help is still insufficient.

5.9 Evaluate time
- Time evaluation will be split between the two Kronos time-collection systems and SAP software.
  - Implement a solution using Kronos (or another vendor’s) time clocks to collect time punches, the cross-application time sheet (CATS) from SAP to collect exceptions, time evaluation functionality in SAP software to evaluate time, and payroll functionality in SAP software to pay employees.
  - Invest effort to correct errors and bring Kronos time evaluation up to date.
- Integration testing does not test the full slate of absence and attendance evaluations in a full life cycle.
  - Ensure that integration-test scripts include as many of the absence and attendance codes as possible to be sure that all codes are evaluated properly.
Select key findings within assessment areas (2/5)

5.13 Organizational Management – Enterprise Structure definition

- The core foundation is to integrate all functionality within the SAP ERP Human Capital Management (HCM) solution and establish HCM integration with finance and SAP SRM.
- The Municipality defined the personnel area to resemble the organizational reporting structure, not a unique entity within the personnel administration (PA) functionality. PA consists of department, division, section, and unit, which resulted in the need to build smart coding of the four-character PA codes to segregate the department, division, section, and the unit.
- These enterprise definitions resulted in duplicate descriptions.

6.2 General design concept for SAP Business Warehouse

- No layered scalable architecture (LSA) is followed.
- No naming standards exist.
- No formal gap analysis took place.
- No strategy for report validation exists.
5.5 Payroll – Process

A high level of customization exists in the following areas:

- Kelly shift and flex credits: Four custom programs exist to support the storage, retrieval, and calculation of Kelly shift regular rate of pay and calculation of flex credit for the third pay period within one month; and multiple payroll runs to determine the 27-day work cycle:
  - Retool the entire Kelly shift requirement and its implementation.
- PERS configuration and calculation of retirees for police and firefighters: The business process is convoluted and disputed by the greater Municipality support team.
- More than 2,000 wage types exist.

8.12 FERC Month-End

The FERC month-end processes has not been tested with real data. Integration testing did not fully reflect actual business processes. Development is incomplete for all eight FERC reports. Accordingly, FERC integration testing has not been completed.

- The functional specification of the reports do not contain all the latest information:
  - Conduct testing with all possible business scenarios of the business area. Consider executing a mock close for a month in SAP software with data converted from legacy system before allocation of intergovernmental charges (IGC). Execute IGC allocations in SAP software; complete the month-end close and compare the FERC reports generated in SAP software with those in the legacy system.
  - Complete development and testing of the eight period-end FERC reports.
  - Update the FERC report functional specifications with the latest information, including the report validation methodology.
3.15 Accounts Payable

- Workflow has been deferred for accounts payable (AP). Manual business processes have been tested to manage data entry and approval of supporting documentation. This application is the only one with a financial transaction without workflow.
  - Develop the two workflows for AP nonpurchase order invoice and for logistics invoice verification (LIV).
- Standard match codes for vendor lookup do not meet the AP requirements when searching the four name fields and vendor account groups. A functional specification has been developed; the change request is not approved.
  - Submit the match-code change request to improve vendor lookup by name and vendor account group.
- Period-based encumbrance tracing (PBET) is activated. The PBET functionality is not understood. Documentation or test scripts have not been outlined to document this process.
  - Review the quantity and price-variance setting.

3.40 Cash Management

- Cash management has been taken out of scope, which stopped the final configuration steps.
- Cash management reports by fund has not been configured.
  - Final configuration
  - Development of test scripts
  - Knowledge transfer
  - Documentation of the business process
Select key findings within assessment areas (5/5)

Project Scheduling (separate report)

- No clearly defined project scheduling methodology exists.
  - Specific policies and expectations for schedule creation, maintenance, and reporting do not exist.
- The current schedule is not resource-loaded.
  - Without resource-loading the schedule, the legitimacy of the schedule cannot be validated.
- Task completion standards do not exist.
  - The definition of complete is not clear.
  - How to report status of tasks is not defined.
- The use of tracking sheets is inconsistent.
  - What the tracking sheet should contain is not defined.
  - How the tracking sheet should relate to the master schedule is not defined.
- The tools to be used for scheduling and reporting progress against tasks are unclear.
  - The Municipality plans to use a new tool for project task and communication tracking.
  - How the new tool will be used in conjunction with Microsoft Project was not completely defined at the time of the Review.
- Schedule management is undefined.
  - No resource has sufficient bandwidth to manage whatever tool is to be used.
Thank You!

Municipality of Anchorage
January 7–23, 2015