CITY AUDITOR'S OFFICE

AUDIT OF HANSEN SOFTWARE UTILIZATION – MAYOR AND CITY COUNCIL STAFF MEMBERS

Report No. CAO 2009-1415-01

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CITY AUDITOR

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BACKGROUND

The city uses an enterprise resource planning software application known as Hansen**.** Approximately 700 city employees have Hansen user accounts. The largest number of Hansen users work for the following city departments: Public Works, Building and Safety, Planning, Operations and Maintenance, and Fire and Rescue. Hansen is used by these employees in land and asset management and the tracking of service requests, work orders, inspections, applications, and permits.

The city is currently in the process of upgrading Hansen to a web-based version of Hansen known as Infor. Infor was recently implemented in the city's Business Licensing division and will be rolled out to other city departments in the coming years.

The Mayor and City Council staff members (15 employees) have unique jobs within the city as they are regularly responding to questions of constituents and council members on a wide variety of issues involving the diverse operations of the city. Hansen is one of the city's systems that are available to these staff members as a resource to obtain needed information. Several City Council staff members have expressed concerns about the difficulty they have had in accessing needed information from Hansen in a timely manner to effectively perform their job responsibilities.

OBJECTIVES

Our objectives in completing this audit were to evaluate the concerns of the City Council staff members in using Hansen and to identify opportunities for improved accessibility to the data within Hansen for fulfilling their job responsibilities.

SCOPE AND METHODOLOGY

The scope of this audit was limited to an evaluation of the concerns of the Mayor and City Council staff members in accessing data from Hansen in performing their respective work responsibilities. The scope of our work on internal controls was limited to the controls within the context of the audit objectives and the scope of the audit. The last fieldwork date of this audit was June 10, 2014. Our audit methodology included:
- Discussions and correspondence with Mayor and City Council staff members.
- Survey of Mayor and City Council staff members.
- Discussions with Information Technologies staff members on Hansen data access improvement options and future software application upgrades.
- Review of Hansen access privileges of the Mayor and City Council staff members.

CONCLUSIONS, FINDINGS, AND RECOMMENDATIONS

The following conclusions were noted:

- The Mayor and City Council staff members are rarely or never using Hansen due to a variety of factors. Information Technologies should complete a user needs analysis with these staff members and evaluate options for improving their accessibility to needed information within Hansen. Information Technologies should also assess the training needs of these staff members and provide necessary training. (See Finding #1)
- While the Mayor and City Council staff members perform similar functions, differences were found between the Hansen security access rights of these staff members. Information Technologies should complete an evaluation of the Hansen security access rights of these staff members in conjunction with the user needs analysis to ensure they have the appropriate and sufficient access rights for their job duties. (See Finding #2)

Further information on these issues is contained in the sections below. While other issues were identified and discussed with management, they were deemed less significant for reporting purposes.


1.   Data Accessibility Challenges

Criteria

The effectiveness of employees in performing their work responsibilities is enhanced when required data is easily accessed from an organization's data systems.

Condition

Our audit procedures included gathering information from Mayor and City Council staff members on their usage of Hansen through interviews and the use of a survey. Most of the staff members responded that they rarely or never use Hansen. The following were their reasons for not using the software:
- The software is difficult to navigate in.
- It is difficult to obtain timely answers to constituent inquiries using the software.
- Insufficient access privileges have been granted to obtain information needed for their purposes.
- Certain data fields lack sufficient information for their purposes.
- Certain data fields contain unfamiliar department specific acronyms or information.
- Lack of adequate training.

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The current version of Hansen being utilized at the city is a client server application. The data within Hansen is organized into various tabs as seen in the example service request screen below:
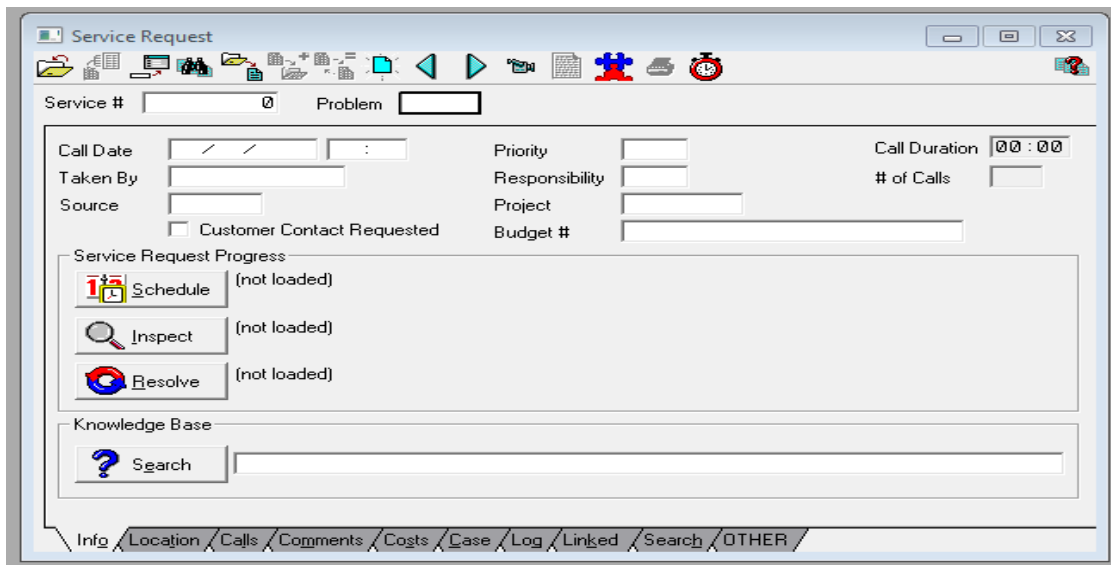

As with many software applications, accessing data within Hansen can be challenging for users who are not consistently using the software or who are not familiar with how to properly interpret the various data fields therein.

Several years ago, Information Technologies created a desktop utility specifically for the Mayor and Council offices known as **Hansen Lookup** that allows the Mayor and City Council staff members to view the status of service requests by city council ward in Hansen. The feedback received from the Mayor and Council offices is that this desktop utility is not being used.

As previously discussed, the city is rolling out a web-based upgrade to Hansen known as Infor that should be more user friendly. While this upgrade may eventually make information within Hansen/Infor more easily accessible for the Mayor and City Council staff members, there may be alternative solutions for improving their accessibility to data required in performing their work responsibilities.

A software application known as **Oracle Business Intelligence (OBI)** may be an option to enhance the Mayor and City Council staff members' accessibility to needed information. OBI can be customized to the needs of work groups and is capable of pulling data from multiple systems. OBI has already been used by Information Technologies to create customized data summary screens (known as dashboards, see example below) for city departments based on their specific informational needs. The summarized data can be selected by a user to view the detailed data behind the summarized data.
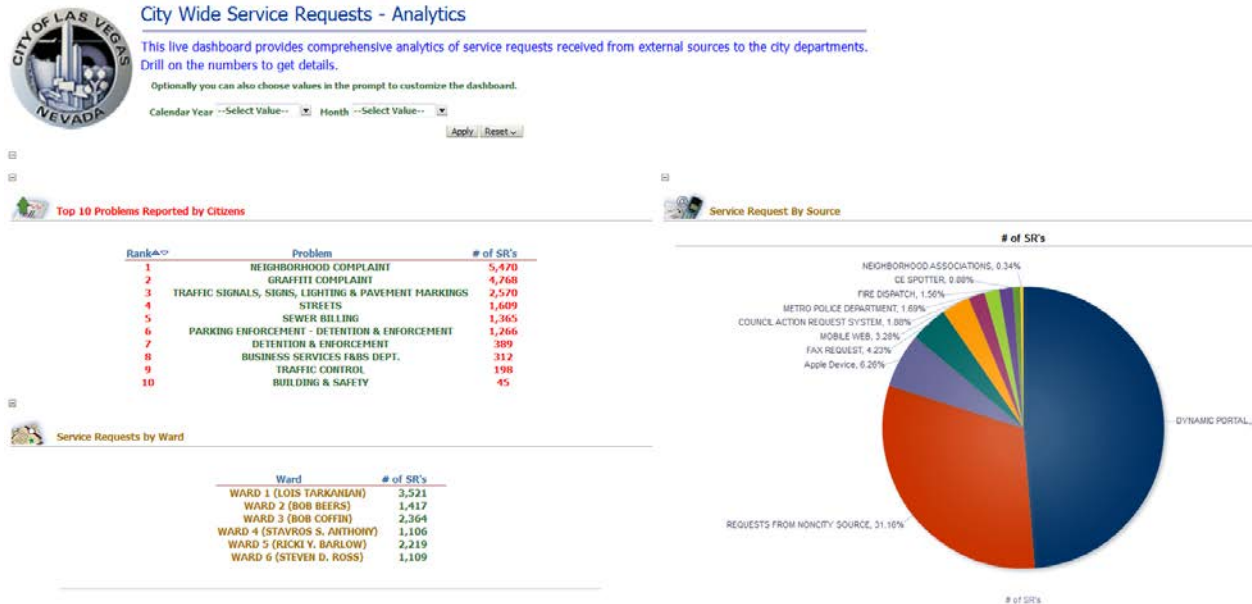
While many of the Mayor and City Council staff members have access to OBI, their access is currently limited to only several dashboards including one that summarizes service requests from Hansen. Based on feedback from the staff members, OBI is not regularly being utilized due to a lack of awareness of the software and/or lack of training it its use.

Cause

- Hansen screens not easily navigated by inexperienced or inconsistent users.
- Information Technologies has not recently completed a system informational needs analysis of the Mayor and City Council Office staff members.

Effect

- Mayor and City Council Office staff members are not regularly utilizing Hansen, Hansen Lookup, or OBI as resources in performing their job duties.

Recommendations

1.1 Information Technologies should complete a data needs assessment of the Mayor and City Council staff members with an emphasis in identifying information needed by them on a routine basis.

1.2 Based on the information gathered in the data needs assessment, Information Technologies should evaluate which data needs can be addressed through the expanded use of the Oracle Business Intelligence software application. An evaluation should be completed of existing Oracle Business Intelligence software dashboards for which the Mayor and Council staff members could be granted access. Where appropriate,

Information Technologies should create dashboards that specifically address the informational needs of the Mayor and Council staff members.

1.3 Information Technologies should evaluate and document the software training needs of staff members in Hansen and Oracle Business Intelligence and conduct formal training sessions as needed.

2. Hansen Security Access Rights Differences

Criteria

Periodic evaluations of employee security access rights help ensure they are appropriate.

Condition

While the Mayor and City Council staff members perform similar functions, differences were found between the Hansen security access rights of these staff members.

Cause
- The Hansen security access rights for the Mayor and City Council staff members have not been recently reviewed by Information Technologies.

Effect

- Certain staff members may not have sufficient security access rights to Hansen for their job duties.

Recommendation

2.1 Information Technologies should complete an evaluation of the Hansen security access rights of the Mayor and City Council staff members in conjunction with the user needs analysis to ensure the staff members have the appropriate and sufficient access rights for their job duties.

MANAGEMENT RESPONSES

1.   Data Accessibility Challenges

1.1   Information Technologies should complete a data needs assessment of the Mayor and City Council staff members with an emphasis in identifying information needed by them on a routine basis.

Management Action Plan: Information Technologies agrees that a full data needs assessment is the best approach to identifying the information needed by the Mayor and City Council staff members. Meetings will be set with these individuals by the IT Business Partner, Don Jacobson. The use of the Hansen data in their day-to-day operations will be documented so that the appropriate roles, queries, reports, and dashboards can be assigned to them. This will include information in Hansen and other systems city-wide.

Estimated Date of Completion: August 4, 2014

1.2   Based on the information gathered in the data needs assessment, Information Technologies should evaluate which data needs can be addressed through the expanded use of the Oracle Business Intelligence software application. An evaluation should be completed of existing Oracle Business Intelligence software dashboards for which the Mayor and Council staff members could be granted access.   Where appropriate, Information Technologies should create dashboards that specifically address the informational needs of the Mayor and Council staff members.

Management Action Plan: All Mayor and City Council and their staff have been provided access to the Oracle Business Intelligence dashboards. The IT Oracle Business Intelligence team will meet with these individuals to review the dashboards and the data available. It may be that the dashboards need to be streamlined for their use, or other dashboards developed that are more appropriate for the data they need.

Estimated Date of Completion: March 31, 2015

1.3   Information Technologies should evaluate and document the software training needs of staff members in Hansen and Oracle Business Intelligence and conduct formal training sessions as needed.

Management Action Plan: Since the Audit took place, training was conducted with those members of the city council that requested it. They also have a primary point of contact who will coordinate any additional training. Once the data, roles, and dashboards have been finalized, an assessment of the training needs will be conducted by the IT Technical Trainer. The IT Trainer

and Technical Writer will develop a training plan including necessary instruction/reference material.

Estimated Date of Completion: December 31, 2014

2.   Hansen Security Access Rights Differences

2.1   Information Technologies should complete an evaluation of the Hansen security access rights of the Mayor and City Council staff members in conjunction with the user needs analysis to ensure the staff members have the appropriate and sufficient access rights for their job duties.

Management Action Plan: A full review will be conducted of each individual's role and setup in the current Hansen system, and other applicable city systems. This will be coordinated with the data needs analysis in order to ensure the appropriate access is provided.

Estimated Date of Completion: July 15, 2014