



Audit of Treasurer's Office Vendor Management (MUNIS/Tyler Technologies)

City of Milwaukee

Audit Division

February 2022



Agenda

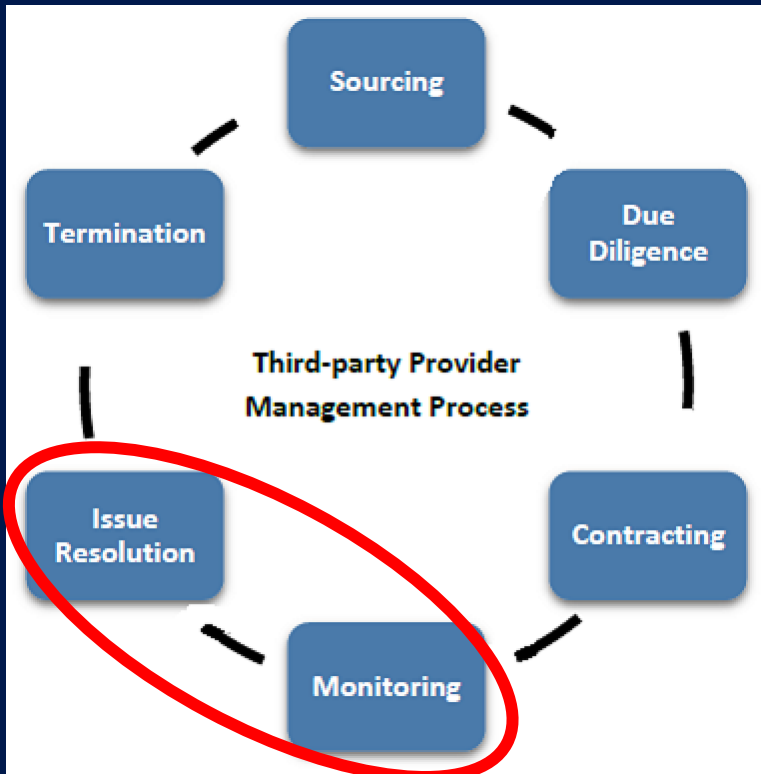
- Scope & Audit Objectives
- Audit Procedures
- Audit Conclusions
- Next Steps



Audit Scope and Objectives

Scope

Key elements and controls that govern, define, and monitor the relationship between the City of Milwaukee and Tyler Technologies for the period June 1, 2020 through May 31, 2021.



Objectives

Verify that the a) monitoring and issue tracking processes and b) related controls over Vendor Management are suitably designed and operating effectively

Determine if the Complementary User Entity Controls (CUECs) as identified in the 2021 SOC Audit Reports are adequately designed and operating effectively for the MUNIS application.

Audit Procedures

Audit activities consisted of:

- Process walkthroughs
- Observations
- Review of policies and procedures
- Testing of controls



Audit Conclusions

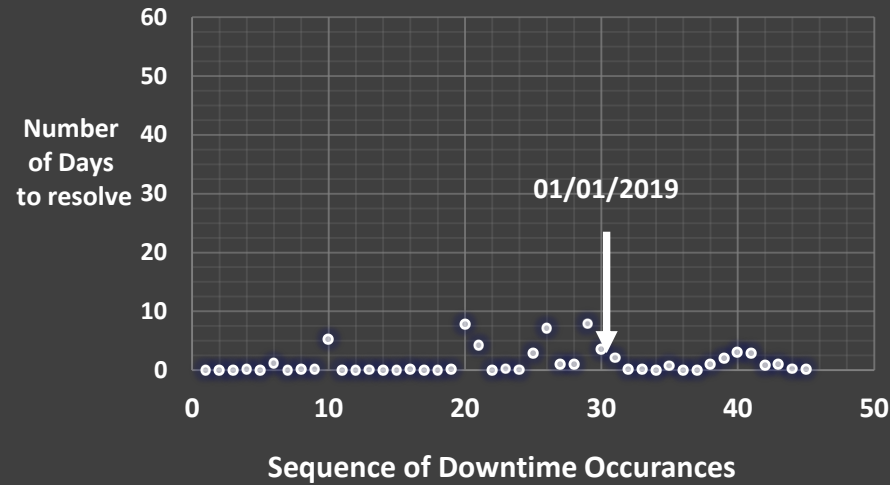
The audit concluded that internal controls related to: 1) the Monitoring and Issue Resolution components of Vendor Management processes and 2) those required of entities using the MUNIS application were suitably designed and operating effectively for the period under audit. Opportunities to enhance evaluating vendor performance were identified and communicated to management.

Commendation

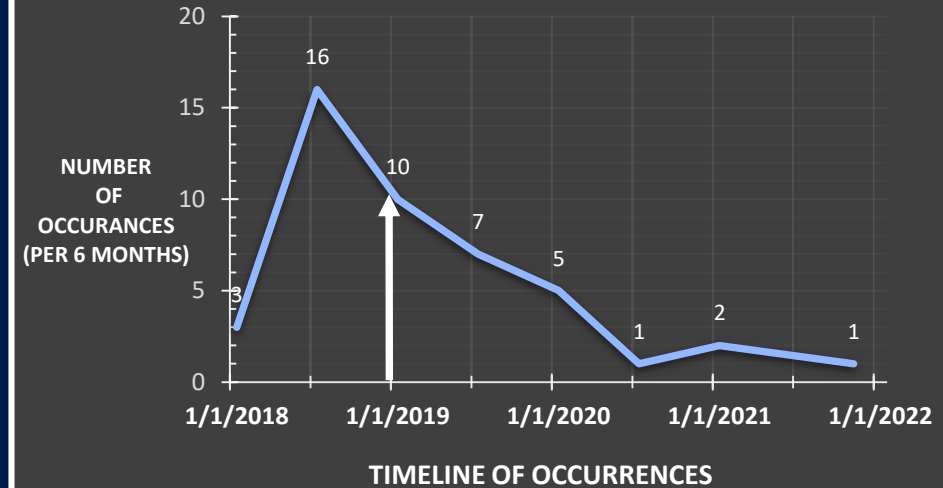
- The Office of the City Treasurer's oversight and interaction with the vendor is diligent, yet realistic with its current operating environment. They continue to demonstrate effective management of the relationship, while retaining ownership of the outsourced activities. The professional staff has significant and relevant technical and institutional knowledge to implement application system requirements and oversee functional needs.
- Tyler had a ransomware attack in September of 2020, which was caught by ITMD and communicated back to the Treasurer's Office. Data connectivity was severed immediately and other steps were taken to ensure protection of City data and assets within the first 12 hours. Precautions were maintained until final resolution was communicated by the vendor.

Commendation (continued)

1. System Downtime Resolution
(duration per Critical incident)



2. Frequency Trend of Critical Downtime Occurrences



- Chart 1 sequentially quantifies how long it took to resolve critical issues (in days) (Magnitude of Impact)
- Chart 2 shows how often critical events occurred (in volume per 6 months) (Likelihood of Occurrence)
(See Finding Risk Rating on following slide)

As the charts indicate, the Treasurer's Office proactive approach through diligent communications, involving weekly meetings that are focused on identifying and resolving issues have been instrumental in:

- Chart 1 – ensuring that the time to resolve critical issues has remained relatively low; and
- Chart 2 – significantly reducing the frequency of critical events throughout the contract period.

Also note the correlation trend in activity subsequent to the dateline marked on both Charts.

Audit Finding #1

- **Finding**: A performance guarantee provided in the contract could not be measured accurately.
 - **Impact**: Loss of potential financial credits owed.
 - **Risk Rating**: Low
 - **Recommendations**:
 - Perform quarterly reviews of vendor performance in compliance with current contract guarantee using accurate, timely, reconciled and validated system data.
- For Future Amendment(s):*
- Define service level guarantees with measureable criteria using agreed upon reliable and relevant supporting information that are substantive to the relationship, incorporating them into the contract.

Next Steps

Phase 1

- Auditee will execute audit finding remediation action plans



Phase 2

- Internal Audit will solicit audit finding remediation progress updates at least annually





Phase 3

- Internal Audit will report remediation status to the F&P committee annually until fully executed



Thank You.

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