

Deliverable 2.1 Current State Assessment

Prepared for: The State of Tennessee
Administrative Office of the Courts (TN AOC)

Date: December 20, 2024
Version: v8



Table of Contents

01	Executive Summary	page 3
02	Current State Assessment Approach	page 12
03	Assessment of Tennessee’s Current Court Technology <ul style="list-style-type: none">▪ Detail on eFiling Solution — page 19▪ Detail on Case Management Solution — page 29▪ Detail on Document Management Solution — page 42▪ Detail on Financial Management Solution — page 52▪ Detail on Data Repository Solution — page 62▪ Detail on Data Reporting Solution — page 72	page 17
04	Summary Analysis and Next Steps	page 82
05	Appendices	page 87

Executive Summary

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TN Administrative Office of the Courts (TN AOC) Strategic Vision

This assessment focused on whether the current Tennessee Court Technology landscape aligns with TN AOC's Strategic Vision for the Court System Technology Solution Project.



The Administrative Office of the Courts (TN AOC)* provides support to the Tennessee Supreme Court and the entire state court system.

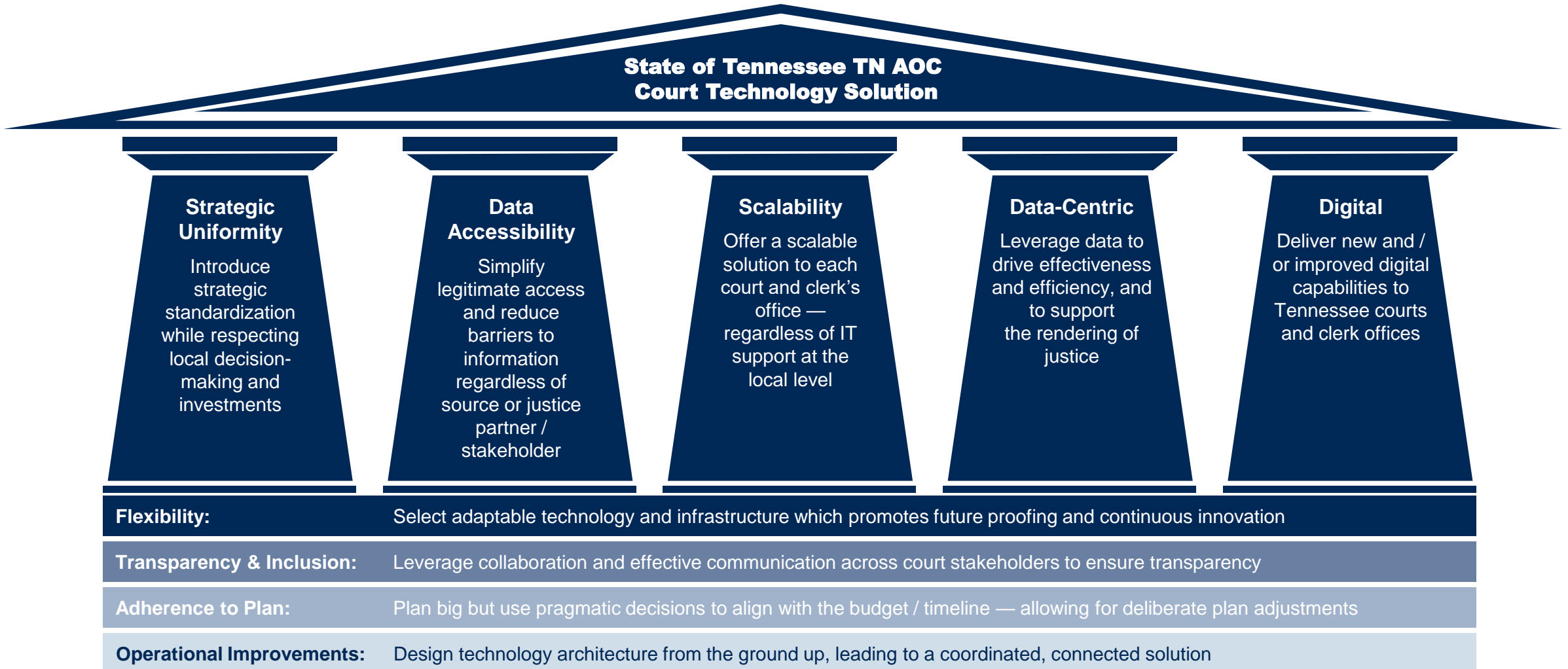
Tennessee Statewide Court Information Systems Technology Solution Project:

Strategic Vision Statement

The Court System Technology Project will **provide a roadmap for a comprehensive statewide court information technology solution**, inclusive of architecture, infrastructure, and applications, that supports the pursuit of **strategic standardization, robust data reporting and analytics, data-sharing, accessibility, and effective application communication** among justice partners for the State of Tennessee.

TN AOC's Guiding Principles for this Effort

The following previously-established guiding principles underpin this Current State Assessment.



Summary Assessment of Current Court Technology in the State of Tennessee

The current technology architecture across the state's court system reveals that it does not align with TN AOC's strategic vision and guiding principles.



1 Decentralization

This assessment revealed a **decentralized environment with a collection of applications, tools, and infrastructure** that are not meeting all needs across the state. TN courts and clerk offices have existed with a level of independence that allows for locally owned and managed solutions; because of this the current architectural landscape* lacks cohesion.



2 Lack of Uniformity

There have been attempts at standardizing technology across the state (e.g., encouraging use of TnCIS). However, **variation in operational practices is common**. While some TN courts and clerk offices use the same vendor or product for key solutions, the configurations and workflows are different, resulting in a lack of uniformity.



3 Lack of Modern, Streamlined Workflows

The current Case Management Solutions (CMS) provide coverage for most of the state's business capabilities; however, TN courts and clerk offices are sometimes **limited to tracking of case events and facts**, rather than the proactive management of the flow of case.

Additionally, many court processes are handled manually (e.g., the physical handling of documents and manual data entry or data sharing that relies on email), instead of via utilizing automated processes.



4 Insufficiently Consolidated and Usable Statewide Data

TN AOC seeks to reduce barriers to accessing data, with more robust and timely data-sharing practices. While TN AOC has made significant progress with its ability to use statewide data; **both data-sharing and data analytics/reporting are more labor intensive than efficient and reliable** (e.g., manual intervention and custom coding is needed to consolidate data into existing statewide data repositories such as GSDR*).



5 Resistance to Change

TN courts and clerk offices use a wide array of solutions and technologies, many of which are sufficient for their own local needs. TN courts and clerk offices are also **limited in their exposure to the features standard in more modern solutions**; without clear examples of how processes could be improved, there is resistance to change.

Summary of HB 2930 (SB 2689)

In the spring of 2024, the **Tennessee General Assembly enacted HB2930/SB2689 (PC 947)**, which **directs TN AOC to define and develop** a centralized system of **case management, document management, electronic case filing, electronic payment methods, data reporting**, and any other capability deemed necessary for collection and reporting of all state and local court public case level data.

The associated [Fiscal Note](#) includes the following:

Summary

- Beginning January 31, 2025, and every six months thereafter, requires the TN AOC to submit an update on the progress of the system development, including projections for ongoing and maintenance costs, to the General Assembly and the Governor.
- Requires the clerk of each court to install the new system developed by the TN AOC to collect and report all data required by Supreme Court rules and statute.
- It also requires counties that already have an automated system to adopt the new system developed by the TN AOC.
- The system must be made available to all courts and clerk offices, including those offices previously automated and those offices within Shelby, Davidson, Knox, and Hamilton counties. Offices shall adopt and convert to the new system on a schedule to be determined in consultation with the TN AOC.

Fiscal Impact

- The TN AOC received a \$75M appropriation in the FY23-24 budget for a statewide case management and e-filing system.
- It is assumed that the TN AOC has already begun the process of developing a statewide system.
- The \$75M appropriation will cover the cost of developing and implementing a statewide system — it will not significantly impact state expenditures or operations.
- To the extent that any local courts would not install the new system in the absence of a direct requirement, as found in the proposed legislation, the legislation will result in a significant mandatory increase in local expenditures for installation and maintenance of the system.

Summary of Relevant Laws, Rules, or Statutes in the State (1 of 2)

The State of Tennessee operates under a framework of laws, rules, and statutes that **govern the use of technology in the courts and help ensure it is used effectively, securely, and in a manner that upholds the integrity of the judicial process.**

A preliminary review of Tennessee Codes and Supreme Court Rules/Rules of Procedure (summarized below and on the next page) **suggests that the TN AOC has broad, superseding authority** to aggregate data, ensure data consistency and accuracy, implement a uniform case management system, and mandate electronic filing.

Relevant Law, Rule, or Statute	Key Points
Tennessee Code Annotated, Title 16, Chapter 1, Part 117: Reports to the Administrative Office of the Courts	<ul style="list-style-type: none">Requires courts to submit various reports to the TN AOC — TN AOC has the authority to specify the types of reports and frequency of submission (e.g., case filings, dispositions, financial data, and other relevant information).Aims to ensure transparency and accountability within the judicial system.
Tennessee Code Annotated, Title 16, Chapter 3, Parts 401 & 402: Rule Making Power of Supreme Court	<ul style="list-style-type: none">Grants the Tennessee Supreme Court authority to establish rules governing court procedures.Ensures uniformity and consistency in legal proceedings across the state.Empowers the court to amend or repeal rules as necessary to improve judicial processes.
Tennessee Code Annotated, Title 16, Chapter 3, Part 501: Power of Supreme Court	<ul style="list-style-type: none">Defines the jurisdiction and powers of the Tennessee Supreme Court.Confirms that rules established by the Supreme Court have the force of law and are binding on all lower courts.Empowers the court to interpret laws and ensure they are applied consistently.
Tennessee Code Annotated, Title 16, Chapter 3, Part 803: Administrative Office of the Courts	<ul style="list-style-type: none">Authorizes the TN AOC to collect and analyze court-related data; TN AOC is responsible for gathering statistical data and other information from courts to improve the administration of justice.Requires the creation and maintenance of an integrated case management and accounting system with statewide reporting and data transfer capabilities using standard case definitions.Mandates the development of electronic filing systems and records management.Requires the establishment of technical standards for court technology systems.Ensures public access to court records in accordance with state laws.

Summary of Relevant Laws, Rules, or Statutes in the State (2 of 2)

Relevant Law, Rule, or Statute	Key Points
Tennessee Code Annotated, Title 18, Chapter 1, Part 105: Clerical and Administrative Duties of the Clerks of Court	<ul style="list-style-type: none"> Empowers the Administrative Director of the Courts and grants authority to require reports from courts Outlines their role in managing court data and ensuring compliance with reporting requirements
Tennessee Supreme Court Rule 11: Supervision of the Judicial System by the Supreme Court	<ul style="list-style-type: none"> Affirms the Supreme Court authority to take all actions whether enumerated or not to for the orderly administration of justice Reaffirms TN AOC's role in collecting and analyzing court data Empowers TN AOC to require courts to submit necessary data and reports
Tennessee Supreme Court Rule 18: Adoption of Local Rules	<ul style="list-style-type: none"> Allows local courts to adopt rules specific to their jurisdictions. Requires local rules to be consistent with statewide rules and approved by the Supreme Court. Facilitates flexibility in addressing local procedural needs.
Tennessee Supreme Court Rule 26: Use of Electronic Recordings of Court Proceedings	<ul style="list-style-type: none"> Regulates the use of electronic recordings as official records of court proceedings. Provides guidelines for the storage, access, and use of electronic recordings. Ensures the integrity and reliability of electronic court records.
Tennessee Rules of Civil Procedure, Rule 5B: Electronic Filing, Service, and Signature	<ul style="list-style-type: none"> Authorizes electronic filing and service of documents in civil cases. Establishes standards for electronic signatures to ensure authenticity. Aims to streamline court processes and improve efficiency.
Tennessee Rules of Criminal Procedure, Rule 49.2: Electronic Filing, Service, and Signature	<ul style="list-style-type: none"> Permits electronic filing and service of documents in criminal cases. Sets requirements for electronic signatures to maintain document integrity. Enhances the efficiency of criminal court proceedings.
Tennessee Rules of Juvenile Procedure, Rule 106(h): Electronic Filing, Service, and Signature	<ul style="list-style-type: none"> Allows for electronic filing and service of documents in juvenile cases. Provides guidelines for the use of electronic signatures in juvenile proceedings. Supports the modernization and efficiency of the juvenile justice system.
Tennessee Data Security and Privacy Laws, T.C.A. § 47-18-2107	<ul style="list-style-type: none"> Requires businesses to implement data security measures to protect personal information. Mandates notification to individuals in the event of a data breach. Aims to safeguard consumer privacy and prevent identity theft.

Key Risks and Constraints in Realizing TN AOC's Strategic Vision

If left unaddressed, the below observed risks and constraints may present challenges for the state's court technology modernization efforts.



Legacy Technology Risks and Inefficiencies

Current systems are operationally stable, with no significant availability disruptions noted. However, many of the state's current court systems are deployed on older platforms and/or using legacy software development patterns (e.g., monolithic and tightly-coupled solutions that incorporate external county partners.) This technical debt **increases maintenance costs, does not protect against new threats, and impedes innovation.**



Variation in Local Data Definitions

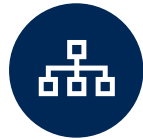
While all TN courts and clerk offices are subject to key reporting requirements and must share specific data elements with TN AOC regularly, the state **lacks a common data dictionary.** Normalizing data is time-consuming, and TN AOC must sometimes customize ETL solutions by individual jurisdictions (e.g., GSDR data feeds).

Any future data repository solution(s) at the state level should be supported by a statewide data dictionary to ensure uniformity.



Significance of Change Required

The amount of change required to get from the assessed fragmented current state to a more integrated and uniform target state will be substantial and **require a multi-year effort.** When technology initiatives span multiple years, it is easy for stakeholders to forget project objectives, lose confidence, or veer off the roadmap. The **project will require continuous benefits realization** to assure completion — as TN courts and clerk offices see change, they will “buy in” further.



Need for Governance

Ongoing maintenance and enhancements are not coordinated across TN AOC and locally-provisioned CMS solutions. There is **limited awareness and comprehensive planning** for technology spend across the state.

There is an **eagerness for guidance and direction from TN AOC** on technology and innovation. Courts have intentionally held back on further investments in technology (e.g., improved analytical tools) in anticipation of more direction.

There is also a **lack of awareness of formal channels** to provide input or receive guidance about the new statewide technology direction. This contributes to an inertia to change and skepticism of the future vision.

Finally, the state does not have uniform methods for **collecting documentation on current state solutions**; this makes it challenging to assess compliance with functional or technical mandates across systems statewide.

Summary of Court Technology Utilized Across the State

The courts and clerk offices of Tennessee are supported by a wide variety of applications across the six core court system components.

Tybera eFlex serves the eFiling needs of many local jurisdictions.¹

TN AOC provides core Case Management and Document Management functionality in the form of TnCIS. Many small to medium size courts and clerk offices utilize TnCIS; larger jurisdictions typically provision either COTS or homegrown solutions.

eFiling Solution	Case Management Solution	Document Management Solution	Financial Management Solution	Data Repository Solution	Data Reporting Solution
<p>While there is no single statewide solution provided by TN AOC, most TN courts and clerk offices that eFile use Tybera eFlex.</p> <p>Exceptions include:</p> <ul style="list-style-type: none"> A locally-provisioned COTS solution (i.e., installation of Tyler eFile & Serve) A homegrown solution (i.e., Hamilton County Juvenile's eFileIt) 	<p>TN AOC provides TnCIS as a CMS option.</p> <p>TN AOC also offers a COTS solution, Quest for Juvenile.</p> <p>Other solutions include:</p> <ul style="list-style-type: none"> Locally-provisioned COTS solutions (e.g., Tybera Alpine; Tyler Enterprise Justice; Contexte; Equivant CourtView) Homegrown solutions Integration Patterns: <ol style="list-style-type: none"> Tightly Coupled (Davidson, Hamilton) Message-Based (e.g., Shelby Criminal) NIEM (Shelby) File-Based (e.g., TJIS from CMS, Department of Revenue) 	<p>TN AOC provides Document Management integrated to the TnCIS CMS option.</p> <p>Other solutions include:</p> <ul style="list-style-type: none"> Locally-provisioned COTS solutions (e.g., Tybera CEDAR; Hyland OnBase; Laserfiche) Homegrown solutions/CMS extensions, which typically store documents as Binary Large Objects ("BLOBS") in the CMS.² 	<p>While there is no standalone solution, financial capabilities are available within the TN AOC-provided CMS, TnCIS.</p> <p>Other CMS solutions include various levels of embedded financial capabilities (including those managed by other vendors).</p> <p>Most TN courts and clerk offices collaborate with their respective county-level financial organizations.</p>	<p>TN AOC provides key repositories which consolidate data from across the state (e.g., TJIS, GSDR, Genses, and Mental Health Monitoring System, all built on MS SQL Server/Access or Oracle technology).</p> <p>In addition, Quest Juvenile CMS aggregates data and builds reports based on information from jurisdictions using system.</p>	<p>TN AOC provides some SSRS dashboards (e.g., internal AOC capabilities such as Mental Health) and custom-developed reports for statewide reporting.</p> <p>Local reporting capabilities are typically based on what is available within local eFiling and CMS solutions.</p>

TN AOC draws data from local CMS instances to create statewide repositories such as TJIS and the GSDR. Repositories are purpose-built and limited in the scope of data collected.

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¹ Per [Tybera's website](#), eleven counties in Tennessee are currently utilizing their solutions.

² A glossary of terms and abbreviations can be found in the [Appendices](#).

Current State Assessment Approach

Current State Assessment Background and Goals

The below provides background on TN AOC’s goals for this engagement.

Project Background*

The Statewide Court Information Systems Solution is based on the state’s **vision for a local and statewide court system technology solution** that meets the needs of the state.

The state seeks guidance from the Contractor to ensure that its design and implementation consider not only the various system components that comprise the desired solution, but also the architectural and infrastructure considerations that are necessary for the implementation of a multi-court, multi-jurisdictional and/or statewide court system technology solution. The focus of any such solution shall include **flexibility, interoperability, core integration, and security**.

In addition to providing guidance on the design, the Contractor will assist the state in determining and developing detailed technical and functional requirements and desires using software standards for the following court system components:

- | | |
|--|-----------------------------------|
| 1. eFiling Solution | 4. Financial Management Solution |
| 2. Case Management Solution | 5. Data Repository Solution |
| 3. Document Storage/ Management Solution | 6. Robust Data Reporting Solution |

Current State Assessment Goals

The goal of this deliverable is to **provide an assessment of the current state of technology in the Tennessee court system** (include at a minimum the previously described court system components).

This assessment spans **the designated levels of courts** (Trial Courts, Chancery, Circuit, General Session, Juvenile, and Specialized Courts) as well as the architecture, infrastructure and integration associated therewith.

The deliverable includes **Gartner’s observations on technology and systems** currently being used by TN AOC and Tennessee courts and clerk offices, with **implications, gaps, and opportunities for improvements noted**.

Gartner utilized a framework built upon **industry standards, best practices, and proprietary research** to structure this assessment.

The assessment helps to **ground this engagement in the reality of the state’s current court technology**.

* **Source:** This description of the project is taken directly from the TN AOC Statewide Court System Technology Assessment finalized Scope of Work for this engagement.

Current State Assessment: Deliverable Description

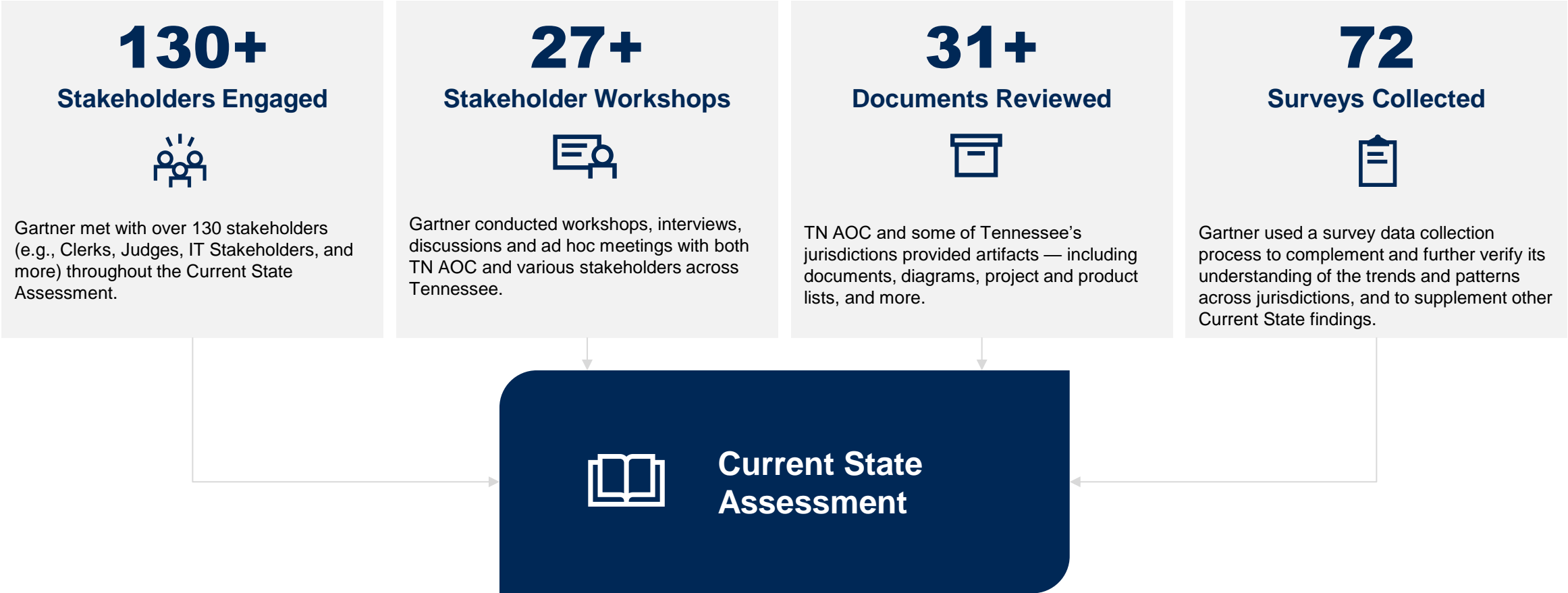
Gartner Consulting was engaged to provide this Current State Assessment, as described below.

Task 2: Deliverable Descriptions*

2.1 Current State Assessment Document: PowerPoint document with observations of technology and systems currently being used by TN AOC and Tennessee courts, with implications, gaps and opportunities for improvements noted. Contractor will utilize frameworks stemming from industry standards, best practices, and Contractor proprietary research to provide assessment and observations of the state's current state. The Current State Assessment is a key input to the Target State Design. The assessment will describe court system components (i.e., eFile, case management systems, document management solutions, financial management solutions, data repository solutions, data reporting capabilities) and will include the standard court processes from filing through case resolution, data collection, storage, and distribution. Additionally, the state's current architecture, infrastructure, and integration will be assessed. The assessment will identify key risks, gaps, and opportunities for improvements related to the various component technology systems and the architecture, infrastructure, and integration currently in place across the state.

Current State Assessment Inputs

This assessment required extensive engagement with Tennessee court stakeholders.* Inputs to the Current State Assessment included:



* “Stakeholders” refers to the broad list of individuals consulted as part of the Current State Assessment efforts, including TN courts and clerk offices, IT leaders from across the state, and leadership at TN AOC.

Current State Assessment Framework and Taxonomy

Gartner assessed the capabilities, utilization, tools, and processes across the state for the following six core court system components:



Gartner provided an assessment of each core court system component against these eight categories:



Architecture	Degree to which the legacy systems, TN AOC processes, and IT resources provide a stable and flexible network/infrastructure — inclusive of data exchange among systems and products, integration architecture, and application architecture.
Data, Reporting, & Analytics	Degree to which the legacy systems can manage data and provide analytics / reports accurately and efficiently; the ability for the tools to support operational needs and drive decision-making, support statewide collaboration, and manage internal tasks; the processes / resources available to support reporting and analytics capabilities.
Scalability	Degree to which the legacy systems or components can meet evolving expectations; the processes and IT resource capability to support system expansion to meet expectations; fundamental architectural changes to adapt to new technology, tools, and needs.
Security	Degree to which legacy systems protect data through streamlined processes, procedures, oversight, and access.
Usability	Degree to which the legacy systems can be utilized with effectiveness, efficiency; user satisfaction.
Functional Suitability (In-Court)	Degree to which the legacy systems provides functions and capabilities that meet necessary operational needs, workflows, and expectations of TN AOC, <i>within the courtroom</i> .
Functional Suitability (Out-of-Court)	Degree to which the legacy systems provide functions and capabilities that meet necessary operational needs, workflows, and expectations of TN AOC, <i>outside of the courtroom</i> .
Functional Suitability (Financials)	Degree to which the legacy systems provide functions and capabilities that meet necessary accounting, workflows, and expectations of management of <i>financial responsibilities</i> .

Assessment of Tennessee Current Court Technology

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Detailed Assessments by Court System Component

This document provides an Assessment Detail for each of the six court system components, structured as follows:



Each Assessment Detail contains:

- A **definition** of the component
- **State context** for the component
- An **assessment of each component's alignment with TN AOC's strategic vision** utilizing, as a framework, the categories described in the image to the right
- A **summary analysis for the component**



Assessment Detail for eFiling Solution

1 eFiling Solution

2 Case Management Solution

3 Document Storage / Management Solution

4 Financial Management Solution

5 Data Repository Solution

6 Data Reporting Solution

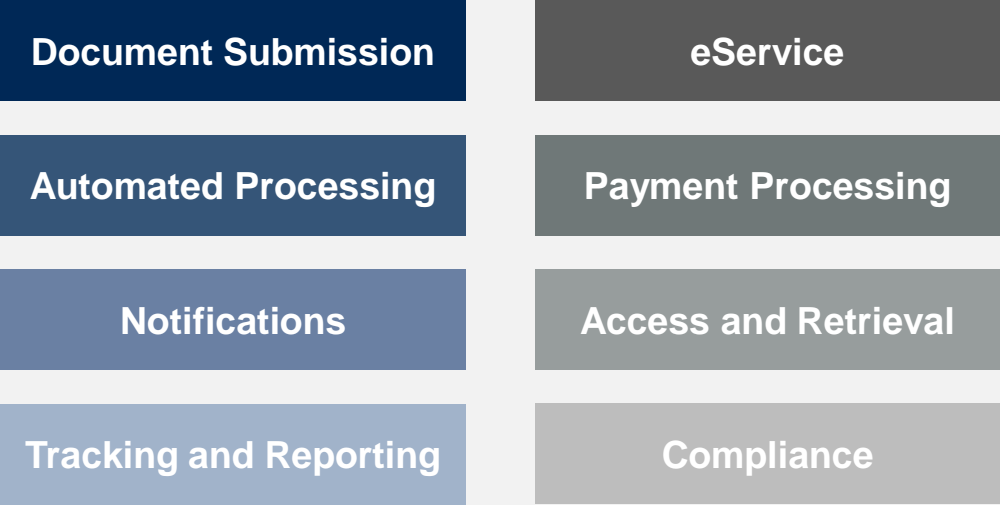
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eFiling Solution Definition

eFiling for Court Technology is the technology that enables electronic submission of legal documents to courts, rather than in paper forms. eFiling solutions streamline the filing process, enhance accessibility, and improve efficiency by allowing users to file documents online and receive real-time updates — moving toward a more digital judicial environment. eFiling solutions often integrate with other court solutions, such as CMS, to provide more seamless workflows.

Main Function & Key Components:

The eFiling solution streamlines the document filing process, increases accessibility to records, reduces data inaccuracy potential and improves convenience for all filers — including attorneys (pro se attorneys), law enforcement, and other justice partners. eFiling is inclusive of documents to be filed (subject to clerk approval) and draft orders (subject to subsequent action by the court).




Best-In-Class Examples*:

eFiling Solutions for Government Clients


Tyler Technologies
eFile & Serve




Tybera
eFlex



TurboCourt



File & Serve
File & ServeXpress



* These are offered as illustrative examples only; Gartner is not recommending a particular solution or vendor.

eFiling Solution

State of Tennessee Context

While eFiling is authorized and encouraged in the state of Tennessee, there is **no statewide Electronic Filing Service Provider (EFSP) or Electronic File Manager (EFM)**. As a result, **filers must access different sites** when filing in different jurisdictions.

Most TN courts and clerk offices use **Tybera eFlex**.^{*} Exceptions include an instance of Tyler eFile & Serve and a homegrown solution in Hamilton County. Other jurisdictions are still filing via paper. There are roughly 40 courts (out of 300+ courts in TN) that are utilizing an eFiling software or capability.

High-Level Findings:

- Some clerks and judges advocate for a statewide mandatory eFiling requirement to streamline processes and reduce exceptions for paper filings.
- Courts using eFiling report increased convenience and advancements in digital court records, though some clerks suggest improvements in data validation to reduce filer feedback loops (e.g., automated validation versus manual clerk validations).
- There are other methods of electronic delivery of filings, which do not utilize an eFiling solution. They include: (1) criminal initiations, where there is direct integration between the charging authority and the court for criminal matters, and (2) fax/email filings, where documents are sent directly to clerks or judges.

Challenges & Inefficiencies:

- For some stakeholders, siloed systems and **inconsistent integration lead to redundant data entry**; however, integrations between Tybera eFlex and CMS systems are seen as effective by TN court and clerk offices who use them.
- Clerks indicate users (e.g., Attorneys) report **inconsistencies in completing filings and accessing court records**, including coordination issues between courts and clerk offices and delays in document entries, particularly in criminal matters.

eFiling Solution Architecture

Definition: Degree to which the legacy systems, TN AOC processes, and IT resources provide a stable and flexible network/infrastructure, data architecture — inclusive of data exchange among systems and products, integration architecture, and application architecture.

- There are three variations of eFiling architecture in Tennessee — there is one instance of Tyler eFile & Serve and one instance of a homegrown system in Hamilton County. Other courts and clerk offices with eFiling utilize Tybera eFlex.
- In Hamilton County, which uses a homegrown solution for Juvenile, eFiling is not modular; it is part of the overall CMS solution. This constrains integration with third party eFiling platforms.
- The most commonly used eFiling solution in TN, uses a modern technology architecture including ECF standards (e.g., Tybera eFlex, Tyler eFiling).



Tybera eFlex is used by most TN courts and clerk offices with eFiling platforms. Tybera eFlex adheres to ECF standards and employs modern technology architecture, making it a bright spot for the state.

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eFiling Solution

Data, Reporting, & Analytics Capabilities

Definition: Degree to which the legacy systems can manage data and provide analytics / reports accurately and efficiently. The ability for the tools to support operational needs to drive decision-making, support statewide collaboration, and manage internal tasks. The processes / resources available to support reporting and analytics capabilities.

- A primary purpose of eFiling is to provide data to the CMS. Once documents are electronically filed, they and their related data elements are accepted and updated into the CMS, which houses the official court record and associated data. Therefore, case data reporting is primarily conducted through the CMS, not the eFiling solution. The need for reporting and analytics capabilities within the eFiling solution is limited, except for data such as the volume of filings.
- Reliable statewide reporting and analysis of filing statistics is hindered by siloed (and nonintegrated) eFiling systems and the continued concurrent use of paper filing.

For example, Tybera eFlex tracks basic volume metrics that can inform TN courts and clerk offices on usage patterns of filing transactions. TN AOC does not currently collect this data at the state level.



Only limited reporting is conducted using the eFiling solution. Therefore, data, reporting, and analytics capabilities are largely not applicable here.

eFiling Solution

Scalability

Definition: Degree to which the legacy systems or components can meet evolving expectations; the processes and IT resource capability to support system expansion to meet expectations; fundamental architectural changes to adapt to new technology, tools, and needs.

- Tybera eFlex leverages a current technology architecture which has proven to be scalable across the jurisdictions served.

Tybera eFlex, representative of the commercial eFiling solution market, is widely deployed across Tennessee and has shown to be an effective, scalable eFiling solution, especially when satisfactorily integrated with the respective CMS solution.

- eFiling is currently not mandated across Tennessee. This lack of a mandate (in part) causes eFiling adoption and local filing processes to vary across jurisdictions, thereby limiting the state's ability to scale eFiling effectively and uniformly.

- Elements of the ECF standard are being used across many Tennessee jurisdictions. Without mandated statewide policies on how the standard is to be applied for both eFiling and interfacing CMS platforms, implementation of the standard varies across jurisdictions.

For example, Tybera eFlex reported the need to tailor interfaces to accommodate CMS or process idiosyncrasies in individual jurisdictions. This need for customized interfaces limits the ability of current state eFiling to scale for both growth and as surrounding CMS solutions evolve.



The scalability of eFiling in Tennessee is hindered by a lack of statewide policy regarding eFiling and the ECF standard. This leads to inconsistent implementation of eFiling solutions, which in turn negatively impacts uniform growth and adoption.

eFiling Solution Security

Definition: Degree to which legacy systems protect data through streamlined processes, procedures, oversight and visibility of access capabilities within each county and across the state.

- The State of Tennessee Civil Rules of Procedure and Electronic Filing Rules suggest that the State and TN AOC have the authority to both implement and regulate eFiling.
- Based on the various electronic filing rules across the state, TN AOC has the ability to set the technical (i.e., security and reliability) standards for eFiling. TN AOC has baseline standards for eFiling across the state.
- There is an absence of statewide eFiling security standards or policies. Security standards exist at the local level based on local decision-making. Due to the lack of statewide standards, inconsistencies in security protocols are found and not all security structures and protocols consistently meet best practices and modern standards.

The variation in solutions causes difficulty to audit compliance and security best practices. While no security breaches attributed to eFiling access points were reported as a part of the assessment, the lack of uniformity has made it more difficult to manage security and ultimately increase security-related risks.

While most (if not all) jurisdictions are more broadly aware of eFiling standards (e.g., ECF) and their associated security attributes, the implementation and validation of these standards vary.



Most jurisdictions are aware of eFiling standards and their security attributes, but varying levels of eFiling adoption complicate security compliance assessments. Despite no reported breaches, the lack of standardized security measures and existence of fragmented eFiling solutions increase security risk.

eFiling Solution Usability

Definition: Degree to which the legacy systems can be utilized with effectiveness, efficiency, and user satisfaction to complete tasks and meet operational goals and expectations.

- While not all jurisdictions have eFiling solutions, those that do typically utilize a COTS solution (e.g., Tybera) with modern capabilities and a generally consistent and positive user experience.
- For courts that do not utilize an eFiling solution, the filing process is not as efficient or effective as it could be and is seen as cumbersome and time-consuming.
- Some eFiling installations are not seamlessly integrated into the TnCIS CMS, which leads to issues with data validation and also leads to inefficiencies (e.g., users entering the same data twice).
- Some attorneys described inconsistencies in filing and accessing records from court to court, based on the tools and processes available.
- There is currently no mandate to implement or make use of eFiling technology, and while electronic services are not yet consistently used across the state, there has been an uptick and increased interest in the ability to provide service of process through electronic means.

This has been particularly evident since COVID and the subsequent increased usage of court technology. Additionally, there is a general observation of, and common agreement with, the heightened usage of technology such as advanced mobile devices with email, text messaging, and other features and tools that enable quicker and more efficient transmission and receipt of information and electronic documents. More advanced capabilities (e.g., facial recognition, ability to flag when items have been read or accessed) are increasing trust in electronic services.

For example, an attorney could submit and receive a rejection in one court but find that the exact same submission is accepted without issue in another court.



Because eFiling is not mandatory, TN courts and clerk offices have inconsistent processes. They use a mix of paper and electronic filing. Where eFiling does exist, the processes are not as efficient or as integrated (to the CMS) as they could be, and some jurisdictions also struggle with data validation and redundant data entry.

eFiling Solution

Functional Suitability

Definitions:

- **Functional Suitability (In-Court):** Degree to which the legacy systems provides functions and capabilities that meet necessary operational needs, workflows, and expectations of TN AOC, within the courtroom.
- **Functional Suitability (Out-Of-Court):** Degree to which the legacy systems provides functions and capabilities that meet necessary operational needs, workflows, and expectations of TN AOC, outside of the courtroom.
- **Functional Suitability (Financials):** Degree to which the legacy systems provides functions and capabilities that meet necessary accounting, workflows, and expectations of management of financial responsibilities.

- This analysis of the current state did not reveal any challenges related to viewing documents in court, or any lagging performance.

In court, documents are typically not filed using the relevant eFiling solution but rather they are entered directly into the CMS (and scanned into the case file, as applicable). For this reason, eFiling constraints in-court were not apparent.

- Outside of court, filers must navigate multiple sites when filing across jurisdictions, and there is limited functionality to assist pro-se litigants. Without a statewide solution like an EFSP, there are fewer economies of scale to support TN AOC or vendor-sponsored statewide training for electronic filers.

- While eFiling and CMS integrations exist, there are still limitations in user experience.

In some jurisdictions, clerks must separately view the CMS and eFiling applications concurrently when reviewing filings, which creates a sub-optimal user experience. However, typically integration is strong enough to avoid significant re-entry of data into CMS.

- While broader integration challenges between CMS and county financial entities are present, they are not specific to eFiling: All eFiling solutions are capable of collecting payments and integrating this information into the CMS and/or the county's financial system. However, challenges arise in jurisdictions where both paper and electronic filings coexist, leading to delays in financial reconciliation.
- Some jurisdictions utilize their eFiling solutions (e.g., Tyler Technologies eFiling) to manage the drawdown of funds as filings are processed versus through the CMS.



Where eFiling solutions exist, they integrate well with their respective CMS, reducing data re-entry and supporting payment processing. Without a sanctioned statewide solution, adoption of eFiling is mixed. There are multiple sites for filers, with limited guidance for pro-se litigants. This presents a sub-optimal user experience. It also can lead to delays in financial reconciliation, in cases where paper and electronic filings coexist.

eFiling Solution Summary Findings

1

Architecture

Tybera eFlex is used by most TN courts and clerk offices with eFiling platforms. Tybera eFlex adheres to ECF standards and employs modern technology architecture, making it a bright spot for the state.

2

Data, Reporting, & Analytics Capabilities

Only limited reporting is conducted using the eFiling solution. Therefore, data, reporting, and analytics capabilities are largely not applicable here.

3

Scalability

The scalability of eFiling in Tennessee is hindered by a lack of statewide policy regarding eFiling and the ECF standard. This leads to inconsistent implementation of eFiling solutions, which in turn negatively impacts uniform growth and adoption.

4

Security

Most jurisdictions are aware of eFiling standards and their security attributes, but varying levels of eFiling adoption complicate security compliance assessments. Despite no reported breaches, the lack of standardized security measures and existence of fragmented eFiling solutions increase security risk.

5

Usability

Because eFiling is not mandatory, TN courts and clerk offices have inconsistent processes. They use a mix of paper and electronic filing. Where eFiling does exist, the processes are not as efficient or as integrated (to the CMS) as they could be, and some jurisdictions also struggle with data validation and redundant data entry

6

Functional Suitability

Where eFiling solutions exist, they integrate well with their respective CMS. Without a sanctioned statewide solution, adoption of eFiling is mixed. There are multiple sites for filers, with limited guidance for pro-se litigants. This presents a sub-optimal user experience. It also can lead to delays in financial reconciliation, in cases where paper and electronic filings coexist.



The state does not have a sanctioned statewide EFSP or EFM. The widely deployed Tybera eFiling solution has evolved into a 'grassroots' partial statewide solution, and as such, demonstrates some of the benefits and possibilities of a more consolidated and consistent statewide approach to eFiling.

RESTRICTED

Assessment Detail for Case Management Solution

1 eFiling
Solution

2 Case
Management
Solution

3 Document Storage
/ Management
Solution

4 Financial
Management
Solution

5 Data Repository
Solution

6 Data Reporting
Solution

RESTRICTED

Case Management Solution Definition

A **Court Case Management Solution** is a comprehensive software application designed to manage and track all information related to the life cycle of legal cases. This system integrates for various functionalities with additional systems to support the administration of justice, ensuring that cases are processed efficiently and effectively from initial filing through to resolution.





Main Function & Key Components:

A case management solution would streamline case handling, improve efficiency, and ensure timely and consistent resolution of court-related matters for TN AOC.

Case Tracking & Management	Document Management
Scheduling & Calendaring	Knowledge Management
Workflow Automation	Tracking & Monitoring
Financial Management	User Access & Security
Collaboration Tools	Reporting & Analytics
Public Access & Self-Service	Compliance & Audit

Best-In-Class Examples*:

Court Case Management Solutions

- Tyler Technologies**
Enterprise Justice Case Manager

- Journal Technologies**
eCourt, JWorks

- Thomson Reuters**
C-Track

- Equivant**
CourtView


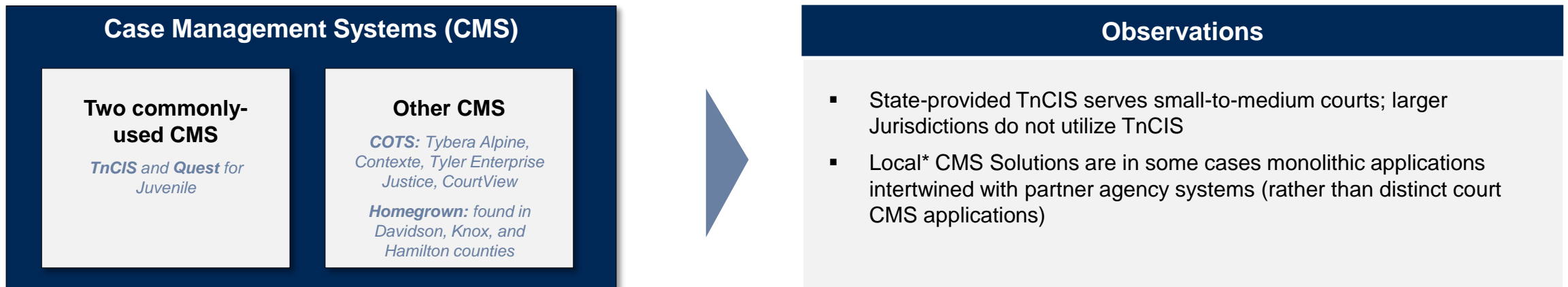
* These are offered as examples only; Gartner is not recommending a particular solution or vendor.

Case Management Solution

State of Tennessee Context

There is no mandated Court Case Management Solution (CMS) in the State of Tennessee. Each court and clerk office currently has the option to deploy a particular solution or vendor to support managing of their cases and court activities. Therefore, there are multiple types of CMS and vendors deployed throughout the state.

While these diverse solutions provide flexibility in court operations, **use of multiple CMS requires sophisticated integration approaches** to overcome data silos and potential data inconsistencies.



At the state level, allowing diverse case management systems without an effective integration strategy leads to fragmentation (e.g., inconsistent data entry, incompatible data storage formats, and lack of real-time data sharing). This heightens the risk of data discrepancies, reduces the accuracy of case information, and hampers reliable reporting and analytics. Ultimately, this also impedes access to data for decision-making.

*Local systems are technology solutions deployed and managed within a specific jurisdiction, such as a county or a municipal court. These systems are tailored to meet the unique operational needs and preferences of the local entity. They are often independently maintained by local IT resources and may have limited interoperability with other jurisdictions.

Case Management Solution Architecture (1 of 2)

Definition: Degree to which the legacy systems, TN AOC processes, and IT resources provide a stable and flexible network/infrastructure, data architecture — inclusive of data exchange among systems and products, integration architecture, and application architecture.

- The current network infrastructure varies across jurisdictions, with some courts relying on TN AOC-managed networks while others depend on local IT resources. This variation can lead to inconsistent levels of stability and support.

For example, TnCIS deployments are performed on local network hubs sometimes managed by TN AOC, ensuring a certain level of stability. However, non-TnCIS courts leverage local county IT resources, leading to potential disparities in network reliability and support.

- The TnCIS architecture and current infrastructure do not support centralized hosting of TnCIS (e.g., TnCIS is deployed locally in each jurisdiction rather than centrally hosted and managed in a TN AOC or otherwise centralized data center).
- CMS solutions across the state utilize different architecture approaches, impacting the flexibility and maintainability of these solutions.

For example, Quest employs technology that is accessible through a standard web browser. It utilizes current technology approaches (e.g., object-oriented design, support for loosely coupled architecture, compatibility with multiple backend database engines); these allow for greater flexibility and scalability in its deployment.

Whereas TnCIS is characterized by a monolithic architecture that consolidates application and database services within a single virtual machine, limiting its ability to support distributed computing and transactions. The architecture of TnCIS contrasts with more modern, modular systems, which facilitate easier integration and adaptability to evolving technological requirements.

- The data architecture of TnCIS has appropriately designed database schemas that include referential integrity and normalization. However, the lack of a standard data dictionary across the state introduces challenges in data consistency and quality.

For example, TnCIS database designs and schemas are reported as robust, but the absence of a standard data dictionary leads to inconsistencies in data definitions and reporting.

Quest also employs a data architecture that not only incorporates robust database schemas with referential integrity and normalization but also aligns with a more standardized data dictionary approach. This alignment facilitates consistent data definitions and reporting across different jurisdictions, enhancing data quality and interoperability. Quest's architecture supports seamless integration and data exchange.

- Data structures vary across CMS implementations (e.g., different data structures exist in TnCIS, Quest, COTS and homegrown CMS solutions). This variation in data architecture makes it difficult to aggregate and analyze data statewide.

For example, implementation of GSDR has required the development of unique data import scripts for individual jurisdictions contributing data to GSDR.

Case Management Solution Architecture (2 of 2)

Definition: Degree to which the legacy systems, TN AOC processes, and IT resources provide a stable and flexible network/infrastructure, data architecture — inclusive of data exchange among systems and products, integration architecture, and application architecture.

- The integration architecture relies heavily on file-based exchanges using S/FTP, which are stable but limited in real-time data integration and interoperability. This approach can lead to data integrity issues and inefficiencies.

For example, CMS currently send data unidirectionally to the TN AOC TJIS system using S/FTP batch files, limiting real-time data integration and interoperability. Errors and fault conditions are communicated via email and corrected with subsequent push-batch payloads. Relying on batch files and manual error correction processes increases the risk of data discrepancies and delays in data updates.

- The need for custom extensions and logic to handle data inconsistencies further complicates integration efforts.

For example, Tybera eFiling implementations required custom extensions to handle data and process inconsistencies between local jurisdictions, illustrating the inflexibility of the current integration architecture.

- The less-modular application architecture of TnCIS further restricts the ability to utilize modern approaches to scalability.

For example, the TnCIS architecture does not support distributed computing deployments, such as adding additional application or database servers, limiting the system's flexibility to address performance issues and integrate new functionalities.



The significant variations in network infrastructure and inconsistencies in data and integration architectures result in operational inefficiencies, hinder remote access capabilities, and complicate data consistency and integration efforts, ultimately impacting TN AOC's ability to deliver a cohesive and flexible case management system with centralized data aggregation capabilities.

Case Management Solution

Data, Reporting, & Analytics (1 of 2)

Definition: Degree to which the legacy systems can manage data and provide analytics / reports accurately and efficiently. The ability for the tools to support operational needs to drive decision-making, support statewide collaboration, and manage internal tasks. The processes / resources available to support reporting and analytics capabilities.

- TN courts and clerk offices rely on their own data analysis capabilities to generate operational and management reports, using built-in queries and reports from their local case management systems.

For example, most courts use their case management systems' built-in queries and reports to address local data needs for operational guidance and management decision-making (i.e., to enable informed decisions based on accurate and up-to-date data).

- Though AOC produces statewide reports based on consistent datasets provided by each jurisdictions, variation in the CMS data sources across jurisdictions implies data extraction processes also vary across jurisdictions. The documentation of such data extraction processes also varies.

For example, some rural courts utilize older file transfer mechanisms requiring significant manual effort and oversight. This is seen with GSDR having customized feeds of CMS data.

- There is no standard data dictionary across the state, leading to inconsistencies in data definitions and reporting. This absence complicates data integration and quality management.

For example, the lack of a standard data dictionary means that different systems interpret the same data elements differently, leading to data inconsistencies and errors.

An example of inconsistencies include: one CMS defines a “case closure date” as the date the final judgment is entered, while another system defines it as the date all related activities are completed.

An additional example of inconsistencies include: one CMS stores a defendant’s name in a single field, while another uses separate fields for first name, middle name, and last name. This inconsistency complicates data integration efforts.

Case Management Solution

Data, Reporting, & Analytics (2 of 2)

Definition: Degree to which the legacy systems can manage data and provide analytics / reports accurately and efficiently. The ability for the tools to support operational needs to drive decision-making, support statewide collaboration, and manage internal tasks. The processes / resources available to support reporting and analytics capabilities.

- Siloed systems and inconsistent integration levels hinder efficient data processes, often requiring duplicate data entry into multiple systems. This fragmentation limits the ability to perform comprehensive data analytics across the state.

The need to rekey data related to electronically filed documents or fee payments into multiple systems exemplifies the inefficiencies caused by siloed systems.

- Investments in new reporting and analytical tools have, in many counties, been deferred until further progress is made in TN AOC's technology modernization initiative. This delay hampers the ability to enhance data-driven decision-making.

For example, General Sessions Courts have halted investments in new analytical tools, waiting for more direction from the TN AOC technology initiative. This is also a wider trend across other courts to pause due to ongoing efforts to standardize.

- Data governance is largely reactive to legislative changes, with little evidence of proactive evaluation of legislative impacts on data governance and implementation.

For example, proposed legislative changes are not reviewed beforehand for their impact on data governance, leading to reactive and often inefficient data management practices.

- Each of the case management systems across Tennessee courts have baseline reporting and query capabilities native to their system. However, the systems vary in the number of standard reports available, the data available to query, and the flexibility of the reports to meet the needs of each Court.

For example, some of the COTS solutions (e.g., Tyler Technologies) have hundreds of canned reports and flexibility for both end-users and technical administrative users to widely query different tables in the front-end of the system. Other custom solutions for larger counties (e.g., Davidson) has more robust capabilities including database access to query data and aggregate into a report. Smaller rural, homegrown Courts have limiting reports and query capabilities.



The current data analytics and reporting capabilities within CMS are impacted by the absence of standard data definitions, labor-intensive and manual reporting processes, siloed systems, delayed investments in analytical tools, and reactive data governance. These issues collectively hinder the ability to perform comprehensive data analysis, generate timely and accurate reports, and make informed decisions, ultimately affecting the overall effectiveness of the court system.

Case Management Solution Scalability

Definition: Degree to which the legacy systems or components can meet evolving expectations; the processes and IT resource capability to support system expansion to meet expectations; fundamental architectural changes to adapt to new technology, tools, and needs.

- The monolithic design of many CMS systems, including TnCIS, limits their ability to scale effectively.

For example, TnCIS deployments are typically contained within a single virtual machine, combining application and database services, which restricts scalability and performance enhancements.

- Some systems are built on outdated platforms (e.g., PowerBuilder), which are difficult to scale and modernize.

For example, jurisdictions face pressure to retire legacy systems that no longer comply with modern IT standards or for which resources are less available (e.g., PowerBuilder), impacting their ability to scale.

- TnCIS was not designed for wide-area network (WAN) access, which leads to significant performance degradation when accessed remotely.

For example, The lack of WAN support prevents efficient remote operations and limits the system's ability to scale geographically.

- There are multiple solutions that are web-based and support loosely coupled architectures and have opportunities for scale (e.g., Quest, Equivant – CourtView, and Tyler Technologies – Enterprise Justice).

The solutions are web-based and support loosely coupled architectures.

- TN AOC Technology Division has limited resources, making it challenging to internally support a large-scale modernization similar to this statewide Court Technology modernization.

For example, ITSD currently has 37 positions, which is insufficient to manage large-scale deployments without additional staffing and/or contracted services.

- Homegrown (custom) and COTS solutions are viewed as scalable, but scalability depends heavily on local jurisdictions and IT resources.

For example, Jurisdictions report hundreds of annual changes to internally developed systems, indicating a high level of local control but potential scalability issues at statewide level.



The scalability of current CMS systems across Tennessee faces challenges such as monolithic architectures, WAN access limitations, resource constraints, and reliance on legacy technologies. These challenges ultimately hinder TN AOC's ability to efficiently manage growing caseloads and adapt to evolving court needs.

Case Management Solution

Security (1 of 2)

Definition: Degree to which legacy systems protect data through streamlined processes, procedures, oversight and visibility of access capabilities within each county and across the state.

- Security practices are decentralized, leading to inconsistencies and potential vulnerabilities.

For example, TN AOC ITSD manages security for TnCIS deployments, while local IT departments handle security for custom and COTS systems, resulting in varied security standards and practices.

Different jurisdictions implement varying levels of security, leading to gaps in protection. For example, some jurisdictions lack essential security measures like encryption and multi-factor authentication (MFA), while other jurisdictions have full capabilities, MFA, and IAM protocols and standards.

- There is no unified, statewide CMS security plan, which increases the risk of data breaches and unauthorized access.

For example, the absence of a cohesive security strategy increases the likelihood that security measures are implemented inconsistently across jurisdictions.

Inconsistent security practices increase the risk of data breaches, as weaker systems can be more easily exploited by malicious actors.

- Some CMS solutions (generally the older custom-built solutions) are built on older platforms for which availability of modern security functions may lag, making them more susceptible to security threats and harder to protect against new vulnerabilities.

As underlying application platforms age, inclusion of current security approaches can increasingly lag. For example, PowerBuilder is the platform for Davidson County's CMS solutions. While PowerBuilder is still a supported platform, its use is declining nationally.

Some of the legacy system vulnerabilities observed include:

- *Lack of modern security features like encryption, MFA, and intrusion detection systems.*
- *Infrequent updates and regular patching.*
- *Legacy systems sometimes lack adequate support (over the end of their life cycles)*

Case Management Solution

Security (2 of 2)

Definition: Degree to which legacy systems protect data through streamlined processes, procedures, oversight and visibility of access capabilities within each county and across the state.

- Identity & Access Management (IAM)* practices vary widely across jurisdictions, with some local IT departments managing IDs in isolation rather than through a centralized system, leading to potential gaps in user authentication and authorization.

For example, TnCIS IAM is being rearchitected to manage IDs through a hybrid Azure AD and on-prem deployment, but larger counties not using TnCIS manage IDs in isolation, creating inconsistencies.

- There are gaps in documented IT security policies and identity management plans, leading to potential misunderstandings and security vulnerabilities.

For example, without formalized security documentation, jurisdictions implement varying levels of security measures. For instance, some courts enforce strict encryption and multi-factor authentication (MFA), while others lack these protections, leading to inconsistent security standards and potential vulnerabilities.

The absence of clear IT standards and security policies have resulted in miscommunication between TN AOC ITSD and local IT departments. This can lead to incorrect assumptions about security responsibilities, such as who is responsible for patching and updating systems, increasing the risk of unaddressed vulnerabilities.



In the absence of a unified statewide CMS security strategy, vulnerabilities inherent in legacy systems with older technology and platforms, security challenges and risks may continue to emerge. Varied security standards across jurisdictions increase the risk of potential data breaches and make it difficult to protect against modern security threats.

Case Management Solution Usability

Definition: Degree to which the legacy systems can be utilized with effectiveness, efficiency, and user satisfaction to complete tasks and meet operational goals and expectations.

- The variation in technological infrastructure and user interfaces across jurisdictions results in ineffective user experiences for some.

Stakeholders have identified inefficiencies in accessing documents, as some need to query the Document Management System (DMS) separately, while others rely on the eFiling system as their primary source for viewing electronic documents. Although stakeholders acknowledge that their Case Management System (CMS) fulfills their operational objectives, they also recognize that it may not represent the most advanced technological solution available due to the rapid pace of innovation.

In Davidson County, documents and case data are integrated within a single interface, streamlining access. Conversely, other jurisdictions require separate queries for the DMS.

In Shelby County, users benefit from direct access to case documents through the CMS. In contrast, other jurisdictions necessitate navigation between the eFiling system and the CMS.

- Siloed systems and poor integration can sometimes mean repeated data entry is required.

For example, data related to electronically filed documents or fee payments often needs to be manually re-entered into multiple systems, highlighting the lack of seamless integration.

- Users expressed general satisfaction with their current systems, though those views are limited by a lack of visibility of what other new systems offer. Larger jurisdictions with tightly integrated CMS systems showed interest in additional access to statewide data and potential system replacement.

- There is no statewide definition for user experience of court CMS technologies, leading to varied practices and user experiences.

For example, the four large counties and systems like TnCIS and Quest pursue their plans independently, without a shared analysis of required changes or usability improvements for consistency in user experience.

- Remote usability is inconsistent, impacting the ability to perform tasks away from assigned locations.

For example, Davidson County reported using mobile CMS capabilities for community outreach, but such innovative uses are not widespread.

Stakeholders recognize that while their CMS meets current operational objectives, they are not the most capable solutions available due to technological advancements. Usability across the state is hindered by frequent manual entries, inconsistent user interfaces (TnCIS and non-TnCIS CMS), and a lack of common statewide procedures. Limited remote access capabilities further exacerbate usability challenges.



Case Management Solution

Functional Suitability

Definitions:

- **Functional Suitability (In-Court):** Degree to which the legacy systems provides functions and capabilities that meet necessary operational needs, workflows, and expectations of TN AOC, within the courtroom.
- **Functional Suitability (Out-Of-Court):** Degree to which the legacy systems provides functions and capabilities that meet necessary operational needs, workflows, and expectations of TN AOC, outside of the courtroom.
- **Functional Suitability (Financials):** Degree to which the legacy systems provides functions and capabilities that meet necessary accounting, workflows, and expectations of management of financial responsibilities.

- Stakeholders reported general satisfaction with their CMS solution and its ability to support on-going operations. However, many users display a resistance to change and a lack of desire to learn a new system. Therefore, the general satisfaction of CMS solutions appears to be due to hesitancy and not truly due to system capabilities. Additionally, users do not consistency seem to have awareness of how their tools and functionality compare to more modern CMS solutions with more robust capabilities and workflows. Many of the systems do not appear to have capabilities of a modern CMS (e.g., workflows, queues, automations)
- The lack of automated reconciliation features comparable to modern accounting software results in inefficient financial management and increased operational costs.

For example, integration between CMS and payment systems is limited, leading to time-consuming and error-prone manual reconciliation processes.

- The disparity in the technological infrastructure of courtrooms across the state affects the functional suitability of CMS systems, leading to inconsistent usage, inefficiencies, and an inability to uniformly support court-related processes across different jurisdictions.

For example, some courtrooms, like the Hamilton County Juvenile Court, have achieved complete digitization, while others lack basic equipment and consistent connectivity, leading to varied levels of functionality. Some courts are equipped with advanced capabilities and features, while others lack basic equipment, affecting overall alignment with state standardization.

- Quest is commonly used for Juvenile Court operations in the state. Users believe that the system adequate supports storing and clerk management of data, processes, and reporting needs of Juvenile matters.



The functional suitability of current CMS systems across Tennessee meets basic case management needs but innovation is compromised by inconsistent technological infrastructure, underutilization of system features, and manual, redundant processes.

Case Management Solution Summary Findings

1

Architecture

The significant variations in network infrastructure, lack of WAN support, and inconsistencies in data and integration architectures result in operational inefficiencies, hinder remote access capabilities, and complicate data consistency and integration efforts, ultimately impacting TN AOC's ability to deliver a cohesive and flexible case management system with centralized data aggregation capabilities.

2

Data, Reporting, & Analytics Capabilities

The current data analytics and reporting capabilities within TN AOC Case Management Solutions are impacted by the absence of standard data definitions, labor-intensive and manual reporting processes, siloed systems, delayed investments in analytical tools, and reactive data governance. These issues collectively hinder the ability to perform comprehensive data analysis, generate timely and accurate reports, and make informed decisions, ultimately affecting the overall effectiveness of the court system.

3

Scalability

The scalability of current CMS systems across Tennessee faces challenges such as monolithic architectures, WAN access limitations, resource constraints, and reliance on legacy technologies, ultimately hindering TN AOC's ability to efficiently manage growing caseloads and adapt to evolving court needs.

4

Security

In the absence of a unified statewide CMS security strategy, vulnerabilities inherent in legacy systems with older technology and platforms, security challenges and risks may continue to emerge. Varied security standards across jurisdictions increase the risk of potential data breaches and make it difficult to protect against modern security threats.

5

Usability

Stakeholders recognize that while their CMS meets current operational objectives, they are not the most capable solutions available due to technological advancements. Usability across the state is hindered by frequent manual entries, inconsistent user interfaces (TnCIS and non-TnCIS CMS), and a lack of common statewide procedures. Limited remote access capabilities further exacerbate usability challenges.

6

Functional Suitability

The functional suitability of current CMS systems across Tennessee meets basic case management needs but innovation is compromised by inconsistent technological infrastructure, underutilization of system features, and manual, redundant processes.



Courts across the state have foundational Case Management Solutions in place, but generally, the solutions do not fully leverage the latest capabilities available in the market. Technology modernization must be a priority to address the multiple limitations and risks associated with the CMS environment across the state, which ultimately hinders effective decision-making and delivery of justice.

Assessment Detail for Document Management Solution

1 eFiling Solution

2 Case Management Solution

3 Document Management Solution

4 Financial Management Solution

5 Data Repository Solution

6 Data Reporting Solution

RESTRICTED

Document Management Solution Definition





Court Document Management Solutions (DMS) offer specialized capabilities, either embedded within CMS or third-party vendor solutions, designed to electronically store and retrieve case files and the documents within those files. Documents can be either scanned images or digital in origin.

Main Function & Key Components:

A document management or storage solution would help TN AOC enhance efficiency, accuracy, accessibility, and compliance of court operations. Importantly DMS allow for better version control and audit trails for documents. CMS providers have integrated DMS capabilities within their Case Management solutions to ensure a seamless and comprehensive platform for managing court documents and enhancing overall court processes.

Improved Efficiency	Enhanced Accessibility
Better Compliance	Cost Savings
Increased Security	Streamlined Workflow

Best-In-Class Examples*:

DMS Solution Focused on Courts	<i>Tyler Technologies Content Manager</i>	
	<i>OnBase by Hyland</i>	
	<i>Laserfiche</i>	
	<i>Equivant Enterprise Content Management</i>	

* These are offered as examples only; Gartner is not recommending a particular solution or vendor.

Document Management Solution

State of Tennessee Context

Electronic documents are used to some extent **in nearly all jurisdictions**. Stakeholders expressed recognition of their benefits and, with some exceptions, an openness to their use.

Document management and storage across the state showcase a diverse array of systems and solutions, reflecting a fragmented environment upon which to build a more unified and efficient statewide approach.

The current document management **practices** are **characterized by diverse implementation methods, inconsistent adoption**, and **varying levels of integration** across jurisdictions.

The current state reveals challenges, including:

- Manual processes
- Lack of a statewide unified process
- Security concerns



Some jurisdictions use CMS with fully embedded DMS (e.g., Tyler Enterprise Justice). Other jurisdictions utilize third-party tools, like Laserfiche and Hyland OnBase.

The lack of standards and the multiplicity of solutions increases costs and complicates operational practices and the secure sharing of documents.

Document Management Solution Architecture

Definition: Degree to which the legacy systems, TN AOC processes, and IT resources provide a stable and flexible network/infrastructure, data architecture — inclusive of data exchange among systems and products, integration architecture, and application architecture.

- The architecture of document management solutions varies significantly across jurisdictions, with some using fully embedded capabilities in COTS CMS systems and others relying on third-party content management tools, or locally managed file systems.

For example, systems in use include Tyler Enterprise Justice (with embedded DMS) and TnCIS (with custom-developed DMS). Other jurisdictions such as Knox County use third-party tools (such as Hyland OnBase).

- Different jurisdictions have their own methods for document storage, retention, and retrieval, resulting in a fragmented system with varied practices and user experiences.

For example, some courts are fully digitized, while others still rely on paper records, leading to inconsistencies in document management practices.

- Document Management capabilities are offered in two variations: a fully embedded version within TnCIS and a complementary instance called “Next Gen.” However, the extent of integration and the user experience can vary across jurisdictions.

In jurisdictions utilizing TnCIS, the DMS is managed by Local Government under a contract with the TN AOC. Despite the availability of these integrated solutions, the integration between TnCIS and the DMS is not always seamless. Users often encounter challenges in efficiently accessing, managing, or imaging documents, which can impact overall productivity and user satisfaction.



The varied implementation methods, inconsistent integration, and disparate practices and infrastructure of document management solutions across the state create significant architectural challenges. These issues lead to operational inefficiencies, increased manual workloads, and fragmented systems, ultimately compromising the effectiveness, reliability, and scalability of document management statewide.

Document Management Solution

Data, Reporting, & Analytics Capabilities

Definition: Degree to which the legacy systems can manage data and provide analytics / reports accurately and efficiently. The ability for the tools to support operational needs to drive decision-making, support statewide collaboration, and manage internal tasks. The processes / resources available to support reporting and analytics capabilities.

- Non-TnCIS jurisdictions integrate basic reporting capabilities into their Document Management Systems (DMS), allowing for simple data extraction and reporting.

Systems in use, such as Laserfiche and Hyland OnBase, offer built-in reporting tools, but their use and effectiveness vary across jurisdictions.

- Effective integration between some eFiling systems (e.g., Tybera eFlex) and local CMS allows for better data reporting and analytics by ensuring that document-related data is accurately captured and synchronized. This integration supports more reliable reporting and analytics but is not consistently implemented across all jurisdictions.



The state's DMS posture across courts and clerk offices suffers from inconsistent data quality, sometimes labor-intensive reporting processes due to limitations in CMS reporting and query capabilities, and a lack of modern features like workflow queues (i.e., managing the flow of documents through various stages of processing). These impede the ability to generate insightful analytics and reporting on document movement and processing to enable efficient operations.

Document Management Solution Scalability

Definition: Degree to which the legacy systems or components can meet evolving expectations; the processes and IT resource capability to support system expansion to meet expectations; fundamental architectural changes to adapt to new technology, tools, and needs.

- The diverse range of document management systems used across jurisdictions, including COTS solutions, third-party tools, and homegrown systems, creates challenges in achieving a scalable, unified approach.

For example, Systems like Tyler Enterprise Justice, Laserfiche, and Hyland OnBase are used, each with different capabilities and limitations, making it difficult to scale uniformly.

- The lack of seamless integration between document management systems and other court case management systems limits the ability to scale effectively. This fragmentation requires significant manual intervention and hinders system expansion.

For example, There is indication that different jurisdictions have their own methods for document storage, retention, and retrieval. Manual re-entry of data related to electronically filed documents into multiple systems highlights across many jurisdictions also highlight the inefficiencies and scalability challenges.

- Many jurisdictions rely on legacy DMS that are not designed to support modern scalability requirements (i.e., uniformity, integrated analytics, workflow automation). Limited IT resources further exacerbate the challenge of expanding and modernizing these systems to meet evolving expectations.

For example, Jurisdictions face internal IT pressure to retire outdated systems that no longer comply with modern IT standards or are built on legacy technologies (e.g., PowerBuilder), impacting their scalability. Additionally, jurisdictions report having legacy custom developed solutions that are no longer supported by the original developer.

Current systems are stable with few disruptions, but support relies heavily on a few long-serving individuals with deep institutional knowledge. Limited resources are focused on TnCIS initiatives and maintenance rather than modernization efforts.



Due to varied implementation methods, inconsistent integrations, and resource constraints compounded by legacy technological challenges, TN AOC's DMS is not scalable, ultimately hindering the state's ability to efficiently manage increasing volumes of documents and adapt to evolving technological needs.

Document Management Solution Security

Definition: Degree to which legacy systems protect data through streamlined processes, procedures, oversight and visibility of access capabilities within each county and across the state.

- There is no cohesive, statewide security strategy for document management.

For example, the absence of a unified security plan means that security practices and policies are implemented inconsistently, leaving some systems more vulnerable than others.

Security management is decentralized, with local IT responsible for courts and clerk's offices running COTS and home-grown CMS, while TN AOC manages security for TnCIS deployments which highlights variation of security in DMS as an existing capability within CMS.

For TnCIS deployments, AOC has access to jurisdiction endpoints and provides network architecture and infrastructure security support.

- Identity and access management (IAM) practices for document management systems are not standardized.

For example, TnCIS IAM is being rearchitected to manage IDs through a hybrid Azure AD and on-prem deployment, but populous counties manage IDs in isolation, creating inconsistencies and potential security risks.

- Security practices for document management vary across jurisdictions.

For example, while some jurisdictions have robust security measures, others have gaps (e.g., different network and infrastructure setups, varying IAM practices, lack of ITSD security oversight of non-TnCIS systems) in their document management security protocols, leading to potential vulnerabilities.



Document management solutions across the state are compromised by decentralized security practices, a lack of a unified security strategy, and inconsistent identity and access management, resulting in significant vulnerabilities and uneven data protection across jurisdictions.

Document Management Solution Usability

Definition: Degree to which the legacy systems can be utilized with effectiveness, efficiency, and user satisfaction to complete tasks and meet operational goals and expectations.

- Electronic document capabilities are deployed to some extent in nearly all jurisdictions.

Stakeholders expressed recognition of the benefits of electronic documents. With some exceptions, stakeholders also indicated an openness to the use of electronic documents in daily operations.

- The variation in document management systems across jurisdictions leads to inconsistent user interfaces, impacting user satisfaction and efficiency.

For example, users in some jurisdictions need to navigate separate systems to access documents, while others have more integrated solutions, resulting in a fragmented user experience across the state.

- The absence of consistent procedures for document management results in varied practices and user experiences across different jurisdictions, complicating training and support.

For example, different methods for document storage, retention, and retrieval across jurisdictions create a fragmented system, making it difficult to ensure consistent and efficient document management practices.



Inconsistent user interfaces and the absence of standardized procedures, has led to fragmented DMS experiences and operational inefficiencies across jurisdictions.

Document Management Solution

Functional Suitability

Definitions:

- **Functional Suitability (In-Court):** Degree to which the legacy systems provides functions and capabilities that meet necessary operational needs, workflows, and expectations of TN AOC, within the courtroom.
- **Functional Suitability (Out-Of-Court):** Degree to which the legacy systems provides functions and capabilities that meet necessary operational needs, workflows, and expectations of TN AOC, outside of the courtroom.
- **Functional Suitability (Financials):** Degree to which the legacy systems provides functions and capabilities that meet necessary accounting, workflows, and expectations of management of financial responsibilities.

- In-court, the significant disparity in technological infrastructure affects the functional suitability of DMS, leading to inconsistent usage and effectiveness. Additionally, the varying use of eFile across the state impacts document management, as documents can be received in different formats such as eFile, email, and paper copies. Without a standardized digital requirement designating the digital file as the official record, there are inconsistent levels of document management even within the same courthouse..

For example, some courtrooms, like the Hamilton County Juvenile Court, have achieved complete digitization, while others still rely heavily on paper records, resulting in varied levels of functionality.

- Out-of-court, the lack of consistency in remote access and document management processes leads to varied adoption and implementation across jurisdictions, impacting efficiency.

For example, post-COVID-19, there is no statewide policy for remote access and work processes, leading to inconsistent practices and capabilities in managing documents outside the courtroom.

- Functional Suitability (Financials): n/a.



An overall assessment of the state's DMS posture finds considerable challenges in both in-court and out-of-court settings, owing to uneven technological infrastructure and a lack of standardized remote access policies, which lead to inconsistent functionality and efficiency across different jurisdictions.

Document Management Solution Summary Findings

1

Architecture

The varied implementation methods, inconsistent integration, and disparate practices and infrastructure of document management solutions across the state create significant architectural challenges. These issues lead to operational inefficiencies, increased manual workloads, and fragmented systems, ultimately compromising the effectiveness, reliability, and scalability of document management statewide.

2

Data, Reporting, & Analytics Capabilities

The state's DMS posture across TN courts and clerk offices suffers from inconsistent data quality, labor-intensive reporting processes, and a lack of modern features like workflow queues, which impedes their ability to generate insightful analytics and reporting on the movement and processing of documents to enable efficient operations.

3

Scalability

Due to varied implementation methods, inconsistent integrations, and resource constraints compounded by legacy technological challenges, TN AOC's DMS is not scalable, ultimately hindering the state's ability to efficiently manage increasing volumes of documents and adapt to evolving technological needs.

4

Security

Document management solutions across the state are compromised by decentralized security practices, a lack of a unified security strategy, and inconsistent identity and access management, resulting in significant vulnerabilities and uneven data protection across jurisdictions.

5

Usability

Inconsistent user interfaces and the absence of standardized procedures, has led to fragmented DMS experiences and operational inefficiencies across jurisdictions.

6

Functional Suitability

An overall assessment of the state's DMS posture finds considerable challenges in both in-court and out-of-court settings, owing to uneven technological infrastructure and a lack of standardized remote access policies, which lead to inconsistent functionality and efficiency across different jurisdictions.



While there is a broad acceptance of electronic documents, the inconsistencies in DMS technological infrastructure, integration, and document handling processes across document management solutions throughout the state leads to operational inefficiencies and hindered scalability.

Assessment Detail for Financial Management Solution

1 eFiling
Solution

2 Case
Management
Solution

3 Document
Management
Solution

4 Financial
Management
Solution

5 Data Repository
Solution

6 Data Reporting
Solution

RESTRICTED

Financial Management Solutions

Definition

A **Financial Management Solution** is an integrated software system designed to handle the financial operations and transactions associated with court activities. This solution typically includes functionalities for budgeting, accounting, fee and fine collection, financial reporting, and auditing. Generally, court-related Financial Management Solution capabilities are found or developed within CMS.

Main Function & Key Components:

The Financial Management Solution efficiently manages and tracks all financial transactions and processes related to court operations — enhancing accuracy, improving compliance, increasing transparency, streamlining financial workflows, and providing stronger financial oversight and decision-making.



Best-In-Class Examples*:

<i>Tyler Technologies</i> Enterprise Justice	
<i>Equivant</i> CourtView	
<i>Catalis</i>	
<i>Thomson Reuters</i> C-Track	
<i>Journal Technologies</i> eCourt, ePay-it	

* These are offered as examples only; Gartner is not recommending a particular solution or vendor.

Financial Management Solution

State of Tennessee Context

- While **most payment processing is handled by vendors not associated with CMS solutions**, some financial management capabilities are **embedded within existing CMS systems** — each offering various financial capabilities.
- The CMS solutions have **varying financial management capabilities** in their support of operations and financial management of cases.
- This integration point represents a significant challenge for Tennessee, **heightened by the differences in CMS solutions**.



- There is no indication that payment processors outside of CMS solutions have been challenging for stakeholders.
- However, integrations have **minimal system-to-system exchanges** with bank accounts and limited automated support for reconciliation with county financial systems, resulting in time-consuming and potentially error-prone manual processes.
- Systems provide **varying levels of capabilities for managing fee and fine assessments** (e.g., *Knox Criminal Court with no automatically recognized mandatory fine limits*) based on dispositions, hindering the quick and efficient determination of cost bills and accounting matters for courts and clerk offices.

Financial Management Solution Architecture

Definition: Degree to which the legacy systems, TN AOC processes, and IT resources provide a stable and flexible network/infrastructure, data architecture — inclusive of data exchange among systems and products, integration architecture, and application architecture.

- Varying financial capabilities and differing synchronization methods within the CMS systems limit the ability for data exchange and aggregation to TN AOC.
- Additionally, the differing capabilities related to add-on and ancillary financial systems (e.g., payment management, cashiering) present challenges in integration with local financial systems.

For example, some CMS solutions (e.g., Shelby and Hamilton) have integrated capabilities for payment systems, whereas other CMS solutions and payment systems interact through manual process (dual entry into both systems) but not through direct technological communication. As a result, the data structures are inconsistent, data is not always fully accurate.



The financial capabilities in local jurisdictions are inconsistent and have limitations in data exchanges and technological communication expected of either a modern, robust financial management solution or a CMS solution with core financial management capabilities.

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Financial Management Solution

Data, Reporting, & Analytics Capabilities

Definition: Degree to which the legacy systems can manage data and provide analytics / reports accurately and efficiently. The ability for the tools to support operational needs to drive decision-making, support statewide collaboration, and manage internal tasks. The processes / resources available to support reporting and analytics capabilities.

- Some financial reporting is made more complex in part due to the variety of methods for the collection of fees such as the use of both paper-based filing and eFiling in the same jurisdiction.

More specifically, the inconsistencies in the methods used for filing causes discrepancies in the financial reporting in jurisdictions which offer both paper and electronic filing.

- Due to lack of uniform tools used for financial management across jurisdictions, not all financial data is consistently housed within the CMS solutions (e.g., some data is found in notes, other data in events, or financial data tables). This impacts the ability to ensure completeness in the aggregation of financial data as they may not be easily available to access.



Due to areas of manual and paper-based processes in local jurisdictions, the data being collected cannot be consistently assured as complete and up-to-date causing difficulty in having robust financial data and analytics information. Additionally, inconsistent integration of tools means TN AOC will not always have a full picture of information drive decisions — particularly relating to key areas of financial impacts such as fee waiver or collections of fines.

Financial Management Solution

Scalability

Definition: Degree to which the legacy systems or components can meet evolving expectations; the processes and IT resource capability to support system expansion to meet expectations; fundamental architectural changes to adapt to new technology, tools, and needs.

- There is an opportunity to expand financial management capabilities to meet user needs. This might include capabilities like dual-entry accounting, targeted support for reconciliation with county financial systems, and integration with cashiering devices and platforms.

Development can be improved within CMS solutions across the state to expand functionality related to financial management. Jurisdictions with loosely coupled architectures are more prepared to scale.

However, some systems with older structures and platforms may have issues with newer coding and API requirements and therefore, will not scale due to the time and cost associated with updating base systems to meet the newer APIs.

- The scalability of financial management capabilities is directly linked to the scalability of the associated CMS.

Financial management capabilities throughout the state live within or integrated into existing CMS solutions. A more modern, statewide CMS will increase financial management at the local levels.

- Scalability at a statewide level is not currently achievable as is.

Each financial system has different levels of integration, data taxonomies, and structures. This makes it impractical to roll-out a statewide financials solution that fits with the diversity of CMS across the state.



The scalability of financial management solutions is achievable at the local level but not consistently statewide due to varying levels of integration, data taxonomies, and system structures, and with older systems facing significant challenges in meeting newer API requirements.

Financial Management Solution Security

Definition: Degree to which legacy systems protect data through streamlined processes, procedures, oversight and visibility of access capabilities within each county and across the state.

- There is a lack of consistency in financial security protocols (e.g., encryption, preferred vendors, use of email, S/FTP).

Jurisdictions manage data in various ways (both inside and outside of the CMS)(e.g., some courts utilize excel spreadsheets, some have automated assessments, other courts have manual entry by the clerks) which impacts consistency which directly calls into question reliability and integrity of the data. As there are some manual processes and some data housed outside of the system, this limits efficiency and completeness of data, if not fully entered into the CMS.

- Courts with older CMS's (e.g., non-TnCIS rural Courts) have solutions utilizing older platforms with versions nearing end of life (e.g., PowerBuilder), has an increased risk and concern about financial data security. Older systems and platforms are more vulnerable to cyber threats and breaches, including hacking by foreign entities.



Current financial management security capabilities in local jurisdictions are inconsistent due to the lack of statewide security standards and policies, outdated CMS solutions, and the presence of manual processes, which collectively increase vulnerabilities and risks.

Financial Management Solution Usability

Definition: Degree to which the legacy systems can be utilized with effectiveness, efficiency, and user satisfaction to complete tasks and meet operational goals and expectations.

- Different levels of financial capabilities within CMS solutions across the state.

For example, many counties (e.g., Shelby and Hamilton; counties using TnCIS) have matured financial management capabilities, whereas others maintain CMS solutions that require manual integration with their respective payment systems, which causes inefficiencies.

- Current financial capabilities are not necessarily scalable to accommodate ever evolving methods of payment that constituents may expect, or that TN AOC may wish to consider for future adoption.

For example, modern payment methods such as Venmo and Zelle are not currently offered across the state.

- E-payment options and interfaces vary widely across different courts and counties.

While payments are completed today, the lack of uniformity in e-payment options and interfaces makes it difficult should TN AOC be mandated to implement statewide financial rules and/or automate efforts.

- The ability to request a fee waiver is largely manual – including the use of paper forms.



Usability of financial management capabilities across the state is hindered by various capabilities existing across CMS solutions (where financial management capabilities are either housed or connected to via integration). With no statewide financial data protocols, various payment processes, and data management variations, the user experience differs significantly.

Financial Management Solution

Functional Suitability

Definitions:

- **Functional Suitability (In-Court):** Degree to which the legacy systems provides functions and capabilities that meet necessary operational needs, workflows, and expectations of TN AOC, within the courtroom.
- **Functional Suitability (Out-Of-Court):** Degree to which the legacy systems provides functions and capabilities that meet necessary operational needs, workflows, and expectations of TN AOC, outside of the courtroom.
- **Functional Suitability (Financials):** Degree to which the legacy systems provides functions and capabilities that meet necessary accounting, workflows, and expectations of management of financial responsibilities.

- Most foundational financial management capabilities exist, but there are still some localized inefficiencies.

The combination of CMS, eFiling and third-party payment solutions provide basic functionality to collect fees and fines to support operations. These capabilities vary across jurisdictions and sometimes require dual entry due to lack of integration (specifically between payment processing platforms and the CMS).

The management of receipting, tills, and other related features is not consistently utilized, nor does it have the same degree of functionality amongst CMS solutions. Some solutions have very robust functionality (e.g., modern COTS) and others have limiting functions (e.g., rural custom).

Some larger jurisdictions (e.g., Hamilton County Juvenile Court) allow for receipt printing, case payment status, and more.

- Manual financial management and functionality is still prevalent in many jurisdictions:

For example, functionality for certain processes such as fee waivers for indigent defendants is not consistently provided and associated waiver request and review workflows are often managed manually. More specifically, there is not a consistent (if it exists at all) automated CMS process to receive, route the review, and record the outcome of the fee waiver request.

TnCIS and Quest have trust accounts and investment management capabilities. However, users are not consistently utilizing functionality and therefore the management of funds held in trust is largely managed outside of CMS capabilities.



Fundamental financial management capabilities exist across Tennessee (given the combination of CMS, eFiling and third-party payment solutions), but these capabilities vary significantly across jurisdictions and heavily depend on integrations to meet expectations. As a result, some jurisdictions still leverage manual processes.

Financial Management Solution Summary Findings

1

Architecture

The financial capabilities in local jurisdictions are inconsistent and have limitations in data exchanges and technological communication expected of either a modern, robust financial management solution or a CMS solution with core financial management capabilities.

2

Data, Reporting, & Analytics Capabilities

Due to areas of manual and paper-based processes in local jurisdictions, the data being collected cannot be consistently assured as complete and up-to-date causing difficulty in having robust financial data and analytics information. Additionally, inconsistent integration of tools means TN AOC will not always have a full picture of information drive decisions — particularly relating to key areas of financial impacts such as fee waiver or collections of fines.

3

Scalability

The scalability of financial management solutions is achievable at the local level but not consistently statewide due to varying levels of integration, data taxonomies, and system structures, and with older systems facing significant challenges in meeting newer API requirements.

4

Security

Current financial management security capabilities in local jurisdictions are inconsistent due to the lack of statewide security standards and policies, outdated CMS solutions, and the presence of manual processes, which collectively increase vulnerabilities and risks.

5

Usability

Usability of financial management capabilities across the state is hindered by various capabilities existing across CMS solutions (where financial management capabilities are either housed or connected to via integration). With no statewide financial data protocols, various payment processes, and data management variations, the user experience differs significantly.

6

Functional Suitability

Fundamental financial management capabilities exist across Tennessee (given the combination of CMS, eFiling and third-party payment solutions), but these capabilities vary significantly across jurisdictions and heavily depend on integrations to meet expectations. As a result, some jurisdictions still leverage manual processes.



Financial Management capabilities are sufficient throughout the state and generally maintainable as they are housed within the CMS solutions. A more modern CMS with centralized functionality will also support standardization and centralization of FMS capabilities, structures, and reporting.

Assessment Detail for Statewide Data Repository Solution

1 eFiling
Solution

2 Case
Management
Solution

3 Document
Management
Solution

4 Financial
Management
Solution

5 Data Repository
Solution

6 Data Reporting
Solution

RESTRICTED

Data Repository Solution Definition

A **Data Repository** is a centralized system designed to store, manage, and aggregate data from various systems across the state. A data repository solution enables comprehensive data integration, reporting, and analytics, providing a unified view of data.

Main Function & Key Components:

Enhanced Data Integration	Improved Reporting and Analytics
Better Compliance & Security	Streamlined Operations
Scalability & Flexibility	Resource Optimization

Best-In-Class Examples*:

Snowflake Data Repository



Oracle Data Repository



Microsoft Azure Database



* These are offered as examples only; Gartner is not recommending a particular solution or vendor.

Data Repository Solution

State of Tennessee Context

- All CMS in the state include the **necessary local data** from their respective TN courts and clerk offices.
- Presently, there are **limits to statewide data repository capabilities**.
- Additionally, there are **very limited analytical capabilities** available on aggregated data across different jurisdictions.
- The state has some elements of a statewide data repository (in the form of **TJIS** and **GSDR**) and the ability to make use of this data for reporting and insights — however, the process to feed data into those current state repositories is complicated by a lack of uniformity in the underlying CMS data sources. In addition, flexibility in reporting from the current state repositories (e.g., TJIS, GSDR) is constrained by the limited availability and integration of modern analytical tools.

Example

General Sessions Data Repository (GSDR) Implementation:

The GSDR contains only General Sessions case data and has been implemented using a star schema, which facilitates more flexible reporting.

Data Repository Solution Architecture

Definition: Degree to which the legacy systems, TN AOC processes, and IT resources provide a stable and flexible network/infrastructure, data architecture — inclusive of data exchange among systems and products, integration architecture, and application architecture.

- The lack of standardized data storage, retention, or retrieval methods in CMS source systems results in a fragmented architecture, complicating data integration and creating inconsistency at a statewide level.

For example, Tennessee Judicial Information System (TJIS): Data is sent unidirectionally from CMS to the TN AOC TJIS system using S/FTP batch files, which introduces potential limitations in real-time data integration and interoperability.

- In addition to information stored as data in CMS instances and consolidated in statewide repositories, documents are an important source of case information. Extending the concept in this assessment of the Data Repository Solution to include documents, different jurisdictions use a mix of fully embedded capabilities in COTS CMS, third-party content management tools, and locally managed file systems, leading to inconsistencies in data management practices and impeding the ability to uniformly implement statewide policies such as retention policies.

For example, Davidson County uses Laserfiche with automated retention schedules, ensuring compliance with state policies. Rural counties like Cumberland use a basic file system, relying on manual processes for document retention. The variety in DMS implementation affects the uniformity and quality of data, posing challenges for a cohesive data repository that relies on consistent data inputs from all jurisdictions.



Data Repository capabilities across the state are characterized by a lack of standardized data management architecture, reliance on less timely file transfer mechanisms, and fragmented data storage, retention, and retrieval practices across jurisdictions.

Data Repository Solution

Data, Reporting, & Analytics Capabilities

Definition: Degree to which the legacy systems can manage data and provide analytics / reports accurately and efficiently. The ability for the tools to support operational needs to drive decision-making, support statewide collaboration, and manage internal tasks. The processes / resources available to support reporting and analytics capabilities.

- The scope, quality and completeness of historical data vary significantly across jurisdictions, impacting the ability to perform comprehensive reporting and analytics. Diverse data structures and schemas in different jurisdictions have led to inconsistencies during data integrations, which highlight complexities.

For example, data integration initiatives have led to inconsistencies and gaps, making it difficult to maintain a comprehensive and accurate historical record. Non-TnCIS General Sessions courts have different data structures, which has slowed the rollout of the General Sessions Data Repository (GSDR).

- The absence of a standard data dictionary has led to inconsistencies in data definitions and reporting. (This is the same statement as in CMS and DMS.)

- The General Sessions Data Repository (GSDR) has been implemented as a star schema (a method for modeling data which optimizes the use of analytical reporting tools). This data schema allows for more flexible reporting.

- Processes to feed data to the Data Repository Solution are often manual and resource-intensive, requiring significant effort to compile and submit data, leading to inefficiencies and potential errors.

For example, courts use older file transfer mechanisms, like S/FTP, for reporting datasets, necessitating some level of manual oversight and validation such as the recurring submission of data for TN AOC reporting.



TN AOC faces challenges in receiving consistent data in a consistent data structure and quality due to the lack of standard data dictionary.

Data Repository Solution

Scalability

Definition: Degree to which the legacy systems or components can meet evolving expectations; the processes and IT resource capability to support system expansion to meet expectations; fundamental architectural changes to adapt to new technology, tools, and needs.

- Tennessee has no comprehensive centralized statewide data repository to support scalability.

The state has some elements of a statewide data repository (e.g., TJIS, GSDR); however, there are limits on the data collected. This limits the state's ability to make use of statewide data-driven analysis (e.g., statewide views of a defendant's interactions with the courts across jurisdictions).

- GSDR's data feed processes hinder scalability.

GSDR receives on-going CMS updates through a full replace and reload approach (rather than just updating data that has changed). This method poses scalability challenges as accumulated data volumes grow and cannot be scaled to support near real-time data feeds from CMS.

The GSDR schema meets its design intent of being scalable, but the challenge is that its effectiveness is currently limited by inconsistent data quality (e.g., the rollout of GSDR feeds from non-TnCIS General Session courts has been slowed down by variations in data structures and quality) and integration practices across jurisdictions.

- GSDR's star schema repository design enhances reporting flexibility making it easier to develop reports which directly align with both in-court and out-of-court operations as well as summarized reporting to support management of TN AOC and state courts and clerk offices.



Components of a statewide data repository have evolved in the state and flexible reporting has expanded due to GSDR's star schema. However, without a robust centralized statewide solution, TN AOC is limited in the ability to leverage more data-driven features and real-time data feeds that would aggregate and segment critical data.

Data Repository Solution

Security

Definition: Degree to which legacy systems protect data through streamlined processes, procedures, oversight and visibility of access capabilities within each county and across the state.

- Data security of the current data repositories are largely implemented in the applications (e.g., CMS) that access those repositories.

Local level data repositories are generally embedded within the local CMS. Given the current state variation in CMS solutions, it is therefore difficult for TN AOC to measure and assure compliance with data security and access control directives in each local CMS statewide (should such standards be implemented in the future).

- The lack of uniform statewide methods for managing data access in local CMS solutions limits the ability of those CMS solutions to be extended to include integrated direct access to current state statewide repository(s).

To be clear, there are no security/access directives in use today across the state.

- The current data repository solutions lack the ability to secure access to specific rows of data through configurable business rules, known as row-level access control. This limitation restricts broad access to modern reporting features, such as drill-through analytics, while maintaining control over sensitive case records. Additionally, it hinders the ability to provide ad-hoc query access via third-party tools to users who are not authorized to view all individual case records.

This means: End users face limitations in accessing detailed insights from reports, as the system cannot selectively control who sees specific data rows. This could restrict end user's ability to fully utilize advanced reporting features, like drill-through analytics, that allow deeper exploration of data. Additionally, if third-party tools are used for ad-hoc queries, users might not have the necessary access to all the data needed, especially if it involves sensitive case records.



The security capabilities of statewide repositories are hindered by their reliance on the applications by which they are accessed, the absence of security measures at the database level, and lack of statewide data standards, making it challenging to enforce consistent access policies and use modern reporting techniques.

Data Repository Solution Usability

Definition: Degree to which the legacy systems can be utilized with effectiveness, efficiency, and user satisfaction to complete tasks and meet operational goals and expectations.

- Usability is assessed in the Data Reporting section of this document, as this is where users interact with information from the Data Repository.

The lack of a uniform statewide data dictionary, as well as the fact that current statewide repositories are not comprehensive (e.g., GSDR contains on General Sessions cases) are elements of the Data Repository current state that negatively impact the usability findings in the Data Reporting section.



Usability of the Data Repository is assessed in the Data Reporting section.

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Data Repository Solution

Functional Suitability

Definitions:

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 - **Functional Suitability (Financials):** Degree to which the legacy systems provides functions and capabilities that meet necessary accounting, workflows, and expectations of management of financial responsibilities.
-
- Current statewide repositories adequately support the production of mandated TN AOC pre-defined reporting.
 - The limited scope of the data in current statewide repositories constrains TN AOC's ability to introduce more advanced functionality, such as cross-jurisdiction reporting and analytics.

This more advanced functionality could be used to inform individual case decisions, enhance courts and clerk office operations and aid in the measurement of the effectiveness of policy changes.



While current statewide data repositories adequately supported mandated TN AOC reporting, limitations in the scope of data impede the ability to implement data driven operations.

Data Repository Solution

Summary Findings

1

Architecture

Data Repository capabilities across the state are characterized by a lack of standardized data management architecture, reliance on less timely file transfer mechanisms, and fragmented data storage, retention, and retrieval practices across jurisdictions.

2

Data, Reporting, & Analytics Capabilities

TN AOC faces challenges in receiving consistent data in a consistent data structure and quality due to the lack of standard data dictionary.

3

Scalability

Components of a statewide data repository have evolved in the state and flexible reporting has expanded due to GSDR's star schema. However, without a robust centralized statewide solution, TN AOC is limited in the ability to leverage more data-driven features and real-time data feeds that would aggregate and segment critical data.

4

Security

The security capabilities of statewide repositories are hindered by their reliance on the applications by which they are accessed, the absence of security measures at the database level, and lack of statewide data standards, make it challenging to enforce consistent access policies and use modern reporting techniques.

5

Usability

Usability of the Data Repository is assessed in the Data Reporting section.

6

Functional Suitability

While current statewide data repositories adequately supported mandated TN AOC reporting, limitations in the scope of data and the underlying architecture impede the ability to implement data driven operations and management of TN AOC and courts and clerk offices.



While data repositories with limited scope exist (e.g., TJIS, GSDR), there is a lack of a comprehensive centralized data repository that enables access to statewide data for operational and analytical purposes across jurisdictions.

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Assessment Detail for Data Reporting Solution

1 eFiling
Solution

2 Case
Management
Solution

3 Document
Management
Solution

4 Financial
Management
Solution

5 Data Repository
Solution

6 Data Reporting
Solution

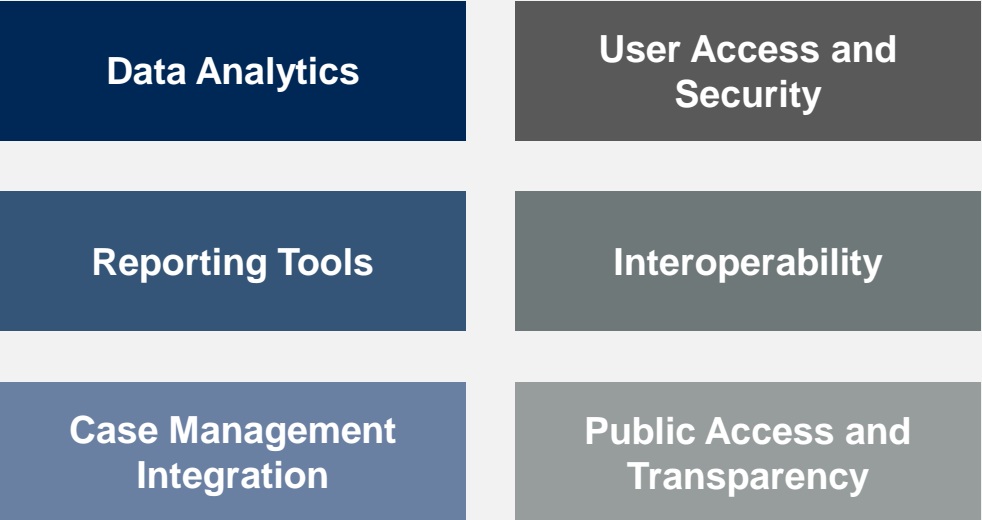
RESTRICTED

Data Reporting Solution Definition

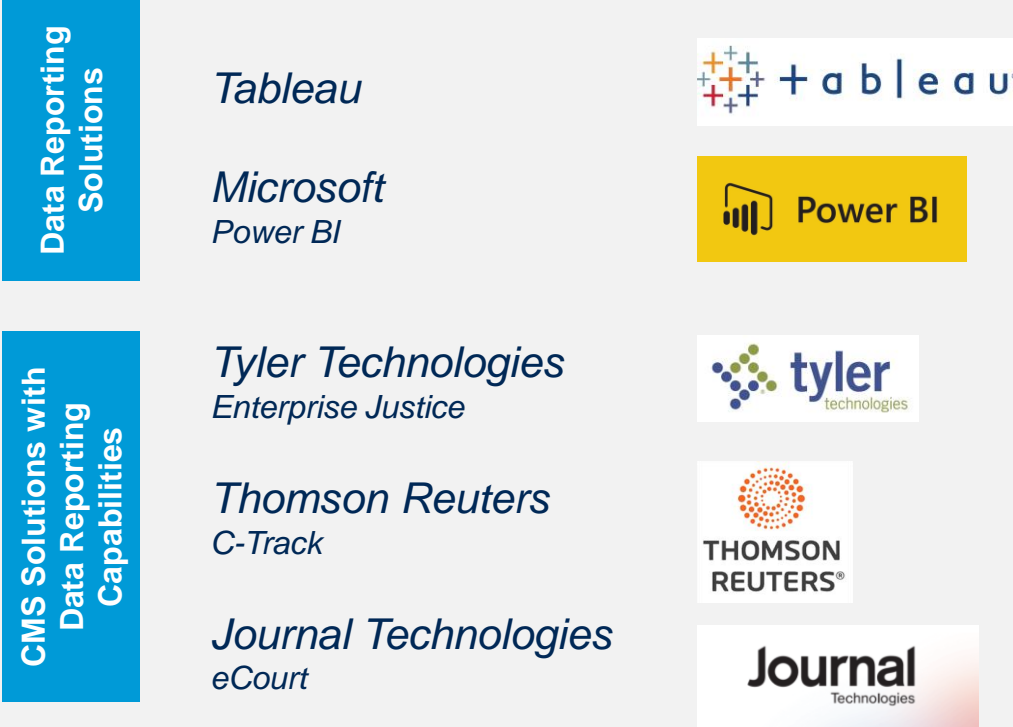
A **Data Reporting Solution** is a tool or platform that helps users collect, process, and present data in a structured format. This solution can assist to monitor performance, communicate insights, make data-driven decision, and enhance transparency. Often, Court Case Management Systems have data reporting capabilities built within the solution. Additional analytics tools are often integrated to add more robust functionality.

Main Function & Key Components:

The Data Reporting Solution provides access to view data from the Data Repository in different forms such as predefined reports, ad hoc queries, visualizations and portals.



Best-In-Class Examples*:



* These are offered as examples only; Gartner is not recommending a particular solution or vendor.

Data Reporting Solution

State of Tennessee Context

- Statewide reporting is **provided using custom-developed TN AOC reports and emerging reporting capabilities of the GSDR.**
 - TN AOC does not extensively utilize **3rd-party reporting tools**; however, STS has license agreements for multiple relevant tools (e.g., Informatica, Snowflake, SQL) which may be extendible for TN AOC use.
 - **Integration with local justice partner systems varies**, which further impedes the ability to implement shared enterprise-level reporting solutions and methods.
- Local reporting solutions are generally part of local CMS solutions, and they meet basic needs. However, TN courts and clerk offices have only limited access to the consolidated data in statewide data repositories.
 - This causes judicial officers and others to rely on phone calls or other manual methods to obtain external data to inform critical activities such as sentencing determination. Data reporting tools are limited to the CMS capabilities reports and queries.
 - The management of essential data elements, such as master person records, is implemented inconsistently across CMS solutions. This inconsistency can result in the overwriting of historical case attributes, which negatively impacts the accuracy, completeness, and effectiveness of reporting.

For example, some CMS master person records in effect overwrite specific case attributes such as address on historic cases when a new case is filed under a different address (with complete history only found in trail audit records).
 - Several isolated reporting issues were identified, including unclear procedures for handling discrepancies in divorce judgments, uncertainty about the entry of protective orders in the statewide registry, and unclear electronic access permissions for court data. Additionally, there is no standard for public access to court records based on party role and attorney. Insights from interviews include these examples:

While divorce judgments are reported to Vital Statistics, courts receive a monthly list of these judgments back from the agency. It is unclear what needs to be done with these lists and what needs to happen if there is a discrepancy between what was reported to the agency and what the list contains.

In Juvenile matters, the typical case participants (e.g., DCS, a Juvenile Prosecutor) desire more access to court data. However, it is unclear what data can be shared (whether electronically or not).
 - There is no standard statewide data dictionary, resulting in potential inconsistencies and misinterpretation of data in reports that compile multi-jurisdictional datasets.

Data Reporting Solution Architecture

Definition: Degree to which the legacy systems, TN AOC processes, and IT resources provide a stable and flexible network/infrastructure, data architecture — inclusive of data exchange among systems and products, integration architecture, and application architecture.


- Statewide integrated data reporting is limited to pre-defined standard TN AOC reports and emerging GSDR capabilities. Each CMS has its own local reporting capabilities. While these reporting solutions may be useful locally, they do not meet the statewide needs for better visibility into cross-jurisdiction data.

TN AOC has not yet established comprehensive data standards or a data dictionary, impacting the ability to inform and guide data designs across applications and dataset reporting statewide.

CMS solutions have their own respective local databases; as such, integrated access into statewide datasets is not typically directly from embedded CMS reporting platforms.

- Due to the different CMS solutions and platforms utilized across the state and no standard data dictionary, there is variation in data schema and structure. This causes inconsistency in data reporting capabilities and the ability to consistently aggregate data across the state and ensure data quality and reliability.

- Current state CMS solutions generally have internal capabilities for reporting on a jurisdiction's own data. CMS solutions also send data extract files to TN AOC for aggregation into statewide repositories such as TJIS – from which statewide reports are generated. TN AOC indicated that these data transmissions sometimes require manual intervention for data correction and resubmission when data anomalies are discovered.
- While TnCIS deployments are similar and share a common data architecture, each instance is deployed individually and on-premises. Consolidated cross-agency reporting happens through TJIS (and to the extent data is available (i.e., General Sessions data), through GSDR).
- For non-TnCIS jurisdictions, local reporting exists either through native COTS capabilities or by developers creating reports directly against homegrown CMS databases. Use of a self-service local reporting platform was not identified during this assessment, nor of data schemas optimized for analytics (e.g., OLAP).

 Data reporting needs are met locally, largely through functionality in the CMS. However, TN AOC is architecturally limited in its ability to perform more advanced, statewide analyses necessary for data-driven decision making.

Data Reporting Solution

Data, Reporting, & Analytics Capabilities

Definition: Degree to which the legacy systems can manage data and provide analytics / reports accurately and efficiently. The ability for the tools to support operational needs to drive decision-making, support statewide collaboration, and manage internal tasks. The processes / resources available to support reporting and analytics capabilities.

- Statewide reporting in Tennessee includes custom-developed TN AOC reports that draw data from local courts and clerk offices. The TN AOC also uses SSRS for drill-down reports against GSDR. However, aside from the GSDR, which is limited to General Sessions data, there are no statewide capabilities for applying analytics and visualizations to data. Additionally, users cannot create and execute ad-hoc queries without IT intervention.

This limits the ability of TN AOC leadership to perform data driven analysis of operations and to evaluate the effectiveness of program or policy changes, as well as report on statewide data to inform case specific activities such as sentence determination.

The lack of consistency in statewide data (and corresponding lack of a statewide data dictionary) also constrains the ability to further implement statewide data reporting and analytics.

- Local courts rely on native COTS reporting capabilities (e.g., Enterprise Justice Enterprise Case Reporting (ECR)) or developer-created reporting queries against the CMS database for reporting.

Local CMS reporting solutions do not have access to an overlaying statewide repository to facilitate the inclusion of multi-jurisdiction data to produce outputs such as the statewide collection of cases involving a single defendant or another involved person.

For Juvenile matters, particular interest was expressed during this assessment for access to a consolidated list of cases for a juvenile to render more effective decisions, lessen the current practice of judicial officers or others relying on phone calls to obtain relevant information from neighboring jurisdictions, and more effectively share information with other authorized case participants (e.g., DCS, a Juvenile Prosecutor).



TN AOC lacks a flexible and comprehensive data reporting and analytics solution which limits the ability of TN AOC and courts and clerk offices around the state to leverage data to inform policy, operational and case-specific decisions.

Data Reporting Solution

Scalability

Definition: Degree to which the legacy systems or components can meet evolving expectations; the processes and IT resource capability to support system expansion to meet expectations; fundamental architectural changes to adapt to new technology, tools, and needs.

- The current data structures underlying existing statewide reports are primarily designed to produce those specific reports. Without adopting a more flexible and fundamental approach to designing these statewide data structures, the ability to scale and develop new statewide reports is constrained.

As a result, dedicated IT intervention is required to fulfill routine reporting needs.

Scalability to near real-time reporting is also limited as most individual jurisdictional data transfer processes use batch file transfer protocols (i.e., S/FTP) for statewide data feeds that are the basis of current state statewide reporting.

- The expansion of GSDR for statewide reporting showcases the potential value of leveraging a more flexible and scalable reporting foundation, such as a 'star-schema' data model optimized for data reporting.

- The absence of a statewide data dictionary leads to misunderstandings when interpreting aggregated data, often only revealed as anomalies in specific reports. This lack of a standardized dictionary limits scalability by hindering non-TnCIS jurisdictions from successfully mapping their data schemas.

Most courts rely on their own data analysis capabilities to address local data needs for operational guidance and management decision-making while also using the queries and reports built into their local CMS, which inherently localizes reporting capabilities.

- Although modern third-party analytic tools (e.g., PowerBI, Tableau) are not typically used at the local level, the observed local data structures do not constrain the use of these tools. There is potential for improved reporting capabilities.



Data reporting scalability is currently hindered by narrowly designed underlying data repositories and the lack of uniformity including a statewide data dictionary. The reporting capabilities of the GSDR offers an example of a more scalable approach starting with a data schema design optimized for reporting.

Data Reporting Solution Security

Definition: Degree to which legacy systems protect data through streamlined processes, procedures, oversight and visibility of access capabilities within each county and across the state.

- There are not universally applied statewide access control mechanisms in place to facilitate advanced reporting across broad datasets.

Statewide reporting capabilities are primarily limited to pre-defined TN AOC reports, mostly with narrow, aggregated datasets shown. While reporting security in this narrow current state context is not a significant concern, there are not current state security mechanisms in place to support more advanced statewide reporting such as ad-hoc reporting, analytics with drill down capabilities and public access portals.

- For non-TnCIS jurisdictions, there is not statewide technical guidance for securing access to local data or local reporting.

Though specific local security vulnerabilities were not identified during this assessment, the lack of statewide guidance or protocols prevents TN AOC from measuring compliance and therefore impedes TN AOC from assuring that access to data and reporting on that data is being properly managed across courts and clerk offices.



The lack of statewide guidance or mechanisms for securing access to data and reporting makes it difficult for TN AOC to measure and assure compliance with best practices and resulting risk impedes the ability to introduce more advanced statewide reporting, analytics and portals.

Data Reporting Solution Usability

Definition: Degree to which the legacy systems can be utilized with effectiveness, efficiency, and user satisfaction to complete tasks and meet operational goals and expectations.

- Usability is limited, aside from General Sessions data, by lack of flexible and user-generated analytics and visualizations to create ad-hoc queries to inform data-driven decision-making.

TN AOC can generate statewide reports and queries with data from applicable jurisdictions via the use of SSRS and GSDR. However flexible reporting such as that provided by PowerBI is not currently in use in TJIS. (TJIS uses Crystal reports.)

TN AOC has a dedicated employee to monitor, validate and manage the process of updating TJIS with data from local CMS solutions.

- General satisfaction with localized systems but some frustrations and inefficiencies identified

Data reporting capabilities are generally embedded within case management solutions. Local reporting flexibility and satisfaction was frequently described in terms of effective relationships with local IT or the CMS vendor, rather than in terms of users being able to create their own queries and reports. The inability for local systems and users to query statewide cross-jurisdiction information (such as defendant past case data across the state) limits overall data reporting usability.



Data reporting capabilities appear to meet the fundamental needs of localized end-users — who are mostly satisfied with their ability to query information — but TN AOC usability is limited by the lack of analytics and visualization capabilities to support data-driven decision-making.

Data Reporting Solution

Functional Suitability

Definitions:

- **Functional Suitability (In-Court):** Degree to which the legacy systems provides functions and capabilities that meet necessary operational needs, workflows, and expectations of TN AOC, within the courtroom.
- **Functional Suitability (Out-Of-Court):** Degree to which the legacy systems provides functions and capabilities that meet necessary operational needs, workflows, and expectations of TN AOC, outside of the courtroom.
- **Functional Suitability (Financials):** Degree to which the legacy systems provides functions and capabilities that meet necessary accounting, workflows, and expectations of management of financial responsibilities.

- Local data reporting capabilities meet basic operational needs and expectations, but manual methods are being utilized due to no integration with statewide repositories.

For example, data reporting capabilities are tied to local CMS solutions (with no local to statewide repository integration), Judges therefore sometimes rely on phone calls or other manual methods to obtain cross-jurisdiction defendant and case data.

- Statewide reporting capabilities exist but are limited by the scope of underlying datasets and by the current state limited use of modern, flexible reporting tools with self-service capabilities.

For example, core TN AOC reports are produced and maintained through custom developed code and scripts, and IT intervention is required to perform ad-hoc data queries on most existing statewide data repositories.



Local data reporting meets basic needs, but without statewide integration, judges often use manual methods to obtain cross-jurisdiction data, and TN AOC lacks robust and flexible functions to present statewide cross jurisdiction data.

Data Reporting Solution

Summary Findings

1

Architecture

The current state of CMS data repositories supports TN AOC mandated reports, but the architecture hinders TN AOC's ability to perform more advanced statewide business intelligence necessary for data-driven decision making.

2

Data, Reporting, & Analytics Capabilities

TN AOC lacks a flexible and comprehensive data reporting and analytics solution which limits the ability of TN AOC and courts and clerk offices to leverage data to inform policy, operational and case-specific decisions.

3

Scalability

Data reporting scalability is currently hindered by narrowly designed underlying data repositories and the lack a statewide data dictionary. The reporting capabilities of the GSDR offers an example of a more scalable approach starting with a data schema design optimized for reporting.

4

Security

The lack of uniform statewide guidance and methods for data and reporting security makes it difficult for TN AOC to measure and assure compliance and impedes the ability to introduce more advanced statewide reporting such as analytics and portals.

5

Usability

Data reporting capabilities appear to meet the fundamental needs of localized end-users (who are mostly satisfied with their ability to query information) but TN AOC usability is limited by the lack of analytics and visualization capabilities to support data-driven decision-making.

6

Functional Suitability

Local data reporting meets basic needs, but without statewide integration, judges often use manual methods to obtain cross-jurisdiction data, and TN AOC lacks robust and flexible functions to present statewide cross jurisdiction data.



While statewide reporting utilizing TJIS provides current state mandated TN AOC reporting needs, the current solution and architecture impedes the introduction of more advanced analytics and overall flexibility. The emerging architecture of PowerBI reporting, for example, highlights the possibilities of a more flexible reporting solution.

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Summary Analysis and Next Steps

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The current state of Tennessee Court Technology is fragmented and often utilizes outdated or limiting technology and processes.

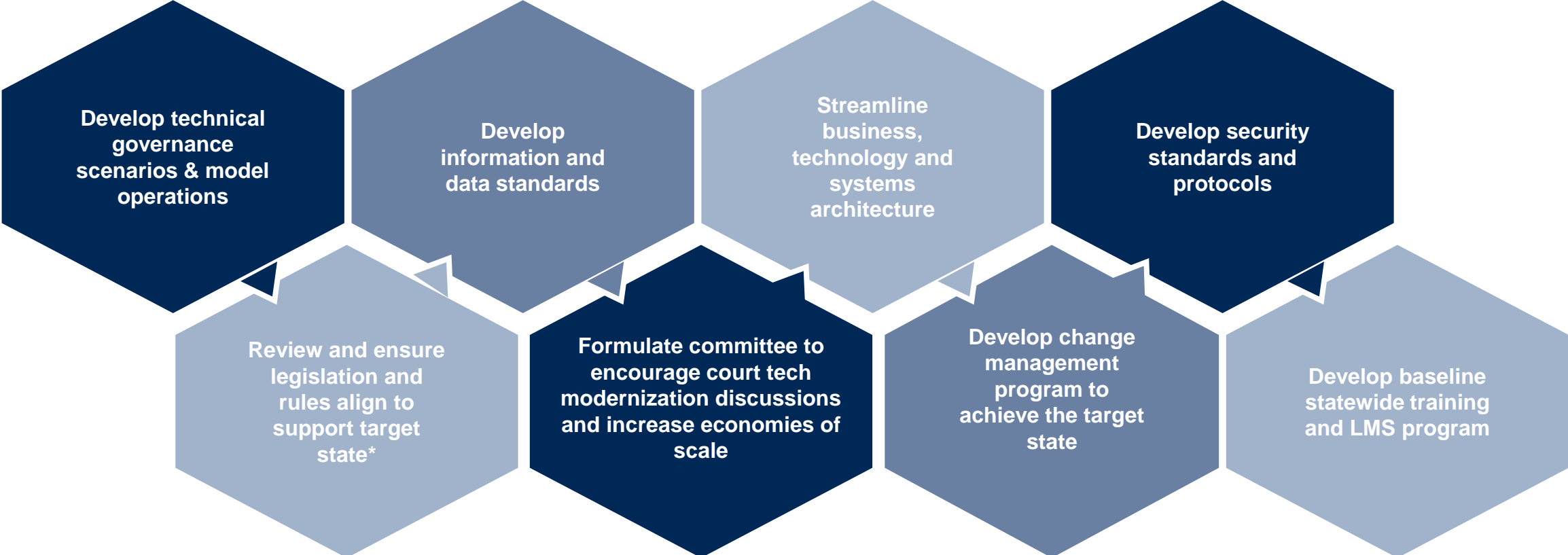
The current architectural landscape and capabilities do not align with or support TN AOC's strategic vision for Court Technology.

- There is a **lack of court technology uniformity** across the state. Each Court utilizes different solutions (e.g., some of eFiling while others do not, some have external document management capabilities and some utilize the CMS systems). Additionally, different Courts have varying levels of capabilities and tools available for their users.
- There is a lack of **consistency in local data structures and data definitions**. This directly impacts the ability to ensure accuracy and reliance on analytics to drive decision-making.
- Across most counties and courts in the state, the **court technology is outdated and limiting**. This outdated technology leads to manual processes, security risks, accuracy issues, and lack of trust and visioning by end-users in the 'art of the possible'.
- While there may be hesitancy regarding TN AOC mandated standardization, **most court and clerk offices are well-primed and in need of TN AOC's leadership** to drive modernization and uniformity.
- TN AOC has several current bright spots that can be explored and expanded upon in the future. The state has an **opportunity to capitalize on what is already working** to build a target state design that better meets its strategic vision and long-term court technology goals.

For example, GSDR highlights some of the benefits and opportunities of a centralized data repository. CMS solutions TnCIS and Quest provide some level of uniformity, standardizing data structures for easier data aggregation. The widespread use of Tybera eFlex solution may point to its potential ability to act as a statewide solution. While these specific systems may not be in the target state, the framework and structures could provide a backdrop and example of TN AOC's abilities towards centralization, modernization, and developing statewide standards and policies.

Opportunities for Improvement for TN Target State and Action-Oriented Roadmap

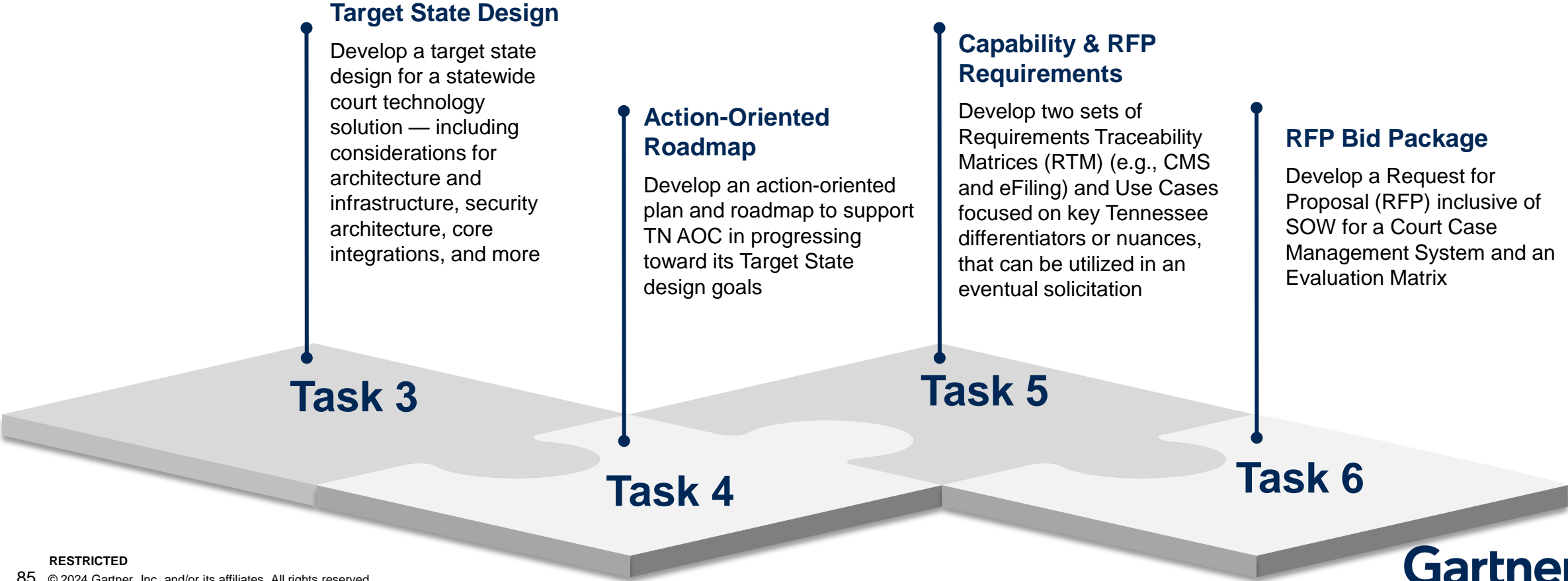
Based on the current state assessment, below are the top areas Gartner believes are necessary for TN AOC to address for successful implementation of its Target State. These topics will be further explored, and actions and recommendations will be collaboratively developed in the Task 4: Action-Oriented Roadmap.



* A preliminary review of Tennessee Codes and Supreme Court Rules suggests that the TN AOC has broad, superseding authority to aggregate data, ensure data consistency and accuracy, implement a uniform case management system, and mandate electronic filing.

Upcoming Activities to Develop the Statewide Court Information Systems Solution Design

There are four remaining tasks toward developing and formalizing the Statewide Court Information Systems Solution design. These activities will be a collaborative effort between TN AOC, other identified Tennessee stakeholders, and Gartner.



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Appendices

Abbreviations Used in the Current State (1 of 3)

Acronym	Definition
ACAP	TN AOC Claims and Payment System
AD	Active Directory
ADR	Alternative Dispute Resolution
AI	Artificial Intelligence
TN AOC	Administrative Office of the Courts
AWS	Amazon Web Services
CMS	Case Management System
CJIS	Criminal Justice Information Services
CSA	Current State Assessment
DA	District Attorney
DCS	Department of Children's Services
DHS	Department of Human Services
DMS	Document Management System
ECF	Electronic Case Files
EFM	Electronic Filing Management
EFSP	Electronic Filing Service Providers
ETL	Extract, Transform and Load
GSDR	General Sessions Data Repository

Abbreviations Used in the Current State (2 of 3)

Acronym	Definition
IT	Information Technology
ITSD	Information Technology Services Division
MDM	Master Data Management
OCM	Organizational Change Management
OCR	Optical Character Recognition
ODR	Online Dispute Resolution
OLTP	Online Transaction Processing
S/FTP	Secure / File Transfer Protocol
STS	Strategic Technology Solutions
SRL	Self-Represented Litigants
SSO	Single Sign-On

Abbreviations Used in the Current State (3 of 3)

Acronym	Definition
SQL	Structured Query Language (context typically refers to Microsoft SQL Database Server / Services)
TnCIS	Tennessee Court Information System
TJIS	Tennessee Judicial Information System
TS	Target State
TN	State of Tennessee
VM	Virtual Machine
WAN	Wide-Area Network(s)

Glossary of Terms (1 of 4)

Term / Abbreviation	Definition
Architecture	In the context of this document, Architecture refers the overarching view of an organization's technology infrastructure, encompassing all the systems/software components and relationships between them.
Architectural Landscape	In the context of the document, Architectural Landscape refers to the overarching design of solutions and technology.
Artificial Intelligence (AI)	Artificial intelligence (AI) refers to the application of advanced analysis and logic-based techniques, including machine learning, to interpret events, support and automate decisions, and take actions. AI continuously improves its performance by self-learning and incorporating human feedback.
Binary Large Object, or "BLOB"	Storing a document as a BLOB (Binary Large Object) means that the document is saved in a database as a large binary data object. BLOBs are used to store various types of data, such as images, videos, audio, and large text files, that are too large or complex to be stored in traditional database fields.
Case Management Solution (CMS)	A Court Case Management Solution or System (CMS) is a comprehensive software application designed to manage and track all information related to the life cycle of legal cases. This system integrates for various functionalities with additional systems to support the administration of justice, ensuring that cases are processed efficiently and effectively from initial filing through to resolution.
Centralized Data Repository	A Data Repository is a centralized system designed to store, manage, and aggregate data from various systems across the state. A data repository solution enables comprehensive data integration, reporting, and analytics, providing a unified view of data. Importantly, this refers to the ability to report on statewide data and does not replace the need for local data reporting from the CMS. See also "TnDR".
Commercial off-the-shelf (COTS)	Commercial off-the-shelf (COTS) refers to ready-made software or hardware products that are available for purchase by the general public and can be used immediately without the need for customization or significant modification. These products are designed to meet the needs of a wide range of users and are typically developed, maintained, and updated by commercial vendors.
Data Integration	Data Integration refers to the process of combining data from various sources (e.g., databases, applications, and external data feeds) into one central location.
Local Data Reporting Solution	Local Data Reporting solution refers to the tools and/or platforms that help users collect, process, and present data in a structured format. Often, Court Case Management Systems have data reporting capabilities built within the solution. Additional analytics tools are sometimes integrated to add more robust functionality. Importantly, this refers to the ability to report on local data, not statewide data.
Document Management Solution (DMS)	A Document Management Solution is an integrated software system designed to handle capabilities related to document storage and management. Generally, court-related Document Management Solution capabilities are found or developed within Court Case Management Solutions (CMS).

Glossary of Terms (2 of 4)

Term / Abbreviation	Definition
eFiling Solution	eFiling (sometimes referred to as “e-Filing”, or “e-File”) is the electronic submission of legal documents with various courts, effectively replacing traditional paper-based methods with a digital platform. eFiling solutions streamline the filing process, enhance accessibility, and improve efficiency by allowing users to file documents online and receive real-time updates — moving toward a more digital judicial environment. eFiling solutions often integrate with other court solutions, such as Case Management Solutions (CMS), to provide more seamless workflows.
Electronic Case File (ECF)	Electronic Case Files (ECFs) are digital versions of case-related documents and records that are stored and managed electronically, typically within a legal or judicial system. These files include all the documents and information pertinent to a particular case, such as pleadings, motions, orders, evidence, and correspondence.
Electronic Filing Management (EFM)	Electronic Filing Management (EFM) refers to the systematic process of managing the submission, storage, and retrieval of electronic documents, particularly in legal and governmental contexts. It involves the use of digital systems and software to handle the entire lifecycle of document filing, from initial submission to archiving.
Electronic Filing Service Provider (EFSP)	An Electronic Filing Service Provider (EFSP) is a third-party service that facilitates the electronic submission of legal documents to courts. EFSPs act as intermediaries between filers (such as attorneys, law firms, and self-represented litigants) and the court's electronic filing system. They provide a user-friendly interface and additional services that streamline the filing process.
Extract, Transform, Load (ETL)	Extract, Transform and Load (ETL) is a process used in data warehousing and data integration to move data from various sources into a centralized data repository. ETL tools and platforms often automate these steps, providing a streamlined and efficient way to handle large volumes of data from multiple sources.
Financial Management Solution (FMS)	A Financial Management Solution (FMS) is an integrated software system designed to handle the financial operations and transactions associated with court activities. This solution typically includes functionalities for budgeting, accounting, fee and fine collection, financial reporting, and auditing. Generally, court-related Financial Management Solution capabilities are found or developed within Court Case Management Solutions (CMS).
Identity and Access Management (IAM)	Identity and Access Management (IAM) is a framework of policies, processes, and technologies that ensures the right individuals have the appropriate access to technology resources within an organization.
Infrastructure	Infrastructure refers to the foundational hardware, software, networks, and facilities that support the operation and management of court information systems. It includes servers, data storage, networking equipment, and other technology components essential for running court applications and services.
Integration	Integration refers to the process of linking different information systems and software applications to work together within a court's technology ecosystem. This allows for the seamless sharing and processing of data across various platforms and departments, enhancing efficiency and accuracy in court operations.

Glossary of Terms (3 of 4)

Term / Abbreviation	Definition
Integration Hub	Integration Hub is a centralized platform or middleware that facilitates the seamless exchange and synchronization of data between disparate systems, applications, and databases. It acts as a central point of control, managing data flows and transformations to ensure that data is consistently and accurately shared across the organization
Interoperability	Interoperability refers to the ability of different information systems, devices, or applications to connect, communicate, and exchange data effectively and efficiently. This ensures seamless integration and functionality across various court-related technologies and platforms.
Modular	Modular refers to a system design approach where the technology is divided into separate, interchangeable components or modules. This allows for flexibility and scalability, enabling courts to add, remove, or update specific functionalities without disrupting the entire system.
Monolithic Architecture	In the context of technology, "monolithic" refers to a system or architecture that is composed of a single, unified block. This means that all components and functionalities are tightly integrated and interdependent, often making the system less flexible and harder to modify or scale. For example, a monolithic software application has all its features and services bundled together in one large codebase, as opposed to being divided into smaller, independent modules or services.
Security	Security refers to the implementation of robust measures to protect sensitive judicial data and systems from unauthorized access, breaches, and threats, ensuring data integrity, confidentiality, and compliance with legal standards in the TN AOC's target state design.
Self-Represented Litigants (SRL)	Self-Represented Litigant (SRL) functionality refers to the features and capabilities of an electronic filing system that are specifically designed to assist individuals who are representing themselves in legal proceedings without the assistance of an attorney. This functionality aims to make the legal filing process more accessible, user-friendly, and efficient for non-lawyers.
Star Schema	A star schema is a type of database schema that is commonly used in data warehousing and business intelligence. It is designed to optimize query performance by organizing data into a central fact table connected to multiple dimension tables. The fact table contains quantitative data for analysis, such as sales or revenue, while the dimension tables store descriptive attributes related to the data, like time, geography, or product details. The structure resembles a star, with the fact table at the center and the dimension tables radiating outward.
Standardization	Standardization in technology refers to ensuring compatibility, interoperability, quality, and safety across products, services, and systems. These standards are typically established by consensus and approved by recognized bodies, such as international, national, or industry-specific organizations. Standardization aims to create uniformity and consistency, facilitating easier integration, communication, and collaboration among different technologies and stakeholders. For the purposes of this document, standardization may refer to multiple domains, e.g., data standardization, process standardization)
Structured Query Language (SQL) and Microsoft SQL Server	Structured Query Language, is a standardized programming language specifically designed for managing and manipulating relational databases. SQL is widely used for querying, updating, and managing data stored in relational database management systems. Microsoft SQL Server is a relational database management system developed by Microsoft, build on SQL. It is designed to store, retrieve, and manage data as requested by various software applications, whether those applications run on the same computer or on another computer across a network.

Glossary of Terms (4 of 4)

Term / Abbreviation	Definition
Target State Design (TSD)	Refers to the Target State Design (TSD) deliverable, which is a PowerPoint document with a description of the target state for court technology, including objectives and guiding principles, and conceptual descriptions of architecture from data, application, and integration perspectives as well as infrastructure needs.
Tennessee Administrative Office of the Courts (TN AOC)	The Tennessee Administrative Office of the Courts (TN AOC) provides support to the Tennessee Supreme Court and the entire state court system.
Tennessee Court Information System (TnCIS)	Refers to the Tennessee Court Information System (TnCIS), a case management solution currently used by some jurisdictions across the state
Tennessee Statewide Centralized Data Repository (TnDR)	Tennessee Statewide Centralized Data Repository (TnDR) refers to the to-be-created Tennessee statewide “centralized data repository”, which is a single, consolidated storage location where statewide data from multiple sources is collected, stored, managed, and accessed. This repository will provide a unified and consistent view of statewide court-related data.
Tightly Coupled Integration	Tightly Coupled Integration refers to a system design where different software applications or components are directly linked and dependent on each other for data exchange and functionality. This often requires synchronized updates and can lead to challenges in scalability and flexibility, as changes in one component may necessitate adjustments in others.

Current State Assessment Workshops and Interviews (1 of 2)

#	Lens	Title	Date
1	Digital Capabilities	SC / TN AOC Reporting	June 10
2	Persona	Clerks — TnCIS	June 11
3	Persona	Clerks — Custom CMS	June 11
4	Persona	Clerks — COTS CMS	June 12
5	Persona	Judges — Circuit, Chancery, Criminal & Probate	June 24
6	Persona	Judges — General Sessions	July 2
7	Persona	Judges — Juvenile and Family	June 14
8	Digital Capabilities	Money Management	July 1
9	Digital Capabilities	Charge, Warrants, Pleas	July 9
10	Digital Capabilities	Electronic Signatures & Order Management	July 8
11	Digital Capabilities	Identification	July 8
12	Digital Capabilities	Problem-Solving Courts	July 9
13	Question & Answer	Comptroller Interview	August 1
14	Enterprise Services	Mobile Computing & Multi-Modal Communications	July 10
15	Enterprise Services	eFiling, eService, ePayment	July 2

Current State Assessment Workshops and Interviews (2 of 2)

#	Lens	Title	Date
16	Enterprise Services	Access to Data & Reporting	July 12
17	Follow-Up Workshop	Reporting Follow-Up	June 21
18	Question & Answer	Technology Discussion	June 25
19	Diagrams & Workshop Review	Understanding Local Justice Information Management	August 1
20	Workshop	External Stakeholders (e.g., The Bar, Prosecutors)	August 7
21	Follow-Up Workshop	Juvenile Focus — Quest	July 26
22	Follow-Up Workshop	TN AOC Technology Infrastructure, Architecture, Security and Development	July 23
23	Discussion / Demonstration	Discussion of homegrown Systems — Davidson County (CJIS & CourtNet)	July 24
24	Discussion / Demonstration	Discussion of TnCIS — Follow-Up	July 25
25	Discussion / Demonstration	Discussion of Systems — Shelby County (with Heidi Kuhn)	July 26
26	Discussion / Demonstration	Discussion of Systems — Shelby County (SoftTec, Tyler & Contexte)	July 26
27	Discussion / Demonstration	Discussion of homegrown Systems — Knox County	July 25

Workshop and Interview Attendees (1 of 4)

Workshop #1: SC & TN AOC Reporting	Workshop #2: clerks — TnCIS	Workshop #3: clerks — Custom CMS	Workshop #4: clerks — COTS CMS
<ul style="list-style-type: none"> • Gary Behler • Mike Hammond • Mike Wilson • Alex Brown • Andy Sullivan • Antoine Fortuin • Benny Rigby • Dewayna Martin • Heidi Kuhn • Jason Garrett • Scott Griswold • Julius Sloss • Randall Kenner • Vince Dean <ul style="list-style-type: none"> • Zach Webb 	<ul style="list-style-type: none"> • Rebecca Barlett • Regina VanCleave • Betty McKenzie • Mark Smith • Tommy Lee • Sandy Newton • Kim Cothron • Karla Stewart • Mitzy Hope • Emily Stewart • Emily Goins 	<ul style="list-style-type: none"> • Sarah Lawson • Joseph Day • Kevin Poe • Maria Salas • Benny Rigby • Gena Boone • Larry Henry • Lonnell Matthews • Tracy Cartwright 	<ul style="list-style-type: none"> • Gary Behler • Mike Hammond • Andy Sullivan • Alex Brown • Jason Amyett • Stacey Olfe • Nicholas Kiefer • Antoine Fortuin • Patti Goodman • Stephanie Patterson • Zack Webb • Julius Sloss • Richard Major • Jason Clark <ul style="list-style-type: none"> • Matt Smith • Terry Hanserd • Howard Gentry • Randall Keener • Kelly Sharp
Workshop #5: Judges — Circuit, Chancery, Criminal & Probate	Workshop #6: Judges — General Sessions	Workshop #7: Judges — Juvenile and Family	Workshop #8: Money Management
<ul style="list-style-type: none"> • Jason Amyett • Angelita Dalton • Chessia Cox • Pamela Fleenor • Bill Ailor • Michael Mansfield • Jimmy Turner • David Briley • Deborah Stevens • Rhynette Hurd • Sandra Johnson • Ryan Spitzer • Stephanie Williams 	<ul style="list-style-type: none"> • Esther Roberts • William Brewer • Alexander McVeagh 	<ul style="list-style-type: none"> • Vicki Snyder • Rob Philyaw • Andy Brigham • Sheila Calloway • Travis Lampley • Amanda Worley 	<ul style="list-style-type: none"> • Richard Morton • Aaron Hall • Larry Henry • Alex Brown • Carlton Brown • Cathy Jones • Gary Behler • Janeen Gordon • Karen McDaniel • Kristie McGowan • Rhonda Wheeler • Stacey Olfe

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Workshop and Interview Attendees (2 of 4)

Workshop #9: Charge, Warrants, Pleas

- Alex Brown
- Dewayna Martin
- Kathryn Strong
- Kevin Loper

Workshop #10: Electronic Signatures & Order Management

- Heidi Kuhn
- Brad Freeman
- Jakob Schwendimann
- James Johnson
- Jared Smith
- Jason Clark
- Kyle Sowell
- Debbie Barrett
- Maria Salas
- Sheila Proffitt

Workshop #11: Identification

- Angie Perez
- Angela Metcalf
- Rex Lynch
- Bobby Russell
- James Johnson
- Wendy Davis

Workshop #12: Problem-Solving Courts

- Amy Galyon
- Brad Price
- Angela Parkerson
- Angie Duck
- Kasey Stone
- LaChelle Ricks
- Marq Gilchrest
- Matthew Naylor
- Ron Hanaver
- Shannon Morgan
- Mark Winslow
- Tammy Spencer
- Jane Taylor

Workshop #13: Comptroller Interview

- Erin Brown
- Betty
- Regina VanCleave
- Jim Arnette

Workshop #14: Mobile Computing & Multi-Modal Communications

- Aaron Hall
- Jason Fulford
- Jimmy Turner
- Michelle Murray
- Pam Lewis
- Tracy Cartwright
- Zachary Walden
- Larry Henry

Workshop #15: eFiling, eService, ePayment

- Mark Smith
- Kathy Jones-Terry
- Michelle McGill
- Tina Thurman
- Aaron Hall
- Sheila Proffitt
- Cathy Jones
- Darren Combs
- Jamita Swearngen
- Gary Behler
- Greg Jackson
- Aaron Dodd
- Jakob Scwendimann
- Jared Smith
- Joseph Day
- Joshua Berkley
- Katelyn Isbell
- Kristie McGowan
- Rhonda Wheeler
- Maria Salas
- Michael Burnett Joiner
- Nick Mize
- Tracy Cartwright

Workshop #16: Access to Data & Reporting

- Teresa Carey
- Stephanie Sellars
- Pam Lewis
- Alex Brown
- Tracy Cartwright
- Alan Hickey

Workshop and Interview Attendees (3 of 4)

Workshop #17: Reporting Follow-Up	Workshop #18: Technology Discussion	Workshop #19: Understanding Local Justice Information Management	Workshop #20: External Stakeholders (e.g., The Bar, Prosecutors, etc.)
<ul style="list-style-type: none">• Jennifer Williams• Lisa McClendon	<ul style="list-style-type: none">• Michelle Long• Brandon Bowers• Jennifer Williams• Lisa McClendon	<ul style="list-style-type: none">• Dallas Powell, Tybera• Eric Johnson, Catalis• Pete Zambri, Catalis• Robert Woodward, LGC• Andy Sullivan• Antoine Fortuin• Cassidy Stokes, Tybera• James Johnson• Julius Loss• Zack Webb• Patty Goodman	<ul style="list-style-type: none">• Brandon McNeary-Dinkelspiel Rasmussen & Mink (Criminal Court)• Ben Raybin
Workshop #21: Juvenile Focus — Quest	Workshop #22: TN AOC Technology Infrastructure, Architecture, Security and Development	Workshop #23: Discussion of homegrown Systems — Davidson County	Workshop #24: Discussion of TnCIS — Follow-Up
<ul style="list-style-type: none">• Margaret Mahew• Jennifer clerk• Bobby Russell• Tristin Porter	<ul style="list-style-type: none">• Jennifer Williams• Brandon Bowers• Lisa McClendon• Jason Hatton	<ul style="list-style-type: none">• Terry Hanserd• Tracy Cartwright• Nicholas Kiefer• Patti Goodman• Lonnell Matthews• Julius Sloss• Joseph Day• Andy Sullivan	<ul style="list-style-type: none">• Bruce Collier• Russell Gibbon• James Parsons• Jill Littrell

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Workshop and Interview Attendees (4 of 4)

Workshop #25: Discussion of Shelby County Criminal Systems

- Heidi Kuhn
- James Johnson

Workshop #26: Discussion of Shelby County Systems

- Aaron Hall
- Don Jarnagin
- Janeen Gordon

Workshop #27: Discussion of homegrown Systems — Knox County

- Scott Griswold
- Alex Brown
- Zack Webb
- Richard Major
- Randall Kenner
- Antoine Fortuin

Documents and Project Artifacts Reviewed (1 of 3)

1. Tennessee Judicial System.pdf
2. Tennessee eFiling Implementation Study Apr 2023 FINAL.pdf
3. 2014 NCSC eFiling.pdf
4. Court Tech and Data statutes.pdf
5. Court Tech and Data statutes.pdf
6. Technology Oversight Committee Strategic Plan — final digital.pdf
7. Trial Court eFiling Oversight Committee.msg
8. Clerk_software_April 2024.xls
9. ELECTED-APPOINTED _Updated_2024-05.xls
10. annual_report_fy2023.pdf
11. Network topology of TN AOC and local County and Clerk level infrastructure
12. annual_report_fy2023.pdf

Documents and Project Artifacts Reviewed (2 of 3)

13. TNCISUserManual.pdf
14. App Map 2023.pdf
15. Civil Reporting Guidelines Manual_6_2021.pdf
16. Clerk Reporting Obligations-update_TnCIS_1.xlsx
17. ITSD Organization Chart_July 2024.pdf
18. TN AOC servers — Redact.pdf
19. ER Schema Dimensional Model TN AOC DW 2019.xlsx
20. GSDR_Data_Dictionary_Master.xlsx
21. FeesAssessedReceipted Report.pdf
22. PDDA Involved Report.pdf
23. Format of Mental Health file from Vendor to TN AOC v1.3_3_updated_1.docx
24. master — MHMS- dbo.pdf

Documents and Project Artifacts Reviewed (3 of 3)

25. Mental Health Monitoring System-Training Manual_1.pptx
26. MHMS Workflow Version 3.vsdX
27. MHMS_BackgroundProcess.docx
28. TN AOC — Tiered Data Standards.pdf
29. Tennessee — Understanding_Your_Court_System.pdf
30. Criminal Justice Project List-updated July 9.xlsx
31. TNCourts-Network-Diagram

CMS Applications Used Across Tennessee – As Provided By TN AOC (1 of 4)

County	Court	Software
Montgomery	Chancery	Alpine
Davidson	Circuit/Sessions/Probate (CV) Traffic	CourtNet
Hamilton	Circuit/Sessions (CV)	CourtNet
Henderson	Circuit/Sessions/Juvenile	CourtNet
Marion	Circuit/Sessions/Juvenile	CourtNet
Washington	Chancery	CourtView
Anderson	Circuit/Sessions/Juvenile	ICON
Carter	Circuit/Sessions/Juvenile	ICON
Monroe	Circuit/Sessions/Juvenile	ICON
Hamilton	Criminal	In-House
Hamilton	Juvenile	In-House
Knox	Circuit CV Div I, II, III/Juvenile	In-House
Knox	Criminal	In-House
Knox	Chancery	In-House
Davidson	Criminal GS and State Trial	JIS
Davidson	Juvenile	JIS
Jefferson	Probate	N/A
Lauderdale	Probate/Juvenile	N/A
Morgan	Chancery	Not Automated
Benton	Juvenile	Quest
Bradley	Juvenile	Quest
Campbell	Juvenile	Quest
Crockett	Juvenile	Quest
Dekalb	Juvenile	Quest
Dickson	Juvenile	Quest
Fayette	Juvenile	Quest
Gibson - Trenton	Juvenile (County Clerk)	Quest
Hamblen	Juvenile	Quest
Hardeman	Juvenile	Quest

County	Court	Software
Henry	Juvenile	Quest
Jefferson	Juvenile	Quest
Macon	Juvenile	Quest
Madison	Juvenile	Quest
Marshall	Juvenile	Quest
McNairy	Juvenile	Quest
Obion	Juvenile	Quest
Putnam	Juvenile	Quest
Robertson	Juvenil	Quest
Sevier	Juvenile	Quest
Smith	Juvenile	Quest
Stewart	Juvenile	Quest
Sullivan	Juvenile (Bristol)	Quest
Sumner	Juvenile	Quest
Tipton	Juvenile	Quest
White	Juvenile	Quest
Williamson	Juvenile	Quest
Monroe	Chancery	Saratoga
Shelby	Juvenile	SoftTec
Weakley	Juvenile	SoftTec
Anderson	Chancery	TnCIS
Bedford	Circuit/Sessions/Juvenile	TnCIS
Bedford	Chancery	TnCIS
Benton	Circuit/Sessions	TnCIS
Benton	Chancery	TnCIS
Bledsoe	Circuit/Sessions/Juvenile	TnCIS
Bledsoe	Chancery	TnCIS
Blount	Circuit/Sessions/Juvenile	TnCIS
Blount	Chancery	TnCIS

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CMS Applications Used Across Tennessee – As Provided By TN AOC (2 of 4)

County	Court	Software
Bradley	Circuit/Sessions	TnCIS
Bradley	Chancery/Probate	TnCIS
Campbell	Circuit/Sessions	TnCIS
Cannon	Circuit/Sessions/Juvenile	TnCIS
Cannon	Chancery	TnCIS
Carroll	Circuit/Sessions/Juvenile	TnCIS
Carroll	Chancery	TnCIS
Carter	Chancery	TnCIS
Cheatham	Circuit/Sessions/Juvenile	TnCIS
Cheatham	Chancery	TnCIS
Chester	Circuit/Sessions	TnCIS
Chester	Chancery/Juvenile	TnCIS
Claiborne	Circuit/Sessions/Juvenile	TnCIS
Claiborne	Chancery	TnCIS
Clay	Circuit/Sessions	TnCIS
Clay	Chancery/Juvenile	TnCIS
Cocke	Circuit	TnCIS
Cocke	Sessions/Juvenile	TnCIS
Cocke	Chancery	TnCIS
Coffee	Circuit/Sessions/Juvenile	TnCIS
Coffee	Chancery	TnCIS
Crockett	Circuit/Sessions	TnCIS
Crockett	Chancery	TnCIS
Cumberland	Circuit/Sessions	TnCIS
Cumberland	Chancery/Juvenile	TnCIS
Decatur	Circuit/Sessions	TnCIS
Decatur	Chancery/Juvenile	TnCIS
Dekalb	Circuit/Sessions	TnCIS
Dekalb	Chancery	TnCIS

County	Court	Software
Dickson	Circuit	TnCIS
Dickson	Sessions	TnCIS
Dickson	Chancery	TnCIS
Dyer	Circuit/Sessions	TnCIS
Dyer	Chancery/Juvenile	TnCIS
Fayette	Circuit/Sessions	TnCIS
Fayette	Chancery	TnCIS
Fentress	Circuit/Sessions/Juvenile	TnCIS
Fentress	Chancery	TnCIS
Franklin	Circuit/Sessions/Juvenile/Probate	TnCIS
Franklin	Chancery	TnCIS
Gibson - Humbolt	Circuit (Law Court)/Sessions and Chancery	TnCIS
Gibson - Trenton	Circuit/Sessions	TnCIS
Gibson - Trenton	Chancery	TnCIS
Giles	Circuit/Sessions/Juvenile	TnCIS
Giles	Chancery	TnCIS
Grainger	Circuit/Sessions/Juvenile	TnCIS
Grainger	Chancery	TnCIS
Greene	Circuit/Sessions/Juvenile	TnCIS
Greene	Chancery	TnCIS
Grundy	Circuit/Sessions/Juvenile	TnCIS
Grundy	Chancery	TnCIS
Hamblen	Circuit/Sessions	TnCIS
Hamblen	Chancery	TnCIS
Hamilton	Chancery/Probate	TnCIS
Hancock	Circuit/Sessions/Juvenile	TnCIS
Hancock	Chancery	TnCIS
Hardeman	Circuit/Sessions	TnCIS
Hardeman	Chancery	TnCIS

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CMS Applications Used Across Tennessee – As Provided By TN AOC (3 of 4)

County	Court	Software
Hardin	Circuit/Sessions/Juvenile	TnCIS
Hardin	Chancery	TnCIS
Hawkins	Circuit/Sessions/Juvenile	TnCIS
Hawkins	Chancery	TnCIS
Haywood	Chancery	TnCIS
Henderson	Chancery	TnCIS
Henry	Circuit/Sessions	TnCIS
Henry	Chancery	TnCIS
Hickman	Circuit/Sessions/Juvenile	TnCIS
Hickman	Chancery	TnCIS
Houston	Circuit/Sessions/Juvenile	TnCIS
Houston	Chancery	TnCIS
Humphreys	Circuit/Sessions	TnCIS
Humphreys	Chancery/Probate	TnCIS
Jackson	Circuit/Sessions/Juvenile	TnCIS
Jackson	Chancery	TnCIS
Jefferson	Circuit/Sessions	TnCIS
Jefferson	Chancery	TnCIS
Johnson	Circuit/Sessions/Juvenile	TnCIS
Johnson	Chancery	TnCIS
Lake	Circuit/Sessions/Juvenile	TnCIS
Lake	Chancery	TnCIS
Lauderdale	Circuit/Sessions	TnCIS
Lauderdale	Chancery	TnCIS
Lawrence	Circuit/Sessions/Juvenile	TnCIS
Lawrence	Chancery	TnCIS
Lewis	Circuit/Sessions/Juvenile	TnCIS
Lewis	Chancery	TnCIS
Lincoln	Circuit/Sessions/Juvenile	TnCIS
Lincoln	Chancery	TnCIS

County	Court	Software
Loudon	Circuit/Sessions/Juvenile/Probate	TnCIS
Loudon	Chancery	TnCIS
Macon	Circuit/Sessions	TnCIS
Macon	Chancery	TnCIS
Madison	Circuit/Sessions	TnCIS
Madison	Chancery/Probate	TnCIS
Marion	Chancery	TnCIS
Marshall	Circuit/Sessions	TnCIS
Marshall	Chancery	TnCIS
Maury	Circuit/Sessions/Juvenile	TnCIS
Maury	Sessions(Mt Pleasant)	TnCIS
Maury	Chancery	TnCIS
McMinn	Circuit/Sessions/Juvenile	TnCIS
McMinn	Chancery	TnCIS
McNairy	Circuit/Sessions	TnCIS
McNairy	Chancery	TnCIS
Meigs	Circuit/Sessions/Juvenile	TnCIS
Meigs	Chancery	TnCIS
Moore	Circuit/Sessions/Juvenile	TnCIS
Moore	Chancery	TnCIS
Morgan	Circuit/Sessions/Juvenile	TnCIS
Obion	Circuit/Sessions	TnCIS
Obion	Chancery	TnCIS
Overton	Circuit/Sessions	TnCIS
Overton	Chancery/Juvenile	TnCIS
Perry	Circuit/Sessions	TnCIS
Perry	Chancery	TnCIS
Perry	Juvenile	TnCIS
Pickett	Circuit/Sessions/Juvenile	TnCIS
Pickett	Chancery	TnCIS

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CMS Applications Used Across Tennessee – As Provided By TN AOC (4 of 4)

County	Court	Software
Polk	Circuit/Sessions/Juvenile	TnCIS
Polk	Chancery	TnCIS
Putnam	Circuit/Sessions	TnCIS
Putnam	Chancery	TnCIS
Rhea	Circuit/Sessions/Juvenile	TnCIS
Rhea	Chancery	TnCIS
Roane	Circuit/Sessions/Juvenile	TnCIS
Roane	Chancery	TnCIS
Robertson	Circuit/Sessions	TnCIS
Robertson	Chancery	TnCIS
Rutherford	Circuit/Sessions/Juvenile	TnCIS
Rutherford	Chancery/Probate	TnCIS
Rutherford	Probate	TnCIS
Scott	Circuit/Sessions/Juvenile	TnCIS
Scott	Chancery	TnCIS
Sequatchie	Circuit/Sessions/Juvenile	TnCIS
Sequatchie	Chancery	TnCIS
Sevier	Circuit	TnCIS
Sevier	Sessions	TnCIS
Sevier	Chancery	TnCIS
Sevier	Probate	TnCIS
Smith	Circuit/Sessions	TnCIS
Smith	Chancery	TnCIS
Stewart	Circuit/Sessions	TnCIS
Stewart	Chancery	TnCIS
Sullivan	Circuit Criminal, Law Court (CV), Sessions and Juvenile (Kingport)	TnCIS
Sullivan	Chancery	TnCIS
Sumner	Chancery	TnCIS
Sumner	Circuit/Sessions	TnCIS
Tipton	Circuit/Sessions	TnCIS
Tipton	Chancery	TnCIS

County	Court	Software
Trousdale	Circuit/ Sessions/Juvenile	TnCIS
Trousdale	Chancery	TnCIS
Unicoi	Circuit/Sessions/Juvenile	TnCIS
Unicoi	Chancery	TnCIS
Union	Circuit/Sessions/Juvenile	TnCIS
Union	Chancery	TnCIS
Van Buren	Circuit/Sessions	TnCIS
Van Buren	Chancery	TnCIS
Van Buren	Juvenile	TnCIS
Warren	Circuit/Sessions/Juvenile	TnCIS
Warren	Chancery	TnCIS
Washington	Circuit/Sessions/Juvenile	TnCIS
Wayne	Circuit/Sessions/Juvenile	TnCIS
Wayne	Chancery	TnCIS
Weakley	Circuit/Sessions	TnCIS
Weakley	Chancery	TnCIS
Williamson	Circuit/Sessions	TnCIS
Williamson	Chancery	TnCIS
Wilson	Circuit/Sessions	TnCIS
Wilson	Juvenile	TnCIS
Wilson	Chancery	TnCIS
Campbell	Chancery	TnCIS
Haywood	Circuit/Sessions/Juvenile	TnCIS
Montgomery	Circuit/Sessions/Juvenile	TnCIS
White	Circuit/Sessions	TnCIS
White	Chancery	TnCIS
Davidson	Chancery	Tyler
Shelby	Criminal	Tyler
Shelby	SessionsCV, Sessions CR	Xerox/Contexte
Shelby	Circuit CV	Xerox/Contexte
Shelby	Chancery	Xerox/Contexte
Shelby	Probate	Xerox/Contexte

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