

NODS - Is Court BI tech impossible or do we lack a Jim Smith - Jim Harris common Information Framework?



CMS Code Meeting

Multiply each person in this picture by 100

INIONS Standards

Agenda

Nomenclature Standards - you mean XML? Beliefs - Who cares? - Paper is the Trust Round and Round - The Tragedy of the Commons A nod to - Comparing other Standards to NODS

What do you think? Ouch my head hurts!

Standards

Nebraska - NE - Nebr. Or Neb. (Post Office)

 Does anyone know why two-character State abbreviations?

XML (Computer)

- Plain text, strict validation
- Does anyone know why these items are important?

PDF (Document - commercial then ISO)

- So brilliant that it became a public standard
- In April 2018, PDFs accounted for 85% of document formats on Bing, while the figures were 10%, 3%, and 2% for DOCx, XLSx, and PPTx respectively
- OASIS Electronic Court Filing (ECF) Standards



Court Nomenclature Standards

- NIEM Justice Domain (NCSC)
- Justice Counts CSG with an assist from NCSC
- CSP NCSC
- NODS NCSC

Beliefs – Who Cares the Paper Record is the Truth

True enough for **A** case but in the Internet era citizens, the press and the Feds want to know are state court **Just.**

Each court maintains **two CMS** systems the computer system they purchase and the other is the paper(either paper or electronic-unstructured) documents the system generates.

Courts manage cases and therefore the managing cases effort overwhelms or obscures the ability to measure Justice efforts.

Three key components - Charge/Issue, Parties, Disposition everything else is administration - BUT where is the focus?



Round and Round – Tragedy of the Commons

One more Cow ... Millions of data reports but the delivery of Justice does not improve.

One more Cow ... CMS Implementations value 'same bird, new feathers', 'high configurability', and data entry goals.

One more Cow ... Rather than an end in themselves, information and knowledge are thought about as 'dashboards', 'AI', 'ML', etc. What is needed is a cohesive, agreed to and well managed plan to move data to information to knowledge and finally strategic planning.

One more Cow - Data lacks verifiability and context which breeds a lack of distrust and skepticism of state institutions and particularly courts.

One more Cow – With staff unsure, unwilling or unable to correlate to a standard, every information request becomes a one-off effort, and the overall information system gains no knowledge from the process.



Before we Begin - Stds produce nothing without a framework

"Data governance is the <u>framework</u> by which courts reach and communicate organizational <u>decisions</u> around data, ensure that business activities and data management are synchronized, and develop and document longand short-term strategies around the [missing <u>creation</u>,] collection, use, and disposal of data. Data governance encompasses the people, court processes, and procedures that ensure that <u>data are fit</u> for managing cases, planning, and budgeting. Governance is about creating a <u>culture</u> around data <u>creation</u> and use, including how data rules are created and <u>enforced</u> and how <u>disputes</u> are resolved." NCSC CSP Executive Summary (highlighting added by presenter)

> "Without strong data governance, courts risk wasting time and energy searching for missing information, collecting unnecessary information, correcting bad information, entering data redundantly, and making decisions repetitively and sometimes inconsistent."

Now, think about YOUR framework – Agile/Extreme

"Ideally, Agile Development teams capture these high - level requirements in workshops, working together in a highly collaborative way so that all team members understand the requirements as well as each other. It is not necessarily the remit of one person, like the Business Analyst in more traditional projects, to gather the requirements independently and write them all down; it's a joint activity of the team that allows everyone to contribute, challenge and understand what's needed. And just as importantly, why."

"This is a big contrast to a common situation where the business owner sends numerous new and changed requirements by email and/or verbally, somehow expecting the new and existing features to still be delivered in the original timeframes. Traditional project teams that don't control changes can end up with the dreaded scope creep, one of the most common reasons for software development projects to fail.

Agile teams, by contrast, accept change; in fact they expect it. But they manage change by fixing the timescales and trading-off features. " Agile Principle 4: Agile Requirements Are Barely Sufficient - Kelly Waters

https://www.courtstatistics.org/__data/assets/pdf_file/0014/23900/data-governance-final.pdf

RECOMMENDATION – Read and CONSUME the CSP DGPG

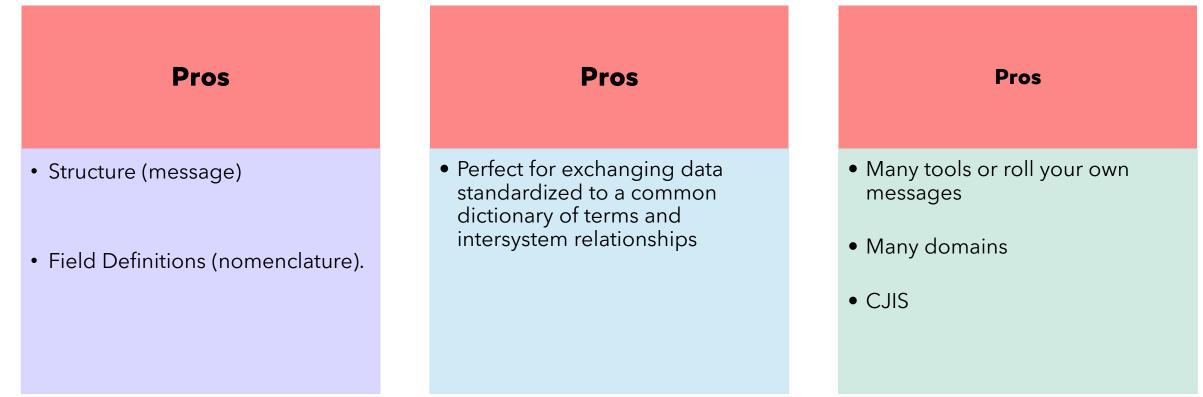
Data Governance Policy Guide

Start untying the knot!!



Court Standards Overview

<u>NIEM</u>



NIEM – a computer to computer standard – provide a "dictionary of agreedupon terms, definitions, relationships, and formats that are independent of how information is stored in individual systems."

The Big NIEM - CON

"Data is made of unprocessed observations, information makes sense of data, and knowledge makes use of information." Caminao

> NIEM is a data model and therefore lacks any inbuilt information or knowledge about data

Justice Counts

Pros

- Data to metrics (meaning, measuring and relationships to Justice)
- Measures metrics across the entire Justice environment – Supervision, Prisons, Jails, Courts and Pretrial, Defense, Prosecution and Law Enforcement

Pros

- Perfect for cross justice organizational evaluations and comparisons to the fair and equitable delivery of Criminal Justice.
- Perfect for national collection of aggregate-level criminal justice information to inform policy makers on fairness, equity, etc.
- CSG drivers with NCSC in the mix

Pros

- Simple collection model
- Feasible data collection based on commonly collected data which 'should' be easy to share
- Effective Metrics are simple to understand while enabling local context

Justice Counts – a model to ingest data and provide context and information by aggregating data into easy-to-understand metrics on Justice delivery.

Justice Counts - Con

A solid group of data experts but their target is not Courts but the relationship of court ops to the fair and equitable delivery of Justice.

> The Justice Counts effort is required but it can't be pushed by our IT departments - Must come Top Down

CSP

Pros

- Data with Context
- Focus on measures to compare courts across the nation
- Organized around the creation of the CSR - Court Statistical Report

Pros

- Through explanation of each field and its relationship to its environment.
- For example, Manner of Disposition - Important discussion, standard types and examples
- COSCA and NCSC are drivers

Pros

 Preamble discussions of each court grouping Appellate, Trial, etc. and the key subgroupings – Juvenile, Criminal, Traffic, etc. – i.e. context

CSP – The current model to aggregate court data into statistical measures for comparing state court performance.

CON: A published model from 1975 for statistical reporting

The CSP Report is/was the first step in unifying – data, information context and knowledge

If you are not involved with the CSP Report - Get Involved.

Most CMS systems support CSP value referencing (think Tyler ODY, etc.)

Baseline effort for moving into NODS

<u>NODS</u>

Pros

- Rules for the creation of data
- Defines required data elements from the court business perspective AND Justice
- Technical standard for structure and storage

Pros

- A big swing at "Court Transparency"
- Consistent information
- Reduce the burden to respond
- COSCA and NCSC are drivers

- Start small (pick and choose)
- Courts Only
- Please vendors join
- Expands existing CSP scope
- Cross pollination of NODS and CSP efforts/outcomes

"Data is made of unprocessed observations, information makes sense of data, and knowledge makes use of information."

How NODS says the same thing - "... support the creation, sharing and integration of court data by ensuring a clear understanding of what court data represent and how court data can be shared in a user-friendly format."





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And all-around Handsome Fellow Diane Robinson, PhD The public face of NODS -Senior Court Research Associate - NCSC



Kim Nieves Director of Research and Statistics, PA Courts



Alehandra Peña

Deputy Director of Research, Texas Courts

Key Players on the Team + 12 Other Courts including Vermont

Is BI Impossible - NODS

Where is NODS heading?

Court Business side

- 1. Expanding the data information model
- 2. Fine-tuning the existing information model
- 3. Create a submission and approval process

Technical side

- Building a NODS referential data model (probably Azure to begin with through an effort underway in Vermont.)
- 2. Develop a standards cross walk tool
- 3. Meetings with Microsoft and Informatica about final resting place for NODS data repository and crosswalk tool.
- 4. Create an API and workable NODS discovery tool enabling many editors, but stable and documented approval and retrieval.

Summary – Key Links

<u>CourTools</u>

Justice Counts

<u>NIEM</u> <u>Court Statistical Process - STATs</u>

<u>CSP User Guide</u>



10/21/2023

Is BI Impossible - NODS

Thank You

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