



**National Information Exchange Model**

Paul Wormeli  
Executive Director Emeritus  
IJIS Institute

# Why NIEM?

## Problem

Lack of standards leads to a decreased level of information sharing and increased costs associated with information exchange development.

## Solution

The National Information Exchange Model (NIEM)

NIEM is a federal, state, local, tribal and private initiative to increase information sharing between organizations. NIEM includes a data model from which organizations can establish information sharing specifications.

NIEM adoption leads to cost avoidance, enhanced mission capabilities and low total cost of ownership.

# The NIEM Formula for SUCCESS



**Identification**  
of large scale,  
complex  
processes

**Creation**  
of the  
standardized  
exchange

**Governance**  
and adoption  
of the  
exchange

- Selection based on number of stakeholders and potential for reuse
- Complexity increases with numbers of entities involved
- Benefit increases with numbers of implementations

# What NIEM Is...

## A Standard that facilitates information sharing:

- ❑ Across organizational and jurisdictional boundaries
- ❑ At all levels of government

## A Structured Approach that provides:

- ❑ Development tools
- ❑ Processes
- ❑ Methodologies

## A Data model that provides:

- ❑ Agreed-upon terms, definitions, and formats for various business concepts
- ❑ Agreed-upon rules for how those concepts fit together
- ❑ Independence from how information is stored in individual agency systems

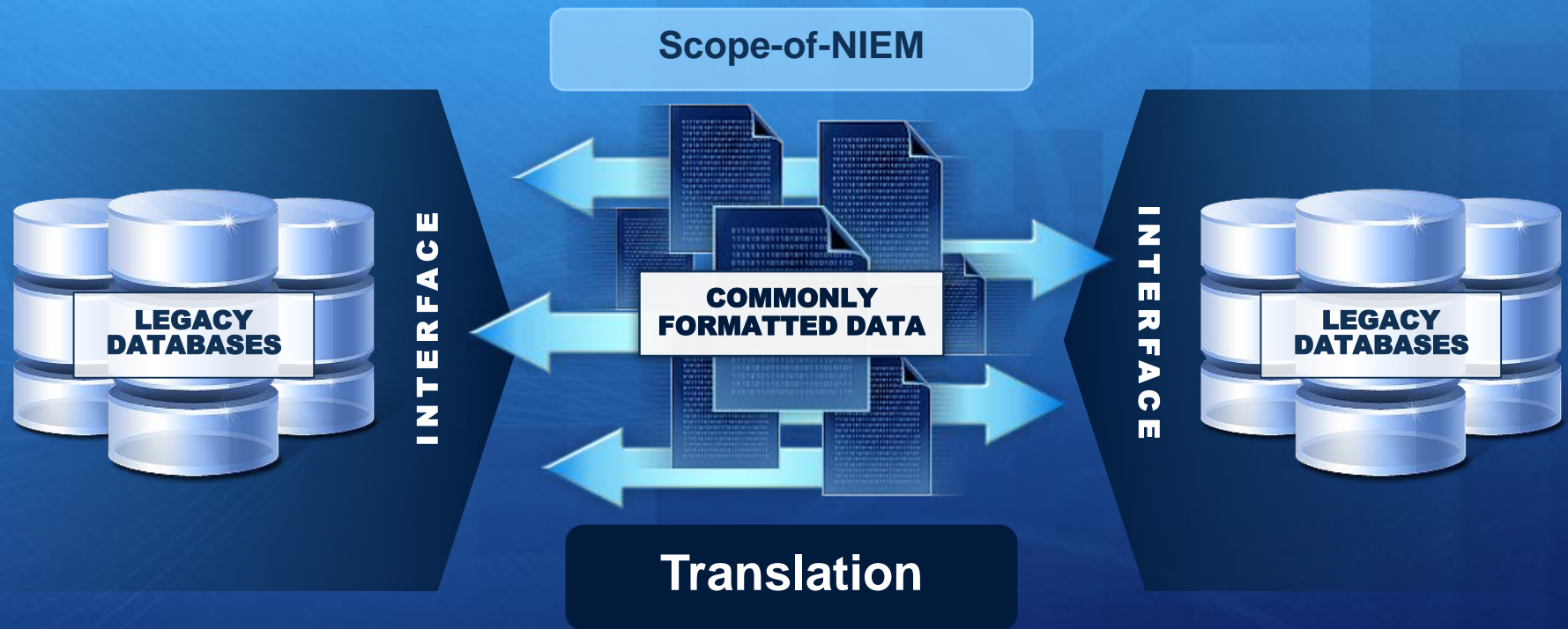
# What NIEM Is Not...

**A database schema**

**Just a data dictionary**

**A programming language**

# Standardizing Data Moving Across Systems



**NIEM intentionally does not address** standardizing data inside legacy systems. NIEM serves as a translation layer (providing a common understanding) between and across disparate systems.

# The NIEM Framework

**NIEM connects** communities of people who share a common need to exchange information in order to advance their missions, and provides a foundation for seamless information exchange between federal, state, local, and tribal agencies. Much more than a data model, NIEM offers an active user community as well as a technical and support framework.

## Community

Formal Governance Processes

Online Repositories

Mission-Oriented Domains

Self-Managing Domain Stewards

## Technical Framework

Data Model

XML Design Rules

Development Methodology

Predefined Deliverables (IEPD)

## Support Framework

Tools for Development and Discovery

Established Training Program

Implementation Support

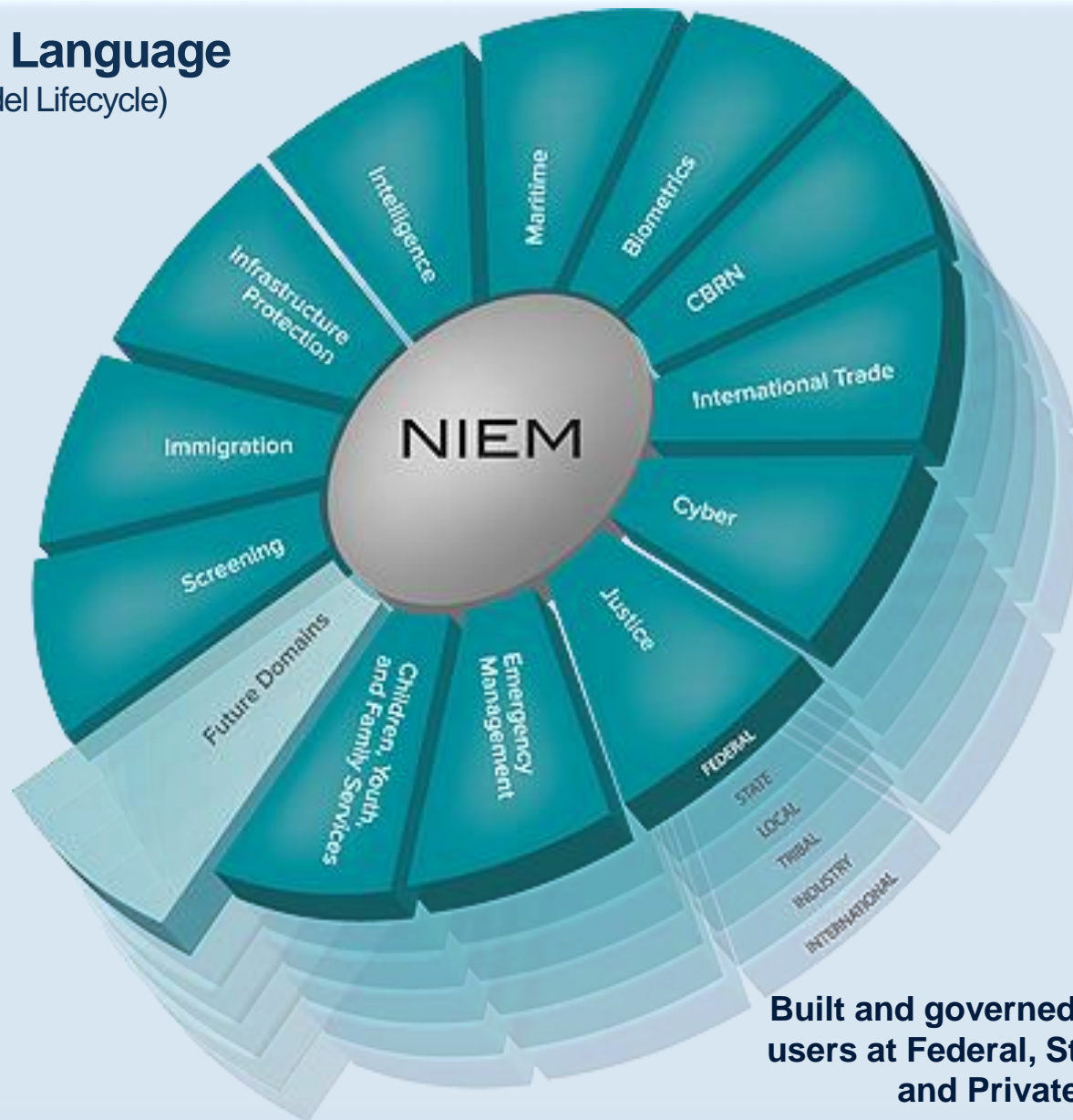
Help Desk & Knowledge Center



# NIEM Domains

## Common Language

(Data Model Lifecycle)



**Built and governed by the business users at Federal, State, Local, Tribal and Private Sectors**



# Key International NIEM Progress

**Japan moves to create its own version of NIEM.**

**North America Day—U.S, Canada, Mexico agree to exchange information on stolen vehicles, pandemic expansion**

**Eurojust uses NIEM for creating a sharable criminal warrant in Europe**

**Canada uses NIEM for visa processing**

# The world needs a standard for sharing information across national boundaries

**NIEM is a possible starting point**

