

Elevating Nuclear Weapon Quality

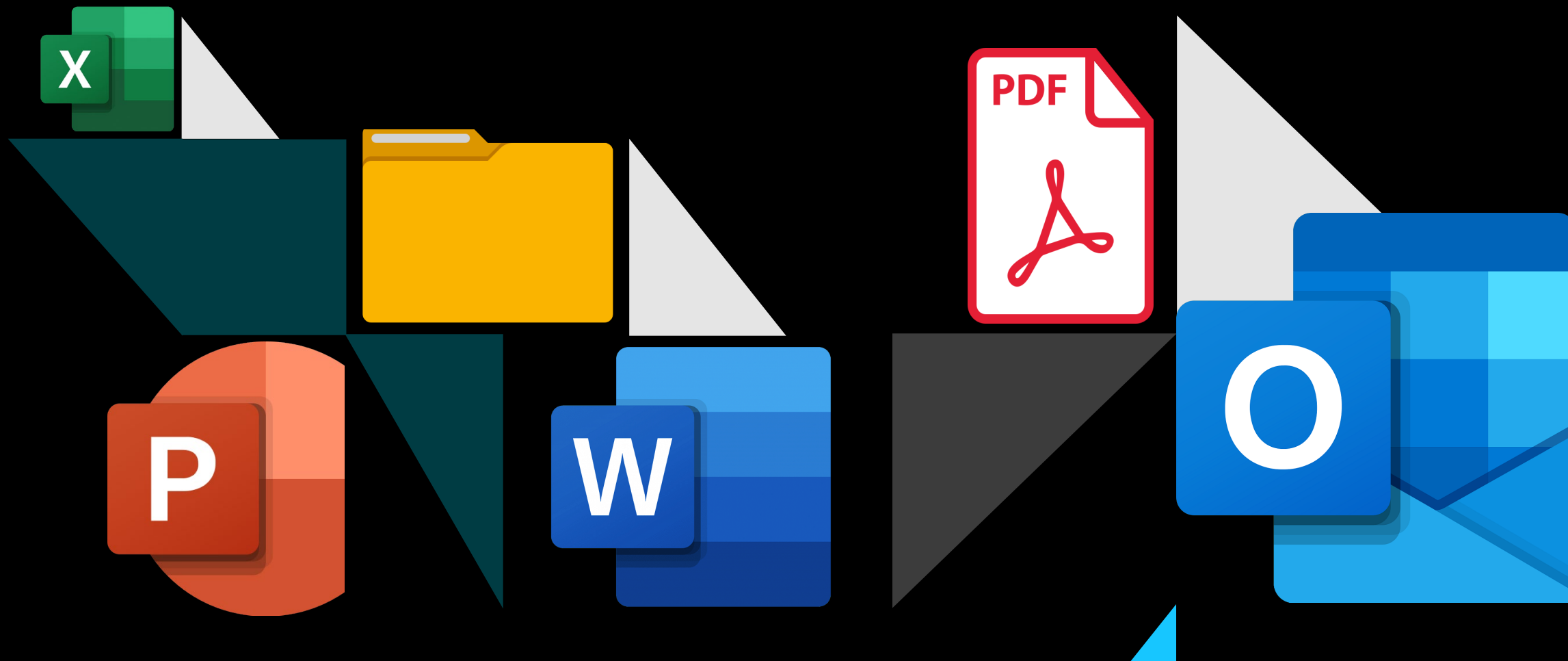
Data Curation Strategies for Unstructured Data

Jason Ehrich, Data Analyst for NNSA Weapon Quality Division



Agenda

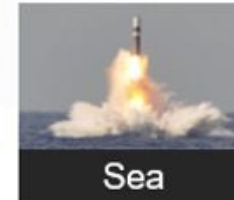
- Unstructured Data
- NNSA Weapon Quality Division
- Nonconforming Material Reports
- Data Lifecycle Planning
- The Updated Data Lifecycle
- Advancements and Lessons Learned



Unstructured Data

NNSA Weapon Quality Division (WQD)

The three legs of the U.S. nuclear triad serve as the backbone of America's national security. The triad, along with assigned forces, provide 24/7 deterrence.



**NNSA
Defense
Programs**



Office of Stockpile Management (NA-12) **directs and oversees all stockpile design, development and production activities**



**Office of
Stockpile
Management**



The Weapon Quality Division (NA-121.3) **establishes policies, requirements and plans, to ensure the effective implementation of quality assurance requirements for weapons and weapon-related products.**



**Weapon
Quality
Division**

The Business Need

Track
“Nonconforming
Materials”

Analyze Trends

Improve
Business
Processes

Nonconforming Material Reports Previous Methodology

WQD Mailbox



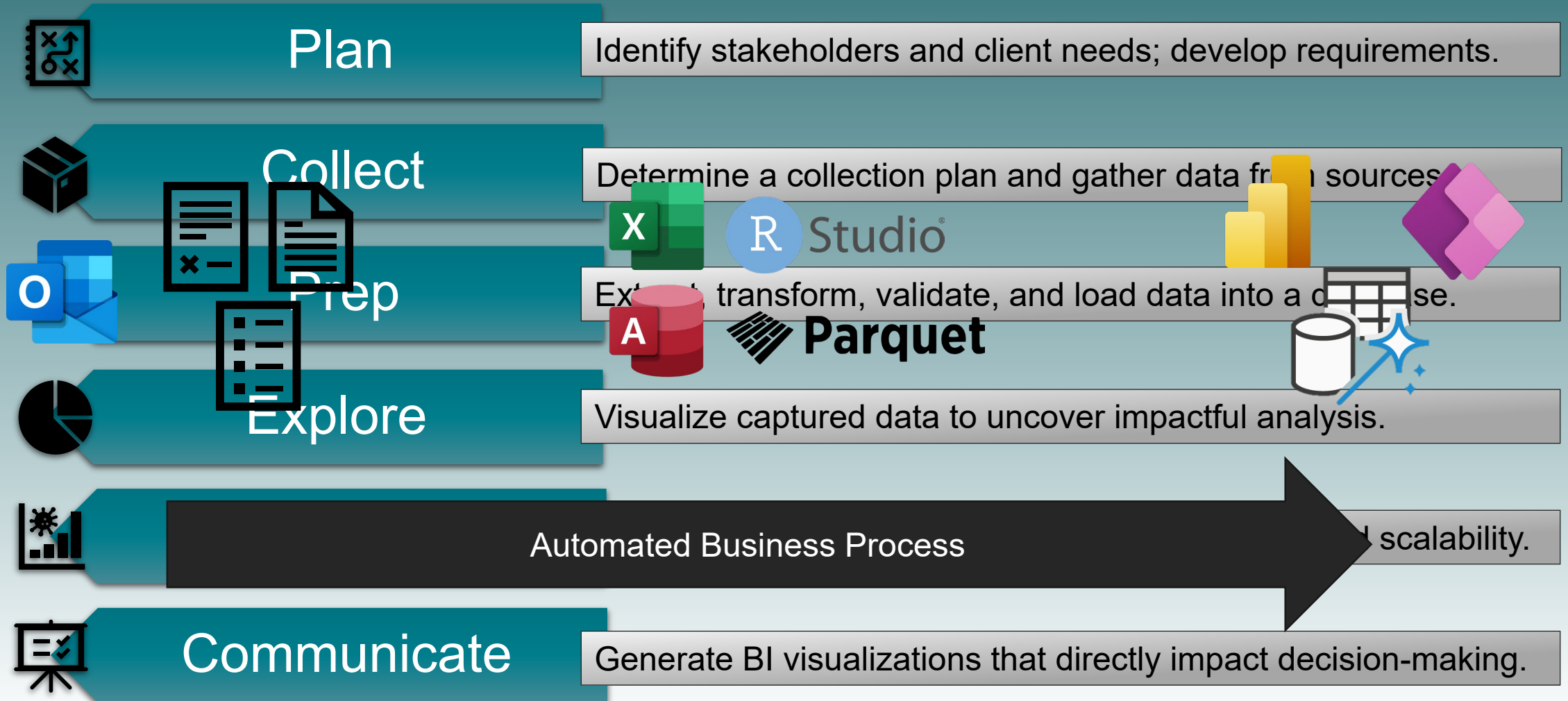
Slides serving as Data Storage



Different PDF Formats



Data Lifecycle



Advancements and Improvements

Keyword Search

Relational Database

Part Nomenclature Documentation

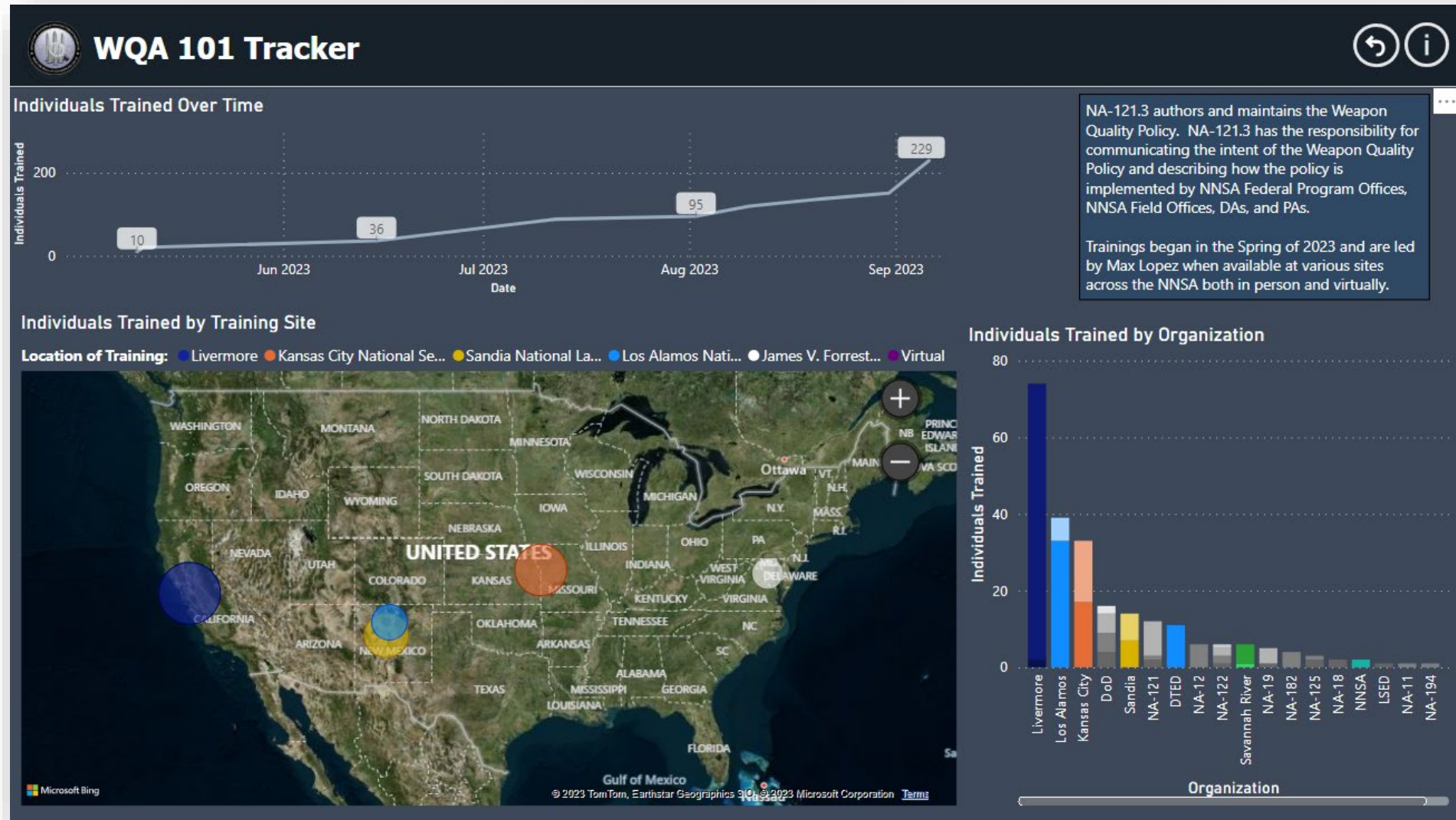
Visualize Flow of Parts

Ease of Use

Accessibility

Traceability

Conclusion





Thank you.