

Research Lab IT Support Core

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Northwestern IT – Academics &
Research Technology

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Origin Story

Data management needs in the research cores is larger than ever before (and only growing). Northwestern lacked a central strategy, support system, protocols, and a warm body to manage these data. A gap in the marketplace...



Research Lab-IT Mission

Helping integrate IT solutions in the advancement of research and collaboration:

- Design and implement data workflow
- Facilitate instrument data collection
- Identify appropriate storage solutions
- Enable data sharing and transfer
- Data loss prevention
- Secure data



Aaron Matthews - Bio

Argonne National Laboratory – Data Scientist

- *Engine Tribology Simulation*

- *APS – Data Post-Processing*

Navistar Inc. – Product Development Engineer

- *Engine Dynamometer Testing*

- *Commercial Vehicle Calibration*

IAV Inc. – Controls Engineer

- *Engine Emissions Controls Simulation*

UOP LLC. – Pilot Plant Operator

- *Catalyst Testing and Data Acquisition*

U of W - Madison – M.E. Engine Systems

U of I - Chicago – B.S. Chemical Engineering

What I Can Do For You

Help groups discover and leverage existing storage and computing resources. Or design custom solutions when there is not a fit.

- *RDSS, Quest, Box, etc.*

Support new equipment with added features, or replace legacy hardware with newer hardware.

- *Asset management*

Help identify and mitigate IT concerns that can disrupt the research process.

- *Data storage, generic passwords, unsupported operating systems*

Workflow Analysis

1. Theory

2. Experiment

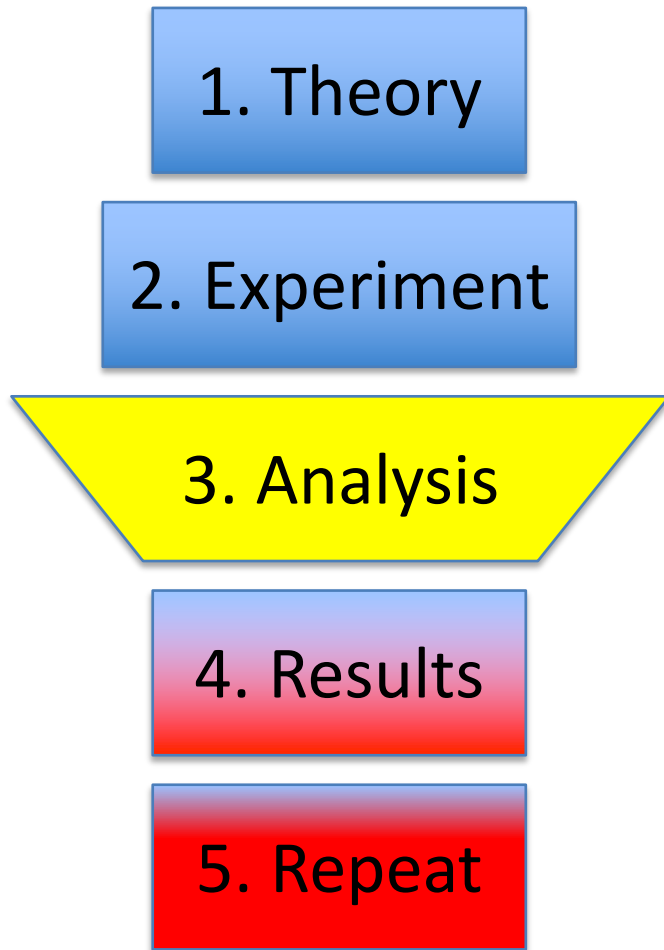
3. Analysis

4. Results

5. Repeat

Well Established
Process

Workflow Analysis



When the core's workflow encounters a bottleneck when moving, storing, or processing data then Lab-IT can help find a solution.



Current Projects

NUANCE Center

- New data backup service
- Staff/Lab computer asset management
- Migration IT planning from Cook to Tech

Current Projects

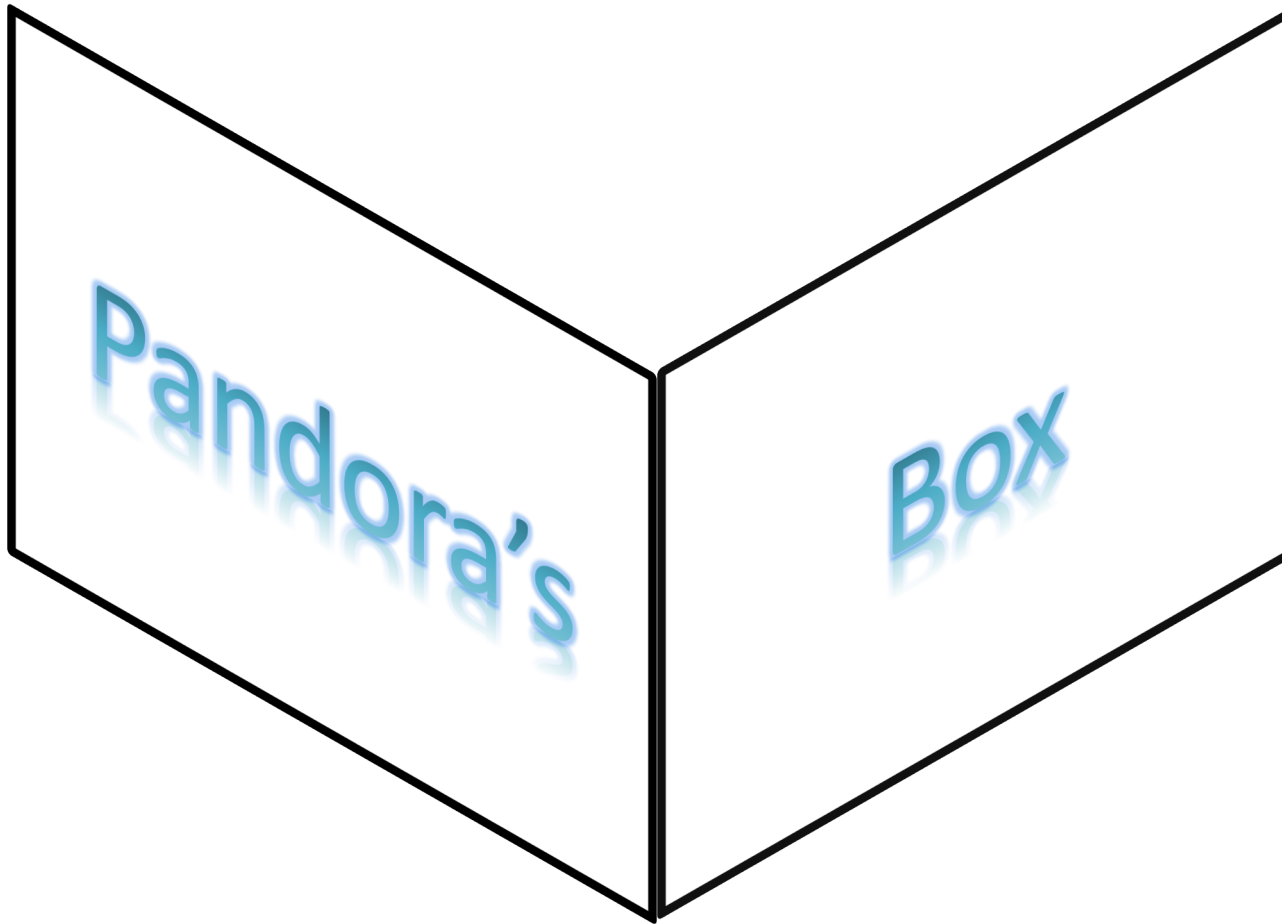
Proteomics Center of Excellence

- Migration of lab-hosted virtual machines to University Data Center

Jerome B Cohen X-Ray Diffraction Facility

- Upgrade of instrument PCs in coordination with new test equipment

But, I've always done it this way....



Leverage of Distributed Support Services

Loss and Security Initiatives

- Data Back Up and Recovery
- Encryption
- Asset Management

How much support?

Consultation and Planning

- Work can be outlined in a contract for 10s or 100s of hours.
- Work can be as needs arise for a few hours at a time.
- Hourly rate of \$70/hr.
- Initial consultation is free.
- Contact me through NUcore
 - Lab IT Support Core



Questions?

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NUIT – A&RT