# Digital Project Management

Jenn Riley
Metadata Librarian
Indiana University Digital Library Program

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#### You are not alone.

- NISO/IMLS: A Framework of Guidance for Building Good Digital Collections. 3<sup>rd</sup> edition, December 2007. http://www.niso.org/publications/rp/framework3.pdf
  - Collections (organized groups of objects)
  - Objects (digital materials)
  - Metadata (information about objects and collections)
  - Initiatives (programs or projects to create and manage collections)
- Principles from this framework integrated into this presentation

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## Achieving good collections

- Curated, cohesive group of materials
- Adherence to standards and best practices
- We must do things the way that others do them
- We must use commons systems or create metadata in ways that allow us to share

The Internet means that we are all in it together – large and small. Digital libraries are by nature collaborative and national/international.

\*Summary by Kristine Brancolini

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### Collaboration

- Many people must actively work together to implement a digital project
- We must collaborate within and between institutions
- Collaboration requires work!
  - Managing expectations and personalities
  - Understanding each other's perspectives
  - Group decision-making

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#### Communication and documentation

- Effective collaboration requires open communication
- Consensus may not always be necessary
  - But allow all participants the opportunity to present their views
  - Give them adequate time to formulate opinions
- Documentation is key, but don't expect people to read it

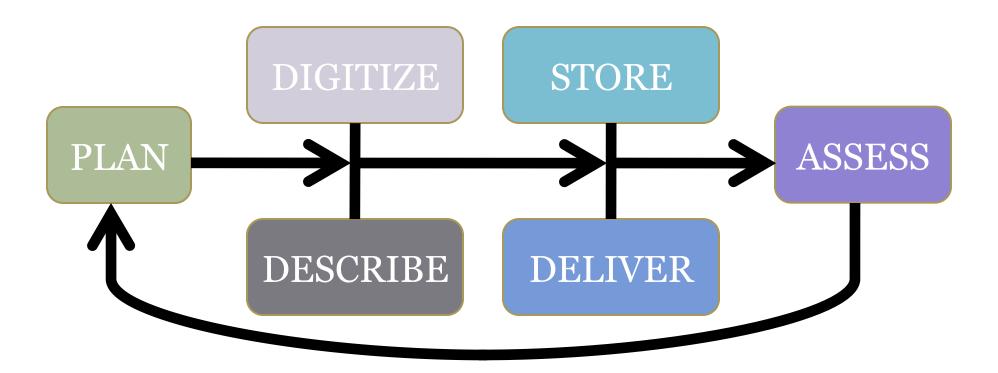
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## Why is all of this necessary?

Sustainability.

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## Digital Project Workflow



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#### Planning is the most important stage.

- Clearly articulate your goals the entire project plan extends from this
  - Envision what services you will provide
  - Define your primary user groups
- Rights issues
- Timelines
- Funding

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#### **Timelines**

- Should be clearly articulated, even for ongoing work
- Will need constant revision
- Build in flexibility
  - Staff turnover
  - Even average production rates aren't average
- Be aware of dependencies

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## **Funding**

- Will be discussed tomorrow
- Funding model depends on the situation
- Some possible sources
  - State/Federal granting agencies if you're doing something innovative
  - Campus for starting up new initiatives
  - Incorporate into operating budget moving to a sustainable model

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- You've heard a great deal about this already!
- Takes up a significant proportion of the project budget
- Designing a good workflow
  - Connect milestones to your project timeline
  - Set production benchmarks, but alter them when necessary
  - Be sure to include preparation/ preservation of physical materials
  - Ensure effective communication with prior and later stages

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## Objects must meet defined uses

- Master and derivative image specifications should support services defined in the project plan
  - Masters should also be created to support future uses, at least as far as we can imagine
  - Don't just copy others' specifications without understanding if they will work for you
- Bottom line: there is no truly neutral view of a resource

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#### Automation

- We have too many important things to do to spend our effort performing repetitive tasks
  - Manually distributing files to multiple places
  - Creating derivatives one by one
  - Emailing lists of images to people who need to know
- Small, nimble tools should be used for these tasks
  - Programming support when you can get it
  - Maximize use of existing tools (e.g., Office)

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- If no one can find your resources, the rest isn't of much use
- The VR community is among the most active specialist community in this area
  - Lots of opinions and experience out there
  - Sharing of expertise is common, but sharing of data and practices is not!
- Pick the right standards
- Design an effective workflow
- Need good tools

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## Selecting appropriate standards

- Elings/Waibel: "Metadata for All" article in *First Monday*, 2007
  - Argues standards should reflect materials, not holding institution
  - Slides and books, for example, should be treated differently
- Many decisions must be made
  - Descriptive metadata structure standards
  - Content standards
  - Controlled vocabularies
  - Technical, administrative, structural metadata

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#### Workflow issues

- Optimize use of existing metadata
- Put the right information in front of the right person at the right time
- Automate when appropriate
- Design to be re-usable
- Many of the same issues apply from the digitization phase
  - Connect milestones to your project timeline
  - Set production benchmarks, but alter them when necessary
  - Ensure effective communication with prior and later stages

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## Metadata quality control

- Patterns (and outliers) emerge from data in the aggregate
- Reporting capabilities
  - Sortable, deduplicated lists of values from a given field or set of fields
  - How many of this field per record
  - How many distinct values used in this field
  - Data overlap between fields

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### **Tools**

- Must be re-usable
- Modularize when possible
- Types of tools that might help
  - Auto-complete
  - Spell-check
  - Integrated controlled vocabularies
  - Data integrity checking
  - Metadata transformation stylesheets

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- Will be discussed tomorrow
- Not just sticking files somewhere
- Likely can't do it effectively on your own
- Some initiatives to be aware of
  - ICPSR Digital Preservation Tutorial
     http://www.icpsr.umich.edu/dpm/dpm-eng/contents.html
  - Open Archival Information System (OAIS)
     http://public.ccsds.org/publications/archive/650x0b1.pdf
  - RLG/OCLC Trusted Digital Repositories
     http://www.oclc.org/programs/ourwork/past/trustedrep/repositories.pdf

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- Will discuss in great detail later today
- Delivery services drive all other project requirements
- Discovery
  - Allows users to find resources that meet their needs
- Use
  - Allows users to do interesting things with the resources once they find them
- Promotion
  - "Build it and they will come" hasn't been effective in this area

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## Building and maintaining systems

- Plan for ongoing improvement
  - User expectations change
  - Technology changes
  - New usage scenarios emerge
- You will migrate to another system eventually
  - Plan for persistent URLs
  - Ensure conformance to standards
  - Limit the degree to which you design for a specific system

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## Interoperability and sharing

- Local users are often the first priority
- But we need to start thinking more widely
  - We're duplicating too much effort at our individual institutions
  - Our data could be used to support services we haven't even imagined
  - Increasingly, working on our own is not sustainable
- Consider this when choosing and implementing delivery systems

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- Digital projects are never done
- Ongoing development is more than simply adding more content over time
- In the current environment, need to repeatedly justify our investments
  - Progress reports
  - User-focused assessments
  - Comparative analyses
- Don't forget usage statistics
- Must constantly monitor new developments in the field

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#### Bottom line

- Learn from experience (yours and others')
- Project management is an active process
- Most difficult parts
  - Managing dependencies
  - Ensuring effective communication
  - Balancing the ideal and the practical
- Think big!